

Phillips 66 Co.'s San Francisco Refinery Tar Sands Oil Expansion in Rodeo, CA

Phillips 66's plan would:

Switch to tar sands oil—Phillips 66 told investors it plans to switch its San Francisco Refinery to heavy oil from the Canadian tar sands.¹ It tried to import this tar sands bitumen oil by train to the refinery's Santa Maria plant, which sends semi-refined oil by pipeline to its main plant in Rodeo.² Now it is trying to expand its marine terminal at Rodeo.

Put tar sands on the Bay—Phillips proposes to import up to two billion gallons of oil per year (130,000 barrels/day) to Rodeo on oil tankers.³ At the same time, it plans to expand its heavy oil refining capacity at Rodeo.⁴ The potential tar sands bitumen oil increase is *more than ten times* the total daily volume of Canadian tar sands bitumen that was shipped across San Francisco Bay to all five Bay Area refineries from 2015–2017.⁵

Expand its refinery—Phillips' refining capacity of 140,000 barrels/day (b/d)⁶ would expand to process the 130,000 b/d of oil it proposes to import over its wharf on top of the roughly 33,000 b/d that its Santa Maria plant sends by pipeline.⁷ Phillips 66 denies this, but it is seeking to expand—and it seeks to exempt part of this expansion, to increase its heavy oil cracking capacity, from public review.⁴

Bad impacts would result.

Environmental consequences of the San Francisco Refinery tar sands expansion were still being hidden from the public as of February 2019. That's a serious problem. Tar sands projects are huge capital investments that can operate for 30–60 years,⁸ causing severe cumulative impacts along the entire fuel chain of the oil project. For example:

Air pollution—Increasing refinery emissions from a switch to tar sands oil by all Bay Area refineries could cause 800–3,000 deaths over 40 years, health experts reported in 2017.⁹ Low-income communities of color near the refineries face a disparately severe mortality risk, 8–12 times the Bay Area average mortality risk from these emissions.⁹

Water pollution—Oil tankers spill. Oil spilled repeatedly from ships at the Rodeo wharf in recent years.¹⁰ Tar sands bitumen sinks in water,¹¹ making cleanup of a bitumen oil spill practically impossible. Increasing tar sands bitumen oil shipped on the Bay by ten times over 30–60 years would drastically increase the risk of a devastating oil spill.

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Stolen land—First Nations community lands in western Canada are being devastated by the strip mining, pipelines, and pollution associated with tar sands oil extraction that would expand to supply the San Francisco Refinery tar sands expansion.

Safety hazards—Twenty refinery workers narrowly escaped death in a crude unit fire that sent 15,000 people to hospital emergency rooms, after a pipe corroded by high-sulfur oil ruptured catastrophically at the Chevron Richmond refinery in 2012.¹² Tar sands oil has more than twice the sulfur content of the crude oil that contributed to this disaster at the Richmond refinery,¹³ and would increase other types of refinery spill, fire, explosion, and flaring hazards as well.

Climate pollution—Petroleum is the biggest climate polluter in California,¹⁴ and tar sands oil emits greenhouse gases from extraction and refining at a rate several times that of conventional oil.¹⁵ In fact, overwhelming scientific evidence indicates that the tar sands must not be exploited if humanity is to have a reasonable chance of avoiding severe and irreversible climate impacts.¹⁶ Expanding long-lasting tar sands oil infrastructure risks everyone's future.

Take Action

Communities for a Better Environment believes that a comprehensive, publicly verifiable environmental review would show that the San Francisco Refinery tar sands expansion must be rejected. An “Environmental Impact Report” (EIR) is required by the California Environmental Quality Act (CEQA), but as of February 2019, Contra Costa County had not yet committed to prepare an EIR on this project. Join us to raise our collective voice and hold our public officials of this county accountable for our right to take informed public action that *prevents* severe and irreversible impacts. Our future is at stake.

Support CBE's JUST TRANSITION CAMPAIGN, learn more — and join us in positive action: Contact us at www.CBEcal.org

(1) *Barclays CEO Energy-Power Conference* 9/12/13, 9/3/14; www.phillips66.com/EN/Advantaged%20Crude/index.htm accessed 10/16/2015. (2) RDEIR SCH #2013071028. (3) AQMD App. 25608. (4) *See* AQMD App. 27954; CBE expert reports on Phillips' “Propane Recovery” project. (5) Analysis of AQMD, USEIA, and CARB data by CBE, 6 Feb 2019 G. Karras note to Phillips 66 Marine Terminal (Wharf) Expansion Proposal file. (6) www.phillips66.com/refining/san-francisco-refinery. (7) AQMD, 2017. *Draft Reg. 13, Rule 1 Workshop Report—Emission Limits Methodology*. (8) CBE data from AQMD files. (9) Kuiper et al. *Health Assessment of Draft EIR for BAAQMD Rule 12-16*; 5/18/17. (10) www.kqed.org/news/11616057/pipeline-corrosion-caused-small-phillips-66-oil-spill-prompting-big-concern. (11) Compare bitumen blends resid (SG ≈ 1.055), water (SG = 1.0000). (12) *Interim Investigation Report, Chevron Refinery Fire* (www.csb.gov). (13) Compare Richmond refinery 2012 crude slate (CBE's 4/19/13 Testimony to CSB) with Canadian dilbit (NRDC, 2015). (14) CARB GHG Inventory (sum of dis-aggregated oil emissions). (15) Gordon et al. 2015. *Know Your Oil* (www.CarnegieEndowment.org/pubs); Karras, 2010. *Env. Sci. Technol.* (DOI: 10.1021/es1019965). (16) McGlade and Ekins, 2015 (DOI: 10.1038/nature14016); IPCC AR5.