

From: "progressive25@earthlink.net" <progressive25@earthlink.net>
To: p66-railspur-comments@co.slo.ca.us
Date: 11/13/2014 03:32 PM
Subject: I strongly urge you to reject the Phillips 66 oil train proposal

Mr. Murry Wilson
San Luis Obispo County Planning Department

Dear San Luis Obispo decision-makers,

I am writing to express deep concern about the proposed oil by rail project at the Phillips 66 Santa Maria Refinery. The Phillips 66 project puts communities throughout California at risk. This project presents significant and unacceptable risks to our communities across California.

PRO-01

First and foremost, emergency responders are not prepared for these heavy, dangerous trains and current safety standards will not protect the public. The recirculated draft EIR dangerously misinforms first responders because it does not adequately assess the risks of an oil train disaster.

The draft EIR's analysis of potential accidents and spills is flawed because it only evaluates rail accident rates from 2003 to 2012 and spill release rates between 2005 and 2009, and omits important data about crude rail accident frequency and magnitude in 2013 and 2014. This is troubling because we know that more crude spilled from trains in 2013 than spilled during the past four decades. The EIR must look at recent data, including accident data from Canada which has also experienced increased crude by rail incidents. This data reflects the increased quantities of dangerous crude being transported in old and unsafe tank cars and will provide a more accurate assessment of accident risk and magnitude along the rail lines that would serve this project.

PRO-02

Moreover, the EIR's worst case scenario spill analysis estimates a spill of approximately 180,000 gallons, that's approximately six tank cars of crude. This must be an error because we know that most crude trains are comprised of 100 or more tank cars. Indeed, a worst case scenario spill would be on the order of millions of gallons of crude. Such a spill could devastate our scarce water resources, property and our local economy, and would pose a significant threat to public health and safety. This project cannot be approved without analyzing and mitigating its true impacts.

PRO-03

Second, the toxic air emissions resulting from this problem pose an unacceptable risk to public health. The Phillips 66 project will create unacceptable levels of toxic air emissions that will impact my community. Volatile toxic chemicals leak out of tank cars into the air poisoning communities along rail routes. In its latest environmental review Phillips 66 admits that its proposed oil train facility will create "significant and unavoidable" levels of air pollution, including toxic sulfur dioxide and cancer-causing chemicals. The report cites increased health risks -- particularly for

PRO-04

children and the elderly -- of cancer, heart disease, respiratory disease, and premature death.

PRO-04
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Third, the EIR must fully analyze the potential worst-case scenario of a spill near each of the many watersheds crossed en route to the Santa Maria refinery. The proposed rail route brings oil trains through the San Francisco Bay-Delta watershed and along California's treasured central coast. Each oil train carries more than three million gallons of explosive, toxic crude oil. A derailment near a river, stream, reservoir, or above a groundwater aquifer could contaminate drinking water for millions of Californians. During a time of extreme drought, SLO must not approve this project and create contamination risk for the rest of our state.

PRO-05

Fourth, the planning department must examine the Santa Maria and Rodeo proposals as a single project. It is clear that Phillips 66 wants to bring toxic Canadian tar sands to California. The proposed oil train terminal in Santa Maria is linked by pipeline to the Phillips 66 refinery in Rodeo, CA. Phillips 66 is proposing to modify these facilities to allow it to 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 along the rail line and near the Santa Maria refinery. San Luis Obispo cannot approve this project in isolation.

PRO-06

Fifth, Phillips 66 must disclose crude quality information in order for decision makers to fully understand the climate impacts of the proposed rail project. Tar sands means more carbon pollution: At every stage of the mining, transportation, and refining process, Canadian tar sands are more carbon intensive than any other source of oil. Bringing tar sands to California will undermine the state's efforts to be a global leader addressing climate disruption.

PRO-07

For all the aforementioned reasons, I urge the San Luis Obispo County Planning Commission and Board of Supervisors to reject the Phillips 66 proposed rail spur. This project creates significant, unavoidable, and unnecessary risks for our communities and our climate.

Sincerely,

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PRO-01	<p>The EIR contains mitigation measures PS-3a through PS-3i (see Section 4.11, Public Services and Utilities) to ensure that the SMR Fire Brigade and the Cal Fire resource are sufficient before the project proceeds. These include; 1) an updated Fire Protection Plan for the Rail Spur Project that meets all the applicable requirements of API, NFPA, UFC, and Cal Fire/County Fire; 2) an updated Emergency Response Plan to include the rail unloading facilities and operations; 3) an updated Spill Prevention Control and Countermeasure Plan to include the rail unloading facilities and operations; 4) requirements that the SMR fire brigade meets all the requirements outlined in Occupational Safety and Health Administration 29 CFR 1910.156, and NFPA 600 & 1081; 5) updated fire brigade staffing/training requirements and Cal Fire funding requirements; 6) funding of a qualified Cal Fire inspector to conduct the annual fire inspections at the SMR; 7) funding of training for Cal Fire personnel, including field training, as per the Security and Emergency Response Training Center Railroad Incident Coordination and Safety (RICS) meeting Department of Homeland security, NIIMS, OSHA 29 CFR 1910.120 compliance. These extensive requirements would reduce the impacts of the rail spur project on fire resources at the SMR to less than significant with mitigation (Class II).</p> <p>In addition, for transportation of crude oil along the mainline tracks, mitigation measures PS-4a through PS-4c) (see Section 4.11, Public Service and Utilities) include 1) Only rail cars designed to Option 1: PHMSA and FRA Designed Tank Car shall be allowed; 2) requires annual funding for first response agencies along the mainline rail routes; 3) require annual emergency responses scenario/field based training; and 4) notification requirements. Impacts to fire protection and emergency response would remain significant and unavoidable (Class I) along the mainline routes.</p>
PRO-02	<p>The historical accidental data used in the RDEIR is not limited to trains shipping crude oil in recent years, but the long term historical train accident data for all freight. The use of data from all freight train movements nationwide provides a very robust database for estimating rail accidents and derailments.</p> <p>Average U.S. train derailment rates over the 5-year period 2005 – 2009 have previously been estimated using data from the U.S. Department of Transportation, Federal Railroad Administration (FRA) Rail Equipment Accident (REA) database combined with traffic data from the rail industry (Liu et al, 2014). This dataset was used to develop detailed derailment rates as a function of three factors: FRA Track Class, traffic volume (which appears to be correlated with additional maintenance above basic federal requirements) and Method of Operation (i.e., signaled or non-signaled trackage). All three of these factors have a significant effect on freight train derailment rate. These factors were used to calculate segment-specific derailment rates thereby enabling a fine grained calculation of derailment probability for any particular route. As discussed below, the overall accident rate has declined since this data was recorded and analyzed, thereby resulting in an overestimate of the present-day risk, and future risk. For example the average accident rate for the five-</p>

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year period 2010-2014 was 27% lower than the average for the five-year period from 2005-2009, and the preliminary estimate of the accident rate for 2014 was 35% lower than the five-year period from 2010-2014.

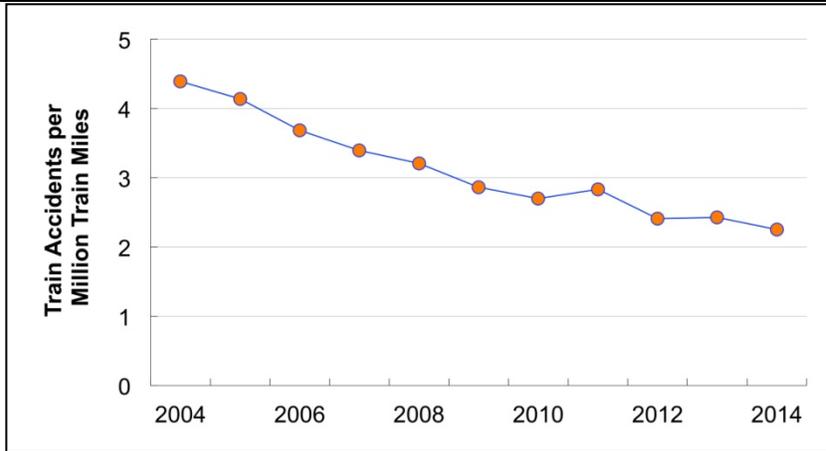
The reason data from 2005-2009 was used is because that dataset contained additional information that allowed for the estimated effect of FRA Track Class, Traffic Density and Method of Operation (Signaled or Unsignaled) on derailment rate. This additional granularity is needed for more precise segment-specific accident rate used in the analysis.

The derailment rates calculated were based on 1,420 Class 1 railroad mainline derailments. Inclusion of a few more crude oil train derailments in recent years would have virtually no effect on the estimated rates. The suggestion that because these recent accidents were not included in our dataset somehow invalidates the results reflects a lack of understanding of the analytical technique and how it was used. The data needed for this analysis are less complete than for overall accident rate but all other things being equal, there is no reason to believe that crude oil trains derail at a rate different than other freight trains. Using what data are available and making certain assumptions, the EIR consultant conducted an analysis in 2014 and observed no significant difference in the derailment rate for crude oil trains then for other freight trains.

The railroad accident rate has been steadily trending downward for over a decade. The accident rates in the past few years were the lowest since the FRA started recording the data in the mid-1970s. In the period from 2004 to 2014 the rate declined by 49% (almost half) (see Figure 1 below). Most derailments receive little or no attention from the public or media. Railroads are required by regulation to report all accidents that exceed a certain monetary threshold in damage to track, signals and rolling stock (currently \$9,600). Proper estimation of train accident rates involves analysis of all accidents, divided by the total amount of traffic. The reason that some perceive an increase in the railroad petroleum crude oil accident rate is because of the more than 50-fold increase in this traffic since 2009. Estimates are that 233,698 tank cars of crude oil were moved by rail in 2012. This increased to over 435,000 tank cars moved by rail in 2013 (the full year of data is not yet available for 2014). With this increase in crude by rail traffic, the derailment and spill probability data would suggest that multiple crude by rail accidents would happen each year.

Figure 1. Railroad Accident Rate 2004 – 2014

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Data Source: US DOT Federal Railroad Administration
<http://safetydata.fra.dot.gov/officeofsafety/publicsite/summary.aspx>
 (Data for 2014 include January through November)

Using the accident and spill probability data from the RDEIR the DEIR would have estimated that between 2012 and 2013 there would have been two to five derailments that had spills of 100 gallons or more in the U.S. Based upon the United States Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) incident data base, there were three crude oil train derailments with spills of 100 gallons or more.

This does not contain the accident and spills that have occurred in Canada over this period since the accident and spill probability data is for mainline rails within the United States only.

The methodology for estimating crude oil unit train accidents and spill probabilities is also consistent with the methodology outlined by the American Institute of Chemical Engineers, Center for Chemical Process Safety (AIChE CCPS) document *Guidelines for Chemical Transportation Risk Analysis* (CCPS, 1995), which is the definitive reference on the methodology for estimating hazardous materials transportation risk.

PRO-03

In the event of a train derailment and accident, only a limited number of rail cars actually derail and spill oil. In no case has a rail accident resulted in all rail cars derailing and failing. In most incidents, there has been no loss of containment from the rail cars. The median number of cars derailed per FRA-reportable, freight-train derailment on Class I mainlines was six (Liu et al., 2013). This is the number that was used in the analysis. In this analysis, we assumed that all derailed cars were crude oil tank cars. The conditional probability of release (CPR) represents tank car safety performance in accidents and was estimated based on the latest statistics developed by the Railway Supply Institute (RSI) – Association of American Railroads (AAR) Railroad Tank Car Safety Research and Test Project. The RSI-AAR Tank Car Project analysis accounts for tank car safety design features and accident characteristics. The RSI-AAR Project has also calculated a similar statistic,

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	<p>CPR (>100), which is the conditional probability of release of more than 100 gallons from an individual tank car involved in an FRA-reportable accident. Releases smaller than this amount are not believed to pose a substantial threat, so this is the principal metric being used by the rail and tank car industries in their consideration of different tank car safety designs. CPR (>100) is used in the risk analysis described here to be consistent with other documents related to this subject. Please note that trains associated with the Phillips 66 Project would generally have 80 tank cars due based on the space available for the new rail spur.</p>
PRO-04	<p>The RDEIR addresses the potential impacts and recommends mitigation measures for the proposed Project consistent with the requirements of CEQA. Section 4.3 (Air Quality and Greenhouse Gases) addresses GHG emissions, criteria air emissions and health risks. The EIR concludes that emissions of criteria and toxic pollutants would exceed the SLOCAPCD thresholds and would be a significant impact.</p> <p>Air emissions from tank car fugitive emissions are nominal, totaling only about 0.02 lbs/round trip within SLO County. Rails cars would not be opened during transit. Emissions associated with unloading of the tank cars, including pumps, pressure relief valves, manifolds, connections, etc, were all included in the EIR and listed in detail in the Air Quality Appendix. Emissions associated with unloading would not occur during transit.</p>
PRO-05	<p>Potential impacts to the state's watersheds were addressed in Section 4.12.4, Water Resources of the RDEIR. The RDEIR found that the risk of a crude oil train accident and spill into watersheds along the rail line was considered a Significant and Unavoidable impact (Class I).</p>
PRO-06	<p>The comment does not identify a specific environmental analysis or CEQA issue relative to the EIR and compliance with CEQA. The commenter's statements about the potential impacts associated with the project are included in the FEIR for the decision-makers' consideration as part of the County's deliberations on the proposed project.</p>
PRO-07	<p>The RDEIR addresses the potential impacts and recommends mitigation measures for the proposed Project consistent with the requirements of CEQA. Section 4.3 (Air Quality and Greenhouse Gases) addresses GHG emissions, criteria air emissions and health risks. The commenter's statement about air issues are included in the FEIR for the decision-makers' consideration as part of the County's deliberations on the proposed project.</p> <p>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</p>

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	<p>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.</p>
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