## BEFORE THE GOVERNOR OF CALIFORNIA AND THE EXECUTIVE OFFICE OF THE GOVERNOR

	)	
Emergency Petition for an Immediate	)	Pursuant to Cal. Administrative Procedure
Statewide Moratorium on Fracking and	)	Act, Government Code § 11340.6
Well Stimulation	)	
	)	

We, the undersigned Petitioners, hereby petition the Honorable Edmund G. Brown to use his emergency powers under the duties of the Governor's office to protect Californians from imminent threats to public health and safety by implementing an *immediate statewide moratorium* on hydraulic fracturing ("fracking") and other forms of well stimulation.

Millions of Californians living near oil and gas wells face grave health and safety threats from fracking and all phases of the oil and gas production process. The oil industry is polluting our air, contaminating our aquifers, using dangerous chemicals near homes and schools, increasing earthquake risk by injecting vast quantities of wastewater into disposal wells near active faults, and speeding climate change. These harms and risks pose an emergency and must be halted immediately.

The health damage from fracking and oil and gas production is severe and well-documented. Multiple independent panels of public health scientists reviewing the peer-reviewed scientific literature on fracking have all reached the same conclusion: the dangers of fracking put the public at too great a risk. In one study, residents living within a half-mile of an active well were significantly more likely to develop cancer than those living more than half a mile away from an active well, with exposure to benzene being the most significant risk. Another study found that pregnant women living within 10 miles of an active well were more likely to bear children with congenital heart defects.

In New York, Governor Andrew Cuomo placed a moratorium on fracking while a multi-year public health study was conducted to evaluate the harms. At the conclusion of that review, Governor Cuomo banned fracking, citing unavoidable "significant public health risks." Dr. Howard A. Zucker, New York state's acting health commissioner, stated that the scientific experts found that the "potential risks are too great." He added that he would not want his family to live in a community where fracking was taking place. 6

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<sup>&</sup>lt;sup>1</sup> See New York State Department of Health, "A Public Health Review of High Volume Hydraulic Fracturing for Shale Gas Development" December 2014; Concerned Health Professionals of New York, "Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking," Dec. 2014; Physicians, Scientists, and Engineers for Healthy Energy, "Toward an Understanding of the Environmental and Public Health Impacts of Shale Gas Development: an Analysis of the Peer-Reviewed Scientific Literature, 2009-2014," Dec. 2014.

<sup>&</sup>lt;sup>2</sup> McKenzie, L., et al, "Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources," Science of the Total Environment, Feb. 2012.

<sup>&</sup>lt;sup>3</sup> McKenzie, L., et al., "Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado," Environmental Health Perspectives, Jan. 2014.

<sup>&</sup>lt;sup>4</sup> Kaplan, T., "Citing Health Risks, Cuomo Bans Fracking in New York," New York Times, Dec. 17, 2015.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid.

Yet shockingly, Governor Brown has permitted fracking and other dangerous activities in California to continue unchecked without the completion of *any* statewide health or environmental review. In stark contrast to their New York counterparts, California's oil and gas regulators have only recently released a draft Environmental Impact Report. This draft study is overly narrow and fundamentally flawed. Even so, the study nonetheless finds that well stimulation has resulted in several "significant and unavoidable" damages to our air, public safety, biological and cultural resources, and climate. To subject Californians to all of the tangible public health harms of oil and gas activities is unacceptable. It is inexplicable that this could happen in our state while health and environmental studies that should have been completed long ago have only just been initiated, and other states like New York have recognized such harms and banned fracking activities in their jurisdictions.

The harm from these ongoing dangerous activities is severe in California. Californians exposed to chemicals used in oil and gas development are falling ill with symptoms that include headaches, nosebleeds, nausea, and asthma. Harm is most acute in children, the elderly, and other vulnerable populations. The damages and risks are widespread. Around the state, including in Kern, Los Angeles, Ventura, and Santa Barbara counties, some wells are situated as close as 12 feet from homes. In Los Angeles County alone, some 580,000 people live within just a quarter-mile of at least one well, and statewide, more than 121,000 children attend a school within a half-mile of an active well.

Many of the chemicals used in fracking and well stimulation are highly dangerous to human health and include a number of known and suspected carcinogens. Methanol, formaldehyde, hydrochloric acid, hydrofluoric acid, xylene, crystalline silica, naphthalene, 2-butoxyethanol, aluminum oxide, and ethylbenzene are among the most used chemicals. Exposure to these chemicals, even at low doses, can cause serious health harm, including damage to the skin, eyes and other sensory organs, respiratory system, gastrointestinal system and liver, brain and nervous system, immune system, kidneys, reproductive system and cardiovascular system. Some chemicals are also mutagens, developmental inhibitors and/or endocrine disruptors. Many chemicals are associated with various types of cancer.

A survey of well stimulation data from the South Coast Air Quality Management District showed that in just one year, well operators in the Los Angeles air basin used 44 different chemicals, which have been categorized as "air toxics" due to their potential to cause adverse human health effects through inhalation or contact through the air. <sup>13</sup> In the course of a single year, these chemicals were

<sup>&</sup>lt;sup>7</sup> Cal. Department of Conservation, SB 4 Draft Environmental Impact Report, Analysis of Oil and Gas Well Stimulation Treatments in California, January 2015, ES-15-22.

<sup>&</sup>lt;sup>8</sup> Srebotnjak, T. and Rotkin-Ellman, M., Natural Resources Defense Council, "Drilling in California: Who's at Risk?" October 2014, available at http://www.nrdc.org/health/files/california-fracking-risks-report.pdf.

<sup>&</sup>lt;sup>9</sup> Ferrar, K., "Hydraulic Fracturing, Stimulations, and Oil and Gas Drilling Unjustly Burden Hispanic and Non-White Students" FracTracker Alliance, Nov. 14, 2014.

<sup>&</sup>lt;sup>10</sup> Center for Biological Diversity et al., "Air Toxics One-Year Report: Oil Companies Used Millions of Pounds of Air-Polluting Chemicals in Los Angeles Basin Neighborhoods." ("Air Toxics Report") (June 2014), pp.4-5.

<sup>&</sup>lt;sup>11</sup> Colborn, T. et al., "Natural Gas from a Public Health Perspective," 17 Human and Ecological Risk Assessment 1039 (2011); Colborn, T. et al "An Exploratory Study of Air Quality near Natural Gas Operations, Human and Ecological Risk Assessment" (2012), http://dx.doi.org/10.1080/10807039.2012.749447.

<sup>&</sup>lt;sup>13</sup> Air Toxics Report.

used over 5,000 times, often in dense urban areas and right next to homes, and totaled over 44 million pounds.

In the city of Shafter, in the Central Valley, where wells are also located close to schools and homes, children have been stricken with severe ailments: a 12-year old student experienced recurring epileptic attacks; a nine-year-old student was diagnosed with prostate cancer; and an 11-year-old student died from a mysterious illness that four hospitals could not diagnose. Fracking and oil and gas production are polluting the air and water with deadly and harmful chemicals in Shafter and other communities already overburdened with pollution and highly vulnerable to further damage.

The majority of California's oil and gas activities in fact occur in areas that already suffer from the worst air quality in the nation. The four Californian cities suffering from the worst ground-level ozone, short-term particle pollution, and year-round particle pollution are Los Angeles, Visalia, Bakersfield, and Fresno. All four cities are in or near substantial, active oil and gas production fields. The introduction of new and additional pollution to these sites is a clear emergency which demands immediate action.

Further, the huge volume of toxic wastewater generated by well stimulation and oil and gas production poses an emergency threat to our scarce water supplies. The state's regulation of wastewater disposal is unsafe and unlawful. The State Oil and Gas Supervisor himself declared an emergency through issuing a series of shut-down orders for multiple wells in the summer of 2014. The wells were injecting oil industry wastewater directly into clean aquifers that are supposed to be protected under the federal Safe Drinking Water Act. It has now come to light that this problem extends to hundreds of wastewater disposal wells throughout California, and that state regulators have for many years failed to comply with the most basic legal and commonsense requirements for protecting our aquifers from pollution. There are also hundreds of open pits where toxic oil and gas wastewater is dumped, polluting the air and further threatening our groundwater. This situation demonstrates two realities: (1) that the regulations enacted to protect Californians have failed to do so, and (2) that the state simply cannot handle the massive volume of toxic wastewater generated by fracking, well stimulation, and production.

Both fracking and the disposal of oil and gas wastewater into injection wells can also induce earthquakes. In California, where fault lines are more active than in other parts of the country, the potential harm from induced seismic activity is of grave concern. A survey of the state found that more than half of California's injection wells are located within 10 miles of an active fault, and that

<sup>&</sup>lt;sup>14</sup> See American Lung Association, "State of the Air 2014" accessed at http://www.stateoftheair.org/2014/assets/ALA-SOTA-2014-Full.pdf

<sup>&</sup>lt;sup>15</sup> See, e.g., July 2, 2013 Emergency Order to Immediately Cease Injection Operations, issued to CMO, Inc. Well(s): 03039980 and 03044445 by State of California Natural Resources Agency, Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("an emergency exists and that immediate action(s) are necessary to protect life, healthy, property, and natural resources, specifically, the further degradation of the affected aquifers…").

<sup>&</sup>lt;sup>16</sup> Letter from Jonathan Bishop, State Water Resources Control Board, to Jared Blumenfeld, Administrator, U.S. EPA Region IX, dated Sept. 15, 2014, attaching chart showing nine wells injecting into non-exempt aquifers "not subject to debate."

<sup>&</sup>lt;sup>17</sup> Baker, D., "State Let Oil Companies Taint Drinkable Water in Central Valley," *San Francisco Chronicle*, Feb. 1, 2015; Letter from Jane Diamond, Director, Water Division, US EPA to Jonathan Bishop, California State Water Resources Control Board and Steven Bohlen, Oil and Gas Supervisor, dated December 22, 2014.

six percent are within a mile.<sup>18</sup> Allowing well stimulation to expand in California will increase the need for injection wells to store millions more gallons of waste fluid, further increasing earthquake danger.

Finally, with the need for deep greenhouse gas pollution cuts to address the climate crisis becoming more urgent with each passing day, continued well stimulation and the development of California's unconventional oil and gas also warrants the Governor's emergency action because it speeds climate disruption. Twenty leading climate experts have already called on Governor Brown to impose a moratorium on development of California's tight shale oil and gas resources for this reason.<sup>19</sup>

This Petition is submitted to the Governor, Department of Conservation, and State Water Resources Control Board pursuant to Government Code section 11340.6<sup>20</sup> and the additional authorities cited herein. The Governor has the duty and authority to institute a moratorium where, as here, the public is in danger. The California Public Resources Code gives the Governor and his agency, the Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("DOGGR") the authority to "order or undertake the actions he or she deems necessary to protect life, health, property, or natural resources" where an emergency exists.<sup>21</sup> The Governor and DOGGR also have the statutory duty to "prevent, as far as possible, damage to life, health, property, and natural resources. . . ."<sup>22</sup>

In addition, the Governor has broad authority to proclaim a state of emergency and "make, amend, and rescind" any regulations as needed to address an emergency. His authority applies to circumstances where "extreme peril to the safety of persons and property within the state caused by such conditions as air pollution . . . drought . . ., or other conditions, . . . which, by reason of their magnitude, are or are likely to be beyond the control of the services, personnel, equipment, and facilities of any single county, city and county, or city and require the combined forces of a mutual aid region or regions to combat . . . ." The Governor has already used his emergency authority to implement 20 emergency orders related to water usage in response to California's historic drought. 25

An immediate moratorium is well within the Governor's power. At a minimum, the moratorium should apply to all forms of well stimulation, including fracking, acidizing, and gravel packing. The moratorium should remain in place until and unless California completes its own *comprehensive*, *scientific review* of the health and environmental consequences of these high-risk activities. It should

<sup>19</sup> Letter from Ken Caldeira, Ph.D. et al. to the Honorable Governor Jerry Brown, dated November 13, 2013. Available at http://www.biologicaldiversity.org/news/press\_releases/2013/fracking-11-13-2013.html.

<sup>22</sup> Pub. Res. Code § 3106(a); the Government Code also allows for emergency rulemaking under section 11346.1; *see also*, Water Code § 1058.5(a), authorizing State Water Resources Control Board to adopt emergency regulations to protect water resources.

<sup>&</sup>lt;sup>18</sup> Earthworks et al., "On Shaky Ground: Fracking, Acidizing, and Increased Earthquake Risk in California," March 2014, available at http://www.biologicaldiversity.org/campaigns/california\_fracking/pdfs/ShakyGroundReport-March2014.pdf.

<sup>&</sup>lt;sup>20</sup> Government Code section 11340.6 permits "any interested person [to] petition a state agency requesting the adoption, amendment, or repeal of a regulation."

<sup>&</sup>lt;sup>21</sup> Pub. Res. Code § 3226.

<sup>&</sup>lt;sup>23</sup> Gov. Code §§ 8625 and 8567(a); see generally, Cal. Emergency Services Act, Gov Code §§ 8550 et seq.

<sup>&</sup>lt;sup>24</sup> Gov. Code § 8558(b).

<sup>&</sup>lt;sup>25</sup> Gov. Edmund G. Brown, Declaration of State of Emergency Declaration, Jan. 17, 2014, citing Gov. Code sections 8558 and 8625 as legal authority to promulgate 20 Executive Orders in response to drought. Available at <a href="http://gov.ca.gov/news.php?id=18379">http://gov.ca.gov/news.php?id=18379</a>.

not be lifted unless and until effective solutions are implemented that address the emergency and protect our health and environment.

The Governor has 30 days to respond to this petition<sup>26</sup>, but we urge faster action. It is long past time to protect Californians by prohibiting fracking and all other well stimulation statewide.

Respectfully submitted this 26th day of February, 2015,

350 Santa Barbara 350 Bay Area

350 Silicon Valley 350Marin.org

350.org 350-San Luis Obispo **AFSCME Council 57** AFSCME Local 444

Alliance of South Asians Taking Action Alliance of Nurses for Healthy Environments

Anderson Valley Grange Aromas Grange #361

Ballona Institute Ballona Network

Bay Area Labor Committee for Peace & Banner Grange **Justice** 

Bees and Beyond Inc. Biosafety Alliance

Brown and Green: Southeast Asians for Burbank Green Alliance

Climate Justice Cal Poly Biomimicry Club

**Butte Environmental Council** California State Grange

California Environmental Justice Alliance California Student Sustainability Coalition

Center for Biological Diversity Center on Race, Poverty & the Environment Center for Environmental Health

Central California Environmental Justice Climate Parents

ComiteCivico del Valle Climate Workers

Communities for Sustainable Monterey Communities for a Better Environment County

Communications Workers of America -Community Rights Organization of Willits

District 9 **CREDO** Courage Campaign

Earthworks Democracy for America

East Bay Organizing Committee East Bay Alliance for a Sustainable Economy Elder Creek Center For The Land **Ecological Farming Association** 

<sup>26</sup> Gov. Code § 11340.7.

**Breast Cancer Action** 

Network

Environment and Human Rights Advisory **Environment California Environmental Justice Coalition for Water** Family Farm Defenders Filipino Advocates for Justice Food & Water Watch

ForestEthics Fort Bragg Grange

Fractivist.org Frack Free Butte County

Fresnans Against Fracking Global Alliance for the Rights of Nature

Global Community Monitor Global Exchange

Grand Lake Theatre Green Party of Alameda County

Green Retirement, Inc. Greenpeace

Heights Oil Watch Idle No More SF Bay

International Forum on Globalization inNative

IWW Environmental Unionism Caucus JGGarcia Advisors

Kitchell Films Klamath Forest Alliance

**KyotoUSA** La Colectiva De Mujeres Day Labor

Labelgmos.org Laytonville Grange

League of United Latin American Citizens Little Lake Grange

Local Clean Energy Alliance

Marin Pachamama Community Merced Group Sierra Club

Mercedians Against Fracking MLK Coalition of Greater Los Angeles

Los Padres ForestWatch

Mainstreet Moms

Modesto Peace/Life Center Mosaic

Loyola Marymount University ECO Students

**Movement Generation** Movement Generation Justice & Ecology

Project MoveOn.org Civic Action

Mt. Diablo Peace and Justice Center Network of Spiritual Progressives

Oil Change International Occupy San Francisco Environmental Justice

Working Group Our Walmart

Paradise Grange 490 Peace Fresno

Petalumas Grange Physicians for Social Responsibility, SF Bay

Chapter Preserve Wild Santee

**Progressive Christians Uniting** Planting Justice

Rainforest Action Network Public Citizen

Sacramento Community Grange Redeemer Community Partnership

SanDiego350 San Benito Rising

San Luis Obispo Clean Water Action

Santa Cruz Live Oak Grange

Save Porter Ranch

Sebastopol Grange #306

Seventh Principle Action Network of the

Unitarian Society of Santa Barbara

Sierra Employee Alliance

Solar Justice Institute

South Bay 350 Climate Action Group

Stewards of the Earth

Sungevity

Sustainable Economies Law Center

Tar Sands Action SoCal

The Action Hub

The Climate Mobilization

The Heritage Farm

The Oakland Institute

Topanga Peace Alliance

United Native Americans

Ventura County Climate Hub

Wholly H2O

Wild Nature Institute

Santa Barbara Frack Back to Save the Central

Coast

SaveWithSunlight

**SEIU USWW** 

Sierra Club California

Sierra Club Loma Prieta Chapter

Sierra Club Tehipite

Soil Not Oil Coalition

**Stencils Against Fracking** 

Students Against Fracking at UC Berkeley

Students Against Fracking UCSB

Sunflower Alliance

Sustainable Carmel Valley

The California Water Impact Network

The Earth Justice Associates of First

Unitarian Church of Oakland

The River Project

Turtle Island Restoration Network

Ventura 350

Wellstone Democratic Renewal Club

Wild Heritage Planners

Windsor Grange #410

Women's Earth Alliance