6 March 2015

The Honorable Edmund G. Brown Jr. Governor State of California c/o State Capitol, Suite 1173 Sacramento, CA 95814



Re: Emergency need for local, regional, and state officials throughout California to implement a <u>Moratorium</u> that halts new permits and construction of extreme oil infrastructure

Dear Governor Brown,

California faces a crude source switch. The new oil the industry wants to refine here is fundamentally different, and its extraction, transport, and processing results in the most extreme pollution, safety hazard, and climate impacts of any petroleum known. A switch to this 'extreme oil' could result in severe and irreversible harm. Better alternatives are available—if we stop extreme oil before it becomes entrenched. Stopping extreme oil would allow alternatives that could reduce already-serious impacts of our energy system, create more and safer jobs, and meet our state's climate targets, to be ramped up instead. For these reasons, an **Extreme Oil Infrastructure Moratorium** is necessary, feasible, beneficial, appropriate, and prudent policy for Californians.

Harm caused by extreme oil includes but is not limited to pollution, deaths, injuries, climate disruption and economic damage resulting from:

- Increased frequency and magnitude of toxic spill, fire, explosion, and flare emission incidents impacting workers and residents in and near refineries, ports and rail lines;
- Increased daily emissions of toxic and smog-forming air pollutants from refineries that switch to extreme oil as a greater portion of oil feedstock processed;
- Severe and disparate impacts on low income communities of color and oil workers;
- Increased greenhouse gas emissions from the extraction, upgrading and refining of bitumen and heavy oil and from fracking operations;
- Contamination and destruction of aquatic habitat near rail lines when trains derail and release tar sands bitumen that sinks in the water and cannot be cleaned up; and
- Undermining the achievement of climate protection targets and slowing the growth of sustainable energy in California through an unfair subsidy of extreme oil created by allowing its associated environmental, health, safety, and economic impacts.

¹As these terms are used herein, *extreme oil* includes 'heavy oil' and 'natural bitumen' as those oils are defined by the USGS (tar sands oil),² oil produced using hydraulic fracturing (fracking) or strip mining, and oil transported by extremely hazardous methods (i.e., via rail). *Extreme oil infrastructure* includes oil processing (refining), extraction (production), storage, and transport (port, pipeline and rail facilities) equipment that enables the use of extreme oil.

²Meyer et al., 2007. USGS Open-File Report 2007-1084; http://pubs.usgs.gov/of/2007/1084.

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Irreversible harm is imminent. The new and modified refining, fracking, port and rail spur equipment that could enable extreme oil in California is a huge capital commitment that would become entrenched for the equipment's operational duration ($\approx 30-50$ years). This commitment is imminent; refinery, port, and rail infrastructure that could enable extreme oil is proposed in dozens of places throughout the state now. If it is built now this infrastructure could be used for decades, even if we keep using less and less gasoline in California, since the industry in California is rapidly switching to export its refined products overseas. Extreme oil threatens to cause imminent and irreversible harm.

Extreme oil is not needed. An extreme oil moratorium would allow refiners to use conventional crude oil while California continues its technically and economically feasible switch to power our cars with proven, currently available technologies⁶ such as electricity generated from renewable sources of energy. Moreover, a global scientific consensus holds that we can only burn less than half of currently proven fossil reserves and still have a good chance of avoiding climate change so extreme it could be 'incompatible' with human societies and economies as we know them.⁷ Thus, we have both the means, and the societal-and-economic imperative, to leave more than half of the remaining oil resource in the ground. What we do not have is any overriding need to use the part of this resource that is extreme oil.

Extreme oil threatens California's jobs recovery. Allowing extreme oil impacts here would make using more oil artificially cheap. The unfair subsidy would undermine less polluting energy and transportation alternatives that create more jobs, and slow efforts to make our economy less dependent on oil and less vulnerable to oil price shocks. This jobs threat is important: Government data show that oil refining creates fewer jobs per dollar revenue than any other sector in California's economy,^{3,8} and ten of the last 11 U.S. recessions followed on sharply rising oil prices.^{3,9} The Moratorium would protect our jobs from this threat while allowing money that could otherwise go to extreme oil infrastructure to instead support cleaner, safer jobs in the badly needed upgrading of existing refineries' dangerously old and polluting equipment.

California is crucial. The oil industry's footprint in California accounts for 91% of crude production and 76% of refining capacity in the western continental U.S. (Arizona, California, Nevada, Oregon and Washington).⁴ Extreme oil could cause more harm here than in neighboring states, and action here is crucial to prevent its climate impacts.

³ See CBE fact sheets; www.cbecal.org/resources/our-research.

⁴ See U.S. Energy Information Administration data; www.eia.gov/petroleum/data.cfm.

⁵ <u>See</u> San Francisco-Oakland-Fremont and Los Angeles-Long Beach-Santa Ana metropolitan areas data *in* Brookings Inst., 2013; www.brookings.edu/research/interactives/export-nation.

⁶ See Williams et al., 2011. Science. ScienceExpress; DOI: 10.1123/science.1208365.

⁷ <u>See</u> Intergovernmental Panel on Climate Change, 2014. Fifth Assessment Report.

⁸U.S. Bureau of the Census, various dates. <u>See</u> Economic Census data for 'paid employees' versus for 'sales, shipments, receipts, revenue or other business done.'

⁹ <u>See</u> National Committee on the BP Deepwater Horizon Oil Spill & Offshore Oil Drilling, 2011. Deep Water: the Gulf Oil Disaster and the Future of Offshore Oil Drilling; Report to the President.

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Conclusion

Emergency action is needed. This imminent threat of severe and irreversible harm warrants emergency orders directing state, regional, and local agencies to halt and suspend actions in furtherance of extreme oil infrastructure permits and construction. On behalf of Communities for a Better Environment (CBE) we urge you to take this emergency action, and hope to discuss any question you may have about this request and how CBE could better help you to implement it at your earliest convenience.

In Health,

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