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Empowering Citizens for Climate Action

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Cool Davis Mission
To inspire our community to reduce greenhouse gas emissions, adapt to a changing climate, & improve the quality of life for all.

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Re: Comments on the SLO Phillips 66 Rail Spur Extension Project

November 23, 2014

Murry Wilson
SLO County Dept. of Planning and Building
San Luis Obispo, CA 93408
P66-railspur-comments@co.slo.ca.us

Dear Mr. Murry Wilson,

Please add our comments to the public record on the Phillips 66 Rail Spur Extension Project which proposes the shipment of crude oil by trains. We understand that proposed route for the trains would pass through the center of Davis.

Cool Davis is a non-profit organization whose mission is to inspire our community to reduce greenhouse gas (ghg) emissions, to adapt to a changing climate, and to improve the quality of life for all! We are concerned that not only do the trains present the danger of spillage and explosions in our area, but also, that our own efforts to mitigate the climate crisis will be compromised or negated by the potential pollution and increased GHG emissions from the proposed trains carrying crude oil through Davis and other cities along the rail route. COOL-01

The impacts of the trains are cumulative as more trains travel on the tracks. Cool Davis has already commented on the Valero Crude-by-Rail Project in Benicia which proposes two trains of 50 cars each per day, seven days a week, traveling to Benicia and back through Davis. The additional trains to Santa Maria refinery and back five days a week means the greenhouse gas (GHG) emissions will be even higher, exacerbating the pollution problems already increased by the Valero trains. The mitigation for the Phillips 66 train emissions must take into account the round trip of the Phillips 66 trains in the larger context of the existing air quality and the compromised air quality in the near future should the Valero project be approved. COOL-02

The climate impacts of Canadian tar sands crude must also be taken into account. At every stage of the mining, transportation, and refining process, 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 greenhouse gas (GHG) emissions and climate disruption. Spills threaten to pollute our waterways and often cannot be cleaned up as the heavy bitumen sinks rapidly to the bottom. The refining process emits sulfur dioxide and other toxic chemicals which can cause serious health problems. The refining process also produces the by-product "petcoke" which is too polluting to be burned in the U.S., though it can be sold for burning in Asia. COOL-03

CEQA addresses impacts for all of California. The REIR for the Phillips 66 project has focused on air quality and GHG emissions from Roseville to San Luis Obispo, saying the routes above Roseville are uncertain. Nonetheless, the REIR provides data on the three northern entry routes, and their GHG emissions are calculated and considered. Similar data is included for the two southern entry routes to Colton. Therefore, total GHG emissions in the state introduced by the Phillips 66 trains can be considered for possible mitigations from each possible entry point where the trains cross the California border.

To be truly complete**, the REIR should consider the full life-cycle impact of the fossil fuel footprint** from the extraction process to the transportation to the final consumption which all contributes to local pollution and to global climate change. Singling out only the greenhouse gas emissions as the train passes through town is a thin slice of the total lifecycle and its impact. CEQA requires a more cumulative and holistic approach.

Under AB32, the California Global Warming Solutions Act, California has chosen a set of goals for greenhouse gas reduction. According to the California Energy Commission, in the last year California significantly reduced its consumption of oil through conservation measures such as more efficient vehicles and more trips by transit, biking and walking. We have proven we can reduce our footprint! Bringing in more crude by any means runs counter to our path to renewable energy and conservation.

COOL-04

If mitigations are called for, generally, they are direct offsets related to local pollution. However, since GHG emissions contribute to global climate changes that affect California communities as well as others around world, the mitigation should also provide global benefits. Cool Davis proposes creative mitigations such as funding to support the transition to electric and hybrid vehicles, including incentives to encourage households to purchase electric vehicles and to encourage multi-family residences to install electric vehicle charging devices for their residents. Another example would be funding to support local government efforts to convert to "complete streets" to encourage more biking and walking. Cool Davis would be happy to work with the project proponents on a list of possible mitigations to effectively reduce GHG emissions to best fit our community, the region, and the world. The mitigations must reduce GHG emissions sufficiently to counterbalance the emissions added to the community by the added daily trains.

As already stated, the sudden and substantial increase in crude-by-rail into our state takes us backwards, increasing our ghg emissions into the atmosphere and slowing our necessary conversion to renewable energy and low-carbon fuels as we confront climate change. **This REIR must examine how the increase in oil trains will affect our state and local climate goals and propose appropriate mitigations if it finds that the incoming crude-by-rail makes it harder to reach those goals.** At stake is a livable climate for all living beings, including our children and their

children. The best mitigation may be to stop importing crude by rail, particularly high carbon-intense and explosive crude, and instead put our efforts into supporting passenger rail and other measures more consistent with a safe climate.

COOL-04 cont

Thank you for taking into account the above concerns regarding greenhouse gas emissions for the Phillips 66 Rail Spur Extension Project. We urge you to reject the REIR and the Phillips 66 Rail Spur Extension Project until the above concerns are addressed in full.

Sincerely,

Bill Heinicke, President of Cool Davis Foundation Board of Directors
Davis, CA
info@cooldavis.org

COOL-01	This comment introduces the signatory of the comment letter and the topic of subsequent comments and therefore does not identify a specific environmental analysis or CEQA issue relative to the EIR and compliance with CEQA. The commenter's concerns about hazards and climate are included in the FEIR for the decision-makers' consideration as part of the County's deliberations on the proposed project.
COOL-02	The additional trains associated with other rail related projects has been addressed in the cumulative section of the RDEIR. See section 3.0, Cumulative Projects, of the RDEIR.
COOL-03	Tar sands produce greater GHG emission intensity primarily in the mining and extraction phases. The refining of tar sands crude is similar to the refining GHG emissions from other heavy crude oils. The additional GHG emissions associated with mining the tar sands, such as steaming or excavations, would occur no matter the destination of the crude oil, whether the crude oil is destined for the SMR, or other locations within the U.S. or world-wide, as is acknowledged in the Keystone Pipeline EIR " The proposed [Keystone Pipeline] Project is not likely to impact the amount of crude oil produced from the oil sands" (Keystone Final EIS, page ES-15) indicating that the crude oil would be produced and refined even without the new pipeline system or the elimination of California refineries to process the crude oil. Refineries are equipped to handle a specific type of crude oil, generally a refinery equipped to handle a heavy crude oil could not switch to a lighter crude oil and efficiently and economically conduct refining. Switching amongst heavy crudes would not substantially change the GHG emissions from a refinery. NETL (2009) conducted studies on a range of crude oils for a wheel-to-tank and wheel-to-wheel GHG lifecycle analysis associated with the Keystone Pipeline FEIS. The majority of differences between tar sands and other heavy crude oils was the Raw Material Acquisition (mining and extraction) stage of the lifecycle process, where the raw material acquisition GHG intensity ranged from 14 to 128 kg CO2e per bbl crude oil acquired, with Canadian Tar Sand at the upper end with 111. Conventional Canadian crude produced 36 kg and the US average produced 24 kg. This is in contrast to the refining stage of the lifecycle process which, between heavier crude oils, was similar. The RDEIR, has evaluated the impacts on GHG emissions associated with the Proposed Project. This has included the GHG emissions associated with construction, operation of the trains, and changes at the SMR due to the processing of tar sands (see Section 4.3, Air Quality and Greenhouse Gases). The RDEIR identified mitigation measures that would require GHG emission reduction credits for all of the project GHG emissions for the life of the project (see AQ-6). With respect to tar sands, it was acknowledged in Impact WR.3 (Section 4.13) that Dilbit crudes will typically submerge in the water column and can be challenging to remediate. Water quality impacts related to a

	mainline railroad spill were concluded to be significant and unavoidable (Class I). The RDEIR evaluated the impacts of processing tar sands oil and the SMR. The impacts to GHG emissions from processing tar sand oil is discussing in impact AQ.6 (see Section 4.3, Air Quality and Greenhouse Gas Emissions). The SMR is somewhat unique for a refinery in California since it does not produced any finished motor grade fuels. The refinery was designed to process the heavy sour crude from the Santa Maria Basin and the Santa Barbara OCS into intermediate products (naphtha and gas oils). As such the refinery does not have any processing equipment that adds hydrogen to the heavier oil components. Many of the heavy crudes currently processed by the SMR are similar to dilbit crudes. This can be seen by reviewing the crude data provided in the Table 4.3.13 of the RDEIR. The SMR does not have processes that combust the crude so emissions of sulfur dioxide from burning of the tar sands would not be an issue. The SMR does produce petroleum coke as a byproduct of the refining process, and the air emissions associated with the storage of this coke is discussed in Section 4.3. The percentage of vacuum resid is a measure of the amount of coke that could be produced at the refinery. Coke generated at the refinery is transported from the refinery via truck and rail. Increasing levels of vacuum resid would result in increased trucking and rail transport from the refinery. As shown in Table 4.3.13 the expected percentage of vacuum resid would remain about the same as the current operations. Therefore, coke production would not be expected to increase over current operations with the implementation of the Rail Spur Project changes in crude. The coke produced at the SMR is stored in piles prior to being loading on to trucks or rail cars. As specified in the Memorandum of Agreement for Coke and Sulfur Storage and Handling Plan, dated May 11, 2011, the coke piles must be kept moist to prevent any dust.
COOL-04	GHG emissions within California have been quantified in the EIR for different train routes. GHG emissions related to the extraction of the tar sands would occur regardless of the status of this project. In addition, the demand for gasoline and diesel fuels is independent of the status of this project and would not change if this project is approved or not approved. GHG emissions from these sources would therefore be the same regardless of the status of the project.