



January 27, 2014

Via Email

(p66-railspur-comments@co.slo.ca.us)



San Luis Obispo County Department
of Planning and Building
Murry Wilson
976 Osos Street, Room 200
San Luis Obispo, CA 93408



RE: Comments to the Draft Environmental Impact Report (“DEIR”) for the Phillips 66 Company Rail Spur Extension Project (“Project”)

Dear Mr. Wilson,

The Santa Maria facility is the “front end” of the Phillips 66 San Francisco Refinery (“SFR”). The facility performs severe processing of oil streams that are then piped to the SFR’s Rodeo facility to make into profitable engine fuels. This rail expansion allows the company to get tar sands “dilbit” oils that its throughput increase allows it to convert into engine fuel feedstocks for the Rodeo facility, where a liquefied petroleum gas expansion requires this change in oil processing, and allows some resultant byproducts, otherwise uneconomic to dispose, to be recovered and sold. These interdependent activities could switch the SFR to refining tar sands oil. Phillips 66 discloses this to investors. Its environmental review does not—thereby hiding serious local pollution, climate pollution and chemical safety hazards from the public and its own workers. Accordingly, on behalf of Communities for a Better Environment, the Sierra Club, the Center for Biological Diversity, the Natural Resources Defense Council, Food and Water Watch, San Francisco Baykeeper, and the California Nurses Association, we respectfully submit this comment seeking an adequate environmental review of the Project.

Communities for a Better Environment (“CBE”) is a California nonprofit environmental health and justice organization with offices in Oakland and Huntington Park. CBE has extensive organizational experience in protecting and enhancing the environment and public health by reducing pollution and minimizing hazards from refinery operations.

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Sierra Club is a national nonprofit organization of over one million members and supporters dedicated to exploring, enjoying and protecting the wild places of the earth; practicing and promoting responsible use of the earth's ecosystems and resources; educating and enlisting humanity to protect and restore the quality of the natural and human environment; and using all lawful means to carry out these objectives. Sierra Club's Beyond Oil Campaign works to stem our nation's dependence on oil and to secure protections for communities and ecosystems from the significant toxic and global warming pollution emitted by oil development, including prevention of oil spills and other catastrophic events and pollution emissions that result from transporting extreme forms of oil by rail. Sierra Club has more than 143,000 members in the State of California who want to ensure that California's treasured landscape and coastline through which oil would be transported by rail are protected into the future.

The Natural Resources Defense Council ("NRDC") is a national environmental organization with over 1.4 million members and online activists. NRDC's mission is to safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends.

The Center for Biological Diversity ("Center") is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 675,000 members and e-activists throughout California and the western United States, including members that live and/or visit the vicinity of the proposed project. These comments are submitted on behalf of our board, staff and members.

Food & Water Watch works to ensure the food, water and fish we consume is safe, accessible and sustainably produced. So we can all enjoy and trust in what we eat and drink, we help people take charge of where their food comes from, keep clean, affordable, public tap water flowing freely to our homes, protect the environmental quality of oceans, force government to do its job protecting citizens, and educate about the importance of keeping the global commons — our shared resources — under public control.

San Francisco Baykeeper works to reverse the environmental degradation of the past and promote new strategies and policies to protect the water quality of the San Francisco Bay. For two decades, Baykeeper has been the premiere watchdog of the water quality of San Francisco Bay.

California Nurses Association ("CNA"), founded in 1903 is the largest all nurse union in the United States. CNA successfully fought for the first and only statewide law mandating minimum nurse-to-patient ratios in California which saved thousands of lives, among many other laws making hospitals safer for patients. CNA is currently involved in national campaigns to bring economic and political justice and a safe environment in addition to its mainstay of fighting for healthcare justice, and the best nurse contracts in the United States.

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As set forth below in the attached report of Phyllis Fox, Ph.D., PE (“Fox Santa Maria Report”), and in the attached exhibits, the DEIR suffers from numerous deficiencies that render it inadequate under the California Environmental Quality Act¹ (“CEQA”) and the CEQA Guidelines² (“CEQA Guidelines”). We respectfully request that the County reject the DEIR as an environmental review document, and defer approval of the Project until such time as the DEIR is revised to comply with CEQA.

An EIR is “the heart of CEQA.”³ “The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.”⁴ The EIR “is an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended ‘to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.’ Because the EIR must be certified or rejected by public officials, it is a document of accountability.”⁵ The DEIR for the proposed Project not only fails entirely to live up to this mandate, but also tramples principles of Environmental Justice.

The DEIR suffers from several inadequacies predicated on two fundamental defects. First, the DEIR fails to disclose the specific quality of oil feedstock that the Project would enable Phillips 66 to process at its Santa Maria facility in relation to that of its current baseline feedstock. The DEIR obscures that the Project will allow the company to partially refine tar sands crude in Santa Maria. Second, the DEIR illegally piecemeals this Project. The DEIR fails to properly acknowledge the inextricable link between this Project and other projects, in particular masking the identity of the “San Francisco Refinery,” which is comprised of this Santa Maria facility and its interdependent partner facility in Rodeo, California. Consequently, the DEIR fails to:

- (1) provide a stable, accurate and detailed project description, thus undermining every aspect of the impacts analysis;
- (2) accurately evaluate numerous Project impacts, including air quality, greenhouse gas emissions, public health and safety, and biological resources;
- (3) provide sufficient analysis of cumulative impacts; and
- (4) adopt feasible mitigation measures.

Attached Exhibits 1 through 26 support this comment. For these and other reasons detailed herein, the DEIR is inadequate under CEQA. The County must revise the DEIR and recirculate it for public comment.

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¹ Pub. Res. Code § 21000 *et seq.*

² 14 Cal. Code Regs. § 15000 *et seq.*

³ *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 392 (“*Laurel Heights I*”).

⁴ Pub. Res. Code § 21061

⁵ *Laurel Heights I*, 47 Cal. 3d at 392 (citations omitted).

I. THE EIR'S PROJECT DESCRIPTION IS INADEQUATE.

In order for an environmental document to adequately evaluate the environmental ramifications of a project, it must first provide a comprehensive description of the project itself. “An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.”⁶ As a result, courts have found that, even if an EIR is adequate in all other respects, the use of a “truncated project concept” violates CEQA and mandates the conclusion that the lead agency did not proceed in a manner required by law.⁷

Furthermore, “[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity.”⁸ Thus, an inaccurate or incomplete project description renders the analysis of significant environmental impacts inherently unreliable. While extensive detail is not necessary, the law mandates that EIRs should describe proposed projects with sufficient detail and accuracy to permit informed decision-making.⁹ The EIR's Project Description fails to meet this standard in three respects: first, it fails to disclose a change to a different, perhaps even lower, quality crude feedstock; second, it illegally piecemeals this Project from Phillips 66's greater project to import “advantaged crude”; and third, it fails to estimate and analyze impacts from the project's duration.

A. The Project Description Fails to Disclose a Change to a Different Quality Crude Feedstock.

This Project will enable Phillips 66 to import and process tar sands crudes at Santa Maria. Yet, the DEIR fails to disclose this fundamental Project characteristic and consequently fails to analyze any associated and evidently significant impacts. The failure to disclose the type and chemical composition of the new crude oils and their resultant potential impacts is a “threshold issue” and “fundamental defect” in environmental review.¹⁰

Phillips 66 is currently in the process of implementing a series of projects to allow a switch to refining what its management calls, “advantaged crude.” The company emphasizes: “(the) opportunity that we have...is to get...Canadian crudes down into California... We're looking at rail to barge to ship, down to the West Coast refineries...”¹¹ In May 2013, Phillips 66 EVP Tim Taylor stated in response to a question on bringing heavy Canadian crude oil into California: “Today, we are doing some barge movements down the coast into California on heavy Canadian. You can look in the Northwest to do that. So that's an option that we're going to continue to use and we're looking at expanding that opportunity with some of the logistics things we're putting in place. We're also continuing to move crude by rail in smaller amounts into

⁶ *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal. App. 4th 713, 730, quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 185, 193.

⁷ *Id.* at 730.

⁸ *Id.* (citation omitted).

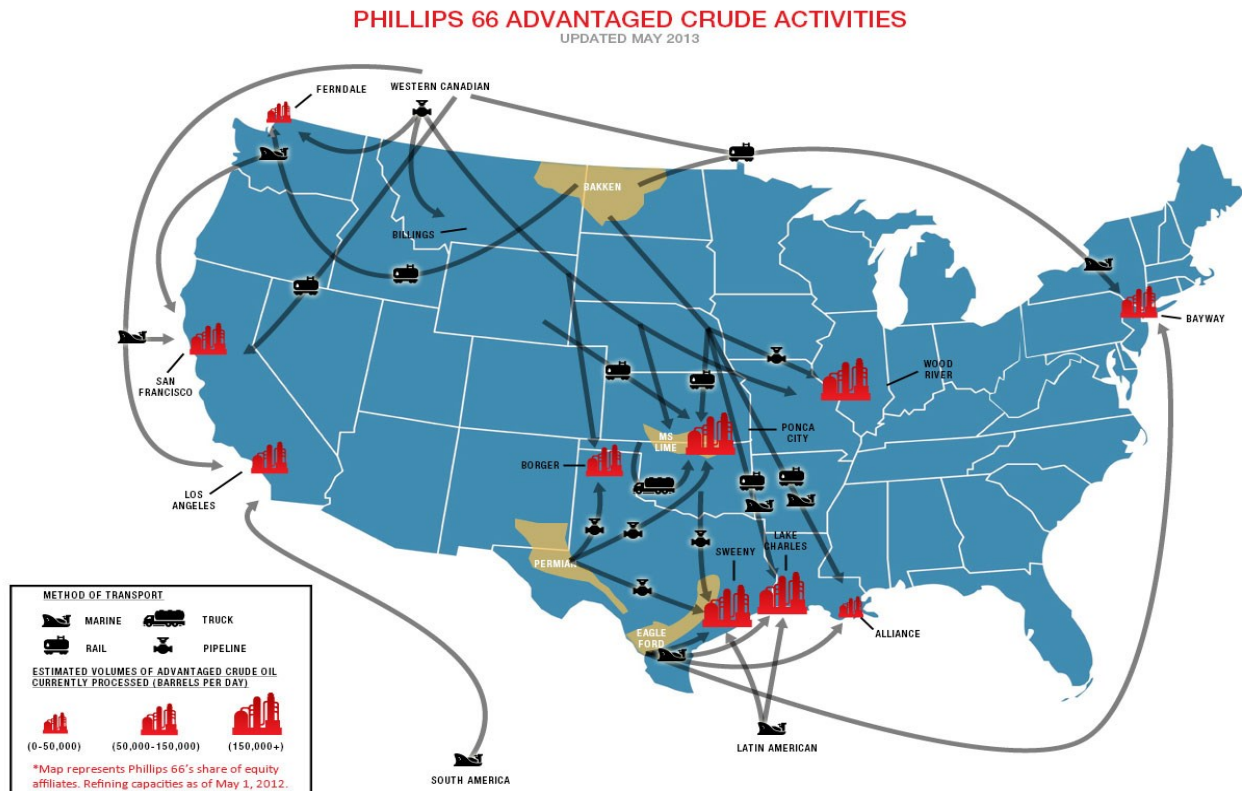
⁹ See CEQA Guidelines, §15124 (requirements of an EIR).

¹⁰ See eg. Exhibit 25.

¹¹ September 12, 2013 Transcript, pdf 7: Available at:

http://www.phillips66.com/EN/investor/presentations_ccalls/Documents/Barclays_091213_Final.pdf, last accessed January 17, 2014.

California and looking at projects really to increase that as well.”¹² These heavy Canadian crudes include tar sands crudes.¹³ The map immediately below details this strategy.



Phillips 66 map indicating plans to transport Western Canadian crude oil to San Francisco Refinery.¹⁴ Notice that the icon labeled “San Francisco” identifies the San Francisco Refinery, which includes the Santa Maria facility.

These tar sands crudes are cost-advantaged because they are more difficult to process, and, especially in the case of Canadian-sourced oils, they are stranded, with no pipeline access, and must be delivered by rail.¹⁵ Phillips 66 is further incentivized to seek out tar sands blends produced by its own affiliates.¹⁶ In addition, the company has no choice but to seek such an alternative supply of crude oil feedstock. As the DEIR indicates, since 1986, California has steadily faced a declining supply of crude oil.¹⁷ This is particularly the case for the Santa Maria facility and the declining supply in Santa Barbara County.¹⁸ This decline in locally available crude stands in stark contrast to the Santa Maria facility’s recent Throughput Expansion that

¹² May 31, 2013 Transcript, pdf 13, Available at: http://www.phillips66.com/EN/investor/presentations_ccalls/Documents/PSX-Transcript-2013-05-01.pdf.

¹³ See Fox Rodeo Report at 9.

¹⁴ Phillips 66 Advantaged Crude Activities: Updated May 2013, last accessed Jan 22, 2014, available at: <http://www.phillips66.com/EN/Advantaged%20Crude/index.htm>.

¹⁵ Fox Rodeo Report at 9.

¹⁶ See Canadian Crude Monitoring Program (www.crudemonitor.ca): Christina Dilbit Blend (“produced at the jointly owned Cenovus Energy Inc. and ConocoPhillips Christina Lake SAGD facility”); and Surmont Heavy Blend (50% owned, and operated by, Conoco Phillips Canada).

¹⁷ DEIR at 6-3; see also Karras Rodeo Report.

¹⁸ *Id.* at 2-27 – 2-30.

enables the Santa Maria facility to process more crude oil. This inconsistency, coupled with the company's publicly stated intention, highlights the company's anticipation to develop a new crude source. Because the Santa Maria facility is currently not equipped to take on the delivery of large amounts of crude by rail, this Project's rail spur is necessary to complete that switch.

Although the DEIR admits that the Project goal is to access a, "full range of competitively priced crude oil,"¹⁹ its analysis attempts to shift the reader's eye to the lighter end of the spectrum of "advantaged crude." Indeed, in spite of the clear indications that Phillips 66 has every intention of bringing down heavy, Western Canadian crudes, including tar sands oils, the DEIR unnecessarily harps on but one type of advantaged crude: Bakken, which is sourced from North Dakota and classified as a "lighter" crude oil feedstock. Although the transport, storage and refining of Bakken poses significant environmental impacts, the source generally contrasts with heavier tar sands crude. Both the DEIR's Introduction and Executive Summary note that the most likely sources of crude would be, "the Bakken field in North Dakota or Canada." The DEIR continues to either cite Bakken solely as an example of crude source, or adds the legally indispensable "and/or Canadian crude" following any reference to North Dakota Bakken.²⁰ However, the DEIR notes that the Santa Maria facility mainly processes heavy, high-sulfur crude oil.²¹

Bakken Crude is an Unlikely Feedstock for the Santa Maria Refinery

In reality, the Santa Maria facility cannot even handle a lighter crude, such as North Dakota Bakken, for the following three reasons. First, the Project notes that the Santa Maria facility uses two Delayed Coking Units to remove the heavier components from the feedstock.²² Refining of Bakken does not require coking and would idle Santa Maria's cokers; it would however, require a significant modification and capital investment in most of the existing refining equipment that the DEIR does not disclose.²³ Second, the remaining gases produced in the Delayed Coking Units are sent to amine units sized for the removal of hydrogen sulfide (H₂S), prevalent in heavier crudes, including tar sands.²⁴ There is little or no H₂S in Bakken. These process capabilities are, thus, unnecessary to refine Bakken; yet, necessary to refine tar sands crude.²⁵ Third, the size of the unit cars described in this Project is not suitable for the transport of Bakken. If the project proponent's true intent was to solely bring in Bakken sourced crudes, there would be no need for cars the size of what is described in the DEIR. The DEIR should have disclosed the proper purpose of these three project components.

Moreover, changes in the type and amount of semi-refined products sent to Rodeo would result in changes in emissions at Rodeo.²⁶ The DEIR does not disclose any changes in emissions at the Santa Maria or Rodeo Refineries from processing the rail-imported crude. This omission

¹⁹ DEIR at 2-1.

²⁰ See eg. DEIR at ES-3, 2-21, 4.12-21, 2-26. The Project's stated goal is to access competitively priced crude oil from, "North America," which would certainly not preclude Canadian tar sands oils.

²¹ DEIR at 2-3.

²² DEIR at 2-28.

²³ See Fox Santa Maria Report at 10.

²⁴ *Id.*

²⁵ *Id.* at 7-10.

²⁶ *Id.*

either eliminates Bakken as the major crude import, pointing to a heavy, higher sulfur crude, such as tar sands, or renders the DEIR deficient for failing to analyze the impacts of the crude switch.²⁷

The distinction in crude oil feedstock matters. The chemical composition of raw materials that are processed by a refinery directly affect the amount and composition of the refinery's emissions.

The amount and composition of sulfur in the crude slate, for example, ultimately determines the amount of [sulfur dioxide] that will be emitted from every fired source in the refinery and the amount of odiferous hydrogen sulfide and mercaptans that will be emitted from tanks, pumps, valves, and fittings. The composition of the crude slate establishes the CEQA baseline against which impacts must be measured.²⁸

Other significant impacts, such as increased energy consumption, air emissions, toxic pollutant releases, flaring and catastrophic incident risks, are also entirely dependent on the quality of crude oil processed at the facility.²⁹ As detailed further below, a heavier crude oil feedstock has also been identified as a contributing factor to potentially catastrophic incidents at refineries, and a root cause of the August 6, 2012 fire at the Chevron Richmond Refinery.³⁰

Consequently, the DEIR's omission of this switch to a very different crude oil feedstock violates CEQA.³¹ It is impossible to provide any intelligent evaluation of the potential environmental effects and risks to community and worker health and safety of partially refining Canadian tar sands crudes in Santa Maria, unless the DEIR *first* discloses this critical component of the Project.³² At a minimum, the DEIR should have established whether this Project would result in the company's use of a different or lower quality crude oil feedstock, whether in Santa Maria or any foreseeable location, such as Rodeo, and evaluated such consequent impacts.³³ Until then, the DEIR Project Description is inaccurate, incomplete and renders the analysis of significant environmental impacts inherently unreliable.³⁴

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²⁷ *Id.*

²⁸ Fox Rodeo Report at 13.

²⁹ See Fox Rodeo Report, Fox Valero Report and Karras Rodeo Report at 11-13.

³⁰ See Chemical Safety Board Interim Report on Chevron Fire, dated 19 April 2013.

³¹ See *Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1355 ("the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process").

³² See *Id.*, see also, *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4 70, 89 (holding that an EIR is insufficient where it obscures the project's enabling of a refinery to process heavier crude).

³³ *Id.*

³⁴ *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722 (the failure to include relevant information relating to a project's components precludes informed decision making, thwarting the goals of the EIR).

B. The Project Is Piecemealed.

CEQA requires that an EIR describe the entirety of a project, including reasonably foreseeable future actions that are part of it.³⁵ While an EIR need not include speculation about future environmental consequences of a project, the “EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effect.”³⁶ Under this standard, “the facts of each case will determine whether and to what extent an EIR must analyze future expansion or other action.”³⁷ A project proponent must analyze future expansion and other such action in an EIR if there is “telling evidence” that the agency has either made decisions or formulated reasonably definite proposals as to such future activities.³⁸ Further, there must be discussion “in at least general terms” of the future activity, even if the project is contingent on uncertain occurrences.³⁹

Phillips 66 San Francisco Refinery

As a threshold issue, the County should note that the Phillips 66’s San Francisco Refinery consists of two facilities linked by a 200-mile Phillips-owned pipeline. The Santa Maria facility is located in Arroyo Grande, in San Luis Obispo County, while the Rodeo facility is located in Rodeo, in Contra Costa County. As the DEIR notes, “the Santa Maria Refinery and the Rodeo Refinery, linked by the company’s own pipeline, comprise the San Francisco Refinery...Semi-refined liquid products from the Santa Maria Refinery are sent by pipeline to the Rodeo Refinery for upgrading into finished petroleum products.”⁴⁰ The refining processes at Phillips 66’s Santa Maria and Rodeo facilities are integrated to a capacity that neither can achieve alone.⁴¹ Further, Phillips 66 reports these two facilities as a single processing entity, the San Francisco Refinery, to industry and government monitors.⁴²

In order for Phillips 66 to implement its “advantaged crude” strategy for the San Francisco Refinery, it requires three pieces: the Santa Maria Refinery Throughput Increase Project, the Rodeo Refinery Propane Fuel Recovery Project, and this Project. Imports of heavy Canadian tar sands are facilitated by the Throughput Increase project. Components of the Rodeo Propane Fuel Recovery Project potentially lock the Rodeo Refinery into a change in oil feedstock processing, most likely tar sands “dilbit” processing.⁴³ That lower quality feedstock, gas oils and naphtha, is produced at Santa Maria and sent to Rodeo by pipeline.⁴⁴ However, the

³⁵ CEQA Guidelines § 15378(a).

³⁶ *Laurel Heights I*, 47 Cal. 3d at 394-396.

³⁷ *Id.* at 396.

³⁸ *Id.* at 396-397.

³⁹ *Id.* at 398.

⁴⁰ DEIR at 2-3.

⁴¹ See Karras Rodeo Report (Exhibits 21 through 24). *Oil & Gas Journal*, 2012; and EIA Ref. Cap. 2013. See also orders R2-2011-0027 and R3- 2007-0002. Comparing the references shows “Rodeo” capacities reported to EIA include the Santa Maria facility.

⁴² *Id.*

⁴³ See Karras and Fox Rodeo Reports.

⁴⁴ *Id.* and DEIR at 2-29.

Santa Maria facility currently lacks the rail spur required to unload any rail-imported crude to initiate this piecemealed strategy and switch to refining tar sands crude.

(i) The Prior Throughput Expansion is Dependent on this Project.

The DEIR's assertions that the throughput expansion project is unrelated and not dependent on the Rail Spur Project are misleading and incorrect.⁴⁵ This Project wholly supports the throughput expansion. A review of the current baseline for refining at the Santa Maria facility shows that the facility is presently operating far below capacity on declining local crude supplies,⁴⁶ calling into question any initial need to increase throughput capacity.

Notably, one of the key purposes of this Project is to build the infrastructure to allow crude oil to be imported from distant sources to replace declining local crude oil sources and facilitate a 10% increase in crude throughput, separately permitted. The company's stated intent, noted above, to switch to "advantaged crudes," explains this apparent contradiction. The Santa Maria throughput increase project increases, "...the volume of products leaving the Santa Maria facility for the Rodeo Refinery via pipeline."⁴⁷ Nevertheless, the DEIR still maintains that, "the ability of the Santa Maria Refinery to operate at the maximum approved throughput level is based on the existing infrastructure and is not dependent on, or related to, the Rail Spur Project."⁴⁸ Yet, the DEIR then admits that, "the only sources of crude oil to meet refinery crude oil demand are from California production, Alaska production, [or] other North American Production that is delivered by truck or rail."⁴⁹ This begs the simple question: if local supply is declining, leaving imports, or advantaged North American crudes by "truck or rail," as the only feasible option, how can the Santa Maria Refinery operate at the maximum capacity, when it currently operates below capacity, independent of rail assisted imports? Trucking in crude is expensive. There is simply no way for the Santa Maria facility to obtain enough crude oil feedstock for its throughput expansion economically without any crude imports by rail, implicating this Project's rail spur extension. The need for this Rail Spur Project was, therefore, wholly foreseeable at the inception of the Throughput Increase Project.

Furthermore, the DEIR overlaps with the Throughput Expansion explicitly in two regards. First, the evaluation of transport risks associated with this project cites not only to the same analysis performed in the Throughput Increase Project EIR, but that actual EIR itself.⁵⁰ Second, the inclusion of the Vertical Coastal Access component is particularly telling. As a condition of approval of the Throughput Increase Project, Phillips 66 was required to provide a vertical public right of coastal access at the Santa Maria facility.⁵¹ The company provides a detailed discussion of this requirement in this Project's DEIR. The Vertical Coastal Access requirement intersects with this Project. For instance, the DEIR recommends a quantitative risk assessment to determine the minimum distance the coastal access route should be located.⁵²

⁴⁵ See eg. DEIR at 2-29.

⁴⁶ Fox Santa Maria Report at 3.

⁴⁷ See Fox Rodeo Report at 6, citing Throuput Project DEIR at ES-4, 2-25.

⁴⁸ DEIR at ES-18.

⁴⁹ DEIR at 6-3.

⁵⁰ DEIR at 4.7-38.

⁵¹ See DEIR at ES-12.

⁵² DEIR at ES-16.

Evidently, the public must also be protected from the rail transport of hazardous materials, as well as the facility partial refining and storage of those same hazardous materials. Not only was the need for the rail spur clearly foreseeable at the time of the throughput expansion, but the linked projects also implicate greater and significant environmental impacts of transporting and handling tar sands crude. The two projects are piecemealed and integral to this greater design. Specifically, this Project will allow an increase in crude processing of up to 10,921 BPD.⁵³ The DEIR did not, but must, analyze all of the impacts of this increase in crude throughput processing capacity, including the increase in emission of processing an additional 10,921 BPD of crude and the increase in emissions of a change in the crude slate itself. The DEIR analyzes none of the impacts associated with a 10,921 BPD increase in crude throughput or the change in crude slate.

(ii) The Phillips 66 Rodeo Refinery is Dependent on this Project.

These two Santa Maria projects, the Throughput Increase and Rail Spur, are intricately related to the propane/butane recovery project currently proposed at the company's Rodeo Refinery. The Rodeo project recovers propane and butane from the refining of crude oil at both Rodeo and Santa Maria.⁵⁴ The throughput increase at Santa Maria would necessarily be included in the streams from which propane and propane/butane would be recovered at the Rodeo Refinery and this increase would have been anticipated when the propane/butane project was being planned as the Land Use Application for the Santa Maria throughput increase project was filed in 2008, well in advance of the propane/butane project at Rodeo.⁵⁵ This increase would be converted into semi-refined products in the Santa Maria facility's distillation units and coker to yield gas oil and naphtha, which would be sent to the Rodeo Refinery, where propane and butane would be separated, contributing to the propane/butane slated for recovery by the Rodeo Project.⁵⁶

This Project would then allow the import of cost-advantaged tar sands crude streams that are LPG-rich into the company's Santa Maria facility:

Tar sands crudes are heavier and more viscous than the feedstock currently processed at either Rodeo or Santa Maria. These crudes are thus commonly blended with 25% to 30% diluent to facilitate transporting them by rail or pipeline. The blended crude is known as a "DilBit." The diluent is typically natural gas condensate, pentanes, or naphtha. The diluent can be readily separated and recovered as propane/butane at Rodeo.⁵⁷

Furthermore, analysis of current propane and butane recovery levels at the Rodeo facility highlight the dependence of these projects on one another. The table immediately below⁵⁸ summarizes the baseline propane and butane currently recoverable from fuel gas at the Rodeo

⁵³ See Fox Santa Maria Report at 3-4.

⁵⁴ See Karras and Fox Rodeo Reports.

⁵⁵ Fox Rodeo Report at 5, 6.

⁵⁶ *Id.*

⁵⁷ Fox Rodeo Report at 7.

⁵⁸ See Supplemental Evidence-C to Appeal of Phillips 66 Rodeo Propane Recovery Project EIR, attached as Exhibit 7.

refinery based on all currently available actual data, which were submitted by Phillips 66 to the Bay Area Air Quality Management District as representative of the project baseline:

Baseline LPG in Rodeo Facility Fuel Gas, December 2009–November 2012

	Units	Average	90th Percentile
U233 fuel gas flow	(MMSCFD)	29.83	35.21
	(million lbs/day)	1.71	2.02
Propane in fuel gas	(lb/lb fuel gas)	0.2381	0.2381
	(million lbs/day)	0.407	0.481
	(barrels/day)	2,290	2,700
	(% of project design)	54%	64%
Butane in fuel gas	(lb/lb fuel gas)	0.2230	0.2230
	(million lbs/day)	0.381	0.450
	(barrels/day)	1,880	2,220
	(% of project design)	49%	58%

Project design: 4,200 b/d propane and 3,800 b/d butane; data from DEIR at 3-23. Compressed liquid densities at 60 °F: 178 lb/barrel propane and 203 lb/b butane; data from EPA’s AP 42 Appendix A. All other data from Phillips 66 Air Permit Application attachments provided in Exhibit 7. Conversions from MMSCFD (1 atm., 60 °F) to lbs/d based on fuel gas MW (21.75 lb/lb-mol), and on propane and butane mass fractions (lb/lb fuel gas shown in table), from Attachment 4. Butane shown includes *n*-Butane and Isobutane.

The Rodeo project aims to recover 4,200 b/d of propane and 3,800 b/d of additional butane.⁵⁹ The Rodeo refinery’s current recovery, even at the 90th percentile (conditions existing only 10% of the time), only meets 64% of the objective propane goal and 58% of the objective butane goal, based on Phillips’ data submitted to air officials. The San Francisco Refinery is a closed circuit. In order for Phillips 66 to meet its project goal in Rodeo, it must utilize the benefits of both the Santa Maria Throughput Increase Project and this rail extension Project. Changes in the amount and type of feedstock would be required to achieve the propane and butane recovery goals.⁶⁰

In addition, the Throughput Increase Project anticipates a 10% increase in throughput capacity, and therefore butane and propane feedstocks.⁶¹ Even with the throughput increase, a discrepancy between the amount of propane and butane projected and currently recovered still exists, and is quite large, perhaps explained by the company’s anticipated recovery and use of propane and butane-rich diluent in Canadian tar sands crude. Moreover, this implicates direct transport of tar sands crude from the Santa Maria facility to the Rodeo facility by pipeline. This possibility is not precluded by the DEIR’s assertion that, “no crude oil or refined product would

⁵⁹ Id. and see Phillips Propane Recovery Project DEIR at 3-21 and 3-23.

⁶⁰ Fox Rodeo Report at 3.

⁶¹ Fox Rodeo Report at 6, citing Throughput Increase Project EIR.

be transported out of the refinery by rail.”⁶² Further, some tar sands crudes are classified as a semi-refined product,⁶³ and therefore not relevant to that assertion.

Another link between the import of tar sands dilbit oils at Santa Maria for processing and the Rodeo project involves solving the problem of the disposition of the diluent used to transport the bitumen in these dilbits. Generally, plants that, like Santa Maria’s, are not configured to process light crude in any quantity may need to consider disposing of the (very light) diluent, which may, for example, simply be returned for reuse as diluent in future dilbit imports.⁶⁴ While such a solution may be economic for pipeline delivery systems it could be quite costly if the diluent is returned by rail. However, this same diluent is LPG-rich. The Rodeo project, by allowing Phillips to recover and sell that (LPG) portion of the diluent, could significantly improve the cost structure of the “Advantaged Crude” strategy to be implemented by the Project.

Evidently, plenty of “telling evidence” exists regarding the intimate connection between the proposed Project, the Throughput Increase Project and the Propane Recovery Project. The Rodeo Project depends on the projects at the Santa Maria Facility and vice versa. Consequently, these are connected actions that must therefore be analyzed concurrently with the direct impacts of the proposed Project itself.⁶⁵

Finally, under CEQA, even assuming, arguendo, that the Rodeo Propane Recovery project is not an integral part of this proposed Project, the DEIR still failed to adequately discuss the Rodeo project, and should at a minimum have discussed the need to recover propane or butane from sources facilitated by the rail spur expansion.⁶⁶ The DEIR’s admission that Santa Maria supplies partially refined oil to Rodeo by processing declining local crude supplies established the dependence of the Rodeo facility on the replacement feedstock to be imported by the Project. In its current state, the DEIR’s incomplete, unstable and vague project description undermines the validity of the document’s environmental impact analyses. The document should be revised to correct these many deficiencies.

C. The DEIR Fails to State a Project Duration.

The expected operational duration of a project is vital to any meaningful assessment of the potential environmental consequences of the project, by both decisionmakers and the public. It is impossible to identify, much less mitigate potential, and foreseeable impacts without information relating to the approximate or known duration of a proposed project’s operational components. It is critical for an accurate, stable and finite project description.⁶⁷ The DEIR fails to meet this standard.

Although both the initial study and the DEIR include discussions of the Project’s anticipated impacts in the context of construction, demolition and general, continued operations,

⁶² DEIR at ES-5.

⁶³ Fox Rodeo Report at 6.

⁶⁴ See eg. Exhibit 18 at 7.

⁶⁵ CEQA Guidelines, § 15378, subd. (a) agency must evaluate the environmental impacts of the whole of the action.

⁶⁶ *Laurel Heights I*, 47 Cal.3d at 398 (requiring discussion “in at least general terms” of future activity in connection with a project, even if the project is contingent on uncertain occurrences).

⁶⁷ See *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

both documents omit identification of a precise duration of those Project phases, beyond the construction phase, which is identified as lasting between 9-10 months. This Project implicates a potentially significant period of operation of the proposed rail car tracks, the resultant transport of a different quality and volatile crude feedstock up and down the West Coast, the proposed rail spur's increase in cargo load capacity at the Santa Maria facility, and the use of the new 24-inch above ground pipeline, as well as the 200 mile pipeline stretch to the Rodeo plant. A legally sufficient project description must identify the anticipated duration of these activities.

For example, it matters whether the Project locks the Refinery into receiving somewhere between 80-73 23,500-30,000 gallon railcars, 5 times a day, for a 5 year, 10 year, or 75 year period. Moreover, as explained above, and detailed further throughout these comments, many of this DEIR's shortcomings stem from its failure to analyze the applicant's clear intent and plan to shift the Refinery's overall crude slate. The physical and chemical components and overall composition of the crude that will be unloaded at the Santa Maria facility directly informs the necessary impact, mitigation and alternatives analyses undertaken in this DEIR. As written, however, the DEIR simply states that the crude oil market is too "speculative" to determine whether and how displaced oil sources will be replaced, when necessary *over time*.⁶⁸ The Project foresees changing components over time; an analysis of project duration is essential. Such integral points of analysis as the direct, immediate, and foreseeable impacts of the Project are thus obscured entirely, unnecessarily, and in violation of CEQA.⁶⁹

II. THE DEIR'S ANALYSIS OF AND MITIGATION FOR THE IMPACTS OF THE PROPOSED PROJECT ARE INADEQUATE.

A. The DEIR Fails to adequately Analyze and Mitigate the Project's Public Health Impacts.

In order to effectuate the fundamental purpose of CEQA, it is critical that an EIR meaningfully inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made."⁷⁰ Only with a genuine, good faith disclosure of a proposed project's components, can a lead Agency's analyze the full range of potential impacts of the project, identify, and implement mitigation measures where necessary, prior to project approval.⁷¹

This Project has the potential to degrade the environment and to cause serious public health impacts. This includes an increased risk of dangers to workers. Indeed, because of the DEIR's failure to include integral project components and the refinery's overall the crude slate change in its analyses, the DEIR often asks the wrong questions, causing the Project's environmental impacts to appear benign, non-existent, or even beneficial. In other instances, the

⁶⁸ DEIR at 2-30 (emphasis added).

⁶⁹ See, *County of Inyo v. City of Los Angeles*, *supra*, 71 Cal. App. 3d 185.

⁷⁰ *Laurel Heights Improvement Ass'n v. Regents of University of California* (1993) 6 Cal. 4th 1112, 1123; CEQA Guidelines § 15126.2(a) ("[a]n EIR shall identify and focus on the significant environmental effects of the proposed project") (emphasis added throughout).

⁷¹ Pub. Res. Code § 21002 (public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects); Guidelines § 15126.4.

document lacks the necessary detail to verify the validity of its analyses. Consequently, the DEIR fails to include a sufficient analysis of the Project's impacts on worker and public health and safety, as required by CEQA.⁷² The following six issues highlight these inadequacies.

(i) The DEIR either Underestimates or Fails to Address the Project's Toxic Air Contaminant and Hazardous Air Pollutant Emissions.

The DEIR provides no information about existing exposure to Toxic Air Contaminants (TACs) including those identified in the Notice of Preparation (NOP) and Initial Study, and further identified as impacts of particular concern to the SLOAPCD, in comments submitted by the agency. This omission violates CEQA's core requirement that an EIR include an adequate "description of the physical environmental conditions in the vicinity of the project."⁷³ As the Guidelines instruct, "[k]nowledge of the regional setting is critical to the assessment of environmental impacts."⁷⁴ Unless the DEIR adequately describes the public's existing exposure to TACs, decision-makers cannot: (1) understand the scope of the existing TAC problem; (2) measure the Project's new TAC impacts against a baseline of current TAC emissions; (3) evaluate mitigation of those impacts; or (4) intelligently decide whether the Project's approval is worth the exposure increases caused by the project.

Moreover, the DEIR fails to identify, analyze or mitigate known impacts, which will result from the added presence of additional TACS and Hazardous Air Pollutants (HAPs) typically found in the crude blend that will be delivered, processed and transported as a result of this Project. Some of these TACs and HAPs, that are of particular concern to both the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB), yet are either omitted or inadequately analyzed in the EIR, include the following: benzene, sulfur compounds, toluene, xylenes, inorganic lead and other metals including Nickel, diesel particulates.

(ii) The DEIR Fails to Adequately Mitigate Potential Toxic Asbestos Impacts From Both the Construction and Operations Phases of the Project.

The Initial Study identifies naturally occurring asbestos and asbestos containing material as two sources of potential toxic contaminants, resulting in a significant impact on the environment.⁷⁵ Both potential sources are identified as toxic contaminants of particular concern to the SLOPACD; triggering notification and survey requirements to ensure that known, severe human health impacts do not flow from construction, demolition and ongoing operations related to the rail spur project.⁷⁶ Such concern was also based on the fact that such activities would

⁷² See, *Laurel Heights Improvement Assn. v. Regents of Univ. of California*, supra, 47 Cal.3d, at 400 (quoting Pub. Resources Code § 21002.1(a); and Guidelines 15002(a)). See also, *Communities for a Better Environment v. Richmond*, supra, 184 Cal.App.4th, at 89 (an "EIR must include foreseeable change in crude processed as part of environmental and impacts analysis.").

⁷³ CEQA Guidelines § 15125(a).

⁷⁴ *Id.* § 15125(c).

⁷⁵ NOP and Initial Study, 8

⁷⁶ NOP and Initial Study, Appendix C, Comments – Agency Referral Responses, SLOACPD Response to Initial Study and Mitigated Negative Declaration, at pp. 4-5.

occur in “close proximity to multiple sensitive receptors.”⁷⁷

The DEIR addresses potential impacts from asbestos releases into the air and surrounding environment in the mitigation table, at IST-13, by simply “covering” during construction. However, the DEIR makes no mention of mitigation measures applicable to demolition, or ongoing operations and their resulting disturbance to the surrounding area containing asbestos. As of updates made in 2011, however, CARB has identified asbestos, including naturally occurring asbestos as a toxic contaminant for which there is no safe level of exposure; thus, merely “covering” construction projects, without addressing ongoing disturbances, particularly in light of the close proximity of multiple sensitive receptors, is an inadequate mitigation measure.

(iii) The DEIR Fails to either Adequately Identify or Mitigate Diesel Particulate Matter Emissions During both Construction and Operations Phases of the Project.

The DEIR admits that both the operational activities and the construction phase of the project will result in emission levels above SLOAPCD thresholds for diesel particulate matter (DPM) a state recognized TAC.⁷⁸ The DEIR classifies such impacts as falling in both the Class I and Class II impact categories. The first, Class I, are impacts that are both significant and unavoidable; and second, Class II, are impacts that are potentially significant, but less than significant with mitigation. While these classifications appear to recognize the severity of the potential impacts that may be caused by DPM, the analysis contained in the DEIR falls short of fully identifying the extent of impacts that will be caused by an increase in DPM emissions. Furthermore, the DEIR’s analysis is misguided by the fact that it fails to state an accurate baseline level of the Santa Maria facility’s current, and foreseeable process emissions. Finally, the DEIR fails to account for the increase in emissions that will come from the Refinery’s undisclosed change in crude slate, and fully fails to identify the Project’s increase in emissions at the Rodeo facility, as a result of the DEIR’s piecemealed analysis.

An Improper Baseline

In section 4.3.1.4, the DEIR generally states that “toxic emissions” including DPM, are associated with the Refinery’s current daily operations.⁷⁹ While it does not state a precise level for those emissions, the DEIR goes on to provide data from a toxic release inventory used to conduct analyses for the last Health Risk Assessment (HRA) done by Phillips 66, pursuant to the requirements of AB2588.⁸⁰ That HRA was conducted in 2007, was based on an emissions inventory taken in 2004, and was used for the Throughput Increase Project Health Risk Analysis in 2010. Although the 2004 data was updated in 2010, in order to assess the potential impacts from the Refinery’s Throughput Increase Project, it fails to state a proper baseline for the purpose of identifying the current level of DPM emissions.

⁷⁷ *Id.*

⁷⁸ DEIR, 4.3-36; *and see*, California Air Resources Board Toxic Air Contaminant Identification List, available at: <http://www.arb.ca.gov/toxics/cattable.htm#Note 1>, last accessed, Jan. 26, 2014.

⁷⁹ DEIR 4.3- 18.

⁸⁰ *Id.*

As described in more detail, *infra*, the CEQA Guidelines state that the baseline for a project should consist of “the physical environmental conditions ... as they exist *at the time the notice of preparation is published*.”⁸¹ The DEIR’s reliance on emissions inventories from 2004, even as updated in 2010, not only fails to meet CEQA’s requirement that a baseline reflect conditions at the time of the NOP, but such data also fails to provide an accurate depiction of the refinery’s true emission levels throughout the life of the Project. The DEIR admits that as of 2013 the Refinery’s throughput levels and operating capacity do not reflect the modifications of the Throughput Increase Project.⁸² Setting aside the contradiction embodied by the DEIR’s reliance on data used for the purpose of that Project’s environmental analyses, when at the same time it fails to disclose the relationship between the two projects, the DEIR states that the Refinery emissions levels are based on operations up to the facility’s full permitted throughput capacity. This alone appears to violate CEQA’s requirement to use actual, rather than permitted emissions, as the project baseline.⁸³ Yet, the DEIR goes on to state that such emissions levels do not reflect the change in operational capacity enabled by the Throughput Increase Project. Thus, the permitted levels, even as of 2013, still fail to provide an accurate depiction of the existing environmental conditions, of this Project, as this Project is integrally related to the Throughput Increase Project.⁸⁴

Finally, as a result of the DEIR’s failed analysis of the range of potential DPM emissions the DEIR underestimates the mitigation necessary to prevent harmful impacts caused by DPM. For example, the DEIR provides that it will address the increase in diesel emissions during construction and operations by watering exposed areas 3 times per day for 61% fugitive dust control; that it will require reduced vehicle speeds to 15 mph and the use of Tier 3 engines with DPM on construction equipment above 100 hp.⁸⁵ It further states that it will confer with SLOAPCD, prior to and during Project operations to develop plans to address the Project’s above threshold emissions levels, including achieving off site emissions reductions, in order to account for those emissions that surpass the County’s applicable threshold levels.⁸⁶ As noted throughout this comment, such deferred mitigation activities are improper under CEQA.

(iv) The DEIR Fails to Identify or Mitigate Additional Impacts of Emissions Resulting from the Project’s Change in Crude Slate.

This Project enables the Santa Maria facility to receive new sources of crude, whose chemical composition, including chemicals mixed to enable transport and further processing at the Rodeo facility remain undisclosed, and therefore, cannot be analyzed for their impacts.⁸⁷ This leaves such impacts without mitigation or alternatives analyses, thwarting the entire purpose of the document, in violation of CEQA.⁸⁸

⁸¹ CEQA Guidelines, 14. Cal. Code Reg. § 15125(a).

⁸² DEIR 4.3-21.

⁸³ See Exhibit 25.

⁸⁴ See *supra* Section I.A.

⁸⁵ DEIR 4.3-35.

⁸⁶ *Id.*

⁸⁷ See *supra* and Fox Santa Maria Report.

⁸⁸ See *Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs*, *supra*, 91 Cal.App.4th 1344, 1355

In addition to generally requiring more energy, and power generation to refine, the composition of tar sands crudes is chemically different from other heavy, locally sourced crudes, currently processed at the Santa Maria facility, and/or transported by pipeline to Rodeo. By their composition, tar sands are heavier, denser, and have higher sulfur contents than locally sourced crudes.⁸⁹ As outlined above, tar sands crudes are distinct from even the heaviest of crudes currently processed at the Refinery, for two principal reasons : (1) the unique chemical composition of the bitumen itself; and (2) the presence of large quantities of volatile diluent containing high levels of VOCs, TACs and HAPs. If released, these air pollutants amount to increased emissions that would result in significant public health and air quality impacts not addressed in the DEIR.

As a result, the DEIR fails to account for significant increases in overall emission estimates, including those of DPM, potent carcinogens such as benzene, toxic sulfur compounds that would individually and cumulatively cause malodors, and degrade ambient air quality; and a dramatic increase in incidents of accidental releases adversely affecting the health of workers and residents throughout the County, and even along the rail route up and down the West Coast. Furthermore, the high acid levels in these crudes and their semi-refined products would accelerate corrosion of refinery components, contributing to equipment failure, more accidental releases, and again, risking harm to both worker and public health and safety.

Bitumen Chemical Composition

Bitumen is composed of higher molecular weight chemicals, including large amounts of benzene, toluene, xylenes, and other heavy metals, present in both state and federal toxic emissions inventories, and therefore of particular concern to both federal and state regulatory agencies.⁹⁰ Benzene has a high cancer potency and is known to cause severe reproductive, developmental and immune systems impacts at even low exposure levels.⁹¹ Systemic benzene poisoning, a long term exposure risk, includes the potential for severe hemorrhages, and may at times result in fatality.⁹² Concentrated, acute exposure levels have also been known to cause headaches, and nausea.⁹³ While less information is available relating to longer term systemic and acute exposure levels to ethylbenzene, toluene and xylene, in California, the toxicity and risk levels of the three are currently under CARB scientific review.⁹⁴

The U.S. Geological Survey reports that “natural bitumen,” the source of all Canadian tar sands-derived oils, contains 102 times more copper, 21 times more vanadium, 11 times more sulfur, six times more nitrogen, 11 times more nickel, and 5 times more lead than conventional

⁸⁹ Fox Santa Maria Report at 26.

⁹⁰ See, e.g., United States EPA, Clean Air Act 1990 List of Hazardous Air Pollutants, available at: <http://www.epa.gov/ttn/atw/orig189.html>, last accessed on Jan 26, 2014; see also, California Air Resources Board Toxic Air Contaminant Identification List, available at: <http://www.arb.ca.gov/toxics/catable.htm#Note 1>, last accessed on Jan 26, 2014.

⁹¹ Determination of Acute Relevance Exposure Levels for Airborne Toxicants, March 1999, Acute Toxic Summary, BENZENE, available at: http://www.oehha.ca.gov/air/acute_rels/pdf/71432A.pdf, last accessed, Jan. 26, 2014.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ California Air Resources Board, Toxic Air Contaminant Identification List, available at: <http://www.arb.ca.gov/toxics/catable.htm#Note 1>, last accessed, Jan. 26, 2014.

heavy crude oil, including even the heaviest of “American crudes,” which, according to Phillips 66, comprise the majority of the crude slate currently processed at the Refinery.⁹⁵ The environmental damage caused by these contaminants, when released includes acid rain; harmful bioaccumulation of the contaminants; the formation of ground-level ozone and smog; visibility impairment; odor impacts affecting residents near the Refinery; accidental releases due to corrosion of refinery equipment; and depletion of soil nutrients.⁹⁶

Currently, the level of bitumen present in the refinery’s overall crude slate is as low as 2 - 7%.⁹⁷ Given this Project’s overall components, including those that are unaddressed in the DEIR, such as the Throughput Increase Project and its resulting dramatic increase in process capacity at Santa Maria, this level of tar sands crude present in the overall crude slate will increase dramatically. The Project may in fact increase the import of heavy tar sands bitumen crudes by up to the entire permitted capacity of the Refinery.⁹⁸ This means, that there will be a remarkable increase not only in the content of lead and other metals listed above contained in the crude itself, but also in derivative coke and coke products, transported out of the refinery.⁹⁹ Moreover, because diluents also have a notably low molecular weight, and a high vapor pressure, they are highly prone to cause fugitive, gaseous releases by increasing vapor pressure in various refinery operation components, including rail cars and pipelines used for transport.¹⁰⁰ Nevertheless, the DEIR fails to identify, analyze or mitigate the wholly foreseeable Project emissions of these contaminants.

For instance, the DEIR does not disclose BTEX concentrations either in the baseline crude slate or in the range of crudes that will be imported by way of the Project.¹⁰¹ BTEX levels in diluent generally range from about 27,000 ppm to 60,900 ppm.¹⁰² The BTEX in dilbits, blended from these diluents materials in turn, ranges from 8,000 ppm to 12,300 ppm.¹⁰³ Again, because of the high vapor rate that is characteristic of the diluents, and thus also characteristic of dilbit, dilbit will likewise quickly evaporate from any unsealed openings. Thus, whether because of pure diluents or the blended dilbit arriving to the Santa Maria facility by way of rail, and likewise being processed, or transported out of the facility by way of pipeline, a remarkably high level of hazardous toxic materials exists, well above the current baseline level that is implicated by this Project, and completely beyond the contents of the DEIR.

The DEIR’s current, single mass fraction crude vapor speciation profile contained in the document’s impacts analysis is wholly insufficient to address the potential risks associated with the increase in dilbit at the Refinery.¹⁰⁴ In order to assess and mitigate the potential impacts from the increased concentration of TACs, and HAPs, and their associated risk of causing serious harm to human health and environment, the DEIR should, at a minimum, include the amount of

⁹⁵ Fox Santa Maria Report at 29.

⁹⁶ *Id.*

⁹⁷ Fox Santa Maria Report at 2.

⁹⁸ *Id.* at 28.

⁹⁹ *Id.* at 29.

¹⁰⁰ *Id.* at 22.

¹⁰¹ *Id.* at 22

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.* at 23.

diluents needed to enable efficient delivery and transport of tar sands crude into and out of the Santa Maria facility.

Overall, a switch in crude slate directly implicates additional HAPs to be emitted at many fugitive components in the Refinery, including both the Santa Maria and Rodeo facilities; through compressors, pumps, valves, fittings, and tanks, in far greater amounts than from the current baseline feedstock.¹⁰⁵ Moreover, when any amount of dilbit is released, the substance will generally create spills far more difficult to clean, or remedy, than those caused by even the heaviest of locally sourced crudes.¹⁰⁶ When held in a storage tank, pipe or rail car, diluents alone can also rapidly evaporate and escape through any unsealed openings¹⁰⁷ – another set of significant impacts the DEIR leaves unidentified, unaddressed and unmitigated.

(v) The DEIR Fails to Identify Risks to Worker Health and Safety.

The DEIR fails to adequately identify the health risks posed to on-site workers as a result of the Project. While the DEIR states that there are health risks associated with exposure to carcinogenic compounds at the refinery, the DEIR fails to provide an assessment of how the increased exposure to carcinogens, stemming from the project, will impact on-site workers.¹⁰⁸ Thus, the DEIR further fails to identify these critical potential impacts.

Workers at both of Phillips 66's San Francisco Refinery facilities will bear the brunt of the burden caused by vapor and other emissions of TACs and HAPs from various transport and refinery equipment. On-site workers will also be on the frontlines of any accidents, spills or other hazards caused by the Project, and therefore are particularly susceptible to suffer from the most serious health impacts, that may stem from this Project.¹⁰⁹ Because of the TACs and HAPs present in the tar sands bitumen crudes and in their blended diluents, the County must require a full HRA analysis that accounts for the change in crude slate. Currently, the DEIR cites to the HRA used for the Throughput Increase Project, yet, fails to acknowledge the relationship between the two Projects. Such a blatant contradiction, that also confirms that these projects are piecemealed, should not stand. The DEIR ignores impacts to workers and the County should require a revised HRA that includes the added TAC and HAP burdens resulting from the combined components of the Throughput Increase, Propane Fuel Recovery, and Rail Spur Projects, prior to approving any EIR document, and certainly prior to Project approval.

(vi) The DEIR Fails to Identify Cumulative Impacts to Public Health.

The DEIR omits a necessary analysis of cumulative impacts of the Project, one of CEQA's most vital requirements.¹¹⁰ An EIR must "discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable."¹¹¹ Furthermore, a lead

¹⁰⁵ *Id.* at 16.

¹⁰⁶ *Id.* at 21.

¹⁰⁷ *Id.*

¹⁰⁸ DEIR, 4.3-48.

¹⁰⁹ Fox Santa Maria Report at 24.

¹¹⁰ See Pub.Res.Code § 21082 (referring to the CEQA Guidelines §§ 15130(a)(1) and 15355 for the applicable definition of cumulative impacts); see also, *Bozung v. Local Agency Formation Commission* (1975) 13 Cal.3d 263, 283

¹¹¹ CEQA Guidelines § 15130(a) (emphasis added).

agency must find “that a project may have a significant effect on the environment” when “[t]he project has possible environmental effects that are individually limited but cumulatively considerable.”¹¹² The Guidelines define “cumulatively considerable” to mean “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”¹¹³ The purpose of this analysis is to avoid considering projects in a vacuum, wherein seemingly benign impacts could lead to severe environmental harm, in light of the environmental context.¹¹⁴ The DEIR must, therefore, “demonstrate that the significant environmental impacts of the proposed project were adequately investigated[,] discussed[,] and ... considered in the full environmental context,” including existing pollution burdens in the areas that are directly impacted by the Project.¹¹⁵

Santa Maria, its surrounding communities including the cities of Nipomo and Guadalupe, as well as Rodeo, and its surrounding communities, have all been identified by the Office of Environmental Health and Hazards Assessment (OEHHA) as bearing a concentrated burden of health hazards resulting from various pollution sources, including the Santa Maria and Rodeo Refinery facilities.¹¹⁶ This means that impacts, which may appear insignificant by themselves, are indeed significant when considered in the context of and in combination with existing sources of environmental impacts, which often tend to be more concentrated in some areas, such as those where these two facilities are located.

With regard to the Santa Maria facility, Santa Maria, Nipomo and Guadalupe score high on the OEHHA’s indicators used to highlight environmental justice, or highly burdened communities.¹¹⁷ Some of these indicators or factors include: number of pollution sources, including active and inactive waste cleanup sites; heavy industrial facilities, such as refineries; and hazardous waste, groundwater waste, presence of ozone and ozone precursors in the ambient environment, among others. The public health indicators examined further include, *inter alia*, asthma and low birth weight rates.

Nipomo has a high concentration of solid waste sites, including both active and in-active clean-up sites.¹¹⁸ This means that the residents of the Nipomo already bear the burden of existing concentrated mal-odors, methane and carbon dioxide emissions from those facilities

¹¹² CEQA Guidelines § 15065(a).

¹¹³ *Id.*

¹¹⁴ *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th at 720.

¹¹⁵ CEQA Guidelines § 15125(c).

¹¹⁶ OEHHA Cal Enviro Screen 1.1 (amended), Statewide Zip code Results, Nipomo, Guadalupe, Santa Maria, available at: <http://oehha.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=1d202d7d9dc84120ba5aac97f8b39c56>, last accessed, Jan. 26, 2014; and Zip code Results, Rodeo, available at: <http://oehha.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=1d202d7d9dc84120ba5aac97f8b39c56>, last accessed, Jan., 26, 2014.

¹¹⁷ *See*, OEHHA Cal Enviro Screen 1.1, Statewide Zip code Results, Nipomo, Guadalupe, Santa Maria, *supra*, at: <http://oehha.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=1d202d7d9dc84120ba5aac97f8b39c56>.

¹¹⁸ OEHHA Cal Enviro Screen 1.1 (amended), Statewide Zip code Results, available at: <http://oehha.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=1d202d7d9dc84120ba5aac97f8b39c56>, last accessed, Jan. 26, 2014.

alone.¹¹⁹ Nipomo also scores within the top 3% of the state's highest Toxic Release Inventory chemical burdens and within the top 1% of the state's burden from pollution caused by pesticide use.¹²⁰ Guadalupe is identified as a linguistically isolated city, and similar to Nipomo has a high concentration of hazardous waste facilities.¹²¹ It also bears the impacts of a high concentration of emissions from other concentrated pollution stationary sources, such as the Santa Maria Refinery.¹²² The combined impacts of these factors renders that city and the surrounding area, a particularly vulnerable community that suffers a high health burden from existing contaminating sources.¹²³

Much like Nipomo and Guadalupe, Rodeo also ranks in the top 8% of the state's highest concentration of hazardous waste facilities, has a high concentration of contamination from Toxic Release Inventory chemicals, ranking in the top 3% for that factor.¹²⁴ Moreover, Rodeo also suffers from a high rate of low birth weights and asthma, ranking in the top 1 and 16% for each, respectively.¹²⁵

The particular vulnerabilities of these communities, and the existing pollution burdens that exist in each, even without the added impacts of the proposed Rail Spur Project, in combination with its related components in both the Throughput Increase and Propane Fuel Recovery Projects, demand a full analysis of the additional burden that will result from this Project. As detailed above, the Project's emissions and impacts analysis is incomplete, as a result of the DEIR's failure to disclose information relating to the Refinery's overall shift in crude slate. Even absent an analysis that includes the Refinery's change in crude, those emissions that are currently identified in the DEIR as being less than significant, are not analyzed in the context of the existing pollution burdens in either Santa Maria and its surrounding communities, or Rodeo. This analysis is an integral component of CEQA, one that the DEIR illegally omitted.¹²⁶

Overall, the DEIR's failure to disclose the exact qualities of its projected and foreseeable feedstock switch preclude any meaningful analysis of the impact of this Project on worker and community health. The DEIR simply does not provide enough information. Even if the Project were to implement the DEIR's claimed Bakken feedstock, Bakken crude is a light and volatile crude with a high API gravity and very low sulfur content, significantly distinct from the current crude feedstock processed at the Refinery, and also distinct from tar sands crudes.¹²⁷ When refined, it yields very little residuum, which is generally used for coker feeds, but it yields large amounts of gasoline.¹²⁸ If the crude slate were switched to Bakken, combustion emissions at the

¹¹⁹ OEHHA, *California Communities Environmental Health Screening Tool, Version 1.1 Guidance and Screening Tool*, September 2013 Update, Matthew Rodriguez, Cal EPA, and George V. Alexeeff, Ph.D., Director of OEHHA, available at: <http://oehha.ca.gov/ej/pdf/CalEnviroScreenVer11report.pdf>, last accessed, Jan 26, 2014.

¹²⁰ See OEHHA Cal Enviro Screen 1.1, *supra*, and *see, Id.*

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ OEHHA, Cal Enviro Screen 1.1 (amended), Statewide Zip code Results, Rodeo, at:

<http://oehha.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=1d202d7d9dc84120ba5aac97f8b39c56>.

¹²⁵ *Id.*

¹²⁶ CEQA Guidelines §§ 15064(d), 15125(c); *see also, Kings County Farm Bureau*, 221 Cal. App. 3d 692, 729.

¹²⁷ *Id.* (citations omitted)

¹²⁸ Fox Santa Maria Report at 9.

Santa Maria Refinery may decrease overall, however, VOC and other HAP emissions would significantly increase, as well as the risks to worker and public health and safety.¹²⁹

B. The DEIR Fails to Adequately Analyze and Mitigate the Project's Air Quality Impacts.

The EIR's analysis of the Project's criteria pollutant impacts is riddled with errors. We highlight five: first, the EIR relies on an inadequate study area and therefore underestimates the Project's potential to result in a substantial increase in criteria pollutant emissions. Second, it underestimates or ignores altogether emissions of criteria pollutants. Third, the Project relies on an illegal use of Emission Reduction Credits. Fourth, the EIR's analysis completely underestimates indirect emissions. Fifth, the EIR's analysis is predicated on a faulty and illegal baseline. The end result is that the Project will result in significant air quality impacts that the EIR fails to identify or mitigate.

(i) The DEIR Incorporates an Inadequate Study Area.

The DEIR substantially underestimates the Project's increase in greenhouse gas ("GHG") and criteria air pollutant emissions because it relies on an artificially and unnecessarily constrained study area. The DEIR's air impact analysis is unnecessarily limited.¹³⁰ However, it is clear that the air quality impacts of the Proposed Project will regularly extend far beyond the county line, or even other areas that the DEIR makes brief mention of, and the DEIR fails to account for that.

The study area of an EIR must include "the area which will be affected by a proposed project."¹³¹ There is no predefined geographic limit to where impacts can occur, and it is well established that "the area that will be affected by a proposed project may be greater than the area encompassed by the project itself."¹³² This broad understanding of the geographic scope of an EIR's analysis is essential, and "the purpose of CEQA would be undermined if the appropriate governmental agencies went forward without an awareness of the effects a project will have on areas outside of the boundaries of the project area."¹³³

By employing an artificially constrained study area, the DEIR fails to assess the air quality impacts of operational emissions outside of San Luis Obispo County. Although the DEIR does calculate both GHG and criteria emissions outside of the County, it neither evaluates the significance of these emissions, nor discusses any mitigation measures. This is particularly problematic. For example, locomotive emissions outside of the County will be significant—the DEIR calculates locomotive GHG emissions outside of the County as over 60,000 MTCO₂E, which accounts for nearly 80% of the total operational GHG emissions of the proposed project.¹³⁴ Similarly, the criteria emissions from locomotives outside of San Luis Obispo County

¹²⁹ *Id.* at 10.

¹³⁰ See DEIR at 4.3-1

¹³¹ See Cal. Pub. Res. Code § 21060.5 (defining "environment" as "the physical conditions that exist within the area which will be affected by a proposed project").

¹³² *Save the Plastic Bag Coalition v. City of Manhattan Beach* (2011) 52 Cal.4th 155, 173.

¹³³ *Muzzy Ranch Co. v. Solano Cnty. Airport Land Use Com.* (2007) 41 Cal. 4th 372, 387.

¹³⁴ See DEIR at 4.3-50, Table 4.3.15.

are significant.¹³⁵ Among other emissions, the DEIR fails to evaluate the impacts of 160 tons of NO_x, 5 tons of PM₁₀, and nearly 25 tons of CO that will be emitted each year in California outside the County borders.¹³⁶

By artificially limiting the geographic scope of the analysis to air pollutants emitted within the boundaries of San Luis Obispo County, the DEIR substantially underestimates the significant air quality impacts of transporting crude oil by rail from oilfields across North America to the Santa Maria facility. The DEIR should be revised to evaluate the Project's emissions outside of the County, and to discuss mitigation for those emissions.

(ii) The DEIR Does Not Analyze Emissions from All of the Project's Components.

The DEIR fails to assess emissions from all components of the Project. Most blatantly, the DEIR fails to assess the air quality impacts of the San Francisco Refinery as a whole, and includes no analysis of the emissions that will be caused at the Rodeo component as a result of the rail spur extension at the Santa Maria component.

CEQA requires that an EIR consider the impacts of a whole project, not simply its constituent parts, when discussing the environmental effects of the project.¹³⁷ As discussed *supra* in Part I, an essential element of this Project is a shift to a different-quality crude slate, and the Santa Maria Throughput Expansion, Rodeo Propane Recovery Project and this Project are at least three integral components of this piecemealed project. Consequently, this DEIR should include an analysis of the full scope of air quality impacts resulting from this larger piecemealed project, not just the impacts from the Rail Spur Extension Project.

Most importantly, because the DEIR does not disclose the quality of crude oil that will be brought to the San Francisco Refinery as a result of the rail spur expansion, the DEIR cannot analyze the severe air quality impacts that will result from processing different-quality crude. The proposed rail spur extension will allow the San Francisco Refinery to import different or lower-quality crude oil from oilfields throughout North America.¹³⁸ The refining of this different quality crude slate can be reasonably expected to require an increase in frequency and magnitude of flaring at Santa Maria, since dirtier crude processing would likely increase "malfunction" and "emergency" flaring.¹³⁹ Moreover, a malfunction or emergency upset causes the whole contents of one or more major process vessels to depressurize suddenly, and each flaring event can cause acute exposures to emitted pollutants, which is not discussed in the DEIR.¹⁴⁰ Each of these flaring episodes comes with associated and extremely high levels of additional pollution.

In addition, the daily operation and refining of a different quality crude slate will result in increased daily emissions of pollutants, including many toxic/PM precursor/smog-forming air

¹³⁵ See DEIR at 4.3-44, Table 4.3.13.

¹³⁶ See DEIR at 4.3-44, Table 4.3.13.

¹³⁷ See CEQA Guidelines, 14 Cal. Code Reg. § 15003(h); *Citizens Assoc. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151.

¹³⁸ See DEIR at 2-21.

¹³⁹ See Karras Decl. (Rodeo).

¹⁴⁰ See Karras Decl. (Rodeo).

pollutants from burning more fuel per barrel to process the likely denser/dirtier crude feeds.¹⁴¹ An increase in fugitive emissions and heightened concentrations of toxic VOCs can also be anticipated as a result of the higher pressure processing of denser crudes.¹⁴² The DEIR does not analyze these effects, and consequently the DEIR also fails to discuss mitigation measures for these impacts.

The EIR process for this Project presents a critical opportunity to engage in a genuine and thorough review of the full environmental impacts of this Project. By failing to analyze the emissions from all components of the larger project, the DEIR obfuscates the full extent of air quality impacts, and renders informed decision-making on this Project impossible.

(iii) The DEIR Inappropriately Relies on Emission Reduction Credits Requested by the Rodeo Facility.

The DEIR underestimates the SO₂ emissions of the Project. The DEIR fails to disclose an application for Emission Reduction Credits (“ERCs”) that would likely result in future SO₂ emissions increases at Phillips 66’s San Francisco Refinery. The application was filed for the Rodeo facility, but it is equally relevant here because the Rodeo and Santa Maria facilities are, by Phillips 66’s own admission, the two component parts of the San Francisco Refinery.

Phillips 66 asserts that its Rodeo Propane Recovery Project will result in a reduction in SO₂ emissions, and has requested 174.7 tons per year of SO₂ ERCs for that reduction.¹⁴³ According to Phillips 66, “[o]f this amount, 7.61 tpy will be used to offset project SO₂ increases so that there will be no net increase in SO₂ emissions from the project (see Table 3-1). The remaining 167.1 tpy of SO₂ (174 tpy minus 7.61 tpy) will be banked as ERCs.”¹⁴⁴ The assertions in this application are contrary to the assertions in the EIR for the Rodeo Propane Recovery Project, which claims that the Rodeo project will reduce refinery-wide SO₂ emissions “by at least 50%.”¹⁴⁵ Banking ERCs equal to the claimed emission reduction would allow the refinery to increase its SO₂ emissions in the future, thus negating any claimed SO₂ reduction benefits.

The DEIR must identify and analyze the impacts of these SO₂ ERCs in order to capture the full air quality impacts of the Project, inextricably linked to the Rodeo facility. The failure to acknowledge and assess these impacts is a clear violation of CEQA’s mandate to identify and avoid the significant effects of a project on the environment.

(iv) The DEIR Fails to Adequately Analyze Indirect Emissions.

CEQA requires an EIR to consider both direct and indirect impacts of a proposed project.¹⁴⁶ Indirect impacts are those that are “caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable.”¹⁴⁷ The scale of the Project’s

¹⁴¹ See Karras Decl. (Rodeo).

¹⁴² See Karras Decl. (Rodeo).

¹⁴³ See Karras Decl. (Rodeo).

¹⁴⁴ Air Permit Application at 17, Section 3.4 (Air Permit App Sections 1–3).

¹⁴⁵ Rodeo PRP EIR at ES-2, 3-5, and 4.3-19.

¹⁴⁶ CEQA Guidelines, 14 Cal. Code Reg. § 15358(a).

¹⁴⁷ CEQA Guidelines, 14 Cal. Code Reg. § 15358(a)(2).

activities is large enough that off-site emissions could reasonably be affected. Moreover, the indirect nature of these wholly foreseeable off-site emissions cannot be ignored as “it is inaccurate and misleading to divide the project's air emissions analysis into on-site and secondary emissions for purposes of invoking the presumption the project will have no significant impact.”¹⁴⁸ Thus, the DEIR requires a sufficient analysis and discussion of these sources. For example, in *North Coast Alliance*, the lead agency’s analysis of the identification of indirect sources of GHG emissions from electrical demand was found sufficient given that the agency conducted a thorough analysis of the project’s demand on a utility’s electricity generation and whether it would increase production at any fossil-fuel power plants.¹⁴⁹

The DEIR does not acknowledge a switch to a lower or different quality crude feedstock and therefore does not address the indirect emissions associated with that switch, for example, greenhouse gas emissions from crude source demand activities such as extraction and front-end refining and diluting.

Similarly, the DEIR does not adequately analyze the substantial air quality impacts associated with the transport of crude oil from new sources across North America. The refinery currently receives all crude oil for processing by pipeline,¹⁵⁰ while the Project proposes to import crude oil by rail from “oilfields throughout North America.”¹⁵¹ The Project would result in up to 250 trains per year moving from Canada or North Dakota to Northern California, through some of the most densely populated regions of the state, along the coast to the Santa Maria Refinery in Central California.¹⁵² Evidently, the air quality impacts, for instance of GHGs, of such extensive rail transport as compared to current impacts of local pipeline transport will be substantial and severe. The DEIR fails entirely to assess the significance of these impacts or to propose mitigation for these impacts. By limiting the study area to the boundaries of San Luis Obispo County, as discussed *supra* in Part II.B.1, the DEIR omits entirely a significant portion of the emissions that will result from the Project, and thus vastly underestimates the Project’s significant air quality impacts.

Additionally, as noted above, the DEIR fails to account for emissions associated with the Rodeo facility. These include increased criteria pollutant and GHG emissions resulting from the processing of different or lower-quality crude, as well as the off-site emissions from the propane and butane produced via the Propane Recovery Project and the off-site emissions associated with natural gas demand activities. The DEIR must, at the least, identify these foreseeable activities and then adequately analyze and estimate how much the Project is likely to increase emissions from all of these sources, regardless of their location.

(v) The DEIR Uses an Inappropriate Baseline Environmental Setting, Rendering its Air Quality Analysis Unreliable.

¹⁴⁸ *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 717.

¹⁴⁹ *North Coast Alliance v. Marin Mun. Water Dist. Bd. of Directors*, 216 Cal.App.4th 614, 652 (“Based on this evidence, the EIR concluded the Project's energy demand would not result in an indirect increase in pollutant emissions.”).

¹⁵⁰ DEIR at 2-27.

¹⁵¹ DEIR at ES-3, 1-4, 2-21.

¹⁵² See DEIR at 2-21 (estimating a maximum of 250 trains per year).

The baseline for a project consists of “the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published.”¹⁵³ As the DEIR acknowledges, emissions resulting from current refinery operations are a key component of baseline air quality.¹⁵⁴ However, instead of providing data on current refinery emissions, the DEIR instead relies on the emissions limitations in the refinery’s permits to establish baseline air quality.¹⁵⁵

This reliance on permit limitations instead of actual emissions to establish baseline air quality is a clear violation of CEQA. This precise discrepancy was at issue in *Communities for a Better Environment v. South Coast Air Quality Management District*, where the Supreme Court rejected the Air District’s argument that permit levels should be used to establish the baseline.¹⁵⁶ The Air District argued that for a project employing existing equipment, the baseline should be the maximum permitted operating capacity of the equipment, even if the equipment is operating below those levels when the Notice of Preparation is issued.¹⁵⁷ The Supreme Court rejected the District’s illegal permit based approach, and clarified the need for the proper assessment of baseline for review under CEQA.¹⁵⁸

The DEIR provides no information about the actual emissions levels at the Refinery, and thus fails to provide sufficient information to establish an appropriate baseline environmental setting. The DEIR should be revised to provide this information and an accurate and informative baseline as required under CEQA review.

C. The DEIR Fails to Adequately Disclose, Analyze or Mitigate Project-related Hazards and Public Safety Risks.

An EIR must provide sufficient information to evaluate all potentially significant impacts of a project, including public safety risks due to accidents or, “information about how adverse the adverse impact will be.”¹⁵⁹ Without this information, it is impossible for County decision makers and the public to evaluate the extent and severity of the Project’s impacts relevant to public safety. The DEIR fails to meet this burden in three respects: (1) it continues to omit relevant and indispensable information regarding crude quality and therefore never addresses resultant safety impacts; (2) it illegally defers mitigation in relying on safety precautions and anticipated plans that are not yet approved; and (3) it includes a flawed and under-estimated analysis of the risk of oil spill or train car derailment.¹⁶⁰ The DEIR therefore fails to provide any currently real and enforceable measures and performance standards and can provide no assurance the Project’s impacts related to hazards would not be significant, or that they would be mitigated at all.¹⁶¹

¹⁵³ CEQA Guidelines, 14. Cal. Code Reg. § 15125(a).

¹⁵⁴ See DEIR at 4.3-17 to 4.3-22.

¹⁵⁵ DEIR at 4.3-18 to 4.3-19.

¹⁵⁶ *Communities for a Better Env’t v. S. Coast Air Quality Management District* (2010) 48 Cal. 4th 310.

¹⁵⁷ *CBE v. SCAQMD*, 48 Cal. 4th at 320.

¹⁵⁸ *Id.*

¹⁵⁹ *Santiago County Water District v. County of Orange* (1981) 118 Cal. App. 818, 831.

¹⁶⁰ See DEIR at 4.7.

¹⁶¹ See *Sacramento Old City Ass’n v. City Council* (1991) 229 Cal. App. 3d 1011.

Scope of Analysis/Federal Preemption

As an initial matter, the DEIR's Study Area and Scope of analysis of public safety risks is unnecessarily limited to the vicinity of the Rail Spur.¹⁶² Although the DEIR provides a detailed description of catastrophic failure scenarios, it does not analyze whether those impacts would prove significant, to any degree of specificity, in regards to this Project. The DEIR's analysis of risks to public safety ends with the Santa Maria facility boundary.¹⁶³

The implications of this Project, however, include approximately 400 tanker cars per week moving up and down the West Coast, likely containing extremely hazardous tar sands crude, or highly flammable Bakken.¹⁶⁴ The DEIR simply analyzes the risks of spill and derailment in regards to the unloading facility at the refinery and in the vicinity of the Union Pacific Railway right of way.

The DEIR claims that certain train movements may be "preempted from local and state environmental regulations by federal law under the Interstate Commerce Commission Termination Act ("ICCTA") of 1995" However, ICCTA does not preempt CEQA. Indeed, no published decision has so held. Accordingly, the DEIR must analyze *all* hazard and public safety impacts created by the Rail Spur Project, regardless of whether they occur on the project site or not.

(i) The DEIR Fails to Discuss the Public Safety Risks of Refining a Different or Lower Quality Crude Oil Feedstock.

The DEIR's failure to disclose the company's switch to crude with a significantly different chemical composition, and even to tar sands crude, renders the instant analysis of public safety impacts inherently flawed. It fails to identify the varied risks associated with refining, storing and transporting these crudes.

(a) The DEIR does Not Adequately Consider Accidental Releases at the San Francisco Refinery.

It is uncertain whether the Santa Maria facility can handle the unique chemical composition of tar sands crudes without significant upgrades. Higher acid and/or sulfur content in a crude may increase the risk of corrosion to refinery equipment and pipes, which in turn can lead to leaks, explosion or fire.¹⁶⁵ There is no assurance that required metallurgical upgrades have occurred at the Santa Maria facility to cope with the different composition of "advantaged

¹⁶² DEIR at 4.7-1, 4.7-2. Section 4.7.1.1 anticipates the scope of review: "The area that could be impacted by a release also includes all rail routes in the County and any routes associated with existing trucking of crude oil or associated facility hazardous materials." However, the DEIR, after an extensive review of the applicable Federal, State and local laws, merely analyzes project impacts immediately within the vicinity of the rail spur (section 4.7.4).

¹⁶³ The company proposes only two mitigation measures (registration of railroad crossings within the Santa Maria facility with the Federal Department of Transportation and installation of crossbucks at those crossings, DEIR at 4.7). This places full reliance on the federal government and ignores explicitly delegated authority outlined throughout the DEIR, for instance the CPUC's regulation in regards to railroads.

¹⁶⁴ See Fox Rodeo Report and DEIR at 4.12-21 and 2-21.

¹⁶⁵ See <http://www.dir.ca.gov/DIRNews/2013/IR2013-06.html>

crude.” Such refinery infrastructure changes are extensive and not required by any regulatory framework. As noted above, changes in crude slate at the Chevron Refinery in Richmond suggests that failure to perform required metallurgical upgrades can lead to catastrophic accidents.¹⁶⁶

A crude slate change could result in corrosion, a root cause of significant accidental releases, even if the crude slate is within the current design slate basis, due to compositional differences. In fact, although the sulfur composition at Chevron Richmond remained within the design range,¹⁶⁷ the gradual and significant change over time caused increased corrosion rates in the 4-sidecut line, which led to a catastrophic pipe failure in the #4 Crude Unit on August 6, 2012. This release sent 15,000 people to nearby hospitals and created huge black clouds of pollution billowing across the Bay. It also put workers at the unit in grave danger, with several escaping the gas cloud and inferno narrowly.

Incidents such as those that occurred at the Chevron Richmond Refinery confirm that refining oil is an inherently dangerous process. According to the report “Improving Public and Worker Safety at Oil Refineries” prepared by Governor Jerry Brown’s Office, every week, the U.S. Department of Energy receives reports on process safety incidents in the U.S. refinery industry.¹⁶⁸ The week that ended March 14, 2013 had 26 reported incidents, including unplanned flaring at the Torrance, California Exxon Mobil Refinery; an unplanned shut-down of the hydrocracking unit at Valero’s Benicia, California facility; and the unexplained restart of a major electrical unit at the Chevron Refinery in Richmond, California.¹⁶⁹ Recent news reports tell of multiple catastrophic events that have resulted in fatalities, serious injuries, and devastating environmental effects.¹⁷⁰ The DEIR fails to account for any preventative or responsive precautions to address the Project’s goal of accessing a wide range of “advantaged crudes.”

(b) The DEIR does Not Adequately Consider the Impacts of Transport of Tar Sands Crude by Rail.

¹⁶⁶ U.S. Chemical Safety and Hazard Investigation Board, Interim Investigation Report, Chevron Richmond Refinery Fire, Chevron Richmond Refinery, Richmond, California, August 6, 2012, Draft for Public Release, April 15, 2013, available at, <http://www.csb.gov/chevron-refinery-fire/>.

¹⁶⁷ US Chemical Safety and Hazard Investigation Board, 2013, p.34 (“While Chevron stayed under its established crude unit design basis for total wt. % sulfur of the blended feed to the crude unit, the sulfur composition significantly increased over time. This increase in sulfur composition likely increased corrosion rates in the 4-sidecut line.”).

¹⁶⁸ See Improving Public and Worker Safety at Oil Refineries Draft Report of the Interagency Working Group on Refinery Safety Governor Jerry Brown, dated July 2013.

¹⁶⁹ *Id.*

¹⁷⁰ See Associated Press, *Crews slowed by Heat in attacking Calif. rail fire*, NBC News, Aug 24, 2011 http://www.nbcnews.com/id/44259169/ns/us_news-life/t/crews-slowed-heat-attacking-calif-rail-fire/; and Bret Schulte, *Oil Spill Spotlights Keystone XL Issue: Is Canadian Crude Worse?*, Apr. 4, 2013, <http://news.nationalgeographic.com/news/energy/2013/04/130405-arkansas-oil-spill-is-canadian-crude-worse/>; and Marianne Lavelle, *Oil Train Crash Probe Raises Five Keys Issues on Cause*, National Geographic, Jul. 11, 2013, <http://news.nationalgeographic.com/news/energy/2013/07/130711-oil-train-crash-five-key-issues/>; and David Boroff, *At least eight injured, five critically, as explosions rock Blue Rhino propane gas plant in Florida*, National Geographic Jul. 30, 2013, <http://www.nydailynews.com/news/national/15-missing-florida-explosions-article-1.1412355>; and Matthias Gafni, *Benicia: Three Valero refinery rail cars filled with coke derail*, Contra Costa Times, Nov. 5, 2013, http://www.contracostatimes.com/news/ci_24458813/valero-refinery-rail-car-derails-benicia.

The Federal Railroad Administration has expressed concern about an increasing number of severe corrosion incidents found in rail tank cars and service equipment.¹⁷¹ Further, there is a history of major spills, derailments and explosions of hazardous materials along California rail routes.¹⁷² The New York Times even recently published an article: “Accidents Surge As Oil Industry Takes the Train.”¹⁷³ Although the DEIR skims the surface of analysis of such impacts,¹⁷⁴ it fails to do so in regards to the Project itself, and in particular to the transport of tar sands and other crudes.

The DEIR does highlight the tragedy in Lac-Mégantic, Canada. Several derailed tank cars spilled oil resulting in multiple explosions and fires causing 47 fatalities, extensive damage to the town center and precipitated the evacuation of about 2,000 people from the surrounding area.¹⁷⁵ The transport of crude by rail also implicates significant hazards to public safety. Bakken itself is particularly flammable, and was the feedstock transported in Lac-Mégantic, but tar sands crude also contain the very dense and toxic diluted bitumen that the rail cars are likely to carry. These oils in particular pose an especially serious environmental and public health threat when accidentally released into the environment. The EPA recently noted that spills of diluted bitumen require a different response action or equipment than for conventional oil spills.¹⁷⁶ Dilbit spills are simply more difficult and more expensive to clean up.¹⁷⁷ A 2010 spill of tar sands oil in Michigan has left substantial amounts of the oil on the river bottom to this day, and a \$1 billion clean-up continues.¹⁷⁸ Public health officials found numerous acute health impacts lasting for days and spanning numerous areas: Cardiovascular, dermal, gastrointestinal, neurological, ocular, renal, respiratory and other impacts.¹⁷⁹ Alternatively, should the project rely on rail transport of Bakken crude, equally serious unmitigated spill, fire and explosion hazards could result, albeit by somewhat different chemical mechanisms and associated safety system gaps, as the Lac-Mégantic incident examples tragically. The DEIR fails to sufficiently analyze any potentially similar impacts throughout California as a result of this Project, and completely omits any discussion beyond the Project’s immediate vicinity, for instance, impacts resulting from increased traffic, train idling and old ageing train cars not equipped for these hazardous materials.

¹⁷¹ See <http://www.fra.dot.gov/eLib/details/L04717>.

¹⁷² For example, there was a very major spill into Upper Sacramento River in 1991. See, <http://www.dfg.ca.gov/ospr/NRDA/Cantara.aspx>.

¹⁷³ See *Accidents Surge as Oil Industry Takes the Train*, New York Times, Jan. 25 2014, available at http://www.nytimes.com/2014/01/26/business/energy-environment/accidents-surge-as-oil-industry-takes-the-train.html?hp&_r=1.

¹⁷⁴ See DEIR at 4.7.

¹⁷⁵ DEIR at 4.7-17.

¹⁷⁶ EPA, Comment letter to US Department of State regarding the Supplemental Draft Environmental Impact Statement from TransCanada’s proposed Keystone XL project, 2013.

¹⁷⁷ Environmental Working Group, Poisons in the Pipeline, Tests Find Toxic Stew in Oil Spill, June 2013, page 6.

¹⁷⁸ See <http://www.epa.gov/enbridgespill/>.

¹⁷⁹ Michigan Department of Community Health, Acute Health Impacts of the Enbridge Oil Spill, November 2010. http://www.michigan.gov/documents/mdch/enbridge_oil_spill_epi_report_with_cover_11_22_10_339101_7.pdf (last accessed 19 June 2013); U.S Department of Health and Human Services and ATSDR, Kalamazoo River/Enbridge Spill: Evaluation of Crude Oil Release to Talmadge Creek and Kalamazoo River on Residential Drinking Water Wells in Nearby Communities, 27 February 2013, p. 90. http://www.michigan.gov/documents/mdch/enbridge_oil_spill_epi_report_with_cover_11_22_10_339101_7.pdf (last accessed 20 June 2013)

(ii) The DEIR's Analysis Illegally Defers Mitigation of Public Safety Precautions.

Formulation of mitigation measures should not be deferred until some future time.¹⁸⁰ Numerous cases illustrate that reliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decision making.¹⁸¹ An EIR cannot rely on any management plans, studies, or reports developed after the EIR process.¹⁸²

Mitigation Measure BIO-7 requires Phillips 66 to amend and submit for review and approval to the County Planning Department, its Santa Maria Refinery Spill Prevention, Control and Countermeasure Plan.¹⁸³ This amendment and review has not yet occurred, and will not occur until after the close of the CEQA process. CEQA specifically forbids any post-project approval bilateral negotiation between project proponent and lead agency.¹⁸⁴ The DEIR's cursory analysis is unclear regarding whether the Spill Prevention, Control and Countermeasure Plan will also address the risk of fire or explosion and danger to the public. This mitigation measure cannot comply with CEQA until the County has had an opportunity to review, approve and include that Countermeasure Plan in a revised document.

The DEIR also includes an exhaustive discussion of certain State regulatory bodies charged with public safety duties. The DEIR does no more than highlight the current regulatory setting, with sparse discussion of relevance to the Project. For instance, the DEIR outlines the authority delegated to the California Public Utilities Commission to inspect and maintain safety at railroad crossings, yet does not make any demonstration that Phillips 66 has or will reach out to the Commission to institute proceedings to ensure safety given a higher frequency of rail cars and traffic or "virtual pipelines" of highly flammable material passing through some of the most densely populated and environmentally sensitive (e.g., water supply for most of the state) areas in the United States.¹⁸⁵

Similarly, the DEIR also notes the California Accident Release Prevention Program, which mirrors the Federal Risk Management program.¹⁸⁶ These programs would document hazard review, provide process hazard analyses, incident investigation, and ensures maintenance and mechanical integrity of the refinery.¹⁸⁷ The DEIR notes these critical requirements, however, "if applicable."¹⁸⁸ Its analysis has not only deferred mitigation of public safety impacts, but also pushes that mitigation beyond certainty.

The DEIR relies on plans that are not yet approved, and because it fails to provide enforceable measures and performance standards, there is no assurance the Project's impacts

¹⁸⁰ CEQA Guidelines section 15126.4(a)(1)(b).

¹⁸¹ *See eg.* *Communities for a Better Environment v. City of Richmond*, 184 Cal. App. 4th 70, 92 (2010).

¹⁸² *Id.*

¹⁸³ DEIR at 4.4-28.

¹⁸⁴ *Communities for a Better Environment v. City of Richmond*, 184 Cal. App. 4th at 93.

¹⁸⁵ DEIR at 4.7-45.

¹⁸⁶ DEIR at 4.7-51.

¹⁸⁷ *Id.*

¹⁸⁸ *Id.*

related to hazards would not be significant and that they would be mitigated at all.¹⁸⁹ A revised EIR must identify all feasible mitigation measures and analyze alternatives that would substantially lessen the significant impacts of the Project.

(iii) The DEIR's Analysis of Risk of Oil Spill and Train Derailment is Inaccurate and Misleading.

In detailing the current setting of transporting crude by rail, the DEIR acknowledges the extent of dangers, for instance, the fatal accident in Lac-Mégantic, Canada.¹⁹⁰ The DEIR then begins its analysis of the risk of this similar Project, and either dispels those potential catastrophic incidents with either an assertion of improbability or a conclusory analysis.

An Inappropriate Threshold of Significance

First, the DEIR ignores the potentially catastrophic consequences of an accident by focusing on the alleged improbability of one occurring.¹⁹¹ It finds the risk of oil spill to pose less than significant impact.

However, “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project,” constitutes a significant effect on the environment.¹⁹² Probability does not factor into the evaluation of this adverse change alone without consideration for the magnitude of potentially catastrophic harm; the correct inquiry is whether the potential for such an adverse change exists. Regardless, the many recent incidents involving crude shipped by rail have shown that such accidents are reasonably foreseeable.

The DEIR instead incorporates a threshold of significance to measure risks to public safety that is based on probability.¹⁹³ The DEIR's analysis relies on the Santa Barbara County Public Safety Thresholds.¹⁹⁴ The analysis interprets the Santa Barbara thresholds to identify a significant impact based on “amber or red regions” of the Santa Barbara County Safety Criteria. These amber or red regions are determined by Fig. 4.7-5 in the DEIR. The amber or red regions are determined by comparing the number of injuries or fatalities of an activity with the frequency per year. This probability-based criteria is not compatible with CEQA. This is particularly the case for a “new” (transport of tar sands or Bakken crude) activity in a “virtual pipeline” that poses different impacts, making any historical analysis of frequency outdated and therefore irrelevant.

The DEIR commits the same error in regards to cumulative impacts: the analysis notes the proximity of the proposed Phillips pipeline (Pipeline Project) route would be located relatively close to the UPRR railroad in Price Canyon and the subsequent overlap in dangers if a derailed train/oil spill interacted with failure of the pipeline. The DEIR offers the assurance that

¹⁸⁹ See *Sacramento Old City Ass'n v. City Council* (1991) 229 Cal. App. 3d 1011.

¹⁹⁰ DEIR at 4.7-17.

¹⁹¹ DEIR at 4.7.56.

¹⁹² CEQA Guidelines section 15382.

¹⁹³ DEIR at 4.7-55.

¹⁹⁴ *Id.*

the resulting “oil spill and fire,” is highly unlikely, and therefore considered less than significant.¹⁹⁵

Second, the DEIR further dispels any significant risks to public safety on the basis of generalized and conclusory statements that are specifically prohibited under CEQA.¹⁹⁶ The following are examples:

“With the increase level of train traffic that would occur with the Rail Spur Project, there would be an increased risk of accidents at these road crossings. However, given that the trains on site would only be moving at speeds of around three miles per hour these impacts would be considered less than significant.”¹⁹⁷

In regards to security, “the Applicant indicates that the site has a comprehensive security system designed to address all security issues. The security system is periodically tested to confirm its effectiveness. It must meet or exceed Industry standards while addressing Homeland Security issues.”¹⁹⁸

In regards to a discussion on injury and fatality rates: “as rail traffic would occur regardless of whether additional crude oil cars were added to the train, the transportation of crude oil would not increase the accident/trauma-related injuries and fatalities associated with rail accidents.”¹⁹⁹

“Given the properties of crude oil, the likelihood of an explosion is virtually non-existent and consequently explosion scenarios are not addressed further in this document.”²⁰⁰

It is remarkable that the DEIR does not even address first response or other emergency precautions. This is particularly the case given the potential inability, as recent news has informed, of first responders to control fires from rail spills or explosions.

History of Violations

Given that this Project would implement operations to allow Phillips 66 to transport highly volatile materials up and down the West Coast through highly populated areas, Phillips 66’s regulatory compliance record is highly relevant. In 2004, a leaking crude oil pipeline “caused a release” at the Santa Maria facility.²⁰¹ The DEIR, especially in the context of switching to a different quality crude slate, should have provided more information regarding

¹⁹⁵ DEIR at 4.7-63.

¹⁹⁶ See *Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.* (2001) 91 Cal. App. 4th 1344, 1371 (striking down an EIR “for failing to support its many conclusory statements by scientific or objective data”); *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal. App. 4th 645, 659 (“[D]ecision makers and general public should not be forced to . . . ferret out the fundamental baseline assumptions that are being used for purposes of the environmental analysis.”).

¹⁹⁷ DEIR at 4.7-57.

¹⁹⁸ DEIR at 4.7-7.

¹⁹⁹ DEIR at 4.7-28.

²⁰⁰ DEIR at 4.7-37.

²⁰¹ DEIR at 4.7-37.

whether this incident was similar to the failed pipe in the crude unit that caused the Chevron Richmond Refinery August 6 2012 fire.

According to the U.S. Environmental Protection Agency (“EPA”) the Refinery ranked as the 8th most toxic polluter of all California facilities with large chemical releases. Phillips 66 was ranked 12th on the Toxic 100 Air Polluters index.²⁰² This index, prepared by the Political Economy Research Institute, identifies the top U.S. air polluters among the world's largest corporations and ranks corporations based on the chronic human health risk from all of their U.S. polluting facilities.²⁰³

The DEIR should have provided this additional information to properly evaluate the Project. Overall, its conclusory analysis and incompatible threshold of significance violate CEQA. The DEIR failed to properly assess, or even identify, the Project’s significant, perhaps even catastrophic, risks to public safety, omitting any consideration of proper and critical mitigation.²⁰⁴

D. The DEIR Fails to Adequately Analyze the Project’s Impacts Related Biological Resources.

The DEIR fails to sufficiently analyze significant environmental effects on biological resources in and around the site of the Project. Specifically, the DEIR should be revised to ensure that the on-site federally-endangered Nipomo Mesa Lupine and off-site prime agricultural farmland are adequately protected.

(i) The DEIR does Not Adequately Analyze the Project’s Impact on Endangered Species.

CEQA mandates a finding of significance for any impact that “restrict[s] the range of an endangered, rare or threatened species.”²⁰⁵ The Supreme Court applied this requirement, making clear that any impacts to federally designated critical habitat are per se significant.²⁰⁶ The reasoning is manifest: the federal agency charged with the protection of a listed species has the requisite expertise to determine the habitat areas that, if impacted, would “restrict the range” of the listed species, and that determination must be respected by state and local agencies under CEQA.²⁰⁷

²⁰² See EPA 2011 Toxics Release Inventory and the Political Economy Research Institute Toxic 100 Air Polluters, available at http://www.peri.umass.edu/toxicair_current/ (last accessed, Jan 20, 2014).

²⁰³ The index relies on the U.S. EPA’s Risk Screening Environmental Indicators (“RSEI”), which assesses the chronic human health risk from industrial toxic releases. The underlying data for RSEI is the EPA’s Toxics Release Inventory (“TRI”), in which facilities across the U.S. report their releases of toxic chemicals. In addition to the amount of toxic chemicals released, RSEI also includes the degree of toxicity and population exposure.

²⁰⁴ Cf. DEIR at 4.7-58.

²⁰⁵ CEQA Guidelines § 15065(a)(1).

²⁰⁶ *Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova*, 40 Cal. 4th 412, 425, 449 (2007) (EIR invalidated for failure to consider significant any reduction in water flow in designated critical habitat area for the Central Valley steelhead trout).

²⁰⁷ CEQA Guidelines § 15065(a)(1); see also 16 U.S.C. § 1532(5)(A)(i) (defining critical habitat as the areas “on which are found those physical or biological features essential to the conservation of the species”).

Federally-and State-Endangered Nipomo Mesa Lupine

The Initial Study and DEIR identifies the Nipomo Mesa Lupine, a state and federally listed endangered plant species, as a biological resource that will be impacted through the construction and operational phases of the project. The document further identifies additional significant impacts to other ground-dwelling and animal species, including mortality impact on the American Badger, which is a fully protected species under California law, and impacts on dune shrub and dune habitats. However, the DEIR fails to mitigate the significant impacts posed to those, and other biological resources by this Project. In particular, without disclosing a switch to a different crude feedstock, the DEIR never analyzes the issues of impact or how to avoid, minimize or protect endangered species from that new feedstock and its plethora of different chemical compositions.

The Santa Maria Refinery property is home to the last remaining population of the federally-endangered Nipomo Mesa lupine.²⁰⁸ Based on the botanical surveys for the DEIR, “[t]he current determination of presence/absence of Nipomo lupine within the Project Site cannot be adequately determined.”²⁰⁹ Though no blooming specimens were identified during the surveys, Figure 4.4-2 Sensitive Species Survey Map²¹⁰ shows two locations in the northern part of the Biological Survey Area (BSA), which according to the legend were mapped by CNPS in 2006. As represented by Figure 4.4-2, the Nipomo Mesa lupine, like many annual plants, moves around on the landscape to take advantage of preferred ecological conditions, and under drought conditions the Nipomo Mesa lupine can persist as an underground seed bank without producing above-ground individuals.²¹¹ Consequently, despite the botanical survey’s inability to detect the species, this Project will certainly directly impact previously occupied habitat, will likely indirectly impact extant habitat and populations and may impact and possibly eradicate the last remaining population of this highly endangered lupine on the planet.

To mitigate for the possibility of this impact, the DEIR proposes mitigation measure BIO-1: before project activities are undertaken, a focused survey shall be conducted during a normal rainfall season to determine whether the Nipomo Mesa lupine is present within the project site.²¹² If the survey determines that the lupine is present, Phillips 66 will apply for an Incidental Take Permit with the California Department of Fish and Wildlife.²¹³

The DEIR claims that, with mitigation measure BIO-5a, which involves the development of a Dune Scrub Habit Restoration Plan, the impacts on the Nipomo Mesa lupine would be less than significant.²¹⁴ However, the Dune Scrub Habitat Restoration Plan does not purport to preserve existing populations of Nipomo Mesa lupine, but instead to “restor[e] and enhanc[e] central dune scrub habitat *immediately adjacent to* known Nipomo Mesa lupine populations.”²¹⁵

²⁰⁸ USFWS letter, attached to Initial Study, Appendix C.

²⁰⁹ DEIR at 4.4-17.

²¹⁰ DEIR at 4.4-16

²¹¹ FWS letter; DEIR at 4.4-17.

²¹² DEIR at 4.4-17.

²¹³ DEIR at 4.4-17.

²¹⁴ DEIR 4.4-17.

²¹⁵ DEIR at 4.4-22 (emphasis added).

Therefore the proposed mitigation is inadequate to fully mitigate direct and indirect impacts to the Nipomo Mesa lupine.

Additionally, if the pre-project survey does not find that the lupine is present, no mitigation is proposed to be implemented. However, the seeds of the Nipomo Mesa lupine often require scouring in order for germination to occur, so there is a possibility that even with a normal rainfall season, the seeds may not germinate and produce above-ground individuals unless the seeds are scoured.²¹⁶ Another survey that simply searches for blooming specimens may not prove sufficient to detect this endangered plant's populations. In any event, any of these mitigation measures, analyses or even consultation with the Fish and Wildlife Service performed *after* certification of this deficient DEIR constitutes *illegally deferred mitigation*.²¹⁷

The DEIR should be revised to provide for the protection of this federally and state-endangered species. Further, any revisions must address the direct and indirect impacts to this species from proximity to the storage and partial refining of tar sands crude – prior to project approval. The DEIR should also be revised to consider an alternative location for construction activities in order to avoid disturbing any Nipomo Mesa lupine populations and habitat identified in future surveys.

(ii) The DEIR does Not Adequately Analyze the Project's Impacts Related to Rare Plants and Plant Communities.

The DEIR appears to downplay the status of the Silver Dune Lupine – Mock Heather Scrub Alliance which is present on the proposed project.²¹⁸ It is actually a plant alliance that is considered highly imperiled and is tracked by the California Department of Fish and Wildlife.²¹⁹

Although the DEIR addresses the Global (G3) and State Rank (S3), it fails to describe the significance of these ranks. Global G3 rank indicates that the alliance is “moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors” globally and the S3 rank indicates that it is “Vulnerable in the jurisdiction due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors making it vulnerable to extirpation.”²²⁰ In the case of the S3 rank, the jurisdiction is the State of California. The DEIR fails to identify the number of acres of any of the plant alliances that occur on site, including the highly imperiled Silver Dune Lupine-Mock Heather Scrub Alliance. Therefore it is impossible to evaluate the direct or indirect impacts to this rare alliance or any of the alliances from the proposed project.

(iii) The DEIR does Not Adequately Analyze the Project's Impacts Related to Wildlife.

²¹⁶ See USFWS letter.

²¹⁷ *Communities for a Better Environment v. City of Richmond*, 184 Cal. App. 4th at 93.

²¹⁸ DEIR at 4.4-3

²¹⁹ See <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=24716&inline=1> at PDF page 50

²²⁰ http://www.natureserve.org/publications/ConsStatusAssess_RankMethodology.pdf

The DEIR documents that American badgers occur on the proposed project site²²¹. The DEIR recognizes that they are a Species of Special Concern, but it fails to recognize that they are also a fully protected species as a furbearing mammal under California Code of Regulations Title 14 Section 460. By simply excluding badgers from their dens, as proposed in Bio-4, does not answer the question if that exclusion results in “take” of the badger or not. Additional monitoring of the displaced badger(s) is(are) required.

In addition, the DEIR documents that burrowing owls occur on the proposed project site.²²² The DEIR recognizes that burrowing owls are Species of Special Concern, but it fails to identify any avoidance or mitigation strategy for the owls. Burrowing owls are in decline throughout California, and as the DEIR recognizes has not reproduced successfully in the central coast in the last 20 years. However, that does not eliminate the need to provide mitigation habitat for the owls that will be impacted by the proposed project. The DEIR needs to comply with the California Department of Fish and Wildlife’s recent guidance on burrowing owl,²²³ which requires projects to:

“Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with

- (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and
- (b) sufficiently large acreage, and presence of fossorial mammals.” (at 12).

Other requirements for mitigation are also included in the California Department of Fish and Wildlife’s guidance, requirements omitted from the DEIR’s analysis.

(iv) The DEIR does Not Adequately Analyze the Project’s Impacts Related to Agricultural Activities.

The DEIR fails to include a comprehensive analysis of agricultural site constraints. Without a full investigation, the DEIR has no basis to conclude that the proposed construction of Project components in an agricultural area would not result in impacts. Site constraints, such as the presence of livestock, and the potential impact of diesel exhaust on pasture and cattle, must be identified prior to Project approval. An EIR must include objective measurements of a cumulative impact when such data are available (or can be produced by further study) and are necessary to ensure disclosure of the impact.²²⁴

San Luis Obispo County is one of the leading agricultural production counties in California.²²⁵ The site of the Proposed Project borders prime farmlands on its southern border,²²⁶

²²¹ DEIR at 4.4-20

²²² DEIR at 4.4-29

²²³ <http://www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf>

²²⁴ See *Kings County Farm Bureau*, 221 Cal. App. 3d at 729.

²²⁵ DEIR at 4.2-1.

and a portion of the project site currently supports grazing activities.²²⁷ Despite this, the DEIR asserts that the construction of a rail spur and the travel of up to 250 unit trains, each with 73 to 80 tank cars each year would have no significant and unavoidable impacts to agricultural resources.

The DEIR acknowledges that construction and operations activities could result in significant impacts on the productivity of adjacent farmlands—dust and contaminated air emissions, hazardous materials spills, and increased water use, among other impacts, could adversely affect agricultural lands adjacent to the project site by contaminated soil and water and putting strain on already limited water resources.²²⁸ Further, the DEIR, by cross-referencing to other mitigation measures, including oil spill control and fugitive dust monitoring, asserts that the impacts on adjacent agricultural lands could be mitigated to less than significant.²²⁹ This conclusory assessment is insufficient. Agricultural impacts are considered significant if they impair the agricultural use of other property.²³⁰ The DEIR’s “bundled” mitigation measures do not provide substantial evidence that the Project will not significantly impact adjacent agricultural properties.

E. The Project is Inconsistent with State and Local Plans.

An EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans.²³¹ Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or State Implementation Plan, area-wide waste treatment and water quality control plans, regional transportation plans, regional housing allocation plans, regional blueprint plans, plans for the reduction of greenhouse gas emissions, habitat conservation plans, natural community conservation plans and regional land use plans for the protection of the coastal zone.²³² An applicable plan, policy, or regulation is one that has already been adopted and thus legally applies to a project.²³³ This necessarily includes County General Plans, such as the SLO County General Plan, adopted by the County in 2010, and other applicable State and Federal regulations, executive orders and policies.

The DEIR fails to discuss any potential inconsistency with applicable plans, polices, and regulations including (1) the San Luis Obispo County General Plan, (2) Contra Costa County’s Industrial Safety Ordinance, and General Plan, (3) the United States Chemical Safety Board, OSHA regulations and other federal guidance regarding risk analysis and hazards prevention, and (4) the California Global Warming Solutions Act (AB 32).

The San Luis Obispo County General Plan sets forth goals to improve the environment, based on public, community-based input from County Residents. The Plan sets forth goals

²²⁶ DEIR at 4.2-15, Figure 4.2-3.

²²⁷ DEIR at 4.2-2.

²²⁸ DEIR at 4.2-22.

²²⁹ DEIR at 4.2-22.

²³⁰ DEIR at 4.2-19.

²³¹ CEQA Guidelines § 15125(d).

²³² See, *San Franciscans Upholding the Downtown Plan v. City & Cnty. of San Francisco* (2002) 102 Cal.App.4th 656, 678.

²³³ *Chaparral Greens v. City of Chula Vista* (1996) 50 CA4th 1134, 1145, n7.

relating to the community's expressed needs to see a decrease in air pollution, decrease in traffic and traffic related noise, and decreased industrial development.²³⁴ The Project, however, will increase all of those issues, wholly conflicting with the General Plan's over-arching environmental goals.

Additionally, because this Project is integrally related to the Propane Fuel Recovery Project at the Refinery's Rodeo facility, and because the two facilities are connected by pipeline, what takes place at the Santa Maria facility, impacts the Rodeo facility, triggering Rodeo, and Contra Costa County Local Plans and Ordinances. By increasing regional and state processing of, and reliance on fossil fuels, the Project conflicts with Contra Costa County's General Plan, to the extent that plan sets goals to increase the usage of renewable energy such as wind and solar.²³⁵ Phillips 66's switch to denser, higher sulfur crude, as well as its storage, transport and the process for recovery of propane and butane at the Rodeo facility, as a result of this Project conflicts with the Contra Costa County Industrial Safety Ordinance that requires Inherently Safer Systems. The pending project proposals at both facilities are also inconsistent with the recommendations of the Chemical Safety Board ("CSB").

In particular, the CSB found a catastrophic and hazardous failure from running higher sulfur crude in existing refineries built before 1985.²³⁶ The CSB identified that corrosion at the Chevron Richmond Refinery, which led to the pipe rupture, was in large part caused by sulfur compounds in the crude processed at the Richmond refinery.²³⁷ It also found that such sulfur corrosion is not a new phenomenon, and that the petroleum industry is well aware of its potential to cause serious impacts on refinery equipment.²³⁸ The DEIR fails to recognize the CSB's analysis and fails to address any proposed recommendations made by the CSB. Thus, it is unclear whether there would be a potential conflict between what the Project entails and what the CSB has set forth as its recommendations for refinery safety. What appears clear, is that the types of crude that the Refinery will be importing by rail will dramatically increase the overall sulfur content in the Refinery's crude slate, and would thus likely cause similar issues to those experienced at the Chevron Refinery, which led to the Chevron Refinery fire, in August, 2012.²³⁹

Moreover, because there will be an increase in the presence of harmful chemicals, raising serious safety and hazards concerns, the Project has the potential to conflict with the Occupational Health and Safety Act (OSHA) employee protection standards, as well as the President's August, 2013 Executive Order (EO) to improve chemical safety and security.

²³⁴ SLO County General Plan, Adopted: August 1994, Revised: June, 2010, Chapter 1, Land Use, available at: <http://www.slocity.org/communitydevelopment/download/unifiedgeneralplan/Chapter1-Land%20Use%20June2010.pdf>.

²³⁵ See generally, Contra Costa County General Plan, 2005-2020, Adopted January 18, 2005, Reprinted July, 2010, available at: <http://contra.napanet.net/depart/cd/current/advance/GeneralPlan/General%20Plan.pdf>.

²³⁶ See, Chemical Safety Board, Chevron Richmond Refinery Interim Investigation Report, April 2013, available at: http://www.csb.gov/assets/1/19/Chevron_Interim_Report_Final_2013-04-17.pdf, last accessed, Jan. 26, 2014.

²³⁷ *Id.*

²³⁸ *Id.*, at 15.

²³⁹ See, Chemical Safety Board, Chevron Richmond Refinery Interim Investigation Report, April 2013, *supra*.

The DEIR does little more than simply mention OSHA, and provides cursory statements in section 4.3, relating to Air Quality Impacts, and elsewhere, that diminish the relevance of the Act. For example, without stating a current or anticipated, foreseeable increase in the presence of hydrogen sulfide, the DEIR states that the hydrogen sulfide levels within the crude slate are “not expected to produce substantial impacts beyond possible OSHA related worker exposure issues...”²⁴⁰ The DEIR even claims that such issues are outside the scope of the EIR.²⁴¹ In section 4.7, in the context of Hazards assessment, the DEIR states only that the Project’s security vulnerability assessments must comply with OSHA Process Safety Management and EPA rules relating to risk management. The DEIR fails to acknowledge, however, that such issues must be raised, and included in a potential conflicts analysis, as the components and implications of the Project may conflict with such rules, given the potential hazards and dangerous impacts the Project may have on workers.

The President’s August, 2013 EO, was signed and executed for the purpose of creating a comprehensive plan to address increasing chemical safety concerns throughout various industrial facilities, including refineries.²⁴² To that end, the President ordered a federal working group that includes, *inter alia*, OSHA and the EPA, to begin the process of improving operational coordination with State and Local partners, as well as owners and operators of industrial facilities increasing their use of hazardous chemicals. By simply dismissing, or failing to adequately analyze the increase in safety and hazards impacts that will result from the Project, the DEIR fails to demonstrate compliance with new federal initiatives such as the EO and forthcoming recommendations which will result from CSB’s investigations. The DEIR, therefore, fails to sufficiently address potential conflicts with existing laws, rules, or regulations, in violation of CEQA.²⁴³

Finally, although the DEIR mentions the Global Warming Solutions Act of 2006 (AB 32) in its list of applicable regulations in the documents “Regulatory Setting” section, the DEIR’s analysis fails to fully recognize that “[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” The DEIR further fails to actually identify, much less analyze the project’s true GHG emission levels, in the context of the current state-wide 2020 greenhouse gas emissions reduction goals, which are, pursuant to AB 32, signed into law. The DEIR’s omission of an adequate GHG analysis, stands in stark contrast to statements made by Phillips 66 officials themselves, relating to the possible conflict between the law and their strategy for their two California refiners. Asked what he thought the permitting track is for delivering Bakken crude or Canadian heavy crude to California by rail, CEO Garland replied, “I think we are pushing it. I think there is some resistance, given the heavy nature of the crudes and the carbon footprint of the crudes and AB 32

²⁴⁰ DEIR, 4.3-52.

²⁴¹ *Id.*

²⁴² See Executive Order Improving Chemical Safety and Security, August 1, 2013, available at: <http://www.whitehouse.gov/the-press-office/2013/08/01/executive-order-improving-chemical-facility-safety-and-security>.

²⁴³ See generally, Guidelines § 15125(d); see also, *Chaparral Greens v. City of Chula Vista* (1996) 50 CA4th 1134, 1145.

cap and trade, et cetera, et cetara [sic] in California.”²⁴⁴

The DEIR fails to address the above examples of the Project’s conflicts with local, State and Federal plans. Overall, the DEIR’s description of the Project and its environmental setting is inaccurate and inadequate to the extent that it improperly minimizes the environmental effects discussed further throughout this comment.

III. THE EIR FAILS TO ADEQUATELY ANALYZE THE PROJECT’S CUMULATIVE ENVIRONMENTAL IMPACTS FROM OTHER REFINING-RELATED PROJECTS.

An EIR must discuss a Project’s significant cumulative impacts.²⁴⁵ A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable future projects whose impacts might compound or interrelate with those of the project at hand. “Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”²⁴⁶

A project has a significant cumulative effect if it has an impact that is individually limited but “cumulatively considerable.”²⁴⁷ “Cumulatively considerable” is defined as meaning that “the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”²⁴⁸ Cumulative impacts analysis is necessary because “environmental damage often occurs incrementally from a variety of small sources [that] appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact.”²⁴⁹ The DEIR fails to meet this requirement; for the following reasons, its analysis of cumulative impacts is incomplete, cursory and superficial.

Initially, the DEIR’s analysis does not comply with CEQA’s requirement that agencies first determine whether cumulative impacts to a resource are significant, and then to determine whether a project’s impacts are cumulatively considerable (*i.e.*, significant when considered in conjunction with other past, present and reasonably foreseeable projects).²⁵⁰ The DEIR skips the first step and focuses only on the second.²⁵¹ This error caused the document to underestimate the significance of the Project’s cumulative impacts because it focused on the significance of the Project’s impacts on their own as opposed to considering them in the context of the cumulative problem. It is wholly inappropriate to end a cumulative analysis on account of a determination that a project’s individual contribution would be less than significant. Rather, this should constitute the beginning of the analysis.

²⁴⁴ Transcript of Jan. 30, 2013 Phillips 66 Fourth-Quarter Earnings Conference Call, available at: http://www.phillips66.com/EN/investor/presentations_ccalls/Documents/PSX-Transcript-2013-01-30T.pdf, last accessed Jan. 26, 2014, 2013.

²⁴⁵ CEQA Guidelines section 15130(a).

²⁴⁶ CEQA Guidelines section 15355(b).

²⁴⁷ *Id.* §§ 15065(a)(3), 15130(a).

²⁴⁸ *Id.* § 15065(a)(3).

²⁴⁹ *Communities for a Better Env’t v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 114.

²⁵⁰ CEQA Guidelines § 15064(h)(1).

²⁵¹ *See eg.* DEIR at 4.7-61.

Second, the DEIR's scope is limited largely to direct, immediate impacts within the immediate Project vicinity. For example, the analysis of cumulative hazards of transporting crude by rail, the analysis of impacts is limited to the County, despite the fact that Project-related rail traffic would pose the same risks throughout its California wide route.

Third, the list of reasonably foreseeable future projects considered in the EIR is under inclusive, especially in light of the potential geographic scope of certain potentially significant impacts. One of the EIR's most egregious deficiencies is the document's failure to disclose that several California refiners are considering developing "Crude By Rail" projects that could bring in tar sands-based dilbit or Bakken crudes to each of the Bay Area refineries.²⁵² Each of the Bay Area's refineries have either recently permitted projects or have pending permits that will facilitate transporting and refining tar sands crude. These refinery projects, including at least three projects proposed by Phillips 66 (Santa Maria Facility Throughput Extension Project, this Project, and the Ferndale Washington Crude Unloading Facility Project), as well as several others including the Valero Crude by Rail Project, the Tesoro Project, and the WesPac Pittsburg Energy Infrastructure Project could result in the delivery of tar sands diluted with other chemicals to the Bay Area.

The California Attorney General has even expressed concern, and recently wrote the attached letter to the City of Pittsburg²⁵³, inquiring about the link of the WesPac project to other refineries in the Bay Area. This County should also ask the same relevant questions.

Although the DEIR mentions these Santa Maria projects, and purports to analyze the cumulative environmental impacts from the projects it identifies (it uses the wrong baseline, the permit levels), it does not come close to disclosing the full list of projects with staggering environmental impacts on the Bay Area.²⁵⁴

Three other projects omitted from consideration in the DEIR's analysis of cumulative environmental impacts include²⁵⁵:

(i) **Phillips 66 Ferndale, Washington Crude Unloading Facility Project**

Phillips 66 was recently issued a permit to construct a new crude rail unloading facility at its Ferndale Refinery in Washington. The DEIR must state whether this Project anticipates, depends on, or is in any other way related to the Washington project.

(ii) **Phillips 66 Rodeo Propane Fuel Recovery Project**

In particular, despite the clear relationship between the Santa Maria projects and the Rodeo Refinery project described above, the DEIR fails to evaluate the Project's cumulative

²⁵² See Karras and Fox Rodeo Reports.

²⁵³ See Letter from Attorney General, Kamala D. Harris, to City of Pittsburg, *Recirculated Environmental Impact Report for the WesPac Energy Infrastructure Project*, dated January 15, 2014, attached as Exhibit 25.

²⁵⁴ See DEIR Table 3.1.

²⁵⁵ This list does not include the nearby oilfield expansion project proposed by Freeport McMoran, which is under construction and discussed in the Fox Santa Maria Report.

impacts of Santa Maria semi-refined products in, and in transport to, Rodeo. These include a cumulatively considerable increase in criteria and toxic air contaminant air emissions and greenhouse gas emissions. This includes cumulative environmental impacts of refining increased volumes of tar sands crude.

(iii) WesPac Pittsburg Energy Infrastructure Project

WesPac Energy–Pittsburg LLC (WesPac) proposes to modernize and reactivate the existing oil storage and transfer facilities located at the NRG Energy, Inc.(NRG, formerly GenOn Delta, LLC) Pittsburg Generating Station. The proposed WesPac Energy– Pittsburg Terminal (Terminal) would be designed to receive crude oil and partially refined crude oil from trains, marine vessels, and pipelines, store oil in existing or new storage tanks, and then transfer oil to nearby refineries, including the Phillips 66 San Francisco Refinery’s Rodeo facility.²⁵⁶

The Terminal Project consists of the modernization and reactivation of the following components at the NRG facility: (1) marine terminal; (2) onshore storage terminal, including both East and South Tank Farms; and (3) the existing San Pablo Bay Pipeline. In addition, the project consists of the construction and operation of new facilities, including: (1) Rail Transload Facility; (2) Rail Pipeline; (3) KLM Pipeline connection; and (4) new ancillary facilities, including an office and control building, warehouse, electrical substation, and others as described below.²⁵⁷

For the delivery of crude oil and partially refined crude oil by train, a new Rail Transload Operations Facility would be constructed on a 9.8-acre vacant rail yard, to be leased from BNSF Railway Company. All products handled at the facility would be transported by rail, ship, barge, or pipeline; no products would be transported by truck as part of the proposed project.²⁵⁸ The Terminal would operate with an average throughput of 242,000 barrels (BBLs)1 of crude oil or partially refined crude oil per day, and would have a maximum capacity throughput of 375,000 BBLs per day.²⁵⁹ The total annual throughput for the entire Terminal would be approximately 88,300,000 BBLs of crude oil and/or partially refined crude oil per year.²⁶⁰

As mentioned above, the Phillips San Francisco Refinery is one of the refineries that may receive crude oil and/or deliver-crude oil to the Terminal.²⁶¹ Therefore, the DEIR should have included an analysis of this WesPac project in the cumulative impact analysis, both because the physical construction and operation of this facility will contribute to cumulative environmental impacts and because it could facilitate greater amounts of crude delivery to and from the Santa Maria facility. The DEIR must be revised to take into account each of the cumulative projects that has the potential to result in cumulatively considerable environmental impacts. Furthermore, the DEIR must identify feasible mitigation measures capable of reducing these environmental impacts.

²⁵⁶ WesPac RDEIR at 2.0-1.

²⁵⁷ *Id.* at 2.0-4.

²⁵⁸ *Id.* at 2.0-1.

²⁵⁹ *Id.* at 2.0-2.

²⁶⁰ *Id.*

²⁶¹ *Id.*

Climate Change Implications

Furthermore, it is important to acknowledge that climate change is the classic example of a cumulative effects problem; emissions from numerous sources combine to create the most pressing environmental and societal problem of our time.²⁶² As one appellate court recently held, “the greater the existing environmental problems are, the lower the threshold for treating a project’s contribution to cumulative impacts as significant.”²⁶³

Canadian tar sands crude is considered to be the dirtiest, most carbon-intensive fuels on the planet. NASA climatologist Jim Hansen explains:

With today’s technology there are roughly 170 billion barrels of oil to be recovered in the tar sands, and an additional 1.63 trillion barrels of worth underground if every last bit of bitumen could be separated from sand. “The amount of CO2 locked up in Alberta tar sands is enormous,” notes mechanical engineer John Abraham of the University of Saint Thomas in Minnesota, another signer of the Keystone protest letter from scientists. “If we burn all the tar sand oil, the temperature rise, just from burning that tar sand, will be half of what we’ve already seen”—an estimated additional nearly 0.4 degree Celsius from Alberta alone.

Notwithstanding the clear evidence documenting the effect that petroleum-refining has on GHG emissions, and enormous increase that would result from the transport, processing and refining of tar sands crudes. The DEIR should have acknowledged the switch to this different quality crude oil feedstock and provided a suitable cumulative impacts analysis.

IV. THE DEIR FAILS TO ANALYZE A REASONABLE RANGE OF PROJECT ALTERNATIVES

An EIR “must consider a reasonable range of potentially feasible alternatives” to a project.²⁶⁴ An alternative is feasible if it is “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.”²⁶⁵

Although “CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR[,] [e]ach case must be evaluated on its facts.”²⁶⁶ The scope of alternatives is judged by the rule of reason.²⁶⁷ Generally, the scope of alternatives is sufficient so long as the EIR provides “information sufficient to permit a reasonable choice of alternatives

²⁶² *Kings County Farm* (“Perhaps the best example [of a cumulative impact] is air pollution, where thousands of relatively small sources of pollution cause serious a serious environmental health problem.”).

²⁶³ *Communities for Better Env’t v. Cal. Res. Agency* (2002) 103 Cal. App. 4th 98, 120.

²⁶⁴ 14 Cal. Code Reg. § 15126.6(a).

²⁶⁵ Cal. Pub. Res. Code § 21061.1.

²⁶⁶ *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal. 3d 553, 556 (*Goleta II*).

²⁶⁷ 14 Cal. Code Reg. § 15126.6(a) (“There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”).

so far as environmental aspects are concerned.”²⁶⁸ In addition, the EIR must include “sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.”²⁶⁹ “The degree of specificity required in an EIR ‘will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.’”²⁷⁰ Thus, an EIR for a specific project must necessarily be more detailed than an EIR for the approval of a general plan.²⁷¹

The DEIR fails to identify a reasonable range of alternatives and to discuss the alternatives in sufficient detail to allow meaningful evaluation and analysis.²⁷² The DEIR analyzed only three alternatives: a no project alternative, a loop rail unloading configuration alternative, and a reduced rail deliveries alternative.²⁷³ The DEIR also identified four alternatives that were considered, but rejected because they were either not technically feasible, failed to attain the basic objectives of the project, or would result in greater impacts than the proposed project. These rejected alternatives included two trucking alternatives, a marine transport alternative, and a rail unloading at the Santa Maria Pumping Station alternative.²⁷⁴

(a) The DEIR Fails to Consider a Reasonable Range of Alternatives.

The DEIR, however, fails to consider even the most simple of alternatives, for example, an alternative rail route that avoids the populations with the highest density in Central and Northern California. Currently, the Rail Spur Project proposes a rail route that would bring trains of crude oil through heavily populated urban areas, exposing large numbers of people to the criteria air emissions associated with locomotive operation, and greatly increasing the human health and safety risks of potential accidents or spills. A spill in the Sacramento-San Joaquin Delta, for example, could jeopardize the water supply for much of the State. Instead of directing trains through Northern California, along the Sacramento River and through the City of Oakland, the DEIR should analyze an alternate rail route that would avoid bringing rails cars containing highly flammable and volatile crude or semi-refined gas oil through high population areas.

The DEIR should also be revised to include an analysis of alternative modes of transporting crude oil from oilfields across North America. For example, the DEIR analyzed only one marine transport alternative, and did not analyze a pipeline alternative. Parties objecting to the EIR are not responsible for formulating alternatives for consideration—the lead agency bears this burden.²⁷⁵ Objecting parties will rarely have access to the same information that the lead agency does, and thus will be limited in their ability to suggest sufficiently detailed and specific alternatives.²⁷⁶ The DEIR failed to include these two, and other reasonable alternatives in its analysis.

²⁶⁸ *Found. for San Francisco’s Architectural Heritage v. San Francisco* (1980) 106 Cal. App. 3d. 893, 910.

²⁶⁹ 14 Cal. Code Reg. § 15126.6(d).

²⁷⁰ *Al Larson Boat Shop, Inc. v. Bd. of Harbor Commrs.* (2d Dist. 1993) 18 Cal. App. 4th 729, 746 (quoting 14 Cal. Code Reg. § 15146).

²⁷¹ *See Al Larson Boat Shop, Inc. v. Bd. of Harbor Commrs.* (2d Dist. 1993) 18 Cal. App. 4th 729, 746.

²⁷² *See* 14 Cal. Code Reg. § 15126.6(d).

²⁷³ DEIR at 5-24.

²⁷⁴ DEIR at 5-15 to 5-23, Tables 5.1 and 5.2.

²⁷⁵ *See Laurel Heights I*, 47 Cal. 3d at 406.

²⁷⁶ *See Laurel Heights I*, 47 Cal. 3d at 406.

(b) The DEIR Fails to Consider Alternatives that Would Lessen the Significant Impacts of the Project.

In addition to failing to assess a reasonable range of alternatives, the DEIR fails to analyze alternatives that would avoid or substantially lessen the significant impacts of the project.²⁷⁷ Of the three alternatives analyzed, the DEIR identifies the no project alternative as the environmentally superior alternative.

However, when the no project alternative is the environmentally superior alternative, CEQA requires an EIR to identify the next environmentally superior alternative. The DEIR identifies the reduced rail deliveries alternative as the next environmentally superior alternative, but notes that certain environmental impacts of the reduced rail deliveries alternative depend heavily upon the question of whether the County would be preempted by federal law from regulating locomotive emissions outside of the Santa Maria Refinery site.²⁷⁸ As discussed above, the argument that the County may be preempted from regulating air impacts outside of the project site is invalid. Consequently, according to the County itself, the reduced rail deliveries alternative would offer no advantage over the Proposed Project in terms of NO_x, ROG, and diesel particulate emissions, and only a minimal advantage in terms of hazard risks, noise, GHG emissions, and health risks.²⁷⁹ Even assuming *arguendo* that preemption applies, the reduced rail deliveries alternative, while better than the proposed Project, still has significant impacts.

The DEIR's failure to consider even an alternative with more than minimal environmental advantages over the proposed project is contrary to the purpose of the CEQA alternatives requirement. An EIR must identify a range of reasonable alternatives "which would feasibly attain most of the basic objectives of the project *but would avoid or substantially lessen any of the significant effects of the project.*"²⁸⁰ None of the alternatives considered in the DEIR, including the reduced rail deliveries alternative, would avoid or substantially lessen the significant impacts of the Project; the range of alternatives considered in the DEIR is insufficient.

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²⁷⁷ See CEQA Guidelines, 14 Cal. Code Reg. § 15126(a).

²⁷⁸ DEIR at 5-35 to 5-36.

²⁸⁰ 14 Cal. Code Reg. § 15126.6(a) (emphasis added).

V. CONCLUSION

The DEIR remains woefully inadequate under CEQA. The County must substantially revise and recirculate the document in order to correct its numerous defects. We appreciate the opportunity to submit our initial comments on the DEIR and will submit further comments, if necessary, as soon as possible.

Sincerely,

/s/

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