A Climate Justice Policy on Oil Refining

Problem: Oil refineries pollute our air.

Air pollution kills thousands in the SF Bay Area annually,¹ disproportionately hurts low-income communities of color near the region's five oil refineries, and threatens to destroy our climate globally.² Oil refining is the biggest industrial air polluter in the region. <u>See map</u>, charts.

Making it worse, refiners are switching to even more polluting 'extreme' oils such as heavy oil and tar sands bitumen. This could increase air pollution, from day to day operations <u>and</u> from spills, fires, and explosions—all along the fuel production chain. From the well to the tanker or train delivering the extreme oil to the refinery processing it, toxic, smog-forming <u>and</u> climatedisrupting emissions could further increase.

Increasing air emissions also increases toxic fallout to the San Francisco Bay-Delta, and the bitumen spilled from trains and tankers could sink in the water and be impossible to clean up.

Solution: Instead of increasing, oil refinery air pollution can be reduced.

In addition to creating jobs, upgrading old, outdated, overly-polluting technology can cut pollution. For example, upgrading existing equipment at Bay Area refineries could:

- cut Richmond refinery PM_{2.5} emitted by 47%;
- cut Rodeo refinery SO₂ emitted by 50%; and
- cut Martinez refinery greenhouse gas (CO₂e) and SO₂ emissions substantially.³

Further, there is a strong scientific consensus that avoiding extreme climate impacts will require us to leave more than half of proven fossil fuel reserves in the ground.² Among other things, this means there is <u>no need</u> to increase emissions by refining the most extreme, highest-emitting half of the oil resource that is left.

continued



San Francisco Bay hosts the second largest oil refining center in western North America.

Existing and pro	posed oil facilit	ies: 🔟	Refinery
🔁 Tank farm	🛏 Tanker po	ort —	Pipeline
🚗 Crude by rail	terminal -	- Crude	rail route



Direct industrial emissions of particulates ($PM_{2.5}$) and GHGs (CO_2e) in the Bay Area. $PM_{2.5}$ data from BAAQMD SIP (2010); CO_2e data from California Air Resources Board (2012).

Communities for a Better Environment



A Climate Justice Policy continued

Action: Join us for climate justice!

The Bay Area Air Quality Management District and its governing board of elected city and county officials has primary authority over industrial air pollution in this region.

On October 15, 2014, the Air District Board voted unanimously to establish, during 2015, refinery emission rules that improve local air monitoring, prevent increasing emissions, and cut emissions to the maximum extent feasible, targeting emission rate cuts of at least 20%.

In a precedent for climate justice, this new policy direction would curb extreme oil for climate protection <u>and</u> environmental justice by forcing cuts in toxic, smog-forming <u>and</u> climatedisrupting pollution at each refinery.

But this historic policy victory was hard-won (*see* Timeline), and the oil industry is fighting to further delay actual cleanup requirements.

We need to win a decision to <u>require cleanup</u> <u>without further delay</u>. A decision could come as soon as December. Here's how you can help:

- *Support CBE* as a dues-paying member (one easy way is at www.cbecal.org)
- Write your Air District to support cleanup (<u>Sgallagher@baaqmd.gov</u>; or U.S. Mail address below)
- Join us at the Air District on December 17th
 - What: Board of Directors Public Meeting
 - When: 9:45 AM Wednesday, Dec 17, 2014

Where: 939 Ellis Street (near Van Ness) San Francisco, CA 94109 (Fill out a card to speak on the refinery emissions rule item when you arrive.)

Notes: (1) Understanding particulate matter; BAAQMD (2012) at 27. (2) Fifth Assessment Report; IPCC (2014).
(3) <u>See</u> CBE's Sep. 26, 2014 comments to the BAAQMD.
(4) <u>See</u> the Refinery Action Collaborative's June 13, 2013 and September 25, 2014 comments to the BAAQMD.

Historic Policy on Refining Extreme Oil: Timeline of selected key events

March 1994—CBE's *Dirty Crude* report becomes the first of many reports to show that lower quality oil greatly increases refinery pollution.

February 1999—A switch to lower quality 'heavier' crude is a contributing causal factor in a fire at the Avon refinery that kills four workers.

May 2009—CBE wins a court order to disclose potential impacts of Chevron's plan to enable refining heavier crude at its Richmond refinery.

December 2010—The American Chemical Society publishes CBE's research relating lower quality crude to increasing refinery CO_2 emission intensity across the U.S. refining industry.

August 2012—A switch to lower quality, higher sulfur crude is a contributing cause in a fire at Chevron's Richmond refinery; the toxic cloud emitted sends 15,000 people to the hospital.

October 2012—The Bay Area Air Quality Management District publishes a concept paper that proposes a first-of-its-kind policy: a rule that is designed specifically to control emissions caused by refining lower quality grades of oil.

June 2013—CBE works with refinery worker, environmental, and academic groups to develop a 'worker/community proposal'⁴ for cutting toxic, smog forming, and greenhouse emissions from Bay Area refineries by at least 20% before 2020.

January 2014—Instead of accepting our worker/ community proposal, under oil industry pressure, the Air District staff proposes to exclude *all* emission controls from its refinery emissions rule.

October 2014—The Air District Board directs its staff to develop specific proposals that could curb and reduce refinery emissions, including but not limited to our worker/community strategy, in a unanimous vote. CBE and community-based groups fighting extreme oil projects in Richmond, Rodeo, Avon, Martinez, Benicia, and Pittsburg anchor a broad network that wins this historic vote—including the Asian Pacific Environmental Network, ForestEthics, NRDC, the Sierra Club, 350 Bay Area, UC Berkeley's Labor Occupational Health Program, and refinery and health care unions such as United Steelworkers Local 5 and the California Nurses Association.

Communities for a Better Environment

