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Review of the Recirculated Draft Environmental Impact Report
For the Phillips 66 Company Rail Spur Extension Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Environmental Impact Report (Final EIR) as appropriate.

The proposed Project will modify the existing rail spur currently on the southwest side of the Santa Maria Refinery (SMR) and build and operate a crude oil rail unloading facility. The Project would include an eastward extension of the existing rail spur, a railcar crude oil unloading facility, and associated above-ground pipelines. Trains would deliver crude oil to the SMR for processing. The unloaded material would be transferred from the proposed unloading facility to existing crude-oil storage tanks via a new on-site above-ground pipeline. The proposed tracks and unloading facilities would be designed to accommodate unit trains and manifest trains. Trains traveling to the Refinery could come from the north or the south using the Union Pacific Rail Road (UPRR) coastal track. From the south, the trains would travel into California and then to the Colton railyard where they would then proceed to the Project site.

Based on our review, SCAQMD staff has concerns with the analysis and the mitigation measures contained in the Recirculated Draft Environmental Impact Report (RDEIR).

Availability of RDEIR for SCAQMD Staff Review

1. Although a portion of the mainline that will be used by trains serving this Project will travel through the SCAQMD's jurisdiction, the CEQA documents for this Project were not provided to SCAQMD staff for review. SCAQMD staff only became aware of the RDEIR on November 19, three business days before the written comments were due. In the future, CEQA documents for all Projects which will result in emissions of criteria pollutants or toxic air contaminants within SCAQMD jurisdiction should be provided to SCAQMD staff in a timely manner to allow for our review and comment. SCAQMD-01

2. Electronic versions of all air quality modeling and health risk assessment files were not made available to the public for review. The RDEIR contained emissions calculations, and a health risk assessment with modeled impacts. However, without electronic input files and supporting air quality documentation, SCAQMD staff was unable to complete our review of the air quality analysis. SCAQMD-02

Project's Emissions within the South Coast Air Basin (SCAB)

3. In Chapter 4, the Project's rail emissions are broken up into mainline rail emissions (Table 4.3.18) and mainline rail emissions past the Roseville and Colton railyards (Table 4.3.19). By breaking up the Project's emissions into two tables, the RDEIR is misleading as to the actual total impacts of the Project in each Air District. The Final EIR should include a table which adds the impacts from Tables 4.3.18 and 4.3.19 for each Air District and compare those emissions to the appropriate thresholds. SCAQMD-03

4. The SCAQMD has also developed both regional and localized significance thresholds. In the RDEIR, the Lead Agency has correctly identified the SCAQMD's regional significance thresholds, however, the RDEIR did not include an analysis of the Project's localized impacts in the SCAB. The SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). SCAQMD staff recommends that the lead agency perform a localized analysis utilizing dispersion modeling in the Final EIR. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. SCAQMD-04

Mitigated Project Emissions

5. A comparison of the unmitigated and mitigated Project emissions shows that a 90% reduction was applied to the unmitigated emissions. It is unclear how the 90% emission reduction from the unmitigated emission scenario was achieved. SCAQMD staff recommends that the Lead Agency include more information regarding the Project's commitments to ensure that the 90% emission reduction will be achieved. SCAQMD-05

6. In the RDEIR, the Lead Agency states that "EPA has estimated that by 2041 the average nationwide emission factors for mainline locomotives would meet the Tier 4 standards" and that "use of all Tier 4 locomotives would provide about a 92 percent and 96 percent reduction in switching ROG+NOx and DPM emissions, respectively." According to the Project description and construction schedule, the Project will be operational as early as 2016. Therefore, given the exceedance of regional CEQA thresholds, the Project should include mitigation measures which will reduce impacts between 2016 and 2041. Furthermore, the Project cannot take credit for the emissions reduction which will occur as a result of existing regulations and the emissions reductions should be described in detail to show the emissions reductions as a result of Project mitigation measures and those anticipated by current regulations. SCAQMD-06

Mitigation Measures

7. In AQ-2b, the Lead Agency proposes to limit on-site idling to no more than 15 minutes. It is unclear if this idling restriction is the same as the California Air Resources Board (CARB) idling rule or how this mitigation measure is more stringent than the existing regulation. Since the Project cannot consider compliance with existing rules as Project mitigation, the Lead Agency should include more information on this mitigation measure to show that it is more stringent than current requirements and provide more information on what scenarios would qualify as "safety purposes", when this idling limit would not apply. SCAQMD-07

8. Given that trains serving this Project will be travelling from the Colton railyard to the Project site, this mitigation measure should be expanded to include off-site idling at other railyard locations. SCAQMD-08

9. In AQ-3, the Lead Agency states that "if the mainline rail emissions of ROG+NOx and DPM with the above mitigations still exceed the applicable Air District thresholds, the Applicant shall secure emission reductions in ROG + NOx and DPM emissions within each applicable Air District". Given that this Project will affect multiple Air Districts, more information needs to be provided, such as how the emissions will be estimated, will the Air Districts be consulted to review the emissions estimates, and what are the Air District thresholds which will be used. The Lead Agency should include this information in the Final EIR. SCAQMD-09

10. SCAQMD staff recommends that initially, the Project applicant should attempt to reduce the Project's impacts at the source of emissions. If the Project applicant has exhausted all possible source-specific mitigation measures, then mitigation measures to reduce impacts in the vicinity of the Project can be applied. The use of emission reduction credits are a final alternative, after exhausting all other mitigation possibilities. The limitation of emission reduction credits is that although the Project's regional impacts are reduced, the Project's localized impacts might not. Therefore, it is important for the Project applicant to demonstrate that the Project's regional and localized impacts will be mitigated. SCAQMD-10

Health Risk Assessment (HRA) and Diesel Particulate Matter (DPM)

11. The HRA prepared for the Project did not include health risks from DPM emissions along the mainline. The Final EIR should include a HRA which addresses the health risks to sensitive receptors located along the mainline rail which will be used by the Project. SCAQMD-11

12. Currently, SCAQMD does not have emission reduction credits for DPM. Therefore, additional mitigation measures, such as a limit on locomotive idling should be applied to trains during their travel time in the SCAB. SCAQMD-12

13. According to the CARB's Railyard HRA for the Colton yard, the cancer risk to residents in the area is 150 per million. The Project will increase the number of SCAQMD-13

trains through the Colton railyard and the increased health risks from those DPM emissions. The Final EIR should contain a HRA disclosing the increased health risks caused by the Project. SCAQMD-13 cont

Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. All electronic files used in emissions calculations and the HRA in the Final EIR should also be provided to SCAQMD staff. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact me at (909) 396-3176, if you have any questions regarding the enclosed comments. SCAQMD-14

Sincerely,

Jillian Baker

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SLO141119-02
Control Number

SN:JB

SCAQMD-01	A notice of availability of the RDEIR was sent to Mr. Barry R. Wallerstein, Executive Director, 21865 Copley Drive, Diamond Bar, CA 91765 on October 10, 2014.
SCAQMD-02	The technical appendices contained all of the emissions calculations and air modeling files. All the electronic versions of the air emission spreadsheets and modeling files were available from the County by request as part of the administrative record.
SCAQMD-03	As described in the EIR section 2, Project Description, section 2.5.1, that train activities beyond these rail yard locations were determined to be speculative since the trains could travel a number of different routes. However, the RDEIR did evaluate the air quality impacts beyond these rail yards, including the addition of the health risk of significant impacts in Table 4.3.22. Health risks were updated to include all emissions in the SCAQMD, even those that would occur beyond the Colton rail yard. Note that the health risks assume that all rail activity would take the prescribed routes. In practice, some trains would go north and some south, thereby reducing the health risks in each district due to fewer actual trains. Impacts were found to be significant.
SCAQMD-04	The only emissions that would occur within the SCAQMD are emissions from train locomotives, or mobile sources. All sources that occur as stationary or onsite sources occur within SLO County and would not impact the SCAQMD. As per the SCAQMD localized guidance, "The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways" (page - preface), and "Off-site mobile emissions from the project should NOT be included in the emissions compared to the LSTs". Mobile emissions would pass by a receptor quickly, with a mile long train traveling past a receptor in less than 90 seconds, which is a very short duration exposure. OEHHA exposure averaging time for acute RELs is 1 hour. Impact AQ.5 (see Section 4.3, Air Quality and Greenhouse Gases) presents an analysis of the impacts for cancer with 250 trains per year visiting the SMR.
SCAQMD-05	The use of Tier 4 locomotives provides for a large reduction in emissions, as discussed in Impact AQ.2 (see Section 4.3, Air Quality and Greenhouse Gases) "Use of all Tier 4 locomotives would provide about a 92 percent and 96 percent reduction in switching ROG+NO_x and DPM emissions, respectively". The air quality appendix provides the UPRR average tier mix emission factors as well as the tier 4 emission factors, as available from the EPA.
SCAQMD-06	The current regulations for locomotives require a reduction in emissions and a phasing in of the Tier locomotives over time. As locomotives are infrequently rebuilt or replaced, the EPA estimates that it would take until 2041 for most locomotives to be operating at a Tier 4 level. For current emissions estimates for criteria pollutants, the EIR assumes that the emissions are occurring as per the UPRR current mix of locomotives and does not use the phase-in values over

	the project life. No credit is taken for future reductions for criteria pollutants. The same is applied for acute and chronic impacts associated with the health risk assessment. Current locomotive emission factors are used for chronic and acute impacts. However, for cancer impacts, the phase-in of the higher tier locomotives is included as it is a regulatory certainty, similar to how automobile emissions are calculated within EMFAC and the CalEEMod model. The EIR uses the same approach for locomotive cancer risks. For mitigation, the EIR assumes the application of Tier 4 locomotives in 2015. Project emissions and mitigated emissions are quantified in the air quality appendix.
SCAQMD-07	The CARB agreement through the Statewide Rail Yard Agreement between CARB, UPRR, and BNSF is not a regulatory requirement and hence there is no certainty that it will be implemented. Longer term regulations by the EPA would have idling restrictions, but the mitigation in the EIR attempts to accelerate the implementation of these measures in order to reduce emissions on a faster timescale.
SCAQMD-08	The unit trains would not be switched or broken apart at other rail yards and therefore idling restrictions in other areas would not be applicable.
SCAQMD-09	Additional requirements have been added to mitigation measure AQ.3 (see Section 4.3, Air Quality and Greenhouse Gases) to require a mitigation plan by the Applicant providing information to ensure that credits or offsets are available on an annual basis and providing emissions estimates based on actual activity and locomotive types for each year.
SCAQMD-10	Mitigation measures related to AQ.2 and AQ.3 (see Section 4.3, Air Quality and Greenhouse Gases) state that "If emissions of ROG+NO_x and DPM with the above mitigations [onsite or Tier 4 locomotives] still exceed the thresholds..." indicating that the preference is for the use of onsite or Tier 4 locomotives over credits.
SCAQMD-11	Impact AQ.5 (see Section 4.3, Air Quality and Greenhouse Gases) includes an analysis of DPM cancer risks along the mainline based on train speed and distance from the mainline tracks. See Appendix B.2. An HRA for all communities along the entire potential routes would be prohibitively complex and would not render additional information that could mitigate or lessen the significant and unavoidable impacts and was therefore not conducted.
SCAQMD-12	Emission reduction credits for DPM have been removed from the mitigation measures under impact AQ.2 (see Section 4.3, Air Quality and Greenhouse Gases), although it has been left in for AQ.3 as some Districts may have programs that could be used to reduce DPM emissions in the area. Note that DPM impacts are determined to be significant and unavoidable for SLOC, which has thresholds for DPM emissions.
SCAQMD-13	Impact AQ.5 (see Section 4.3, Air Quality and Greenhouse Gases) includes an

	analysis of DPM cancer risks along the mainline based on train speed and distance from the mainline tracks. The unit trains would not be utilizing the Colton rail yard for switching or train movements and would therefore not contribute to cancer risks beyond those identified under impact AQ.5.
SCAQMD-14	The County will provide written responses to the SCAQMD comments consistent with the requirements of Public Resources Code Section 21092.5. The County will provide the electronic files for the air emission calculations and HRA modeling to the SCAQMD along with a CD of the FEIR and responses to all the comments.