From: Pennie Opal Plant <pennie@gatheringtribes.com>
To: p66-railspur-comments@co.slo.ca.us
Date: 11/21/2014 01:09 PM
Subject: Santa Maria Refinery Upgrade

Greetings,

As a person who lives near a railroad line and not far from the five Bay Area refineries, I am concerned for the safety of my family and community members. Any increase in the "bomb trains" put us all at greater risk.
Our community members are already suffering from spiked rates of asthma and cancers due to the oil industry. All of this, in addition to dramatic changes in the climate from the ppm of carbon in the atmosphere, shouts for a different way of handling permits and dealing with EIRs. PLP-01

The proposed oil-train terminal in Santa Maria is linked by pipeline to the Phillips 66 refinery in Rodeo, located along the San Pablo Bay in west Contra Costa County. In addition to upgrading its Santa Maria facility, Phillips 66 proposes to modify its Rodeo refinery so that it can refine the most toxic crude oil on earth: Canadian tar sands. Transporting and refining tar sands will create more toxic air and water pollution for families living along the rail line and near the refinery. At every stage of the mining, transportation, and refining process, Canadian tar sands are more carbon intensive than other sources of oil. These crudes also have a higher content of sulfur and nitrogen, meaning they are more corrosive and more highly polluting. PLP-02

The Bay Area would be doubly impacted by this project if Phillips 66 gets its way: the imminent threat of crude by rail to the Santa Maria facility—on top of increased pollution and risk of accident at the Rodeo refinery. Moreover, bringing tar sands to California will drastically undermine the state's efforts to be a global leader in addressing climate disruption. PLP-03

Respectfully,
Pennie Opal Plant
San Pablo, CA 94806

Responses to Pennie Opal Plant Comments

PLP-01	The RDEIR addresses the potential impacts and recommends mitigation measures for the proposed Project consistent with the requirements of CEQA. Section 4.0 presents the environmental analysis for the CEQA mandated issue areas; air quality and GHG impacts are discussed in Section 4.3 (Air Quality and Greenhouse Gases). Safety issues with train transportation are discussed in Section 4.7, Hazards and Hazardous Materials. The SMR has indicated it plans on importing tar sands crude oil, not the highly volatile Bakken crude oil. The Canadian crude is less explosive than Bakken. However, the EIR found that the Canadian crude oil still presents a significant accident risk.
PLP-02	The RDEIR examined changes in emissions associated with a change of slate as part of Impact AQ.2 (see Section 4.3, Air Quality and Greenhouse Gases). For the SMR, key crude slate parameters that could impact air emissions include the percent of BTEX, vacuum resid, sulfur and metals in the crude oil. The BTEX was analyzed in the health risk assessment to determine the increased health risk. See Appendix B.2. Increased sulfur was assessed as to the increased sulfur truck trips that would be required. None of the other components would alter the emissions at the refinery as the heavy metals would not be emitted into the air from the SMR. Note that as the API gravity would be similar, the emissions of volatile components (ROG) from fugitive emissions would be similar with the change in crude slate. BTEX levels of Canadian tar sands crude oil are similar to other heavy crude oil processed by the SMR and the EIR demonstrates that any increases in BTEX would generate a nominal increase in health risk. See Appendix B.2. The potential increase in BTEX has been addressed in the EIR. See Impacts AQ.2 and AQ.4 in Section 4.3, Air Quality and Greenhouse Gas Emissions. However, during the Enbridge Spill, 1,086 air samples of benzene levels, for example, were measured and 21 of the samples showed air concentrations above the EPA action levels (http://www.epa.gov/enbridgespill/data/dataair.html) of 6 ppb, indicating that some volatiles were present in the spilled materials although not very much. Sampling conducted by the Michigan Department Of Natural Resources And Environment Environmental Laboratory on the crude oil in the Enbridge pipeline (which was dilbit from Canada, same as would be expected for the proposed project) indicated that benzene could be as high as 1,100 ppm in the crude, Xylene as high as 1,200 ppm and Toluene as high as 1,900 ppm (measured as mg/kg) (http://www.epa.gov/enbridgespill/data/index.html#aqdata). The results indicated a BTEX concentration of about 0.50%, or, as per Table 4.3.13 in the RDEIR, within or below the range of crude oils currently processed by the SMR. The Keystone Pipeline FEIS (2013) also examined a wide range of crude oils and demonstrated that the " BTEX content of the dilbits [from Canada] is much lower than that of many lighter crude oils" The EIR analyzed a BTEX concentration of 1.25% to be conservative which indicated nominal increases in health risk. BTEX levels of the proposed project

	crude do not present a "far greater" amount of BTEX from fugitive components. In addition, fugitive emissions from components are estimated based on industry-wide average emission rates developed by the EPA and include a wide range of crude oil types, volatilities, BTEX fractions and compositions. The EIR demonstrated that changes to health risk due to a potential increase in BTEX to 1.25% are nominal and do not require further analysis. See Appendix B.2. The metals in the tar sands oil would not be volatilized at the SMR or along transportation routes and would therefore not contribute to increases in air-based health risk.
PLP-03	The main difference in GHG emissions occurs at the extraction point, where extracting the tar sands generally produces higher GHG per bbl of crude oil than convention methods, depending on the level of associated gas and the use of that gas. Some fields in California for example, extract the crude oil and just burn the associated gas in flares, which actually can produce a higher GHG intensity than even Canadian Tar Sands crude oils. Current CARB requirements (LCFS) already require refineries to disclose the carbon intensities of the crude oil they refine.