December 5, 2014

Lashun Cross, Principal Planner
Contra Costa County Department of Conservation and Development
30 Muir Road
Martinez, CA 94553

VIA EMAIL
lashun.cross@dcd.cccounty.us

Re: CBE et al. Comments on Phillips 66 Rodeo Refinery Propane Recovery Project Recirculated Draft Environmental Impact Report (State Clearinghouse #2012072046, County File #LP12–2073)

Dear Ms. Cross,

The recirculated draft environmental impact report ("RDEIR") for the Phillips 66 Propane Recovery Project ("Project") still fails to disclose that this is a tar sands crude by rail project. The RDEIR does not correct several deficiencies of the prior draft report, and fails as an informational document under the California Environmental Quality Act[1] ("CEQA") for the additional reasons explained herein.

The Phillips 66 Rodeo facility is the "back end" of the Phillips 66 San Francisco Refinery ("SFR"). The "front end" is the company's Santa Maria facility, which performs severe processing of oil streams that are then piped to the SFR's Rodeo facility to make into profitable engine fuels. This Project enables the SFR to permanently switch to refining tar sands oil. At Santa Maria, a rail expansion allows the company to get tar sands "dilbit" oils by rail, enabled by the facility's throughput expansion. At Rodeo, this Project relies on the change in oil processing and the SFR's crude slate to be comprised primarily of a different feedstock, in order to allow sufficient resultant byproducts that are otherwise uneconomic to dispose of, to be recovered and sold.[2] The RDEIR, however, still denies the Project's segmentation from this larger project and therefore hides 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 Center for Biological Diversity, the Sierra Club and ForestEthics, we request an adequate environmental review of the Project, which is not reflected in the RDEIR.

[1] Pub. Res. Code § § 21000 *et seq.*
[2] The Phllips 66 Rail Spur Extension and Crude Unloading, Throughput Increase, and Propane Recovery Projects.

As set forth below and in Attachments A-D, which includes the new expert report of Greg Karras ("Karras Rodeo Report 2," Attachment A), the RDEIR suffers from numerous deficiencies that render it inadequate under CEQA and the CEQA Guidelines.[3] We respectfully request that Contra Costa County ("County") reject the RDEIR as an environmental review document, and defer approval of the Project until such time as the RDEIR is revised to comply with CEQA, which includes following the procedures detailed in section I addressing lead agency review of piecemealed projects.

An EIR is "the heart of CEQA."[4] "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."[5] 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."[6] The RDEIR for the proposed Project still fails entirely to live up to this mandate, and therefore, violates CEQA and several principles of Environmental Justice.

I. THE COUNTY HAS FAILED TO FOLLOW THE PROCEDURE FOR ENVIRONMENTAL REVIEW OF THIS PROJECT.

On November 19, 2013, the County Planning Commission certified the draft EIR for the Project. Both CBE and the Rodeo Citizens Association ("RCA") timely appealed that determination to the County Board of Supervisors. CBE requested recirculation of the Project EIR to correct numerous deficiencies. In June 2014, the County Board of Supervisors ordered recirculation of the Project EIR. The RDEIR is currently proposed for hearing before the Board of Supervisors on December 19, 2014. This denies the public of one administrative level of appeal. In addition, environmental review of the larger project that this Project is a part of should have proceeded at a programmatic level.

A. The County's Environmental Review of the Project Does not Meet CEQA's Goals of Informed Decision Making Through Public Participation.

If, subsequent to a period of public and interagency review, the lead agency adds significant new information to an EIR, the agency must issue new notice and must recirculate the revised EIR, or portions thereof, for additional commentary and consultation, and the revised environmental document must be subjected to *the same critical evaluation that occurs*

[3] 14 Cal. Code Regs. § § 15000 *et seq.*
[4] *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 392 ("*Laurel Heights I"*).
[5] Pub. Res. Code § 21061
[6] *Laurel Heights I*, 47 Cal. 3d at 392 (citations omitted).

in draft stage, so that public is not denied opportunity to test, assess, and evaluate data and make an informed judgment as to validity of conclusions to be drawn therefrom.[7]

The procedure followed by the County for recirculation has deprived the public of these procedural safeguards. Certainly, this matter is only before the Board of Supervisors because of the appeals of RCA and CBE. CBE requested recirculation of the DEIR; recirculation should have returned this matter to the original administrative level of review for all draft EIR's, which is the Planning Commission. To leave this matter at the Board of Supervisors skips an important administrative level that also provides "critical evaluation." Anything else does not guarantee the same procedural safeguards as at the traditional draft stage of an EIR. For instance, some of the parties that join this comment did not participate at lower administrative levels of this proceeding; yet at the same time, those parties are providing public comment on the draft environmental impact report. Consequently, should the Board of Supervisors deny CBE's appeal, those parties would be denied an administrative level of appeal. Caselaw is clear that such a scenario would not exist had recirculation returned environmental review to the administrative body for the same "critical evaluation that occurs in the draft stage."[8]

B. Environmental Review Should Proceed Under a Program EIR.

"A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one larger project."[9] Emphasized throughout this comment, is the crucial fact that the Project is piece-mealed and cannot achieve its objective independently without the Santa Maria components of the SFR.

As the Project is part of "one larger project," it would be more appropriate to analyze it under a Program EIR. This has several advantages: providing a more exhaustive consideration of effect and alternatives than would be practical in an EIR, ensuring adequate consideration of cumulative impacts that "might be slighted in a case-by-case analysis," allowing for an earlier and more practical consideration of mitigation measures, and saving considerable agency resources.[10]

Where there could be more than one lead agency, as in this case, the lead agency which acts first on the project shall be the lead agency.[11] On June 8, 2010, the County of San Luis Obispo Planning and Building Department issued the Notice of Preparation for the Refinery Throughput Increase Project. On July 24, 2012, the Contra Costa County Department of Conservation and Development issued a Notice of Preparation and Scoping Session for an EIR for the Phillips 66 Propane Recovery Project. On July 8, 2013, the County of San Luis Obispo Planning and Building Department issued the Notice of Preparation for the Rail Spur Project. The County of San Luis Obispo Planning and Building Department acted first with the first

[7] *Save our Peninsula Committee v. Monterey County Board of Supervisors* (App. 6 Dist. 2001) 104 Cal.Rptr.2d 326 (emphasis added). *See also* CEQA Guidelines 15162, 15163 and 15164.
[8] *Id.*
[9] CEQA Guidelines § 15168.
[10] *Id.*
[11] CEQA Guidelines § 15051.

component of this project, the Throughput Increase project, and is therefore the appropriate lead agency for a program EIR.

Consequently, pursuant to the CEQA Guidelines, it would not only benefit both Counties, but also the potentially affected workers and communities, to withdraw this RDEIR and move forward under a programmatic EIR approach. This would also yield a more accurate assessment of the significant and cumulative impacts and mitigation measures for all communities affected by the SFR's switch to refining tar sands.

II. THE RDEIR's PROJECT DESCRIPTION IS INADEQUATE

Two fundamental defects pervade this environmental review document: the failures to disclose both the switch in a fundamental refining process - refining tar sands - and the full scope of this project. The RDEIR's consequent analysis of Project impacts is wholly underestimated and inadequate under CEQA. In addition, although the RDEIR asserts a goal of reducing emissions of SO_2, this may simply prove an illusory promise.

A. The Project Description Fails to Disclose an Industry Shift to a Different Quality Crude Feedstock

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."[12] 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.[13]

Furthermore, "[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity."[14] 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.[15] The RDEIR's Project Description still fails to meet this standard by still failing to disclose a switch in crude oil feedstock that this Project would enable at the Rodeo refinery. The Project proposes to install and modify operations at the Refinery. It proposes to install a hydrotreater, recovery columns, pressure storage bullets, and a rail loading spur and rack, and would expand Phillips' once-through cooling ("OTC") system.[16] The RDEIR must disclose *every* purpose for each of these components, not just one – recovery of LPG.[17] This is especially the case given the fundamental and interrelated link between refinery crude

[12] *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.
[13] *Id.* at 730.
[14] *Id.* (citation omitted).
[15] *See* CEQA Guidelines, §15124 (requirements of an EIR).
[16] *See* RDEIR Project Description and Karras Revised Rodeo Report, December 2014 (Karras Rodeo Report 2).
[17] *See* CBE et al. v. City of Richmond,

feedstock, the processing of that feedstock, and the production of LPG.[18] The RDEIR must disclose that this Project is a tar sands project.

The currently proposed Rail Spur Extension at the SMF would allow the SFR to receive tar sands crude by rail.[19] However, the SMF cannot fully process that feedstock for sale. The currently proposed Throughput Increase Project at the SMF would increase the SMF's crude processing rate.[20] This increased volume of oil is partially refined and then sent via Phillips' own pipeline directly to Rodeo. To fully refine these semi-refined oils at Rodeo requires increased coking and other processing. Moreover, publicly verifiable data in the record indicates that the Project cannot recover sufficient LPG without additional cracking process feedstock, additional LPG-rich feedstock, or both, in order to yield the anticipated 14,500 bpd LPG.[21] The RDEIR attempts to provide information to contradict this fact: for instance, it makes assertions regarding "vapor pressure limits" and provides data to support the contrary. As noted further below and in the revised Karras and Fox expert reports, those assertions are incorrect and misleading.

> "Ultimately, the RDEIR's assertion that the Project "would not require the Refinery to change the basic feedstocks that are currently received and processed" because it "does not propose to increase the production of propane or butane" is unsupported and wrong because it ignores ongoing changes in crude feedstock."[22]

Instead of disclosing these fundamental process changes, the RDEIR's Project Description is misleading. From the outset, the RDEIR asserts that the Project would not have "any effect on the types and/or quantities of crude oil feedstocks that can be processed," does not "propose to add, change, or modify the operation of other process units, such as the coker" and "has no connection to the transportation of crude oil by rail."[23] Instead, the RDEIR project description, and therefore subsequent analysis, focuses primarily on propane and butane recovery and eventual sale.[24] It states: (the) "main objective for the proposed Project is to have the capability to recover propane and to recover more butane for sale, thus producing more products from the crude oil it currently refines.[25] The RDEIR Project Description even admits the link between feedstock "currently refined" and production of LPG. To the contrary, the RDEIR's narrowed analysis then diminishes the true intent and scope of the Project. This Project expressly enables and locks in refining of tar sands at the SFR: "tar sands oils would likely dominate the new crude source."[26]

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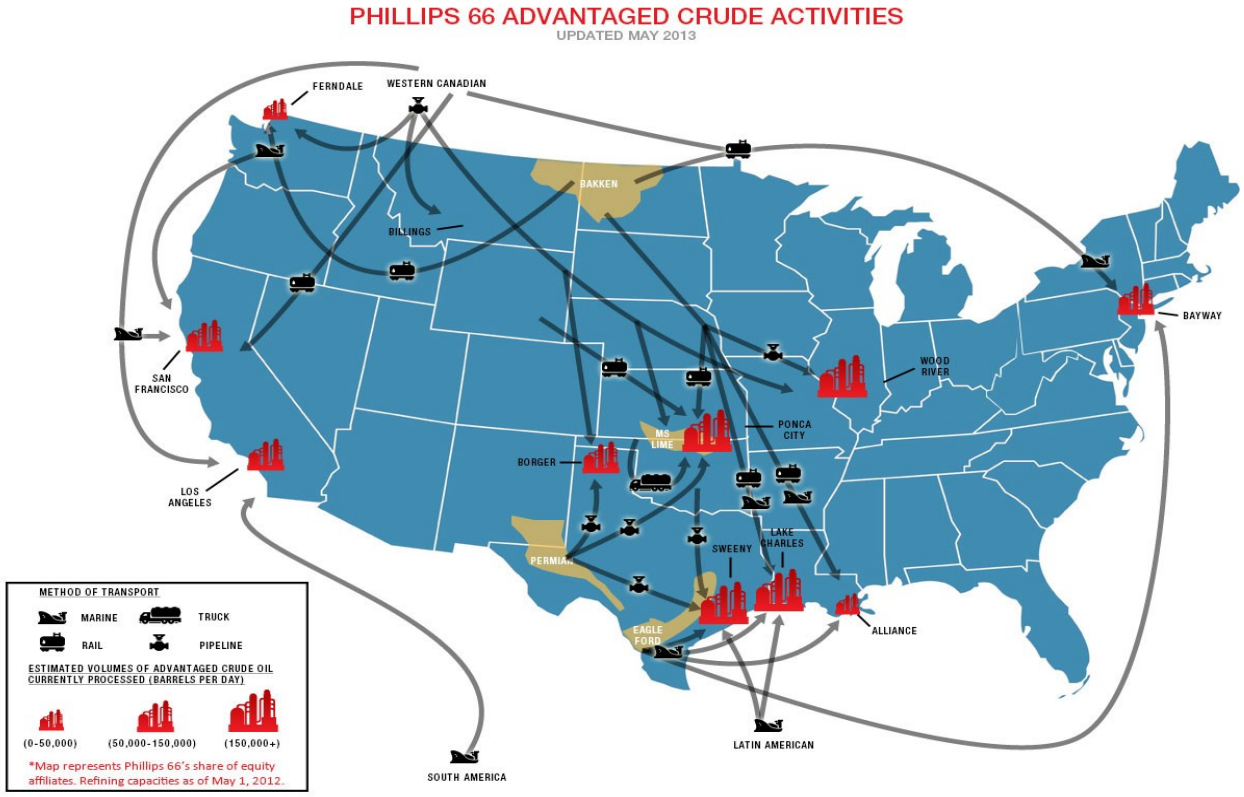
[18] Karras Rodeo Report 2 at 5.
[19] *See Id.* and P66 Santa Maria Rail Spur Extension RDEIR and comments on the RDEIR available at http://www.slocounty.ca.gov/planning/environmental/EnvironmentalNotices/Phillips_66_Company_Rail_Spur_Extension_Project.htm.
[20] *Id.*
[21] Karras Rodeo Report 2 at 5-6.
[22] *Id.*, citing RDEIR at 3-28.
[23] *Id.* at 3-7.
[24] *See Id.* at 3-5, and this comment for discussion of the reduced sulfur emissions and the use of Emission Reduction Credits.
[25] *Id.*
[26] Karras Rodeo Report 2 at 3.

Phillips 66 is currently in the process of implementing a series of projects to allow a switch to refining what its management terms, "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..."[27] The map immediately below details this strategy.



Phillips 66 map indicating plans to transport Western Canadian crude oil to San Francisco Refinery.[28] Notice that the icon labeled "San Francisco" identifies the San Francisco Refinery, which includes the Santa Maria facility.

In fact, the company has no choice but to seek such an alternative supply of crude oil feedstock. As stated in the recirculated EIR for the Phillips 66 Santa Maria Rail Spur Extension Project:

> In the long-term, the need for the SMR rail project could be driven by declines in local production of crude oil that can be delivered by pipeline. Production from offshore Santa Barbara County (OCS crude) has been in decline for a number of years. Oil production in Santa Barbara County (both onshore and offshore) peaked at about 188,000 barrels in 1995 (County of Santa Barbara Energy Division website) and

[27] September 12, 2013 Transcript, pdf 7, available at: http://www.phillips66.com/EN/investor/presentations_ccalls/Documents/Barclays_091213_Final.pdf.

[28] Phillips 66 Advantaged Crude Activities: Updated May 2013, available at: http://www.phillips66.com/EN/Advantaged%20Crude/index.htm.

currently production is around 61,000 barrels per day for both onshore and offshore oil fields (BOEM Pacific Region and Drilling Edge websites).[29]

This decline in locally available crude stands in stark contrast to the Santa Maria Facility's recent Throughput Expansion that enables the Santa Maria facility to process more crude oil. Certainly, the RDEIR makes a bold assertion: "Phillips 66 expects to continue to receive, blend and process a comparable range of crudes in the future."[30] At the same time, however, those diminishing local sources make up the "bulk" of the crude oil currently processed at the Santa Maria facility.[31]

At the other end of the SFR, the Rodeo facility has two options for receipt of crude oil feedstock: the pipeline to the Santa Maria facility; and the Rodeo refinery's wharf. The latter, however, is limited to 51,182 bpd.[32] The Rodeo facility must rely on the pipeline deliveries from the Santa Maria facility to meet remaining capacity.[33] Those Santa Maria facility deliveries include tar sands crude or its derivatives. If the Santa Maria facility is replacing one feedstock with another, so must the Rodeo facility. A more accurate project description must admit that the company is *replacing* one feedstock with another at the (overall) SFR.

In addition, the County must note the extent of this shift in feedstock:

> "…our plan promises…availability and supplies in North America…we're disappointed in the progress to permit our Santa Maria rail rack 40,000 a day, but we have – we're optimistic that we'll get that done. It just takes time in California to get these things permitted…we're making progress in terms of put advantaged crude to the front of our refineries in California."[34]

Bloomberg news service reported that "Phillips's moves will bring a variety of U.S. and Canadian crudes to refineries around the country via pipeline and rail" and that "Phillips's Rodeo refinery near San Francisco could also receive crude deliveries, displacing imports from outside North America."[35]

The company has expressed a clear priority to switch to refining tar sands at the SFR, a priority not only diminished but denied by the RDEIR. Consequently, the RDEIR's omission of this switch to a very different crude oil feedstock violates CEQA in leaving several significant impacts unanalyzed.[36] It is impossible to provide any intelligent evaluation of the

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[29] RDEIR at 2-36.
[30] *Id.* at 2-33.
[31] *Id.* at 2-35.
[32] Karras Rodeo Report 2 at 7.
[33] *See Id.* at 12.
[34] *See* Phillips 66 Presentation to Barclays CEO Energy Power Conference, September 2014, *available a*t http://investor.phillips66.com/files/doc_presentations/2014/PSX-BarclaysCEOConfTransSept2014.pdf
[35] *Phillips 66 Signs Deals to Boost Oil Deliveries by Pipe, Rail*, Mar 20, 2013, available at: http://www.bloomberg.com/news/2013-03-20/phillips-66-signs-deals-to-boost-oil-deliveries-by-pipe-rail.html.
[36] *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").

potential environmental effects and risks to community and worker health and safety of refining Canadian tar sands in Rodeo, unless the RDEIR *first* discloses the extent of the replacement of feedstock that the Project enables.[37] At a minimum, the RDEIR should have established how this Project would affect the scope and degree of the company's use of tar sands in Santa Maria, and subsequently Rodeo, and evaluate its resulting impacts.[38] Until such adequate disclosure occurs, the Project Description is inaccurate, incomplete and renders the analysis of significant environmental impacts inherently unreliable.[39]

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.[40]

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.[41] 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.[42] By failing to disclose this Project-related feedstock switch and providing a sufficient analysis of resulting impacts, the RDEIR fails as an informational document.

Finally, at the close of the June appeal hearing, the Board of Supervisors also requested that the recirculated Project EIR address any connection that this Project has with the WesPac Infrastructure Project currently proposed in Pittsburg, California. This echoes the concerns of the Attorney General and CBE. We had previously submitted supplemental evidence in support of our appeal of this matter. One such submission included a letter from the Attorney General requested whether the Rodeo refinery would receive crude oil feedstock shipments from the proposed WesPac facility. Although the RDEIR provides a brief description of the

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[37] *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).
[38] *Id*.
[39] *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) and *see* Karras and Fox-Pless Revised Santa Maria Reports.
[40] Fox Rodeo Report at 13.
[41] *See* Fox Rodeo Report, Fox Valero Report and Karras Rodeo Report at 11-13.
[42] *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.

Energy Infrastructure Project,[43] it does not go into any further detail regarding any potential link with the Rodeo facility.

B. The Project is Piecemealed.

Phillips 66's Santa Maria and Rodeo facilities are interdependent. One cannot function without the other. If major reconfigurations occur at both facilities at the same time and those modifications require each other, then they must be part of the same project. CEQA requires that an EIR describe the entirety of a project, including reasonably foreseeable future actions that are part of it.[44] Illegally "chopping a large project into many little ones" creates a narrow view of a project and "fallacy of division…that is, overlooking a project's cumulative impact by separately focusing on isolated parts of the whole."[45] Certainly, any permit by permit review, where those permits constitute a larger project, forecloses this essential focus on cumulative impacts, and also, impacts to already overburdened and vulnerable populations.

In *Laurel Heights I*, the Supreme Court established the following test: 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."[46] Under this standard, "the facts of each case will determine whether and to what extent an EIR must analyze future expansion or other action."[47] 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.[48] Further, there must be discussion "in at least general terms" of the future activity, even if the project is contingent on uncertain occurrences.[49]

This Project wholly depends on both the throughput expansion project and the critical front end of the SFR, the Phillips 66 Santa Maria facility. The SFR 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. "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."[50] The refining processes at Phillips 66's Santa Maria and Rodeo facilities are integrated to a capacity that neither can achieve alone.[51] Further, Phillips 66 reports these

[43] *See* RDEIR at 5-5.
[44] CEQA Guidelines § 15378(a).
[45] *See* Bozung v. Local Agency Formation Commission , 13 Cal. 3d 263, 268 (1975) and McQueen v. Board of Directors of the Mid-Peninsula Regional Open Space District, 202 Cal. App. 3d 1136, 1143 (1988).
[46] *Laurel Heights I*, 47 Cal. 3d at 394-396.
[47] *Id.* at 396.
[48] Id. at 396-397.
[49] *Id.* at 398.
[50] P66 Rail Spur Extension DEIR at 2-3.
[51] *See* Karras Report on Phillips 66 Propane Recovery Project, September 2013, 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, attached as part of Attachment A.

two facilities as a single processing entity, the San Francisco Refinery, to industry and government monitors.[52]

The RDEIR's piecemealing of both ends of the same refinery is analogous to the facts of *Laurel Heights I*. In that case, the Supreme Court set aside an EIR for piecemealing the reasonably foreseeable second phase of a multi-phased project. The University of California, San Francisco, had proposed a project to expand into a new building, of which only about a third was initially available to the school. The EIR failed to analyze impacts related to occupying the remaining two thirds, even though it was wholly foreseeable that UCSF would occupy the entire building.[53] Here, Phillips 66 will obtain tar sands crude by rail, must eventually fully refine it for sale, and to do so requires the entire SFR, not only the Santa Maria or Rodeo facilities. Just as it was foreseeable for the University of California to occupy the whole building, it is at least equally foreseeable, if not a surety, that the Rodeo facility will fully refine tar sands imported to the Santa Maria facility by rail.

Moreover, "there is no credible evidence supporting the assertion that during the baseline period, the Rodeo Refinery's refinery fuel gas contained sufficient propane and butane to supply the 14,500 bbl/day design basis of the Project."[54] In order to meet its Project design goals, the Rodeo facility must also receive the lower quality feedstock from Santa Maria. Implementing the Santa Maria facility throughput increase and rail components would boost naphtha and gas oil deliveries to Rodeo and boost *total* gas oil hydrocracking at the Rodeo Facility.[55] As hydrocracking is a significant LPG producer, LPG available for recovery at the Rodeo Facility would increase proportionately more.[56]

In order for Phillips 66 to implement its "advantaged crude" strategy for the SFR, 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 lock the Rodeo Refinery into a change in oil feedstock processing tar sands anticipated by rail to the Santa Maria Refinery.[57] That lower quality feedstock, gas oils and naptha, is produced at Santa Maria and sent to Rodeo by pipeline, a pipeline owned by the same company.[58] These changes are inter-related, wholly anticipate each other, and together create significant impacts on the environment. As more fully detailed in the accompanying attachments:

- Approximately half of the coking capacity of the SFR is currently at the Santa Maria facility. The Rodeo facility needs this capacity. Gas oil derived at the

[52] *Id.*
[53] *Laurel Heights I*, 47 Cal.3d at 393.
[54] Comments on Revised Draft Environmental Impact Report for the Phillips 66 Propane Recovery Project, prepared for Adams Broadwell Joseph & Cardozo, December 2014, ("Fox-Pless Revised Rodeo Report") at 11.
[55] Karras Rodeo Report 2 at 15.
[56] *Id.*
[57] *See* Karras and Fox Rodeo Reports on Draft and Recirculated EIR for this Project (Karras and Fox 2013 Rodeo Reports attached as part of Attachment C).
[58] *Id.* and Rail Spur Extension project DEIR at 2-29.

SMF is fed directly into the new heavy gas oil hydrocracker at the Rodeo facility; without that feed, this would become a stranded asset.[59]

- Publicly verifiable data in the record indicates that insufficient propane and butane is recoverable in the project baseline to implement Phillips' LPG proposal without the additional cracking process feedstock, additional LPG-rich naphtha/pressure distillate, or both, that its SMF throughput increase and rail spur could supply.[60] The Project cannot be implemented as proposed without the rail spur extension or throughput increase projects at Santa Maria.[61]

- Reformers at the Rodeo facility "could not run properly, efficiently *and* safely" under the current configuration if the throughput increase were implemented. Naphtha streams are fed to the Rodeo reformers now but the revised LPG recovery proposal would instead route them through the new hydrotreater. The diluent in tar sands is typically natural gas condensate, pentanes, or naphtha. The Project would therefore "debottleneck" the processing of naphtha – the "LPG component of the project enables full implementation of the SMF components."[62]

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. While such a solution may be economic for pipeline delivery systems it could be quite costly, and hazardous, if the diluent is returned by rail. However, this same diluent is LPG-rich, and presents an opportunity to increase the amount of propane and butane that could be recovered at Rodeo.[63] Furthermore, the refining of dilbits yields much greater amounts of naphtha, "the lighter component of the pressure distillate sent to Rodeo and one of the feedstocks for propane recovery."[64] 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.

The RDEIR attempts to provide information to contradict the interdependence of the two parts of the SFR. The RDEIR alleges that, as vapor "pressure limits (of tanks that store naphtha and gas oil) restrict the amount of propane/butane that can be contained in naphtha and gas oils," and, "additional butane and or propane would cause the products to exceed the vapor pressure limits of the storage tanks," suggesting that there is no link between this Project and the Rodeo project.[65] The RDEIR attempts to bolster this claim by asserting that it historically

[59] Karras Rodeo Report 2 at 12.
[60] *Id.*
[61] *Id.* at 15.
[62] *Id.* at 16.
[63] Fox-Pless Revised Santa Maria Report at 7.
[64] *Id*. at 8, citing RDEIR for the Propane Recovery Project at 3-6.
[65] *Id.* at 2.

and currently operates near these limits, prohibiting any potential increased propane/butane transport to Rodeo.[66] These assertions, however, are incorrect and wrong.[67] Rather, there are either no such vapor pressure limits on the subject tanks, or the materials stored in them have a vapor pressure far below their permitted levels.[68] In addition, the RDEIR fails to contain any support whatsoever for these propositions, which cannot meet CEQA's threshold requirement of substantial evidence.[69] "In sum, the claims made in the RDEIRs in an attempt to decouple the Santa Maria Rail Spur Project and the Rodeo Propane Recovery Project based on vapor pressure limits have no merit."[70]

Evidently, plenty of "telling evidence" exists regarding the intimate connection between the proposed Project, the Throughput Increase Project and the Propane Recovery Project. The facts are again analogous to *Laurel Heights I* and the *San Joaquin Raptor* case: the Rodeo Project depends on the projects at the Santa Maria Facility and vice versa. In the *San Joaquin Raptor* case, the court held that the EIR for a residential development project was invalid because it failed to discuss expansion of the sewer system, even though the developer recognized the necessity for sewer expansion for the overall development project to proceed.[71] The RDEIR's assertions that LPG recovery is unrelated and not dependent on a different quality feedstock that must be received by rail are misleading and incorrect. Just as in *San Joaquin Raptor*, the company has also identified the need to respond to declining local crude supplies and has evidently foreseen each component of the SFR required to refine tar sands Simply, Phillips 66's recently proposed projects depend on one another in an overall plan to refine tar sands at the SFR. This is far removed from court decisions that do not find a piecemealed project on account of an insufficient showing of this "necessity" element.[72] Consequently, these are connected actions that must therefore be analyzed concurrently with the direct and cumulative impacts of the proposed Project itself under a programmatic EIR assessment.[73]

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[66] *Id.*
[67] *Id.*
[68] *Id.*
[69] *Id.* at 3.
[70] *Id.* at 11.
[71] *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus*, 27 Cal.App.4th 713, 729 (1994).
[72] In *Communities for a Better Environment et al. v. City of Richmond et al.*, (184 Cal. App. 4th 70, 100-101 (2010)), the Court of Appeal addressed the piecemealing issue with respect to another refinery expansion project. In that case, the EIR for the expansion project identified the potentially significant cumulative impact of a hydrogen pipeline project, but did not provide a complete analysis of the pipeline project's impacts. The Court held that the pipeline project was not piecemealed, that it is a separate project from the overall expansion project. In so holding, the Court reasoned that the expansion and pipeline projects are independent – they perform *entirely different* functions. The Court focused on project objectives: the expansion project's objective was to access a wider range of crude oil and other feedstocks; the pipeline project's objective was to transport excess hydrogen, not required by the expansion project, to other hydrogen consumers in the Bay Area. Ultimately, the Court found that the expansion project did not "depend on" the pipeline project. Similarly, in *Berkeley Jets*, the Court rejected an argument that an airport development plan should have included "long-range plans for potential runway expansions." The Court held that these future expansion plans were neither a crucial element nor a foreseeable consequence of the development plan. (*Berkeley Keep Jets Over the Bay Comm. v. Board of Port Cmrs.*, 91 Cal. App. 4th 1344, 1361 (2010)).
[73] CEQA Guidelines, § 15378, subd. (a) agency must evaluate the environmental impacts of the whole of the action.

Finally, under CEQA, even assuming, arguendo, that the Rodeo Propane Recovery project is not an integral part of this larger project, the RDEIR still failed to adequately discuss the company's proposed projects in Santa Maria, and should at a minimum have discussed how those projects would affect any LPG recovery or environmental impacts in Rodeo.[74] The company's ownership of the pipeline gives the company proprietary rights and ownership of all shipments of semi-refined products to Rodeo. The impacts are cumulatively considerable and should have been assessed in the RDEIR.

C. The Propane Recovery, Throughput Increase and Rail Spur Extension Projects Lack any Independent Utility.

Under California law, where one part of an arguably larger project serves some "independent utility," the lead agency may focus solely on that smaller part of the project.[75] For the reasons detailed throughout this comment, however, these recently proposed projects bear no independent utility. The Project is piecemealed and the County should review the overall impacts, especially the cumulative impacts, of the larger project.

D. The RDEIR Lacks Any Enforceable Commitment to Actually Reduce Emissions.

The RDEIR claims a Project objective to reduce fuel gas sulfur emissions; the "removal of the sulfur would decrease SO_2 emissions to the atmosphere by at least 50%...the reduction of SO_2 will lead to a reduction of ambient $PM_{2.5}$ concentrations."[76] In 2013, however, Phillips 66 applied for, and subsequently withdrew, an application to the BAAQMD for Emission Reduction Credits ("ERCs") for the Rodeo facility.[77]

An ERC is a credit granted to a facility that voluntarily reduces emission beyond a certain required level of control; it then provides the authority to emit the regulated pollutant in an amount equal to that original reduction. One principle issue with ERCs is that these emission reductions may have been realized elsewhere from the project location. There may be no real emission reduction in the actual project area. Therefore, the cumulative impact of any emissions increases, addressed by such credit related mitigation measures, remains and goes wholly unanalyzed, along with the emission of any associated, and potentially also separately significant co-pollutants. This is particularly problematic in relation to SO_2 and $PM_{2.5}$ concentrations that are certainly *local* pollution problems. Certainly, the BAAQMD has assessed particulate matter emissions as a cause of death in the Bay Area.

The RDEIR must clarify whether the company will use ERCs to achieve the project objective of emission reductions. If ERCs are factored into that calculation, the RDEIR must disclose that *and* analyze the resulting local impact of increased pollution, despite the application of any credits.

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[74] *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).
[75] Del Mar Terrace Conservancy, Inc. v. City Council of San Diego, 10 Cal. App. 4th 712 (1992).
[76] RDEIR at 3-5.
[77] *See also* Karras Rodeo Report 2.

III. THE RDEIR FAILS TO ADEQUATELY ANALYZE AND PROVIDE MITIGATION FOR SIGNIFICANT ENVIRONMENTAL 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."[78] Only with a genuine, good faith disclosure of a proposed project's components, can a lead Agency analyze the full range of potential impacts of the project, identify, and implement mitigation measures where necessary, prior to project approval.[79] Agencies, moreover, should not approve projects if there are feasible mitigation measures or project alternatives available to reduce or avoid the significant environmental impacts contained in the project's EIR.[80]

Nevertheless, because the RDEIR still fails to include integral project components and the SFR's overall switch to tar sands in its analyses, the RDEIR still asks the wrong questions, diminishing or even foreclosing an analysis of the Project's environmental impacts, even those it determines to be significant. In several of those instances, the RDEIR lacks the necessary detail to verify the validity of its analyses. Consequently, the RDEIR fails to include a sufficient analysis of the Project's impacts as required by CEQA.[81] These include significant and unmitigated impacts to: public and worker health and safety, air quality, water quality, biological resources and the local communities surrounding the refinery.

A. The RDEIR's Underestimated Analysis of Hazards to Worker and Public Health and Safety is also Underinclusive.

An EIR must provide sufficient information to evaluate all potentially significant impacts of a project, including public safety risks due to accidents, and it must state sufficient information to determine "how adverse [an] adverse impact will be."[82] This information is critical to the public and agency decision makers as they evaluate the extent and severity of the Project's impacts, specifically as they relate public safety.

The RDEIR fails to meet this CEQA requirement in three respects. First, the RDEIR fails to consider the increased operational hazards of refining an inherently more dangerous and different lower quality oil feedstock. Second, the RDEIR fails to properly assess the scope of this overall project, and therefore the overall scope of hazards that Project approval brings. This includes the transport of tar sands by rail. Third, the analysis that the RDEIR does

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[78] *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).

[79] 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.

[80] Public Resource Code §§ 21002, 21002.1(a)

[81] *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").

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

conduct regarding anticipated Project hazards wholly underestimates the extent of those impacts and is not supported by substantial evidence.

(i) The RDEIR Fails to Discuss the Worker and Public Safety Risks of Refining a Lower Quality Crude Oil Feedstock.

As noted above, a switch to a heavier oil feedstock necessarily implicates a greater risk of corrosion of refinery components.[83] This greater risk of corrosion was identified as a root cause of the August 2012 fire at the Chevron Richmond Refinery that sent 15,000 residents to local hospitals.[84] By denying any shift to a lower quality oil feedstock, the RDEIR fails to adequately discuss the resulting significant impacts of refining this more hazardous material at Rodeo. As a result, the document precludes any meaningful analysis of the significant risks posed by this shift, including any identification or mitigation of the potential risks of catastrophic failure on par with what occurred at the Chevron Richmond Refinery in 2012 and any additional significant risks to public health.

Tar sands blended crudes can lead to significant increases of all criteria pollutant emissions, as well as toxic air contaminants ("TACs") and hazardous air pollutants ("HAPs"). These increased emissions result from the increase in energy intensity required for processing and refining, and the increased risks associated with corrosion and potential accidents.[85] The RDEIR should have accounted for these increased hazards to worker and public health and safety.

The RDEIR instead omits the public health hazards that would result from potential accidents, fires and other accidental releases caused by day-to-day project operations. These risks are significant, and so far unanalyzed, impacts. High sulfur and acid levels contained in tar sands crudes and similar semi-refined products dangerously accelerate corrosion of refinery components, contributing to equipment failure and causing more frequent accidental releases. Overall, the RDEIR must account for increased emissions from refining tar sands crudes not only at Rodeo, but throughout the SFR.

(ii) The RDEIR Does Not Adequately Consider the Full Scope of Project Impacts, Including Transporting Tar Sands Crude by Rail.

Numerous accidents including fires, explosions, and spills have resulted from a rapid increase in crude transport across North America. Such incidents have been caused by accidents such as derailments, as well as non-accident releases from leaking valves or vents.[86]

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[83] *See supra* Part II.A; Fox Comments on Mitigated Negative Declaration of Valero Crude By Rail Project, Use Permit Application 12PLN-00063.

[84] *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.

[85] *See* Fox Rodeo Comments ("more energy will be required and more emissions produced to convert them into the same slate of semi-refined and refined products"), attached as part of Attachment C.

[86] Mike Soraghan, *Crude Mishaps on Trains Spike As Rail Carries More Oil*, E&E (July 17, 2013), *available at* http://www.eenews.net/stories/1059984505

In response to the spike in train car derailments and other accidents causing crude spills, the U.S. EPA recently noted that spills of diluted bitumen require different response action and equipment than conventional oil spills.[87] Indeed, three years after a major spill of DilBit into the Kalamazoo River in Michigan, heavy oil remains at the bottom of the river. Resource intensive cleanup is required to remedy the damage caused by the Kalamazoo oil spill, amounting to $1 billion in costs to public funds.[88]

By failing to include a discussion of the full scope of the Project, which includes the Santa Maria Rail Spur Extension Project, the RDEIR necessarily omits a comprehensive analysis of the unique hazards accompanying rail transport, offloading, handling, storage and processing of a lower quality oil feedstock.[89] As a result, the RDEIR's conclusions regarding the relative significance of the Project's impacts and its assessment of mitigation measures to address the same are inherently flawed. The RDEIR must perform a proper study of the risks of transporting tar sands crudes in particular, and it must require actual, specific, and enforceable measures to mitigate those risks.[90]

(iii) The RDEIR's Analysis Underestimates Risks to Worker and Public Health and Safety.

The RDEIR ignores the potentially catastrophic consequences of an accidental release of LPG from a tank car by focusing on the alleged improbability of one occurring.[91] Although the RDEIR lists flash fires, torch fires, pool fires, and explosions, including boiling liquid expanding vapor explosions, it nevertheless determines that these potential impacts are less than significant.

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.[92] 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. In this case, the transport of increased amounts of LPG, let alone with potentially increased rail traffic due to the transport of also explosive tar sands crude dilbits, certainly poses such a hazard. The RDEIR should have factored this increased traffic into its analysis, but that is also missing from even the QRA[93] modeling. The QRA model should have accounted for any consequent cumulative/hazard impact. The modeling results also questionably rely upon data that, first, removes the risk of boiling liquid expanding vapor explosions from risk calculations, and second, limits that

[87] EPA, *Comment Letter to US Department of State Regarding the Supplemental Draft Environmental Impact Statement from TransCanada's Proposed Keystone XL project* (2013), *available at* http://www.epa.gov/Compliance/nepa/keystone-xl-project-epa-comment-letter-20130056.pdf.

[88] EPA, *Comment Letter to US Department of State Regarding the Supplemental Draft Environmental Impact Statement from TransCanada's Proposed Keystone XL project* (2013), *available at* http://www.epa.gov/Compliance/nepa/keystone-xl-project-epa-comment-letter-20130056.pdf.

[89] *See supra* Part II.A.

[90] These concerns are more fully detailed in our joint comments on the Phillips 66 Santa Maria Rail Spur Extension RDEIR, attached as Attachment C.

[91] RDEIR at 4.6-27.

[92] CEQA Guidelines section 15382.

[93] The modeling tool used in chapter 4.6 of the RDEIR.

analysis further to fatalities only.[94] In addition, modeling results are "determined by the process conditions at the time of release." Without a proper depiction of process conditions, which undoubtedly includes the lower quality oil feedstock, the modeling conclusions are drawn further into question. Even the RDEIR's narrowed modeling cannot constitute substantial evidence.

In addition, the RDEIR's analysis is based on questionable data. Due to the RDEIR's incorrect assumptions, it overestimates annual average baseline locomotive emissions (for LPG transport) by a factor of about two.[95] The RDEIR's analysis similarly underestimated the increase in daily LPG exports, post-Project, and the additional daily number of rail cars over the baseline.[96] This oversight underestimates both air emissions and increased hazards from increased locomotive traffic.

Finally, it is remarkable that the RDEIR does not even address first response or other emergency precautions in regards to controlling such accidental releases. This is particularly the case given the potential inability, as recent news and testimony has informed,[97] of first responders to control fires from rail spills or explosions. The RDEIR must be revised again to include such an analysis integral to worker and public health and safety.

B. The RDEIR's Analysis of Air Quality Impacts is Inadequate.

The RDEIR's analysis of the Project's criteria pollutant impacts is riddled with errors. We highlight the following seven concerns:

(i) The RDEIR Does Not Adequately Analyze Increased Emissions from Refining a Lower Quality Oil Feedstock

The RDEIR fails to analyze the increase in Toxic Air Contaminants ("TACs") and Hazardous Air Pollutants ("HAPs") from refining tar sands at the Rodeo facility. As mentioned throughout this comment, the expert reports, and the comments and expert reports to the DEIR, tar sands crudes are distinct from other more traditional crudes processed at the SFR 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. When released, these air pollutants cause significant public health and air quality impacts that are inadequately addressed in the RDEIR.[98]

Tar sands crudes alone are comprised of higher molecular weight chemicals than the current slate processed at Rodeo, including large amounts of benzene, toluene, ethyl-benzene, xylenes,[99] and other heavy metals such as lead. These chemicals are found in both state and

[94] RDEIR at 4.6-28.
[95] Fox-Pless Revised Rodeo Report at 13-14.
[96] *Id.* at 17.
[97] *Cf:* testimony from the Zoning Administrator Hearing on the RDEIR.
[98] To the extent the RDEIR fails to cure errors regarding the Project's public health impacts, raised by CBE in its comment to the DEIR, the same comments are hereby incorporated by reference.
[99] Together referred to as "BTEX" compounds.

federal toxic emissions inventories, and are, therefore, of particular concern to both federal and state regulatory agencies.[100] 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 heavy crude oil.[101]

When blended with the diluents, tar sands "dilbit" crudes contain even higher concentrations of BTEX compounds, which have a significantly high potential to be released as process related operational emissions that remain unidentified in RDEIR. These contaminants can cause severe impacts on the environment, and can lead to grave human health problems. 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 throughout the SFR.[102]

The RDEIR denies the Project's switch to a lower quality feedstock, thereby still failing to address potentially severe impacts from Project emissions including: the range of potential health impacts from known carcinogens and other harmful pollutants; acid rain; bioaccumulation of the toxic contaminants contained in the Project's potential emissions; the formation of ground-level ozone and smog; visibility impairments; odor impacts affecting residents near the Refinery; accidental releases due to corrosion of refinery equipment; and depletion of soil nutrients.[103]

Benzene alone has a notably high cancer potency, and is known to cause severe reproductive, developmental and immune systems impacts at even low exposure levels.[104] Systemic benzene poisoning, a long term exposure risk, includes the potential for severe hemorrhages, and may at times result in fatality.[105] Concentrated, acute exposure levels have also been known to cause headaches, and nausea.[106] 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.[107] The DEIR was recirculated to include an updated health risk assessment, however, without an adequate project description disclosing the switch to a lower quality oil feedstock, such an assessment will always yield underestimated and inadequate results.

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[100] *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/cattable.htm#Note 1, last accessed on Jan 26, 2014.

[101] *See* Fox Santa Maria Report, attached as part of Attachment C.

[102] *Id.* at 22 (explaining that these contaminants are present in highly dangerous concentrations in "DilBits" as a result of their composition of both undiluted tar sands bitumen crudes and diluent mixtures.).

[103] *Id*.

[104] Determination of Acute Reference 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, November 24, 2014.

[105] *Id*.

[106] *Id*.

[107] California Air Resources Board, Toxic Air Contaminant Identification List, available at: http://www.arb.ca.gov/toxics/cattable.htm#Note 1, last accessed, November 24, 2014.

The RDEIR further fails to state specific information necessary to assess the potential worker and public health impacts from the Project, such as information regarding the concentration of diluents that will be present in those crudes. Readers of an EIR should not be forced to rely on outside research and resources to find important components of a thorough environmental analysis.[108] Information regarding the concentration of heavy metals, chemicals and organic compounds contained in the crude is critical to assessing the scope and extent of impacts from potential emissions caused by refining these crudes, and impacting worker and public health in the areas surrounding the SFR facilities.

Moreover, the RDEIR fully omits any impact analysis for other harmful, air pollutants such as lead, which the California Air Resources Board (CARB) and the Center For Disease Control have identified as a pollutant for which there is no safe level of exposure.[109] The potential health impacts from lead are, moreover, deeply concerning, as they can include serious, permanent neurological damage, particularly in children. The RDEIR's failure to identify, much less analyze or mitigate this category of known potential impacts stemming from the change in crude slate enabled by the Project highlights another crucial example of the failings of the RDEIR, which must be corrected, in a revised, and re-circulated document.[110]

Finally, because the Project's crude slate change will increase TAC and HAP emissions from *all* fugitive components at the SFR, 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,[111] the RDEIR must analyze the overall potential and cumulative impact throughout at least California from this shift.

(ii) The RDEIR Fails to Analyze Emissions from All Components

The RDEIR still fails to assess emissions from all integral components of the Project. In assessing air quality impacts, the RDEIR largely limits its focus to LPG recovery related activities.[112] Most blatantly, this fails to assess the air quality impacts of the SFR as a whole, and includes neither an analysis of the emissions that will be caused at the Rodeo component as a result of the rail spur extension, nor the increased emissions of refining increased quantities of tar sands 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.[113] As discussed *supra* in Part II, an essential element of this Project is a shift to a different-quality crude slate, and the Santa Maria Throughput Expansion, Rail Spur Extension Project and this Project are at least three integral components of this piecemealed project. Consequently, this DEIR should

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[108] *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 649; *see also*, *California Oak Found. v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1239.

[109] *Id*.

[110] *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)).

[111] *See* Fox Comments.

[112] RDEIR at 4.1-20 through 4.1-22.

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

include an analysis of the full scope of air quality impacts resulting from this larger piecemealed project, not just the impacts from one component, let alone one *by*product at the back end.

In addition, because the RDEIR does not disclose that tar sands will be brought to the SFR and refined at the Rodeo facility, the RDEIR cannot analyze the associated and severe air quality impacts. The refining of this different quality crude slate can be reasonably expected to require an increase in frequency and magnitude of flaring at both Rodeo and Santa Maria facilities, contrary to one stated Project Objective,[114] since dirtier crude processing would likely increase "malfunction" and "emergency" flaring.[115] Moreover, a malfunction or emergency upset causes the contents of one or more major process vessels to depressurize suddenly, and each flaring event can cause acute exposures to emitted pollutants.[116] Each of these flaring episodes comes with associated and extremely high levels of additional pollution that the RDEIR's analysis ignores.

Also, 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 pollutants from burning more fuel per barrel to process the likely denser/dirtier crude feeds.[117] 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.[118] The RDEIR does not analyze this effect at either the Rodeo or Santa Maria facilities, and consequently, also fails to discuss mitigation measures for these impacts. As noted above, the RDEIR also fails to include a discussion of the transport of tar sands crude by rail to the SFR.

In fact, the BAAQMD has specifically requested that Phillips 66 provide emissions data on all emissions sources.[119] The RDEIR even fails to comply with this request within the boundaries of the Rodeo facility.[120] The environmental review of 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 RDEIR obfuscates the full extent of air quality impacts, and renders informed decision-making on this Project impossible.

(iii) The RDEIR Fails to Include Relevant Emissions Data.

During the public comment period for the RDEIR, CBE requested throughput data for the Rodeo facility from the BAAQMD. The BAAQMD responded that Phillips 66 claims that this data is protected information: "The throughput data has been designated trade secret by Phillips 66 and is exempt from disclosure under Government Code section 6254.7."[121] Throughput data, however, is essential to any calculation of, and therefore constitutes,

[114] *See* RDEIR at 3-5.
[115] *See* Karras Rodeo Report.
[116] *Id.*
[117] *Id.*
[118] *Id*.
[119] *See* BAAQMD Comment Letter to DEIR, March 2014.
[120] *See* Fox-Pless Revised Rodeo Report at 11.
[121] BAAQMD Response to Public Records Request No. 2014-10-0176, November 2014.

emissions data.[122] Emissions data is public information and essential to review of the air quality implications of any project. The failure to disclose a switch in crude quality foreshadows this failure to disclose this data. The RDEIR must be revised to include this data: "if…a project proponent can pick and choose who sees pertinent data-then a stake is driven into the "heart of CEQA" by preventing the information necessary for an informed decision."[123]

(iv) The RDEIR Does Not Adequately Analyze Potentially Significant Greenhouse Gas Emissions.

The RDEIR wholly underestimates the significant and irreversible effect that the Project presents to climate change. Although the RDEIR makes passing reference to the findings of the Intergovernmental Panel on Climate Change, its references are outdated, and in fact contradicted by more recent reports. Specifically, the RDEIR fails to acknowledge the Intergovernmental Panel on Climate Change's recently voiced and serious concerns regarding the "irreversible" effects of climate change.[124] The report concluded that "continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts," calling for the need for dramatic cuts in pollution.[125]

In the face of that warning, the RDEIR incorrectly claims that the Project would have no significant impacts on greenhouse gas emissions.[126] This is chiefly due to the RDEIR's calculation that net GHG emissions will decrease as a result of the Project, since the propane and butane that were previously combusted onsite will not be sold, and natural gas will be combusted instead.[127] However, though the RDEIR notes that the propane and butane sold may produce GHG emissions offsite, the document refuses to offer an estimate of those off-site GHGs, since off-site uses are not certain and therefore GHG estimates would be too speculative.[128] Consequently, the RDEIR claims credit for reduction of on-site propane and butane combustion emissions, but disclaims responsibility for any off-site emissions, thus presently an artificially low estimate of the Project's GHG emissions.

Additionally, the RDEIR completely fails to take into account the GHG impacts of the change in crude slate that will accompany the Project. The climate change impacts of refining are correlated to the quality of the feedstock refined, as acknowledged in the RDEIR for the Phillips 66 Santa Maria Refinery Rail Spur Project.[129] Refining tar sands at the SFR, compared to refining the more traditional blend, creates far greater GHG emissions and therefore climate

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[122] It has been reported in other EIRs, *see eg.* http://chevronmodernization.com/project-documents/.

[123] *See* CBE et al. v. City of Richmond, 184 Cal. App. 70, 88 (2010).

[124] *See eg.* "Effects of Climate Change "Irreversible"' available at http://www.washingtonpost.com/national/health-science/effects-of-climate-change-irreversible-un-panel-warns-in-report/2014/11/01/2d49aeec-6142-11e4-8b9e-2ccdac31a031_story.html?hpid=z1

[125] Report attached as Attachment B.

[126] RDEIR at 4.5-10 to -15 (Impact 4.5-1).

[127] RDEIR at 4.5-15 (Table 4.5-3).

[128] RDEIR at 4.5-13.

[129] Revised Draft Environmental Impact Report for the Phillips 66 Company Rail Spur Extension and Crude Unloading Project at 4.3-70, SCH # 2013071028.

change implications. Until the RDEIR corrects its Project Description regarding the degree of shift to refining tar sands at the SFR, its analysis cannot provide any adequate analysis of the Project's impacts to climate change.

Finally, we also highlight that the Project calls for an increase in 30 million standard cubic feet of natural gas *per day* to fuel a new boiler or existing Steam Power Plant. The RDEIR ignores the potential effect of this enormous increase in natural gas use.

The increased use in natural gas, which is primarily comprised of methane, may cause a significant increase in greenhouse gas emissions. Methane is a powerful greenhouse gas that has 86 times the global warming potential of carbon dioxide over a 20-year period, and 34 times over a 100-year period.[130] Thus, even small leakage rates will lead to significant increases in greenhouse gas emissions. Yet there is no analysis of the leakage rate of methane, nor an analysis of where these leaks are most likely to occur. Furthermore, the RDEIR also fails to analyze the GHG emissions associated with natural gas demand activities.

The RDEIR's analysis is lopsided and incomplete. It accounts only for the decrease in GHG emissions resulting from removing butane and propane from the gas flow. In contrast, the failure to disclose a switch in crude quality, coupled with the corresponding increase in GHG emissions resulting from the substitution of large amounts of natural gas, leaves a significant impact unaddressed by the RDEIR.

(v) The RDEIR Does Not Adequately Analyze Indirect Emissions.

(a) Indirect Emissions - SFR

CEQA requires an EIR to consider both direct and indirect impacts of a proposed project.[131] 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."[132] The scale of the Project's 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."[133] Thus, the RDEIR requires a sufficient analysis and discussion of these sources. For example, in *North Coast Alliance v. Marin Municipal Water District*, 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.[134]

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[130] G. Myhre et al., *Anthropogenic and Natural Radiative Forcing*, in Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change IPCC 714 (Cambridge Univ. Press 2013).
[131] CEQA Guidelines § 15358(a).
[132] CEQA Guidelines § 15358(a)(2).
[133] Kings County Farm Bureau v. City of Hanford (1990) 221 Cal. App. 3d 692, 717.
[134] 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.").

Similarly here, an inextricable link exists between the Santa Maria and Rodeo ends of the SFR. Just as it was foreseeable in *North Coast Alliance* that utility demand would be met, it is just as foreseeable, if not a certainty, that the Rodeo facility will exactly meet the demand of the Santa Maria facility's export by the pipeline, owned by Phillips 66, that connects the two facilities. By limiting the study of GHG emissions to Rodeo operations alone—just one component of the overall Project—the RDEIR 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.

Emissions from the Santa Maria facility include increased GHG emissions resulting from the processing of tar sands, as well as the substantial and significant locomotive GHG emissions from the transport of up to 250 crude oil trains each year to the Santa Maria facility from points across North America. The RDEIR 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. At a minimum, the RDEIR must address these emissions as reasonably foreseeable cumulative impacts, as more fully addressed below.

(b) Indirect Emissions - LPG

The BAAQMD January 2014 letter regarding LPG emissions states that it is "too speculative" to determine how much propane and butane recovered by this Project will be combusted in the market, and therefore release increased GHGs into the atmosphere. Due to this "speculation," BAAQMD asserts that it is "unreasonable, and probably inaccurate, to assume that their off-site use would increase GHG emisisons. The RDEIR further states that, "Because there would be a substantial amount of speculation involved in assessing the net change in GHG emissions associated with the combustion butane and propane generated by the proposed Project, the County is not further considering these emissions in this RDEIR."[135] This is absurd and requires little further discussion. If these emissions will exist, then CEQA requires that the lead and responsible agencies at least assess whether they will be significant. It is also unreasonable to assume that these additional emissions are zero, based purely on the fact that speculation is required. A more reasoned approach would have identified a range of potential impacts, even starting at a minimum of 10%,[136] and ending at a projected maximum recovery figure. Anything less simply shirks the responsibility of a lead or responsible agency under CEQA.

In addition, despite this omission, the RDEIR still fails to account for locomotive emissions outside an adequate study area. The RDEIR analyzed locomotive emissions for the transport of LPG, but "these emissions were underestimated by counting only emissions released within the boundary of the BAAQMD, rather than the entire distance the locomotives will travel within the BAAQMD and elsewhere in California."[137] Even if the County were to

[135] RDEIR at 4.5-14.
[136] *See* Karras Report 2 at 24 ("must admit at least 10% of them could potentially be burned) citing to RDEIR Table 4.5-3 and Karras Rodeo Report.
[137] *See* Fox-Pless Revised Rodeo Report at 22-25.

accept the BAAQMD's above assertion regarding speculation, the RDEIR's analysis was free from any such issue in regards to studying locomotive emissions at least within the boundaries of California.

(vi) The RDEIR Relies Upon Underestimated Health Risks and Inadequately Protective Health Risk Thresholds.

The addition of a cumulative health risk assessment (HRA) was the principal reason that this EIR was recirculated.[138] However, the HRA fails to fulfill CEQA's requirement that an EIR include a sufficient analysis of local, direct, indirect, and cumulative impacts for two reasons: first, the HRA drastically underestimates emissions and thus underestimates the Project's health impacts, and second, the HRA relies on significance thresholds that BAAQMD has found to be inadequately protective.[139]

First, the HRA drastically underestimates the emissions associated with the Project. As discussed above, the RDEIR fails to disclose and analyze the emissions associated with the Project's change in crude slate, which means that the HRA relies on inaccurate emission estimates. Significantly, the HRA fails to account for the cancer risks associated with increased benzene emissions from Bakken crudes, which have higher levels of benzene than the baseline crude slate.[140] Additionally, the HRA does not account for full emissions impacts of locomotive transit, including idling emissions from both the on-site switching locomotive and haul locomotives on site or nearby.[141] The HRA also fails identify or analyze health risks associated with existing locomotive and other mobile source emissions at the Refinery.[142] These omissions mean that the HRA's emissions estimates are artificially low, and the HRA thus does not capture the significant health impacts of the Project.

Second, the HRA uses inadequate and unprotective thresholds. For example, in evaluating the individual cancer risk caused by the project, the HRA uses a threshold of 100 per million.[143] BAAQMD has publicly declared its 100 per million threshold to be potentially unprotective.[144] Most Air Districts in California use a threshold between 10 per million and 20 per million, and BAAQMD uses the highest cancer risk reduction trigger for cancer risk posed by toxic emissions of any other Air District in the State.[145] The Project's cancer risk of 61 per million would exceed a more protective threshold. By using an inadequately protective

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[138] *See* RDEIR at ES-1.

[139] *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)).

[140] Fox-Pless Revised Rodeo Report at 43.

[141] Fox-Pless Revised Rodeo Report at 42.

[142] Fox-Pless Revised Rodeo Report at 42 (noting the HRA's reliance on a previous health risk assessment conducted for compliance with AB 2588, which does not address mobile source emissions or exempt sources).

[143] RDEIR at 4.1-34, Table 4.1-14.

[144] *See* Karras Rodeo Report 2 ¶ 44; Staff presentations to the BAAQMD Board regarding the Petroleum Refinery Emissions Tracking Rule and Office of Health Hazard Assessment Update, Oct–Nov 2014.

[145] *See* Science and Environmental Health Network Letter to Mayor and BAAQMD Board of Director member Tom Bates, dated May 4, 2009, Re: Bay Area Air Quality Management District Health Risk Reduction Measures Under Toxics Hot Spots Program, 1-4, attached as Attachment D.

threshold, the RDEIR avoids its responsibility under CEQA to mitigate the significant public health impacts of the Project.

The HRA's reliance on low estimates of emissions levels and inadequately protective health standards invalidates the RDEIR's assertion that the Project will have no significant health impacts. Even the underestimated emissions levels would exceed protective health thresholds—the true emissions levels would likely drastically exceed those thresholds. The RDEIR must be revised and recirculated in order to ensure that the public and decision-makers have full and accurate information about the serious risks to human health that are associated with the project.

(vii) The RDEIR Uses An Inadequate Baseline.

The RDEIR fails to properly assess Project impacts by failing to employ an accurate baseline in two respects. First, as the RDEIR fails to properly analyze a change in crude quality feedstock at the Rodeo facility, its air quality analysis omits this crucial component, instead focusing on LPG related activities at the Rodeo facility.[146] To adequately disclose a switch in crude quality feedstock, the RDEIR should have identified the baseline quality and resultant emissions/hazards and compared projected increases due to use of a lower quality crude oil feedstock. Anything less violates CEQA.[147]

Second, the RDEIR's baseline with respect to LPG recovery is questionable. The air quality analysis uses a baseline of 2009 through 2012 (a three year baseline given the date of the Notice of Preparation for this Project).[148] The baseline for LPG, however, includes data for 2013.[149] In 2013, the SFR had already begun to boost crude feedstock volume, and did so at least in part on a new tar sands oil feedstock.[150] This inflated baseline for LPG corrupts the RDEIR's overall air quality analysis and cannot amount to substantial evidence to satisfy CEQA.

In addition, other factors tend towards the unreliability of the RDEIR's assessed baseline LPG. The RDEIR now "lumps together" propane and butane data.[151] It also includes certain LPG sources into calculations for amounts to be recovered, yet those sources can never even be recovered.[152]

Ultimately, the inclusion of 2013 LPG data inflates the baseline, but also, reflects an industry shift to a lower quality oil feedstock. Perhaps the baseline should also reflect this shift, which would mean that any baseline calculation is not static, but must adequately

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[146] *See eg.* RDEIR at 4.1-12 through 14.
[147] See CBE et al. v. City of Richmond, 184 Cal. App. 4th 70 (2010).
[148] *Id.* at 4.1-13.
[149] RDEIR at 3-33.
[150] *See* Karras Rodeo Report 2 at 6, citing Rail Spur RDEIR.
[151] *Id.*
[152] See Fox-Pless Revised Rodeo Report at 9, ("U-233 fuel gas...this propane and butane would not be recovered by the Project, but is included in Phillips 66's summary propane and butane available for recovery...Phillips 66 currently ADDS butane to the fuel gas to control specific gravity. This butane is included in the summary data and clearly is not recoverable under the Project.").

represent the existing condition of a change in crude oil feedstock. During the appeal hearing, CBE submitted the Attorney General's comments on the WesPac project.[153] The Attorney General also identified the need to evaluate "the potential for new or increased impacts to the communities where the crude oil will be refined due to changes in delivered volume or in the composition of the crude" *in the context of existing conditions* driving a purpose "to replace California and Alaska crude stocks, whose volumes are declining, with new sources of crude."[154]

C. The RDEIR's Assessment of Biological Resource Impacts is Inadequate.

The RDEIR fails to properly assess the Project impacts to biological resources in two distinct respects: first in regards to water quality, and second, in regards to special-status species.

(i) The RDEIR's Assessment of Water Quality Impacts is Inadequate.

The RDEIR fails to sufficiently analyze significant environmental effects on biological resources in and around the San Francisco Bay due to Project expansion of the Refinery's once-through cooling (OTC) system. The OTC system—which draws ambient temperature water out of the Bay, uses it to cool Refinery processes, and then expels the hotter water back into the Bay—causes significant impacts resulting from impingement, entrainment, heat, and possible pollutant discharge.[155] Notwithstanding the widely recognized, harsh environmental impacts of this type of cooling process, the DEIR proposed to invest in an expansion of OTC rather than finding ways to retire the system and replace it with practicable environmentally superior alternatives. That would expand hotter flows and reset the clock on the operational lifetime of the OTC system.[156]

This becomes particularly problematic when taking into account the State of California's 2010 Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling.[157] The State's 2010 plan to generally phase out and replace OTC systems has left Phillips 66 as *the only* one of the five refineries linking the Bay that still uses this antiquated technology, let alone relying on it for the Project's success. As noted in the both Karras Rodeo Reports, this is an unnecessary impact on the Bay and easily mitigated through alternative investments. Moreover, the DEIR's analysis was premised on an inaccurate calculation of discharge and intake flows relating to the OTC system, thereby subjecting the Project's analysis to an inaccurate and faulty baseline assessment.[158]

Moreover, while the DEIR admitted that there is a general, potential impact on endangered species caused by the OTC system, it claims that the impact is less than significant. This analysis and conclusion is incorrect for several reasons. First, although the DEIR relies

[153] Supplemental Evidence D, attached as part of Attachment C.
[154] *Id.*
[155] *See* Karras Rodeo Report, and Supplemental Evidence B, attached as part of Attachment C.
[156] *Id.*
[157] *Id.*
[158] *Id.*

on Refinery's compliance with its National Pollutant Discharge Elimination System (NPDES) to reach the conclusion that any impact is insignificant, the NPDES limits are not known to be protective, which is why the NPDES permitting agency for the Refinery, the San Francisco Regional Water Quality Control Board (RWQCB), has ordered the facility to conduct an impact study on the discharge effects.[159] Furthermore, there is indication that the NPDES limits are suspected to be underprotective overall, because the RWQCB has also ordered Refinery to study an OTC replacement. In addition, the DEIR failed to analyze the impact of the Project's conflict with state policy to phase out OTC and Refinery-specific orders that could implement this policy. Finally, the DEIR incorrectly analyzed impacts from only a fraction of the OTC flow that the Project could cause. Because building onto and expanding OTC conflicts with state and RWQCB policy, the Project could foreclose the planned elimination of OTC flow. Therefore, the future impact from the Project could actually be from the *whole* future flow, not just the incrementally increased flow and temperature that the DEIR analyzed. In failing to analyze the Project's full future OTC impact, the DEIR underestimated the possible biological effect of the Project.

The RDEIR does not correct these errors. Instead, it also suggests an increased usage and reliance on the OTC system. Cooling system changes described in the DEIR were limited to cooling the proposed new propane recovery[160] while the RDEIR appears to expand this description to cover all cooling "demands for the proposed Project."[161] Furthermore, the Project's OTC expansion would be oversized for the project heat sources disclosed. That excess capacity is needed for heat from processing the project's changing oil feedstock. "The RDEIR's admission that the OTC expansion would be operated to boost heat discharge in proportion to Bay cooling water flow and its additional project revision to route naphtha produced in part from SMF oil feeds to Rodeo emphasizes this point."[162] The RDEIR's analysis fails to explain this change or discrepancy in the project description. This omission further compounds the RDEIR's lack of disclosure regarding the process sources and amount of the additional heat to be transferred to the San Francisco Bay. This is particularly problematic given that, "the publicly verifiable data in the record (which the RDEIR thus ignores) indicate that instead of the 25% increase suggested by its inflated baseline, the Project could increase OTC flow by 40–65%."

(ii) The RDEIR Fails to Adequately Analyze and Mitigate Impacts to Special-Status Species.

Under CEQA Guidelines, a project would cause significant adverse impacts to biological resources if it would "have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species." The RDEIR's analysis of impacts to special-status species under this significance criterion is flawed because (1) it inadequately analyzes impacts to nesting and foraging birds

[159] *Id.*
[160] DEIR at 3-27.
[161] RDEIR at 3-37.
[162] Karras Rodeo Report 2 at 24.

and concludes without basis that potential impacts are less than significant[163], and (2) fails to analyze impacts to other special-status species likely to be harmed by the project.

The RDEIR acknowledges the potential for Project construction and operation to impact nesting and foraging birds: "Nesting and foraging birds have the potential to occur in other areas of the Refinery and in the RCV, leading to the potential for indirect impacts resulting from noise and visual disturbances resulting from Project construction and operation. These indirect impacts would be significant if they cause nest abandonment or starvation or otherwise decrease fitness and survival among nesting and foraging birds."[164] However, the RDEIR attempts to avoid analyzing these impacts by asserting that the Project components are distant from habitat areas for special-status species, without analyzing whether these distances are sufficient to avoid impacts from Project construction and operation. For example, the Propane Storage tank component is directly adjacent to northern coastal scrub habitat[165] and other vegetated nesting and foraging habitat for birds, including potential habitat for short-eared owls, California horned lark, loggerhead shrike, San Pablo song sparrow, and saltmarsh common yellowthroat as acknowledged in the RDEIR.[166] Given the proximity of the Propane Storage tank site to nesting and foraging habitat, the RDEIR must analyze construction and operational impacts to these species, including increased noise pollution, night lighting, disturbance from human presence, and spread of invasive species from imported soils, and mitigate these impacts, for example by requiring surveys for nesting birds and designating protective buffers around nests.

The RDEIR fails to analyze the impacts from the Project on endangered marsh species—notably the California black rail, California clapper rail, and salt marsh harvest mouse—even though the RDEIR acknowledges that potential habitat for these species occurs near the Project site.[167] The Project applicant did not conduct field surveys for these special-status species, and the RDEIR does not require pre-construction surveys. Without USFWS-protocol-level surveys for special-status species, the RDEIR must assume they are present and treat any potential habitat as occupied habitat, and impacts to these species must be fully analyzed and mitigated.

Finally, such omissions also apply to the RDEIR's analysis of impacts of the OTC system, which also fails to analyze impacts on the full range of special-status fish species that are likely to be harmed. The RDEIR states that larval fish are particularly vulnerable to being entrained and killed in the OTC system.[168] The RDEIR also acknowledges that the longfin smelt, which is listed as threatened under CESA and a candidate for listing under the ESA, has high larval concentrations in San Pablo Bay.[169] Despite the significant probability of take of the longfin smelt, the RDEIR fails to mention and analyze the impacts of the OTC system on this threatened species.

[163] RDEIR at 4.2-26-27.
[164] RDEIR at 4.2-26.
[165] RDEIR at 4.2-5.
[166] RDEIR at Table 4.2-1.
[167] RDEIR at Table 4.2-1.
[168] RDEIR at 4.2-28.
[169] RDEIR at 4.2-10.

IV. THE RDEIR FAILS TO ADEQUATELY ANALYZE CUMULATIVE IMPACTS.

An accurate cumulative impacts analysis is one of CEQA's most vital requirements.[170] Its purpose is to avoid considering projects in a vacuum, and to prevent obscuring potentially severe environmental harm that may be caused by piecemealed approval of several projects with seemingly insignificant impacts, which are in fact cumulatively considerable when viewed together.[171]

To satisfy this critical requirement, the RDEIR must demonstrate that all potentially significant cumulative impacts of the Project were "adequately investigated and discussed," and that they were considered "in the full environmental context" surrounding the Project.[172] In conducting its analyses, the lead agency must find that that a project has a significant effect on the environment when, despite appearing less-than-significant on their own, the individual, incremental impacts of the Project are cumulatively considerable in light of the actual and potential effects of past, current, and probable future projects.[173]

The RDEIR fails to sufficiently analyze the Project's cumulative impacts in three principal ways: First, the RDEIR fails to consider Project impacts in relation to key, related SFR projects; second, the RDEIR fails to conduct its own independent analyses of the Project's cumulatively significant air emissions and air quality impacts, and provides a flawed analysis of cumulative hazards impacts; third, the RDEIR fails to meaningfully consider existing cumulative health and pollution burdens in Environmental Justice communities surrounding the project area.

A. The RDEIR Considers the Project's Cumulative Impacts in Relation to an Incomplete List of Other Projects.

At Table 5-1 the RDEIR provides a list of projects from which the individual, incremental impacts of the Project can be measured, to determine their relative, cumulative significance. While these projects include a number of important current and proposed future projects in the Bay Area, which should be used to measure incremental impact significance, it bears some glaring omissions that render the RDEIR's analysis inherently flawed.

Notwithstanding the RDEIR's list of other Bay Area refinery projects, the Propane Recovery Project has been piecemealed from at least three related projects that will facilitate

[170] *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 (holding that the cumulative impacts analysis of a project's regional impacts as a "vital provision" of CEQA).
[171] *See e.g.*, CEQA Guidelines § 15130(a)(an EIR must "discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable."); see also, *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th at 720.
[172] CEQA Guidelines § 15125(c).
[173] *See, e.g.,* CEQA Guidelines § 15065(a).

the refining of cost-advantaged crudes at the Phillips 66 SFR, leading to serious omissions in the RDEIR's analyses of the Project's cumulatively considerably air emissions, potential hazards, and biological resource impacts. These projects include: (1) The Santa Maria Throughput Increase Project; (2) The Santa Maria Rail Spur Project; and (3) The Rodeo Marine Terminal Throughput Increase Project.

As explained at the outset of this comment and in the attached technical reports, in addition to sharing a 200 plus mile pipeline, the Santa Maria facility and the Rodeo facility are entirely inter-reliant. The Santa Maria facility for example, depends on the Rodeo facility for transport of fuel production and financially sustainable operation. In turn, the Rodeo facility relies on the Santa Maria facility for sufficient feedstock delivery and deep conversion or "coking" capacity to process its market products.[174] Indeed, all of the crude input at the SRF is necessarily finished at the Rodeo facility to make a financially sustainable product slate.[175] Thus, the Rodeo facility **must** rely on the Santa Maria facility-derived crude.[176]

The Karras report further explains why the process by which LPG is produced at the Rodeo facility depends fully on the quality of crude that is refined at the Santa Maria facility. Yet, despite the clear process-related and physical connections between the two facilities, the RDEIR fails to include either the Santa Maria Rail, or the Santa Maria Throughput Increase Projects in its discussion of potential cumulative impacts from the proposed Propane Recovery Project.[177]

The RDEIR also fails to identify or analyze the cumulative Project impacts and their significance in relation to other nearby projects, such as the Kinder Morgan crude by rail terminal – another glaring omission in the RDEIR's Table 5-1 list.[178] This terminal is adjacent to both the Chevron Richmond Refinery and the Richmond Port, and is precisely aligned with the crude-by-rail route identified in the RDEIR, as what would be used by the Project. Despite its proximity, the Chevron Richmond Refinery is prohibited from receiving crude from the Kinder Morgan facility.[179] The RDEIR fails to include this crude by rail terminal, however, in its cumulative impacts analysis and wholly omits any mention of the whether crude delivered by rail to the SMF might be loaded at the Kinder Morgan terminal, the Richmond Port, or both, causing further flaws in its overall analysis.

As Drs. Phyllis Fox and Petra Pless explain, the RDEIR further fails to apply the appropriate methodology to determine whether the Project has significant cumulative impacts, in relation to those projects that **are** included in the list provided in Table 5-1.

According to the Fox-Pless expert report, the RDEIR fails to adequately state, much less analyze an appropriate baseline of cumulative impacts "*i.e.*, impacts from all existing sources at the start of review," to determine whether those, even without the added impacts

[174] *See* Karras Rodeo Report.
[175] *See* Karras Rodeo Report.
[176] *See* Karras Rodeo Report.
[177] *See* RDEIR at Table 5-1 (omitting any mention of SMF projects).
[178] RDEIR at Table 5-1 (omitting mention of the Kinder Morgan Crude by Rail Terminal).
[179] Karras Rodeo Report 2 at (¶41)

from the Project, are significant. Although the RDEIR includes a description of each project it has included in its list, it also fails to state whether and how it determined the relative significance of each of the listed project's impacts, and finally, it fails to explain how or why it determined that the Project's contribution to the baseline impacts from the current and future foreseeable projects would not be "cumulatively considerable."

Both because the RDEIR failed to include critical projects that are inherently interrelated to the Project, and because it has either wholly omitted a necessary methodology or simply failed to describe its methodology, it is inadequate for the purpose of stating meaningful environmental review and fails to meet CEQA's requirements.[180]

B. The RDEIR Fails to Adequately Analyze the Project's Cumulative Air Emission and Air Quality Impacts.

The RDEIR further fails to evaluate cumulative air quality impacts, and erroneously concludes that because Project emissions fall under BAAQMD significance thresholds their cumulative impacts are *per se* less-than-significant.[181] The RDEIR states that according to BAAQMD, "if a project exceeds the identified significance threshold… its emissions would be cumulatively considerable."[182] And, that alternatively, if a project does not exceed the identified significance thresholds, "the project would not be considered cumulatively considerable and would result in a less than significant regional air quality impact."[183]

The cited BAAQMD guidance[184] does not supersede CEQA requirements as set forth in Public Resources Code and in the Guidelines. As stated above, CEQA is clear in its definition of "cumulatively considerable" 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."[185] Because the RDEIR incorporates only selective statements regarding BAAQMD's significance thresholds and fails to consider the actual emissions impacts from the Project in the context of current as well as foreseeable future projects, it fails to comply with CEQA's requirements.[186]

Furthermore, the RDEIR impermissibly limits its analysis of potential cumulative impacts from air emissions, to those impacts which occur solely within the boundaries of the BAAQMD. This limitation is done despite the fact that, for example, locomotives that will transport the recovered propane and butane necessary for the Project will travel outside of the

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[180] CEQA Guidelines §15130(a); *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th at 720.
[181] RDEIR at 4.1-30.
[182] RDEIR at 4.1-30, citing BAAQMD, 2009d.
[183] RDEIR at 4.1-30, citing BAAQMD, 2009d.
[184] BAAQMD, Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance, October 2009, Available at: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/Revised%20Draft%20CEQA%20Thresholds%20%20Justification%20Report%20Oct%202009.ashx?la=en.
[185] CEQA Guidelines §15065(a)(3)
[186] CEQA Guidelines §15130(a); *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th at 720.

BAAQMD and will thereby emit pollutants in other air districts.[187] As explained in the Fox-Pless Report, the RDEIR must be revised to include an analysis of the Project's cumulative impacts based on these out-of-BAAQMD-boundary emissions.[188]

The RDEIR also contains underestimated air emissions estimates, as explained above, and in the attached expert reports. However, even its underestimated emissions are not analyzed properly in relation existing emission levels from other, current projects, and projected future levels from foreseeable projects.

When analyzed properly, the RDEIR's current, underestimated emissions show that the Project's potential NOx and ROG impacts are significant when compared to the BAAQMD's significance thresholds. This is shown in the Fox-Pless report by following table, which illustrates more accurate emissions calculations in similar form as what is provided in the RDEIR, and uses the RDEIR's current (under-estimated) emission levels:

Cumulative Increase in Annual NOx and ROG Emissions

Project	**NOx** (ton/year)	**ROG** (ton/year)	**Reference**
Marine Terminal II	33	2	Ap. 22904, p. 5
Marine Terminal III	79	5	Ap. 22904[a]
Valero Crude-by-Rail Project	-2	1	Valero RDEIR, Table 4.1-5/6
Total Proposed Projects	**110**	**8**	
Propane Recovery Project	**3**	**8**	RDEIR, Table 4.1-8
Cumulative Increase	**114**	**16**	
BAAQMD Significance Threshold	10	10	
Significant?	**YES**	**YES**	

a (33.16 ton/year)(49,000 bbl/day)/(20,500 bbl/day)

Cumulative Increase in Daily NOx and ROG Emissions

Project	**NOx** (lb/day)	**ROG** (lb/day)	**Reference**
Marine Terminal II	182	11	Ap. 22904, p. 5
Marine Terminal III	434	26	Ap. 22904[a]
Valero Crude-by-Rail Project	-322	-9	Valero RDEIR, Table 4.6-5
Total Proposed Projects	**294**	**28**	
Propane Recovery Project	**37**	**47**	RDEIR, Table 4.1-7
Cumulative Increase	**331**	**75**	
BAAQMD Significance Threshold	54	54	

[187] Fox-Pless Revised Rodeo Report at 36.
[188] Fox-Pless Revised Rodeo Report at 36.

Significant?	**YES**	**YES**	

a (2,324 ton/year)(49,000 bbl/day)/(20,500 bbl/day)

Notably, these cumulative emissions would also exceed significance thresholds of air districts in the Sacramento and San Joaquin Air Basins, through which the trains would pass, including: for both NOx and ROG in the Yolo-Solano Air Quality Management District, the San Joaquin Valley Air Pollution Control District, and the Sacramento Metropolitan Air Quality Management District; and for NOx alone in the Placer County Air Pollution Control District. The cumulative impacts of the Project are, therefore, significant not only within the BAAQMD, but within adjacent air districts as well.

The RDEIR similarly, erroneously concludes that the Project's contribution to GHG impacts would not be "cumulatively considerable" as the Project would result in a net decrease of carbon dioxide-equivalent emissions, despite the fact that when calculated more accurately, the Project's GHG emissions also show significant cumulative impacts.[189] As explained in the Fox-Pless and Karras reports, this error is in large part due to the fact that the RDEIR fails to account for declining local regional crude supplies, and the Rodeo facility's inability to continue to recover the Project's design-basis amount of propane and butane from its baseline crude. Again, as described throughout this comment and the expert reports, this omission directly relates to the piecemealed nature of the Project under review in the RDEIR, and the need to consider its components specifically in light of other, related crude-slate shifting projects such as the Santa Maria Rail Spur and Throughput Increase projects.[190]

The RDEIR fails to conduct any analysis to arrive at its "no cumulative GHG impact" conclusion, yet when the Project's potential GHG emissions are considered in light of the GHG emissions from other, nearby project, they are shown to exceed BAAQMD's significance threshold of 10,000 MT CO_2e/year by a factor of almost five. Thus, despite the RDEIR's flawed analyses and inaccurate conclusions, the Project's GHG emissions are cumulatively considerable when analyzed in light of, *inter alia*, the increase in GHG emissions from increased amounts of propane and butane, as well as other process related emissions that stem from a foreseeable change in crude slate at the SFR; the emissions from the downstream use of recovered propane and butane; emissions from Project activities and project components outside of BAAQMD air district boundaries; and increases in GHG emissions from the many other proposed, recently permitted and operating crude-by-rail projects.

[189] RDEIR, p. 5-9.

[190] *See* Karras Report, *see also*, Fox-Pless Revised Rodeo Report, referencing Phillips 66's widely reported plans to replace heavy sour San Joaquin Valley crudes, currently imported by pipeline, with propane- and butane-rich Bakken crudes at its Marine Terminal; a switch that will increase the amount of propane and butane in the refinery fuel gas, even after the Project is fully built out. The RDEIR's GHG emission calculations do not include any increase in GHG emissions from the increase in propane and butane in its refinery fuel gas from refining Bakken crudes as replacements for other heavier crudes, nor does it include an analysis of calculations based on a refinery-wide shift to even heavier, more GHG-intensive Tar Sands crudes such as those that will be transported to the Santa Maria facility, according the RDEIR for the Rail Spur Project.

Because the RDEIR significantly underestimates, or wholly omits critical information regarding the Project's potential cumulative air emissions and air quality impacts, it must be revised and re-circulated.

C. The RDEIR Incorrectly Concludes that the Project's Cumulative Hazards Impacts Are Less-Than-Significant.

As explained in the Fox-Pless report, the RDEIR's conclusion that "routine operations of the proposed Project would either not result in any impacts associated with hazards or hazardous materials or, would be less than significant…; thus routine operations would not contribute cumulatively to hazards-related impacts" is unsupportable by substantial evidence.[191] The RDEIR reaches its conclusion without considering Project impacts in conjunction with other past, present and reasonably foreseeable projects, as required by CEQA. Guidelines § 15064(h)(1). Thus, the analysis is fundamentally flawed.

Additionally, the RDEIR makes the following errors in an attempt to support its conclusion:

1. The RDEIR bases its analysis on underestimated increase in the risk of tank car accidents that may result from operation of the Project, by a factor of about four.[192]

2. The RDEIR's analysis of the relative risk of hazards resulting from the Project is based only on the frequency of LPG releases from tank cars.[193] Because there are many other similar substances that are transported by rail, and there are numerous accidents that involve such other substances, limiting the rate of potential material releases to only those which occur from tanks carrying LPG improperly limits the range of analysis of potential risks from the Project's overall tank-car transport. The RDEIR should have based its analysis on all tanks cars, rather than just a small fraction of them.

3. The RDEIR's analysis was based only on historic (1990 to 2010) LPG rail traffic accident data, thus its risks of hazards estimates are based on data from a period when far fewer trains were transporting hydrocarbon products over the same rail lines.[194] The same rail lines that will be used by the propane/butane trains will also be used by unit trains of 80 to 100 tank cars each, carrying crude oil to local refineries, all routed from the same Roseville Rail Yard.[195] These rail lines pass very close to residential and commercial areas in the vicinity of the Project, within feet of the tracks, and as well as elsewhere along the route. Moreover, these crude trains will be sharing the tracks with the Project's propane and butane trains,

[191] RDEIR at 5-9.
[192] *See* Fox-Pless Revised Rodeo Report at 39, citing, RDEIR, Fig. 4.6-4 and explaining that The RDEIR does not provide any support for the assumed baseline, which should be the average number of tank car shipments in the 2 to 3 years prior to the start of CEQA review.
[193] RDEIR, p. 4.6-27.
[194] Fox-Pless Revised Rodeo Report at 40.
[195] RDEIR at 4.6-27.

increasing the probability of accidents involving the use of shared tracks. The cumulative accident impacts of the increase in LPG cars coupled with the post-2010 and future increase in crude rail cars, therefore, must be evaluated.

4. It appears that the RDEIR's analysis was also only based on a short segment of track from the Richmond Rail Yard to the Refinery; however, incoming trains can take multiple routes from the rail yards to the California border. Indeed, many segments of California rail line pass through some of the state's most sensitive ecological areas and parallel the water supply for most of the state. These route segments also contain many high hazard areas for derailments. Emergency response teams have generally good coverage in the urban areas, but none are located near the high hazard areas in rural Northern California that the RDEIR apparently did not analyze.[196]

5. Finally, the RDEIR's conclusion that an accidental LPG release could occur only once every 25 years and once every 17 years after the Project is operational appears to be based on an inaccurate baseline of current accidental releases. As explained in the Fox-Pless report, correcting the RDEIR's baseline errors, however, shows a more accurate risk of accidental releases occurring once every 10 years—a very high accident probability given the proximity of rail lines to residential communities.

Because these errors drastically underestimate the relative significance of both the individual, incremental risks of accidents, as well as the cumulative risks of accidents and potential hazards caused by Project operations, the RDEIR must be re-drafted and re-circulated.

D. The RDEIR Fails to Adequately Account for Existing Cumulative Health and Environmental Justice Burdens.

Rodeo and its surrounding communities have 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 Rodeo Facility.[197] This means that impacts, which may appear insignificant by themselves, are indeed significant when considered in the context of existing sources of environmental impacts, which often tend to be concentrated in some areas, such as those where this facility is located, more than others. Notwithstanding this fact, the RDEIR fails to consider existing health and pollution burdens suffered by Rodeo and surrounding area residents.

Rodeo is surrounded by already pollution burdended and impaired water bodies; it falls in the top 1% of the state's highest Toxic Release Inventory chemical burdens, and the top 8%

[196] Interagency Rail Safety Working Group, State of California, Oil by Rail Safety in California. Preliminary Findings and Recommendations, June 10, 2014.

[197] OEHHA Cal Enviro Screen 1.1 (now amended), Statewide Zip code Results, Rodeo, CA, available at: http://oehha.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=1d202d7d9dc84120ba5aac97f8b39c56 last accessed, Dec. 3, 2014.

of concentration of hazardous waste facilities in the state.[198] Rodeo residents also suffer from severe asthma rates scoring in the 96th percentile of asthma rates throughout the state, and fall among the top 6% of statewide residents heavily impacted by mobile source pollution from freeway, truck, and rail traffic emissions.

The particular vulnerabilities of this community and the existing pollution burdens, to which its residents are already exposed, require careful attention and full environmental review, to ensure adequate public health protections. As detailed above, the Project's emissions and impacts analysis is incomplete as a result of the RDEIR's failure to disclose information relating to the SFR's overall shift in crude slate, among other inadequacies. Even absent an analysis that includes the SFR's change in crude slate, any increase in emissions that are currently identified in the RDEIR as being less than significant, are not analyzed in the context of the existing pollution burdens in Rodeo, and are, therefore, severely flawed. This analysis is an integral component of CEQA, and without it, the RDEIR cannot be used as informational document, for the purpose of reaching an informed decision relating to the true environmental and human health impacts of this project, prior to the Project's approval.[199]

V. THE PROJECT IS STILL INCONSISTENT WITH STATE AND LOCAL PLANS.

The RDEIR remains inadequate for failing to adequately discuss the Project's potential inconsistencies with applicable plans, polices, and regulations including (1) state policy and Regional Water Quality Control Board (RWQCB) orders to retire once-through cooling (OTC) systems, (2) Contra Costa County's Industrial Safety Ordinance (ISO), (3) U.S. Chemical Safety Board guidance regarding risk analyses, (4) the Contra Costa General Plan, (5) the California Global Warming Solutions Act (AB 32), and (6) Executive Order S-3-05. The CEQA Guidelines state:

> The EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. 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, Lake Tahoe Basin, San Francisco Bay, and Santa Monica Mountains.[200]

An applicable plan, policy, or regulation is one that has already been adopted and thus legally applies to a project.[201]

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[198] *Id*.
[199] CEQA Guidelines §§ 15064(d), 15125(c); *see also, Kings County Farm Bureau*, 221 Cal. App. 3d 692, 729.
[200] CEQA Guidelines § 15125(d); *see also, San Franciscans Upholding the Downtown Plan v. City & Cnty. of San Francisco* (2002) 102 Cal.App.4th 656, 678.
[201] *Chaparral Greens v. City of Chula Vista* (1996) 50 CA4th 1134, 1145, n7.

As raised in comments to the DEIR for the Project, this Project conflicts with state policy including the RWQCB's orders to fully retire OTC systems, by not only proposing to expand the Rodeo Facility's OTC system, but also by foreclosing the option to end use of the system in the foreseeable future.

Additionally, the SFR-wide switch to denser, higher sulfur crude, as well as the proposal to store propane in pressurized tanks, conflicts with the Contra Costa County ISO that requires Inherently Safer Systems (ISS). These Project components are also inconsistent with U.S. Chemical Safety Board (CSB) findings that apply to all refineries and call for industrial safety analysis, seeking to drive risk "as low as reasonably practicable" (ALARP). Indeed, the CSB has issued the final regulatory report on its investigation of the August 2012 pipe rupture and ensuing fire at Chevron's Richmond Refinery, in which the agency reinforced its call for a more rigorous approach to safety management at all US refineries. This report was unanimously approved by agency board members on November 10, 2014,[202] and its latest version of recommendations reiterates CSB's previous recommendation for California and US refiners to implement a safety case regulatory regime similar to that already adopted by refiners in Norway, the UK, and Australia.[203] Despite these newly approved requirements, the RDEIR fails to analyze whether Project components may conflict, and if so, how the implementation of the Project might be altered, to avoid substantial conflicts with necessary safety processes.

Moreover, the Contra Costa County Plan sets goals of increasing the usage of renewable energy such as wind, solar, and biomass methane production, yet the RDEIR still fails to discuss the Project's conflict with these important sections of the County's General Plan and only states generally throughout its analyses that the impacts from conflicts to existing state and local plans are less-than-significant.

The Global Warming Solutions Act of 2006 (AB 32) has also recognized that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California, and set the current state-wide 2020 greenhouse gas emissions reduction goal into law. As explained in this comment and the expert reports, the RDEIR fails to adequately discuss the Project's foreseeable increase in GHG emissions, and thus fails to adequately address its potential inconsistencies with AB 32. This failure is particularly problematic in light of specific statements made by Phillips 66 executives, including its CEOR Greg Garland, who, when asked what he thought the permitting track would be for delivering US Bakken crude or Canadian heavy crude to California by rail 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 cap and trade, et cetera, et. cetara [sic] in California."[204]

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[202] U.S. Chemical Safety Board Report: "*CSB Releases Boar Approved Regulatory Report on Chevron Refinery Fire – Proposes a More Rigorous Refinery Industry Regulatory System in California*," Washington D.C., November 10, 2014, available at: http://www.csb.gov/csb-releases-board-approved-regulatory-report-on-chevron-refinery-fire---proposes-a-more-rigorous-refinery-industry-regulatory-system-in-california-/

[203] Oil and Gas Journal Online, "*Feds call for revamp in safety regulations at U.S. refineries*," by OGJ Editors, Houston, TX Dec. 17, 2013, available at: http://www.ogj.com/articles/2013/12/feds-call-for-revamp-in-safety-regulation-at-us-refineries.html.

[204] *Transcript of Jan. 30, 2013 Phillips 66 Fourth-Quarter Earnings Conference Call*, last accessed Aug 8, 2013, available at: http://www.phillips66.com/EN/investor/presentations_ccalls/Documents/PSX-Transcript-2013-01-30T.pdf

Executive Order S-3-05 established targets for California to reduce GHG emissions to 80 percent below 1990 levels by 2050. The Court of Appeal recently invalidated an EIR for the lead agency's failure to analyze for consistency with these 2050 targets.[205] Though the RDEIR identifies the Executive Order in its discussion of the regulatory setting for GHG emissions,[206] it fails to analyze the Project for consistency with the Executive Order, which is an applicable plan, policy, or regulation under CEQA.[207] This is a fatal error, and the RDEIR must be revised and recirculated to analyze the Project's potential inconsistencies with the State's 2050 GHG reduction goals.

VI. THE RDEIR FAILS TO ANALYZE A REASONABLE RANGE OF PROJECT ALTERNATIVES.

An EIR is not considered complete unless it has considered a "reasonable range of potentially feasible alternatives" to a proposed project.[208] The feasibility of an alternative is determined 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."[209] An EIR's alternatives analysis is considered satisfactory as long as it contains "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."[210] "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.'"[211] Therefore, an EIR must contain more details for a specific project than an EIR for an approval of a general plan.[212]

The alternatives analysis included in the Draft EIR issued last fall was legally inadequate. The DEIR analyzed only three alternatives—a no project alternative, a reduced-project alternative, and a propane truck loading rack alternative.[213] The only significant change that the RDEIR made to the alternatives analysis in the DEIR was to add one more alternative that was considered but rejected on feasibility grounds: a closed-loop cooling system alternative.[214] Consequently, the recirculated document still fails to evaluate a reasonable range of alternatives and consider the alternatives in sufficient detail to allow a meaningful analysis and evaluation.[215]

CEQA does not have an established legal standard for the scope of the alternatives

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[205] *Cleveland Natl. Forest Found. v. San Diego Assoc. of Gov'ts* (Nov. 24, 2014, 1st Dist. Ct. App., Case No. D063288) (publication pending, *available at* http://www.courts.ca.gov/opinions/documents/D063288.PDF).
[206] RDEIR at 4.5-4.
[207] *Cleveland Natl. Forest Found.*, p. 10 ("[T]he Legislature, through AB 32, effectively endorsed the Executive Order and its overarching goal of ongoing greenhouse gas emissions reductions as state climate policy.").
[208] CEQA Guidelines § 15126.6(a).
[209] Cal. Pub. Res. Code § 21061.1.
[210] CEQA Guidelines § 15126.6(d).
[211] *Al Larson Boat Shop, Inc. v. Bd. of Harbor Commrs.* (2d Dist. 1993) 18 Cal.App.4th 729, 746 (quoting CEQA Guidelines § 15146).
[212] *See id.*
[213] *See* RDEIR 6-7 to -8.
[214] *Compare* RDEIR at 6-6 *with* Phillips 66 Propane Recovery Project Draft Environmental Impact Report, June 2013, Part 5.
[215] *See* CEQA Guidelines § 15126.6(d).

considered, but courts have held the scope of the alternative "must be evaluated on its facts," on a case-by-case basis.[216] The rule of reason judges the scope of the alternatives.[217] Parties objecting to the EIR are not responsible for formulating alternatives for consideration—the lead agency bears this burden.[218] 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.[219] The lead agency is in a better position to make these suggestions since they probably have greater access to information than the objecting parties.[220] However, the following discussion illustrates the inadequacy of the alternatives analysis contained in the RDEIR.

Given the dwindling local supply of crude oil feedstock for the SFR and the potentially massive overhaul to a different quality feedstock on account of this and other connected Phillips 66 projects, the point must be made that the existing facility will soon outlive its purpose. Thus, Phillips' proposal presents a choice: should it be allowed to extend this refining operation for several decades by re-purposing the San Francisco Refinery to process tar sands oil that is imported by rail? The RDEIR should have evaluated, instead of obscuring, this choice and its environmental implications. The RDEIR failed to include this and other reasonable alternatives in its analysis, and the document should be revised and recirculated to correct these deficiencies.

Additionally, the RDEIR fails to identify an environmentally superior alternative, as required by CEQA.[221] Though the RDEIR designates the Reduced-Project Alternative as the environmentally superior alternative, it then notes that the Reduced-Project alternative "would tend to have many, if not all impacts, at similar levels of significance to the proposed Project, although it is *conceivable* that air emissions and energy usage would tend to be reduced from those of the proposed Project."[222] The RDEIR also notes that the No Project Alternative and the Propane Truck Loading Rack Alternative would have greater impacts than the proposed Project.[223] Thus, according to the RDEIR, the County has chosen three alternatives that all would have greater environmental impacts than the proposed project. The failure to consider even a single alternative with lesser environmental impacts than the proposed project is flagrantly 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*."[224] None of the alternatives considered in the RDEIR would avoid or substantially lessen the impacts of the proposed project, and consequently the range of alternatives considered in the RDEIR is insufficient.

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[216] *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 566.
[217] CEQA Guidelines § 15126.6(a).
[218] *See Laurel Heights I*, 47 Cal.3d at 406.
[219] *Id.*
[220] *See id.*
[221] CEQA Guidelines § 15126.6(e)(2).
[222] RDEIR at 6-7 to 6-8 (emphasis added).
[223] RDEIR at 6-7 to 6-8.
[224] CEQA Guidelines § 15126.6(a) (emphasis added).

VII. CONCLUSION

For the reasons stated above, the RDEIR remains inadequate under CEQA. The County must reject this RDEIR, revise its flawed analyses and recirculate it for public comment under the procedures for a programmatic level EIR.

Sincerely,

Roger Lin
Yana Garcia
Heather Lewis
on behalf of Communities for a Better Environment

Shaye Wolf
Hollin Kretzmann
on behalf of the
Center for Biological Diversity

Ethan Buckner
on behalf of ForestEthics

Greg Wannier
on behalf of the Sierra Club

Comment also supported by:

The City of Berkeley
Pittsburg Defense Council
Crockett Rodeo United to Defend the Environment (C.R.U.D.E.)
The SunFlower Alliance
350 Bay Area
GreenAction for Health and Environmental Justice
Martinez Environmental Group
Benicians for a Safe and Healthy Community
Global Community Monitor
Asian Pacific Environmental Network