





June 10, 2016

Dr. Jillian Wong C/O Office of Planning, Rule Development, and Area Sources/CEQA South Coast Air Quality Management District 21865 Copley Drive, Diamond Bar, CA 91765 jwong1@aqmd.gov

#### Re: Tesoro Refining and Marketing Company LLC Los Angeles Refinery Integration and Compliance Project – State Clearinghouse 2014091020

Dear Dr. Wong:

We write to you today to submit comments on the Draft Environmental Impact Report ("DEIR") for the Tesoro Refining and Marketing Company LLC Los Angeles Refinery Integration and Compliance Project ("Project" or "LARIC"), and associated permit applications before the South Coast Air Quality Management District ("SCAQMD") for approval. Joining in these comments are Communities for a Better Environment ("CBE"), East Yard Communities for Environmental Justice ("EYCEJ"), the Coalition for a Safe Environment ("CFASE"), and Earthjustice. Overall, this is a deeply concerning project that will add additional environmental impacts in an already overburdened community. Given these problems, we suggest that the SCAQMD address all of the concerns stated in this letter and additional submissions. In addition, the SCAQMD should undertake efforts to make sure the Tesoro Refinery fully protects the community surrounding these facilities.

Commenters also attach a technical report prepared by Julia May. This report will be referred to as "May Technical Report" in these comments. We incorporate by reference the May Technical Report and all the comments in this attachment. In addition, we respectfully request that the SCAQMD respond to the entire contents of the May Technical Report in its response to comments, in addition to these legal comments which rely on that technical report.

### I. COMMUNITY AND ENVIRONMENTAL SETTING.

Noticeably absent from the entire DEIR is the true context for this project. This project is taking place in one of the most disproportionately impacted communities in all of California. The following map shows that both locations are either in an area designated by California as the top 25% of most disadvantaged communities (i.e. Wilmington location) or surrounded on all sides by areas designated in the top 25% of most disadvantaged communities.



In addition, many sensitive sites are located in close proximity to this project as shown by the following map.



In fact, the DEIR does not include meaningful analysis of environmental justice or even acknowledge the existence of the new CalEnviroScreen tool developed by California's Office of Environmental Health and Hazard Assessment (OEHHA). This environmental justice context should be provided for decisionmakers, and the DEIR is flawed for excluding this critical information.

### II. MAGNITUDE OF THE PROJECT.

As the May Technical Report establishes, this Project is unprecedented in scope. Moreover, its location in a dense urban area raises concerns over the health and safety of adjacent residents. Importantly, this Project merges two refineries to create the largest refinery on the west coast.<sup>1</sup> The Project also combines the two worst polluting facilities in California for causing disparate PM10 impacts.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> May Technical Report, § I

<sup>&</sup>lt;sup>2</sup> May Technical Report, §VII

| -    |   |                          |  |  |  |  |
|------|---|--------------------------|--|--|--|--|
| Rank | Facility Name                                   | City                     |  |  |  |  |
| 1    | BP Carson Refinery                              | Carson                   |  |  |  |  |
| 2    | Tesoro Wilmington Refinery                      | Wilmington (Los Angeles) |  |  |  |  |
| 3    | Paramount Refinery                              | Paramount                |  |  |  |  |
| 4    | ConocoPhillips Wilmington Refinery              | Wilmington (Los Angeles) |  |  |  |  |
| 5    | ExxonMobil Torrance Refinery                    | Torrance                 |  |  |  |  |
| 6    | Chevron Richmond Refinery                       | Richmond                 |  |  |  |  |
| 7    | Malburg Generating Station (Vernon Power Plant) | Vernon                   |  |  |  |  |
| 8    | ConocoPhillips Carson Refinery                  | Carson                   |  |  |  |  |
| 9    | Valero Wilmington Refinery                      | Wilmington (Los Angeles) |  |  |  |  |
| 10   | California Portland Cement Company Colton Plant | Colton                   |  |  |  |  |

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Even beyond the large pollution loads imposed on adjacent communities from these facilities, the Project entails storing, transporting and processing dangerous products, including Liquefied Petroleum Gas and other oil products. Thus, in addition to pollution and other impacts, these projects impose immense safety risk to residents in the project area. The DEIR and permit conditions do not adequately assess and mitigate the large risks that are imposed on adjacent communities.

# III. THE DEIR DOES NOT DISCLOSE THE FULL SCOPE OF THE PROJECT AND FAILS AS AN INFORMATIONAL DOCUMENT.

The Project Description is inadequate because it fails to disclose the full scope of the Project's nature and objectives, including enabling a shift to a different quality of crude oil feedstock at the integrated refinery. The description also obscures the inextricable link between this Project and Vancouver Energy, resulting in an improper piecemealed analysis. The incomplete Project description and undisclosed Project components result in wholesale omission or underestimation of significant and adverse impacts, including pollution emissions and elevated hazard risks. The DEIR is therefore fatally flawed and must be withdrawn.

#### A. The DEIR Relies On an Inaccurate Project Description and Violates CEQA's Information Disclosure Mandate Requiring a Comprehensive Description of the Entire Project That Allows the Public to Ascertain the Nature And General Magnitude of Environmental Impacts.

In order for an environmental document to adequately evaluate the environmental impacts of a project, it must first provide a comprehensive description of the project itself. "An accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity."<sup>3</sup> The description must not only be accurate, but also "stable and finite" to be "an informative and legally sufficient EIR."<sup>4</sup> While extensive detail is not necessary, the law mandates that the project description should include detail sufficient to

<sup>&</sup>lt;sup>3</sup> San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus (1994) 27 Cal. App. 4th 713, 731 (internal citation and quotation omitted).

<sup>&</sup>lt;sup>4</sup> *Id.* at 730 (internal citation and quotation omitted).

ascertain the nature and general magnitude of environmental impacts.<sup>5</sup> Thus, a deficient project description renders the analysis of significant environmental impacts inherently unreliable. 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.<sup>6</sup>

The DEIR's Project Description discloses a narrow set of objectives limited to furthering the integration of the Carson and Wilmington Refinery operations through process modifications.<sup>7</sup> It states that the Project will "improv[e] process efficiency," "[r]ecover[]and upgrad[e] distillate range material from FCCU feeds[,]" "[c]omply[] with federal, state, and local rules and regulations[,]" and "[i]mprov[e] efficiency of water-borne crude oil receipt and marine vessel unloading" by expanding barrel tank capacity.<sup>8</sup> The DEIR states that the Project will have a "small impact on crude oil and feedstock throughput . . . . capability[,] increase[ing] approximately two percent or 6,000 barrels per day (bbl/day) as a result of the proposed project."<sup>9</sup> These Project components, however, are actually critical pieces of an undisclosed broader purpose—to enable the Refinery to process cheaper North American Bakken and potentially Canadian Tar Sands Crude Oil, and effectuate Tesoro's business plan to switch its crude oil stock in its west coast refineries. The DEIR's seemingly benign project description, therefore, obscures a key purpose of the Project.

The May Technical Report evaluates the DEIR's factual representations and conclusions. May's analysis outlines the discrepancies, inaccuracies, and omissions of the DEIR, and point to the much broader crude-switch Project purpose with significant impacts. May concludes that a switch to Bakken and Canadian Tar Sands Crude oil is enabled by the Project, including by providing tank expansions to accommodate the new crudes; connecting transport through piping; and through addition of extensive sulfur contamination removal equipment (hydrodesulfurization and hydrotreaters, discussed below) that can remove higher sulfur content from Canadian crude. While the DEIR identifies benefits of these activities (such as reducing ship port time), it fails to disclose the Project impacts that would occur due to the crude oil switch.

As concluded by May, the Project Description is further deficient in failing to disclose the true scale of the Project. The DEIR contradicts Tesoro's public statements about the Refinery's throughput capacity. The Refinery's size is a basic and fundamental characteristic that implicates the purpose of the Project and its significant impacts. Accordingly, the DEIR cannot proceed until the basic facts of the Refinery's size are effectively identified. Moreover, the DEIR mischaracterizes the underlying reason for Tesoro's shutdown of the Wilmington FCCU. The DEIR inaccurately asserts that one purpose of the Project is to disable the FCCU to reduce emissions. The FCCU shutdown, however, is a preexisting requirement independent of Tesoro's efforts to further integrate the Carson and Wilmington refineries. It is a binding commitment in which Tesoro agreed to replace the FCCU as a condition of obtaining government approval for its acquisition of the Carson refinery. Therefore, a key purpose for shutting down the FCCU is to

<sup>&</sup>lt;sup>5</sup> See CEQA Guidelines, §15124 (requirements of an EIR).

<sup>&</sup>lt;sup>6</sup> San Joaquin Raptor/Wildlife Rescue Center, 27 Cal. App. 4th at 730.

<sup>&</sup>lt;sup>7</sup> DEIR, at 2-1 to 2-4.

<sup>&</sup>lt;sup>8</sup> DEIR, at 2-3 to 2-4.

<sup>&</sup>lt;sup>9</sup> DIER, at 2-2.

comply with the acquisition requirements. The Project description is therefore deficient for these additional reasons.

Based on these and other reasons, as described below, the Project Description renders the DEIR woefully inadequate in light CEQA's environmental review requirements.

# a. The project description fails to disclose Tesoro's shift to a different quality crude feedstock for its Los Angeles and other West Coast refineries.

CEQA requires that an environmental review document for a refinery project disclose whether proposed project modifications will enable the refinery to process different crude, if a crude slate change is reasonably foreseeable.<sup>10</sup> In *Communities for a Better Environment v. Richmond* (hereinafter "*Richmond*"),<sup>11</sup> petitioner argued that an EIR violated CEQA's mandate where the refinery project EIR disclosed only equipment changes, but failed to disclose that such modifications would significantly increase Chevron's ability to process lower quality, heavier crude, compared with the crude slate the refinery traditionally processed. The FEIR in *Richmond* dismissed the petitioner's comments on the ground that the project would not alter the refinery's design to process the advantaged crude. The court of appeal disagreed with the lead agency, holding that reasonably foreseeable consequences of a project, such as a crude slate switch, must be disclosed and evaluated in the EIR.<sup>12</sup> The DEIR here is similarly flawed and cannot pass muster under CEQA.

Tesoro is currently in the process of implementing a series of projects to carry out a business plan that allows a switch to refining what it known as "advantaged crude." These crude oil feedstocks are more economically viable as a result of challenges in accessing and transporting them. Both tar sands and Bakken are examples of such "competitively priced," cost-advantaged crudes because they are stranded, with no pipeline access and must be delivered, at least initially prior to any refining, by rail. Tesoro has been explicit in setting forth its West Coast strategy to access and refine these crudes by transporting them to Washington by rail, and then to the Los Angeles Refinery by ship.

Tesoro has expressed a clear priority to switch to refining Bakken and potentially Canadian Tar Sands at the Los Angeles Refinery, and the Project implements that plan by making modifications that enable processing of the different crude. There is ample evidence showing that the Project will enable the refinery to begin processing Bakken and potentially Canadian tar sands crude oil, as discussed below, yet the DEIR both omits and negates this information. Of course, unless the DEIR *first* discloses the extent of replacement of feedstock

<sup>&</sup>lt;sup>10</sup> Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4 70, 89. <sup>11</sup> Id. at 83.

<sup>&</sup>lt;sup>12</sup> The court thus ruled that the EIR was deficient because it failed to disclose the foreseeable crude switch. The California Attorney General and the Governor's Office of Planning Research have maintained that an EIR fails to meet CEQA's requirements where it obscures the project's enabling of a refinery to process heavier crude. *See* Letter from the Office of the Attorney General to the City of Pittsburg Planning Department, Jan. 15, 2013; Letter from the Governor's Office of Planning and Research to the City of Pittsburg Planning Department, Dec. 3, 2013.

that the Project enables, it is impossible to provide any intelligent evaluation of the potential environmental effects and risks to community and worker health and safety resulting from refining advantaged crude in the Los Angeles refinery.<sup>13</sup> The DEIR's omission of the enabled switch to crude oil feedstock and blend violates CEQA's project description requirements and prohibits analysis of its significant impacts.<sup>14</sup>

#### b. Tesoro investor and public statements evidence that the Project's purpose is to enable the Los Angeles refinery to process advantaged crudes as part of its West Coast crude slate switch plan.

In contrast to the DEIR's silence, Tesoro has consistently made known its plan to enable its West Coast refineries, including the Los Angeles Refinery, to process lower quality oil feedstock, including highly volatile crude from the Bakken shale play in North Dakota. May's Technical Report details and assesses Tesoro's public statements on the matter.<sup>15</sup> Tesoro unequivocally told its investors that the purpose of the Project is to obtain a competitive edge by integrating its business chain and placing "advantage crude oils in front of [the] refineries," including Carson/Wilmington, by changing the crude oil supply and demand dynamics in the West Coast. In December 2015, it explained that:

> "formalizing competitive advantage and fully integrating our value chain, that is really what the Los Angeles Integration and Compliance Project is about. And when we think about creating value, we are not just thinking about advantaged crude oils in front of our refineries, but we're thinking about how that supply to the west coast of advantaged crude oils can change the shape of the crude oil supply/demand dynamics for the west coast. And that's what we are trying to accomplish through Vancouver Energy."<sup>16</sup>

Indeed, Tesoro and industry communications are replete with explainations about the direct connection of the LA Refinery integration project with its West Coast crude oil supply project-the Vancouver Energy Project in Washington-which it identifies as "the most efficient route to the West Coast for Bakken crude oil."<sup>17</sup>

In 2013, industry literature reported that:

Tesoro's "refining capacity[,] concentrated in California[,]... has not realized the benefit of the ongoing Mid-Continent discounts

<sup>&</sup>lt;sup>13</sup> See id., see also, Richmond, 184 Cal.App.4 at 89.

<sup>&</sup>lt;sup>14</sup> 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"). <sup>15</sup> May Technical Report, § II(B).

<sup>&</sup>lt;sup>16</sup> Edited Transcript TSO - Tesoro Corporation 2015 Analyst and Investor Day, December 9, 2015, p. 10. <sup>17</sup> Tesoro Presentations webpage, weblink: Morgan Stanley Corporate Access Day, 5/12/16, Slideshow entitled: Driven to Create Value, Morgan Stanley Refining Corporate Access Day, May 2016, Slide 13 &15, available at: http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations.

that many of its peers have. . . . That said, past and future investments as well as the addition of infrastructure should allow it to capture amounts of cost-advantaged feedstock similar to its peers. . . . [I]t has invested in rail facilities to move 50 mb/d of Bakken crude west to its Anacortes, Wash., refinery[.] [L]ight and heavy crude in the Mid-Continent will create an opportunity and economic incentive to rail both types of crude to its three California refineries, increasing their throughput of costadvantaged crude. In fact, Tesoro already has plans in place to do so." "Specifically, Tesoro can dramatically improve the performance of Carson by optimizing its crude slate with light crude from the Bakken. . . . Tesoro should gain further advantages from integrating Carson with the Wilmington refinery."<sup>18</sup>

While in 2013, Tesoro had not realized the cost benefit of Mid-Continent discounts that its industry "peers" had gained, by May 2016, Tesoro's Chairperson and CEO reported that throughout its new distribution of Bakken crude to the West Coast, Tesoro "will be able to capture the refining value because of the *displacement of crudes that we run today with Bakken crude oil*, which we've clearly stated in the past is between \$3 to \$5 a barrel on average."<sup>19</sup>

Between those years, Tesoro made headway in carrying out its plan to displace its west coast refineries' crude slate with Bakken. At a Feb. 2014 Simmons Energy Conference, Tesoro's presentation included the following slide showing its rail and shipping distribution from North Dakota to the west coast refineries, including the Los Angeles refinery:<sup>20</sup>

<sup>&</sup>lt;sup>18</sup> See Julia May 2014 Expert Report at 7-8; Morningstar report, *Tesoro aims to increase throughput of domestic crude over the next few years*. July 24, 2013, available at: http://analysisreport.morningstar.com/stock/archive?t=TSO&region=USA&culture=en-

US&productcode=MLE&docId=604033.

<sup>&</sup>lt;sup>19</sup> Edited Transcript TSO - Q1 2016 Tesoro Corp Earnings Call May 05, 2016, p. 19 (emphasis added), available at: <u>http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-transcriptsarchive</u>.

<sup>&</sup>lt;sup>20</sup> Transformation through Distinctive Performance, Simmons Energy Conference, February 2014, Slide 15.



Tesoro stated that the Washington rail-to-ship project provides "[f]lexibility to deliver to all West Coast refineries," and specified that the cost of rail to the state of Washington, and then by ship to California is "[c]ompetitive with direct rail cost to California." Tesoro's explanation of its "Advantaged Feedstock Opportunity" in Los Angeles consists of shifting crude oil feedstock from what was "currently up to 15% California Heavy" crude to "[p]otentially up to 50% California Heavy and Bakken" crude oil.<sup>21</sup> It then boasted that "Bakken crude oil yields 14% to 16% more gasoline and distillate than ANS."<sup>22</sup> This evidence undermines the DEIR's assertion that "[t]he Carson and Wilmington Operations current [sources of] crude oil and feedstock . . . are not expected to change as a result of the proposed project."<sup>23</sup>

In July of 2014, Tesoro reported that it was "making good progress on the integration of the [Carson and Wilmington] facilities."<sup>24</sup> It explained:

We are off the interim crude oil supply agreements and continue to focus on improving the optimization of the crude oil slate. We expect to continue to run Basrah and A[N]S but are continually increasing the variety of crude oil we run. . . . The Wilmington portion of the facility can now access the Carson inbound crude oil logistics network which improves our flexibility. During maintenance activity at the Anacortes refinery in the quarter, we were able to move some barrels of Bakken down to our

<sup>&</sup>lt;sup>21</sup> Simmons Energy Conference, *Transformation through Distinctive Performance*, February 27, 2014, at 13, available at <u>http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations</u>.

<sup>&</sup>lt;sup>22</sup> *Id.* at 16.

<sup>&</sup>lt;sup>23</sup> DEIR, at 2-27.

<sup>&</sup>lt;sup>24</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, p. 5, available at <u>http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations.</u>

Los Angeles refinery and realized refinery values relative to A[N]S similar to those that we experienced at Anacortes."<sup>25</sup>

In other words, Tesoro explained that it ended its oil supply contracts and was focused on increasing crude supply variety. The integration of the refineries allowed improved flexibility to do just that, providing as an example the Wilmington refinery's access to Bakken, which it successfully refined at a value similar to ANS crude. Again, this evidence shows that, contrary to the DEIR's project description and statements concerning crude slate, Tesoro's objective is to enable the LA refinery to process a different crude feedstock.

#### c. The Project is inextricably related to the Tesoro Savage Vancouver Energy Terminal in Washington and Tesoro's objective to bring Bakken crude to its west coast refineries, with options for Canadian crude.

The DEIR's Project Description improperly omits the Project's full scope and nature by failing to disclose its true relationship to the Vancouver Energy terminal and aim to carry out the latter's purpose.

The Vancouver Energy Terminal in Vancouver, Washington,<sup>26</sup> a joint venture by Tesoro/Savage on the Columbia River, is a crude-by-rail to oil tanker terminal. The Vancouver Energy website states that the terminal project's purpose is to accept midcontinent North American crude, including Bakken, and then transferred to vessels to be shipped to West Coast oil refineries.<sup>27</sup> The Draft Environmental Impact Statement (DEIS) for the Tesoro Savage terminal states that "[s]tarting in 2017, . . . the most likely sources would be northern midcontinent crude oil produced in North Dakota and Montana, and in Canada."<sup>28</sup>

Dr. Phyllis Fox's June 10, 2014 expert report on the Draft Negative Declaration for the Tesoro Storage Tank Replacement and Modification Project found that "[t]he CEO of Tesoro, Greg Goff, has indicated that the Los Angeles Refinery can take the entire shipment [from the Vancouver Terminal because] [t]here are 'no restrictions on how much [the LA Refinery] can take[.]"<sup>29</sup> This evidence shows that Tesoro's intention is to enable the LA Refinery to access and process the Bakken and tar sands crude oil from the Vancouver Terminal.

The DEIR's statements denying that the proposed Vancouver Terminal is related "to the replacement of crude oil tanks or the Tesoro Refinery Integration and Compliance project" on the ground that the Vancouver project "could go forward with or without the" Integration Project, is inapposite.<sup>30</sup> The question here is whether the this Project enables it to process a different crude slate, which must be answered in the affirmative. Based on evidence in the

<sup>&</sup>lt;sup>25</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, p. 5, available at <u>http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations</u>.

<sup>&</sup>lt;sup>26</sup> Not to be confused with Vancouver Canada, which also has oil terminals on the West Coast. <sup>27</sup> https://www.vancouverenergyusa.com/.

<sup>&</sup>lt;sup>28</sup> Tesoro Savage DEIS, Fact Sheet, <u>http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-%20DEIS/DEIS%20PAGE.shtml.</u>

<sup>&</sup>lt;sup>29</sup> May Technical Report, Attachment 13, at 11 (hereinafter "Fox Neg. Declaration Report"). <sup>30</sup> DEIR, at 4-5.

record, it is also clear that Tesoro intends for the Vancouver Terminal to supply the Bakken and potentially Canadian Tar Sands crude to the LA refinery.

#### The LA Refinery is capable of refining a crude blend of Canadian and d. Bakken to approximate its current Alaska North Slope yields.

The DEIR also argues that the LA Refinery is physically constrained from processing Bakken crude oil.<sup>31</sup> Not so. As the DEIR admits, the issue is not whether the LA Refinery can process Bakken crude oil and other light sweet crude *type* oils, but rather, whether these crude oils can be prepared into a "blend" that works with current refinery configurations. Tesoro's own evidence shows that Bakken oil can indeed be blended for successful processing at the LA Refinery.<sup>32</sup> The DEIR, however, obscures this fact in violation of CEQA's environmental review requirements.

The DEIR explains that "[t]here are limitations on the types of crude oil that can be processed in the [LA] Refinery due to the design limitations and capacities of the processing units."<sup>33</sup> Accordingly, "[c]rude oil that is purchased is blended to meet criteria specific to Carson or Wilmington Operations . . . [and] complement specific refinery configurations." As an example, because "the Carson Operations have been designed to run primarily Alaska North Slope (ANS) crude oil, which is in declining availability [,] the Carson Operations blend crude oils to have properties similar to ANS crude oil."<sup>34</sup>

As explained in the May Technical Report, the oil industry has specifically identified a blend of cost-advantaged Bakken and Canadian crude oils to approximate and serve as a replacement to ANS crude oil.<sup>35</sup> May concluded that using such a blend at the LA Refinery would replace dwindling supplies of lighter, low sulfur ANS crude oil used in the range of 100,000 barrels per day (bpd).<sup>36</sup> Contrary to the DEIR's assertions,<sup>37</sup> it is not necessary for the LA Refinery to undergo equipment and design modifications in order to refine Bakken and Canadian crude. Because the blend would approximate the current ANS API, the problems identified by the DEIR<sup>38</sup> are inapposite.

In fact, the evidence shows that Tesoro has already tested and ascertained that the LA Refinery *is* capable of processing Bakken in a manner that "complement[s] refinery

<sup>&</sup>lt;sup>31</sup> DEIR, at 4-5 to -6.

<sup>&</sup>lt;sup>32</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, p. 5 (During maintenance activity at the Anacortes refinery in [2014], [Tesoro] . . . move[d] some barrels of Bakken down to [the] Los Angeles refinery and realized refinery values relative to A[N]S[.]").

<sup>&</sup>lt;sup>33</sup> DEIR, at 2-16. <sup>34</sup> *Id*.

<sup>&</sup>lt;sup>35</sup> May Technical Report, § III(C). (citing The North American Crude Boom: How Changing Quality Will Impact Refiners, John R. Auers, Turner, Mason & Company, Platts Crude Marketing Conference, March 1, 2013, Houston, available at: http://www.turnermason.com/wp-

content/uploads/2013/05/North\_American\_Crude\_Boom-platt-2013.pdf.)

<sup>&</sup>lt;sup>36</sup> May Technical Report, § III(C).

<sup>&</sup>lt;sup>37</sup> DEIR. at 4-5.

<sup>&</sup>lt;sup>38</sup> See DEIR, at 2-16

configurations" and provides "properties similar to ANS crude oil."<sup>39</sup> "During maintenance activity at the Anacortes refinery in [2014], [Tesoro] . . . move[d] some barrels of Bakken down to [the] Los Angeles refinery and realized refinery values relative to A[N]S[.]"<sup>40</sup> The LA Refinery can and has already successfully refined Bakken, and the DEIR's assertions to the contrary strain credulity.

The DEIR must be withdrawn and recirculated to reflect the Project's enabling of processing of Bakken and Canadian crude, and to inform the public of its impacts. May's Technical Comment concluded that the blend's approximation of the ANS API gravity does not mean that no new impacts would result from the advantaged crude switch.<sup>41</sup> Rather, the new blend would introduce new environmental impacts due to other crude oil characteristics. For example, explosion hazards would increase from Bakken crude introduction, as would additional content of toxics, such as benzene, not investigated in the DEIR discussion. Further, increased sulfur mass from Canadian crudes would increase corrosion hazards and increase acutely hazardous sulfur gases, such as hydrogen sulfide. The DEIR ignores these significant impacts, and thus violates CEQA.

### e. The DEIR improperly ignores tank permit changes that specifically facilitate crude slate changes.

The Project seeks to modify and construct new crude storage tanks that provide for over 3.4 million barrels (bbls) of new storage, a 153 million bbl/year increase in throughput based on the tanks alone.<sup>42</sup> The increased storage capacity, as summarized by the May Technical Report, amounts to twice the size of the entire existing crude storage at Wilmington (1.7 million bbls).<sup>43</sup> May's technical analysis of the Project's storage tank component concludes that, contrary to the DEIR's statements, these modifications are not solely for faster ship offloading. May explains that the tank expansion also allows for an "increased throughput" that is itself "greater than the entire existing refinery currently processes."<sup>44</sup> This substantial volume of throughput would need to be transferred from the tanks to elsewhere, meaning that Tesoro will either use or sell — Project purposes that have not been disclosed or evaluated for impacts.<sup>45</sup>

According to May's Technical Report, the changes sought by the Project's storage tank permit application may enable new storage capacity for advantaged crudes.<sup>46</sup> The high vapor pressure limits disclosed by the original 2014 Negative Declaration accommodated Bakken crude.<sup>47</sup> The DEIR omits the modified high vapor pressure limits, although the same tanks with

<sup>&</sup>lt;sup>39</sup> DEIR, at 2-16.

<sup>&</sup>lt;sup>40</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, at 5.

<sup>&</sup>lt;sup>41</sup> May Technical Report, § III(C).

<sup>&</sup>lt;sup>42</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>43</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>44</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>45</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>46</sup> See May Technical Report, § III(E).

<sup>&</sup>lt;sup>47</sup> May Technical Report, § III(E).

the same new modifications are part of this Project, and may very well maintain the proposed high vapor pressure limit.<sup>48</sup> If so, it must be disclosed and evaluated in a revised DEIR.

While it may be true that the tank modifications may also allow faster ship unloading and decreased emissions, the DEIR cannot simply cloak one particular benefit of this Project component as the very purpose of the modifications. The DEIR would have the public believe that Tesoro is investing in tank modifications that increase storage capacity to twice the size of the entire existing crude storage at Wilmington for the sole purpose of having ships offload faster. CEQA does not allow for such a truncated and misleading analysis. The omission of the foreseeable potential impacts to increased sales or processing of higher throughput, and even a crude switch accommodation, from the tank modifications seriously undermines the purpose of the public participation provisions of CEQA and makes meaningful identification and assessment of the potentially significant environmental impacts of the Project impossible.<sup>49</sup>

Accordingly, the Project Description must be amended to reflect the storage tank modification's increased throughput and end uses and possible crude switch utility. A revised DEIR must disclose the current crude oil type baseline, and evaluate the vapor pressure, heating coils, other equipment and permit limits for tanks, regarding how they may accommodate a crude oil slate change, and the associated impacts.

#### f. The Project's proposed new de-sulfurization equipment enables expanded imports of advantaged crude, and is not merely for the purpose of meeting federal low-sulfur fuel standards.

As May's Technical Report explains, the Project proposes to "add a significant amount of sulfur contamination removal equipment as part of the Project[,] contamination [which] comes into the refinery with the crude oil."<sup>50</sup> The DEIR touts that the Project will reduce sulfur contamination, by way of modifications to hydrotreaters and other additions to Refinery equipment, for the purpose of complying with federal tier-three standards. May's examination and other evidence, however, casts doubt on the ostensibly benevolent objective of this Project component, and rather points to a different purpose altogether, which the Project Description fails to disclose.

The DEIR explains that "hydrotreating units remove sulfur and nitrogen from process streams; sulfur in the form of hydrogen sulfide, and nitrogen in the form of ammonia, which are then converted into elemental sulfur and nitrogen in sulfur recovery units."<sup>51</sup> May's Technical Report explains that extensive sulfur removal equipment already exists at the Wilmington and Carson refineries, and outlines the Project's proposal for new and expanded process units for this same purpose.<sup>52</sup> May concludes that "the large increase in desulfurization equipment appears out of proportion with what is needed to comply with federal Tier 3 standards,"<sup>53</sup> since Tesoro

<sup>&</sup>lt;sup>48</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>49</sup> See Sierra Club v. State Bd. of Forestry (1994) 7 Cal. 4th 1215, 1230 (1994).

<sup>&</sup>lt;sup>50</sup> May Technical Report, § III(D).

<sup>&</sup>lt;sup>51</sup> DEIR, at 2-12.

<sup>&</sup>lt;sup>52</sup> May Technical Report, § III(D).

<sup>&</sup>lt;sup>53</sup> May Technical Report, § III(D).

already complies with California's low-sulfur fuel standards, and out-of-state sales that require Tier III compliance comprise a small fraction of Tesoro sales,

Accordingly, the Project's increased hydrotreating cannot be solely for compliance.<sup>54</sup> Tesoro admits as much. After explaining that "the majority of the gasoline has [already] been 10 ppm in California for some time[,]" Tesoro's Chairperson and CEO stated that the Project "does allow [it to] get to the full compliance with tier-three gasoline[,]" but "it is a small part of [the Integration Project]."55

Accordingly, as explained by May, a need for such increased sulfur removal processing in the refinery can be explained only if Tesoro brings in significantly more high-sulfur crude oil[,]"<sup>56</sup> which, as explained above, it specifically plans to do. For example, Canadian tar sands crude oil typically has very high sulfur levels. Based on the evidence, it appears that the Project's de-sulfurization component allows for the additional processing of sulfur content, potentially from high sulfur crude oil. This objective must be disclosed in the Project Description, since the processing high-sulfur crude may cause refinery processing problems and severe safety hazards.<sup>57</sup> For example, sulfur compounds are corrosive and can attack refinery equipment, which can lead to explosions, such as happened in the Chevron Richmond refinery, which nearly killed 19 workers and sent 15,000 neighbors to the hospital. By failing to disclose the full scope of the de-sulfurization component, the DEIR's Project Description fails to inform the public about the true nature of the activity proposed, and therefore must be rejected.

In sum, the DEIR fails to disclose a fundamental Project characteristic by omitting that the Project enables Tesoro's intended transition to process discounted, advantaged crudes at the Refinery. The DEIR's statements concluding that the Project will not impact the types of crudes used at the refinery are defied by the overwhelming evidence found in oil industry literature, investor reports, expert reports, and permitting documents, as discussed above and in May's Technical Report. That evidence shows that the Project will enable Tesoro to process advantaged crudes, including Bakken crude oil and tar sands, at the Refinery. The Project describes precisely the kinds of physical changes and operational shifts required to effect a shift in the types of crudes stored, delivered, processed, and refined there.<sup>58</sup> Omission of the changes in crude slate prevents the public from ascertaining the nature and general magnitude of environmental impacts.<sup>59</sup> The Project Description's use of a "truncated project concept" violates CEQA and mandates the conclusion that the lead agency has not proceeded in a manner required by law.

Because the DEIR relies on an inadequate project description, its examination of significant impacts associated with modifications that will allow the Refinery to process heavier crude is also untenable. The SCAQMD may not proceed with the Project approval based on the

<sup>&</sup>lt;sup>54</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>55</sup> Edited Transcript TSO - Q1 2016 Tesoro Corp Earnings Call MAY 05, 2016, p. 15 (emphasis added), available at: http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-transcriptsarchive.

<sup>&</sup>lt;sup>56</sup> May Technical Report, § III(D).

<sup>&</sup>lt;sup>57</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>58</sup> *Id.*; see also ND, at 1-1 ("The two new tanks are proposed to be permitted to store light and heavy crude oils of varying vapor pressures up to 11 pounds pre square inch (psi)....") <sup>59</sup> See CEQA Guidelines, §15124 (requirements of an EIR).

DEIR because it omits a significant component concerning crude slate, which has severe environmental and safety impacts. The DEIR's analysis of such significant environmental impacts demands further environmental review to determine what impacts may result from changes in crude quality at the Refinery. The planned crude slate modification is an integral part of the integration Project, and must be evaluated in the DEIR.

Moreover, the failure to disclose the type and chemical composition of the new crude oils and their resultant potential impacts is a "threshold issue" and "fundamental defect" in environmental review that violates CEQA.<sup>60</sup> Consequently, it is simply impossible for the DEIR to provide any accurate estimation of impacts. At a minimum, the DEIR should establish how the Project will affect the scope and degree of the Refinery's use of Bakken and tar sands crude and evaluate resulting impacts.<sup>61</sup> Until such adequate disclosure occurs, the Project Description is inaccurate, incomplete and renders the analysis of significant environmental impacts inherently unreliable.<sup>62</sup>

# 2. The Project Description is deficient because it fails to properly identify the size and capacity of the refinery.

The Project Description is further inadequate because it presents contradictory information relating to the total crude oil capacity of the refinery. The refinery's size and capacity are basic and fundamental characteristics, and the contradictory information renders the Project Description and analysis of its significant impacts inadequate under CEQA.

An EIR is inadequate and misleading if its Project Description contains information that considerably differs from data reported under oath in an SEC Annual Report.<sup>63</sup> According to the Project Description, "[t]he total crude oil rate capacity for the Los Angeles Refinery is 363,000 bbl/day."<sup>64</sup> Tesoro's 2015 Annual Report, however, indicates that the Los Angeles Refinery's total crude oil capacity is 380,000 bbl/day.<sup>65</sup> The crude oil capacity discrepancy between that reported in the DEIR and Tesoro's SEC representations amounts to a considerable difference of 17,000 bbl/day, which has vast implications for the environment and community health and safety.

The DEIR's failure to account for the 17,000 bbl/day difference in crude oil capacity renders the Project Description inadequate for several reasons. The Project Description states that the refinery's crude oil capacity will increase by 6,000 bbl/day, or two percent, as a result of the Project.<sup>66</sup> Based on the inconsistent and scant data, it is left unknown whether this increase is

<sup>&</sup>lt;sup>60</sup> See Richmond, 184 Cal. App. 4th 70.

 $<sup>^{61}</sup>$  Id.

<sup>&</sup>lt;sup>62</sup> San Joaquin Raptor/Wildlife Rescue Center, 27 Cal.App.4th at 722 (the failure to include relevant information relating to a project's components precludes informed decision making, thwarting the goals of the EIR).

<sup>&</sup>lt;sup>63</sup> See Richmond, 184 Cal.App. 4th at 83-84.

<sup>&</sup>lt;sup>64</sup> DEIR, at 2-17.

 <sup>&</sup>lt;sup>65</sup> Tesoro Corporation, Annual Report, 5 (Form 10-K) (Feb. 25, 2016); *see also Los Angeles Refinery Fact Sheet*, Tesoro, <u>https://tsocorpsite.files.wordpress.com/2016/04/tesoro-los-angeles-fact-sheet.pdf</u>.
<sup>66</sup> DEIR, at 2-2.

on top of the 17,000 bbl/day increase reflected by Tesoro's 2015 Annual Report. If so, the Project Description fails to disclose a total crude oil capacity increase of 23,000 bbl/day – *three times* the amount identified in the DEIR as the crude oil capacity increase.

The unstated 17,000 bbl/day by itself represents a major increase of five percent in crude oil capacity. Oil refinery capacity is generally described in terms of the amount of crude oil processed in distillation units at the refinery's front-end. The refinery takes crude oil inputs, and separates its components in the distillation units. These components then undergo additional processing in cracking and coker units. Portions are alkylated, reformed, blended, and in the case of high-sulfur portions, hydrotreated. The DEIR does not identify the nature of the inputs–crude oil or other intermediate products–that compose the additional 17,000 bbl/day. Thus, it is impossible to determine which processes the inputs will have to undergo, and, more importantly, the environmental impacts resulting from such capacity increase.

The DEIR's failure to properly identify the true size and nature of the refinery not only renders the Project Description inadequate under CEQA, but also raises grave concerns as to the Project's significant and cumulative impacts. Because the DEIR contains unstable and shifting descriptions of the project, public participation is stultified.<sup>67</sup> "By giving such conflicting signals to decision makers and the public about the nature and scope of the activity being proposed, the Project description is fundamentally inadequate and misleading."<sup>68</sup> The DEIR therefore cannot proceed until the basic facts of refinery size are identified.

### **3.** The Project Description is deficient because it fails to disclose the underlying reason for the FCCU shutdown.

The Project Description is inadequate because it fails to disclose the full scope of the Project's nature and objectives, such as compliance with preexisting binding commitments arising out of the government's approval of the Wilmington/Carson facility merger. The DEIR characterizes the Project, in part, as a pollution-reducing initiative that will allow for the retiring of the dirty, outdated, Wilmington FCCU. The stated purpose of the FCCU is pretextual, however, and the DEIR must be revised to disclose an accurate purpose for the FCCU shutdown.

On May 17, 2014, the California Attorney General's office announced its approval of Tesoro's acquisition of BP's Carson refinery. This approval came as a result of a nine-month investigation in which the Attorney General's office, along with other State and Federal agencies, reviewed the possible impacts of the merger. Two of the chief barriers impeding the merger were antitrust concerns, and the potential environmental impacts that the merger could cause.<sup>69</sup> In order to address these concerns, Tesoro entered into a "binding commitment" to shut

<sup>&</sup>lt;sup>67</sup> San Joaquin Raptor Rescue Ctr v. County of Merced, 149 Cal.App. 4th 645, 674 (Cal.App. 2007) (citing County of Inyo v. City of Los Angeles, 71 Cal.App.3d 185, 192 (Cal.App. 1977)).

<sup>&</sup>lt;sup>68</sup> *Richmond*, 184 Cal.App. 4th at 84 (citing *San Joaquin Raptor Rescue Ctr*, 149 Cal.App. 4th at 655-656).

<sup>&</sup>lt;sup>69</sup> AG Letter to Tesoro, CA DOJ, *available at* 

http://oag.ca.gov/system/files/attachments/press\_releases/AG%20Letter%20to%20CEC%20%28Tesoro%29.pdf?.

down the Wilmington and Carson FCCUs, and replace them with a single DDU.<sup>70</sup> The Attorney General approved the merger subject to this condition. Hence, the shutdown of the Wilmington FCCU has a threshold purpose–compliance with the terms of the merger approval.

The Project Description dedicates a section to reciting the Attorney General's approval letter, yet it curiously omits mention on the requirements on which the merger approval was conditioned.<sup>71</sup> Instead, the DEIR describes Project's purpose as "more fully integrat[ing]" the Carson and Wilmington Operations, increasing efficiency through "process modifications that [will] enable shutting down the [Wilmington FCCU]."<sup>72</sup> Such a description of the Project is not only inadequate, but is vastly deceptive.

The DEIR's willful omission of Tesoro's "binding commitment" to shut down the FCCU obscures the Project's purposes, and renders the DEIR inadequate under CEQA.

### 4. The Project Description is also deficient because it fails to disclose the full extent and nature of the Project's unprecedented tanks expansion.

The Project Description describes the construction of six new tanks at the Carson Crude Terminal with 500,000 bbls capacity, and replacing two existing 80,000 bbls crude oil tanks at the Wilmington Operations with two new 300,000 bbls tanks. According to the DEIR, the Project's massive tank expansion will "[i]mprov[e] efficiency of water-borne crude oil receipt and marine vessel unloading[,]" and "will reduce vessel emissions at the Port of Long Beach."<sup>73</sup> The DEIR claims that "[t]he tanks only affect the ability to offload a marine vessel in less time."<sup>74</sup> Evidence suggests otherwise, however. May's technical analysis points to a discrepancy between the DEIR's narrow conclusion concerning the purpose of the tank expansion Project component, and the significant increase in new throughput capability enabled by the expansion. Evidence indicates that the tank expansion will not only enable importing of large volumes of "advantaged crudes," but allow large scale exports, information which has been improperly withheld from the DEIR.

As examined in the May Technical Report, the Project tank expansion is extraordinary, adding not only 3.4 million barrels' volume of crude oil storage, but also increasing throughput by almost 420,000 barrels/day.<sup>75</sup> The Report explains that, "[b]y comparison, the existing Tesoro LA refinery complex can process crude oil of at least 363,000 bbls/day, and in addition already has storage to accommodate its current daily crude throughput needs, so the new tanks would add new throughput capability greater than the entire existing refinery currently processes."<sup>76</sup>

<sup>&</sup>lt;sup>70</sup> *Id.* at 2.

<sup>&</sup>lt;sup>71</sup> DEIR, at 2-1.

<sup>&</sup>lt;sup>72</sup> DEIR, at 2-1, 2-2.

<sup>&</sup>lt;sup>73</sup> DEIR, at 2-39.

<sup>&</sup>lt;sup>74</sup> DEIR, at 2-39.

<sup>&</sup>lt;sup>75</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>76</sup> May Technical Report, § III(E).

Further, the new tanks "would accommodate the entire daily shipment from the Tesoro Savage terminal[,]"<sup>77</sup> meaning that the tank expansion will enable import of advantaged crude.

Moreover, "[s]ince the Tesoro Savage Vancouver facility is slated at 360,000 bpd . . ., the increased throughput permitted for the new tanks at about 420,000 bpd Tesoro could sell the excess crude to other LA refineries, or export it[.]"<sup>78</sup> This suggests that "[t]he Tesoro Project could open up *all* the Los Angeles refineries to these crude oils, and could become Tesoro's export terminal."<sup>79</sup> Tesoro's own evidence shows that it has stated plans to open up its South Coast assets to third party transfers.<sup>80</sup> For example, the Refinery could sell Bakken or Canadian crude oil to other Los Angeles refineries, and even open up *all* the Los Angeles refineries to these crude oils, thus becoming Tesoro's export hub.<sup>81</sup> Accordingly, the tank expansion has a much broader function and purpose than the innocuous one disclosed by the DEIR.

The Project Description must disclose the import and export capabilities allowed by the tank expansion, so that the significant impacts of such functions can be examined. Unless and until it does so, the DEIR will remain fundamentally flawed.

#### IV. THE PROJECT IS PIECEMEALED.

#### A. The DEIR must include environmental review of the Vancouver Energy Terminal ("Tesoro Savage Terminal") Project.

The DEIR employs "piecemeal" environmental review by failing to consider the combined effects of the proposed Tesoro Savage Terminal Project with the Los Angeles Refinery ("LARIC") Project. Specifically, the DEIR excludes any environmental impact analysis for the VET in its assessment of the LARIC even though the two projects are interdependent. CEQA prohibits this type of piecemealed review, requiring that an EIR describe the entirety of a project, including any reasonably foreseeable future actions that are part of it.<sup>82</sup> Illegally "chopping a large project into many little ones" creates a narrow view of a project and a "fallacy of division . . . that is, overlooking a project's cumulative impact by separately focusing on isolated parts of the whole."<sup>83</sup> 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 minimal treatment for piecemealing: while an EIR need not include speculation about future environmental consequences of a project,

<sup>&</sup>lt;sup>77</sup> May Technical Report, § III(F).

<sup>&</sup>lt;sup>78</sup> May Technical Report, § III(F).

<sup>&</sup>lt;sup>79</sup> May Technical Report, § III(F).

<sup>&</sup>lt;sup>80</sup> May Technical Report, § III(F).

<sup>&</sup>lt;sup>81</sup> May Technical Report, § III(F).

<sup>&</sup>lt;sup>82</sup> CEQA Guidelines, § 15378(a).

<sup>&</sup>lt;sup>2</sup> See Bozung v. Local Agency Formation Commission (1975) 13 Cal.3d 263, 283-84.

"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."<sup>84</sup>

Under this standard, "the facts of each case will determine whether and to what extent an EIR must analyze future expansion or other action."<sup>85</sup> 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.<sup>86</sup> Further, there must be discussion "in at least general terms" of the future activity, even if the project is contingent on uncertain occurrences.<sup>87</sup>

SCAQMD's piecemealed environmental review of the VET and LARIC Projects is supported by the facts of *Laurel Heights I* and *San Joaquin Raptor*.<sup>88</sup> In *Laurel Heights I*, the Supreme Court set aside an EIR for piecemealing the second phase of a multi-phased project. In that case, the University of California, San Francisco ("UCSF") proposed a project to expand into a new building, of which only about one-third was initially available.<sup>89</sup> Because UCSF's EIR failed to analyze the impacts of the project related to the remaining two-thirds of the building when its use was wholly foreseeable at the project's inception, the Court rejected the EIR.<sup>90</sup> In *San Joaquin Raptor*, the court similarly rejected an EIR for a development project because it failed to discuss the impacts associated with a sewer system expansion, even though the project's developer recognized the "necessity" of the sewer expansion for the overall project to proceed.<sup>91</sup>

In contrast, in *Richmond* and *Berkeley Jets*, the courts found that the EIRs under examination were not piecemealed, despite their exclusions of related projects.<sup>92</sup> In *Richmond*, the court of appeal found that an EIR for a refinery expansion project which did not fully analyze the potentially significant cumulative impact of a hydrogen pipeline project was not piecemealed, and found it to be separate from the overall expansion project.<sup>93</sup> The court reasoned that the expansion and pipeline projects were independent, performing entirely different functions.<sup>94</sup> The court focused on the stated project objectives in making its decision: while the

<sup>&</sup>lt;sup>84</sup> Laurel Heights Improvement Association v. Regents of University of California (1988) 47 Cal.3d 376, 395-96 (Laurel Heights I).

<sup>&</sup>lt;sup>85</sup> *Id.* at 396.

<sup>&</sup>lt;sup>86</sup> *Id.* at 397.

<sup>&</sup>lt;sup>87</sup> *Id.* at 398.

<sup>&</sup>lt;sup>88</sup> See Laurel Heights I, 47 Cal.3d 376; see also San Joaquin Raptor, 27 Cal.App.4th at 734.

<sup>&</sup>lt;sup>89</sup> Laurel Heights I, 47 Cal.3d at 393.

<sup>&</sup>lt;sup>90</sup> *Id*. at 397.

<sup>&</sup>lt;sup>91</sup> See San Joaquin Raptor, 27 Cal.App.4th at 734.

<sup>&</sup>lt;sup>92</sup> See Richmond, 184 Cal.App.4th 70; see also Berkeley Keep Jets Over the Bay Comm. et. al. v. Board of Port Cmrs. (2010) 91 Cal.App.4th 1344, 1361 (Berkeley Jets).

<sup>&</sup>lt;sup>93</sup> See Richmond, 184 Cal.App.4th at 97.

<sup>&</sup>lt;sup>94</sup> *Id*. at 101.

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 to other hydrogen consumers in the Bay Area.<sup>95</sup> The court ultimately found that because the expansion project did not "depend on" the pipeline project, the project was not piecemealed.<sup>96</sup> Similarly, the court in *Berkeley Jets* rejected an argument that an airport development plan should have included long-range plans for potential runway expansions because these future expansion plans were neither crucial elements nor foreseeable consequences of the development plan.<sup>97</sup>

As in *Laurel Heights I* and *San Joaquin Raptor*, where both EIRs were rejected because of their respective failures to analyze impacts of foreseeable or necessary aspects of their projects, the LARIC Project DEIR should be rejected because the VET is both a foreseeable and necessary component for the LARIC's success. One of the LARIC's most notable objectives is to "[i]mprove [the] efficiency of water-borne crude oil receipt and marine vessel unloading . . . by constructing six new 500,000 barrel tanks at the Carson Crude Terminal and replacing two existing 80,000 barrel crude oil tanks at the Wilmington Operations with two 300,000 barrel tanks."<sup>98</sup> In other words, it aims to add about 3.4 million barrels of crude oil storage, and allows about 420,000 BPD of increased throughput.<sup>99</sup> With its current feedstocks dwindling, it is foreseeable, if not certain, that this increase in storage and processing capacity will depend upon shipments from the Tesoro Savage Terminal.

As proposed, the Tesoro Savage Terminal Project entails the creation of a crude-by-rail to oil tanker terminal at the Port of Vancouver, Washington, which would "receive an average of 360,000 barrels of crude oil per day by rail . . . then load the oil onto marine vessels for transport" to allow increased importation of cost-advantaged North American crudes to various West Coast refineries.<sup>100</sup> The Tesoro Savage Terminal Project's DEIS notes that it is intended to serve the growing demand of West Coast refineries for mid-continent crude oil amidst the declining availability of the more expensive Californian and Alaskan oils that have historically been used by the LARIC.<sup>101</sup>

The Tesoro Savage Terminal Project's goal is consistent with Tesoro's statements to its investors, which laud the Tesoro Savage Terminal as an integral part of its plan to bring cost-advantaged crudes to its West Coast refineries.<sup>102</sup> While these crudes are more affordable, however, they come at a price: primarily from North Dakota, Montana, and Canada, these crudes are of lower quality than the crudes the LAR currently processes, and thus, may result in

http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-

%20DEIS/DEIS%20Chapters/DEIS%20Ch%200b%20Exec\_Summary.pdf.

<sup>&</sup>lt;sup>95</sup> Id.

<sup>&</sup>lt;sup>96</sup> Id.

<sup>&</sup>lt;sup>97</sup> See Berkeley Jets, 91 Cal.App.4th at 1362.

<sup>&</sup>lt;sup>98</sup> DEIR, at 1-6, 1-7

<sup>&</sup>lt;sup>99</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>100</sup> Tesoro Savage DEIS, Executive Summary (ES-2),

<sup>&</sup>lt;sup>101</sup> DEIR, McGovern Report at F-14.

<sup>&</sup>lt;sup>102</sup> Tesoro Presentations webpage: Morgan Stanley Corporate Access Day, 5/12/16, Slideshow entitled: *Driven to Create Value, Morgan Stanley Refining Corporate Access Day, May 2016*, Slides 13 & 15, available at: <u>http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations</u>.

significant environmental impacts that necessitate assessment.<sup>103</sup> Without increased supply from the Tesoro Savage Terminal of affordable alternative crudes, it is not likely that the LARIC would attempt to expand its capacity or update its equipment to process dirtier crude – however, it is, and has been, doing just that.<sup>104</sup>

Thus, in contrast to the holdings in *Richmond* and *Berkeley Jets*, where the respective EIRs were not found to be piecemealed, here, the Tesoro Savage Terminal is a crucial functional element of the LARIC Project. The LARIC's dependence upon the Tesoro Savage Terminal is even admitted in its investor reports, which state that its purpose is to remain competitive by increasing its processing of cost-advantaged crudes from the North American mid-continent through use of the Tesoro Savage Terminal.<sup>105</sup> The May Technical Report also includes many other places where the LARIC relies on the Tesoro Savage Terminal.<sup>106</sup>

In order for Tesoro to implement its "advantaged crude" strategy at the LARIC, approval of the Tesoro Savage Terminal Project is necessary, because the Tesoro Savage Terminal Project enables the importation of fracked Bakken oils and heavy Canadian tar sands. The LARIC's profitability, success, and overall objectives hinge on the reliable and abundant supply of crude oil that will come from the Tesoro Savage Terminal. These projects are interrelated, wholly anticipate each other in order to achieve the company's "advantaged crude" objective, and together create significant impacts on the environment. Together, the projects satisfy the two-part *Laurel Heights I* test, and are far removed from court decisions in *Richmond* and *Berkeley Jets* that did not find piecemealed projects on account of insufficient showings of "necessity."

The DEIR errs in asserting that it does not need to include an impact analysis for the Tesoro Savage Terminal Project. The Project proponent contends that because the Terminal Savage Project is not approved, it is under independent review by the state of Washington, it will provide crude to other refineries, neither project needs the other to proceed, and the LAR has limited ability to process light Bakken crude, the Terminal Savage Project and LARIC Projects are independent of one another.<sup>107</sup> This reasoning is incorrect.<sup>108</sup>

First, courts have determined, for example, that "when a particular type of retail business planned for a proposed project will have unique or additional impacts, then disclosure of the type of business is necessary in order to accurately recognize and analyze the environmental effects

<sup>&</sup>lt;sup>103</sup> May Technical Report, § II(D).

<sup>&</sup>lt;sup>104</sup> May Technical Report, §§ III(D-E).

<sup>&</sup>lt;sup>105</sup> May Technical Report, §§ II(B).

<sup>&</sup>lt;sup>106</sup> May Technical Report, §§ II(C).

<sup>&</sup>lt;sup>107</sup> DEIR, at 4-5.

<sup>&</sup>lt;sup>108</sup> But compare Citizens for East Shore Parks v. California State Lands Commission (2011) 202 Cal.App.4th 549 (The court upheld the certification of an EIR for a Chevron marine terminal, even though the EIR considered only the effects of the marine terminal while excluding the effects of the adjacent Chevron refinery) (*Citizens for East Shore Parks*).

that will result from the proposed project."<sup>109</sup> Here, it is clear that rail and marine vessel transport of Bakken crude and Canadian tar sands will pose "unique or additional adverse effects" that reach beyond the effects of shipping other types of crudes, including heightened risks of combustion, corrosion, and environmental degradation.<sup>110</sup> Second, under CEQA, a single project is allowed to undergo separate agency approvals while still maintaining its status as a single project.<sup>111</sup> Thus, it should not matter that the Tesoro Savage Terminal Project will undergo independent approval by the state of Washington.

In an outlier case, *Citizens for East Shore Parks*, the court cited no authority to support its holding, and instead based its decision on an unfounded interpretation that the scope of CEQA review is limited to the parts of a project subject to lead agency approval. This case does not override or negate the clear relationship of the Project to the Tesoro Savage Terminal Project. Local supplies of crude oils are declining. How, and why, would the LARIC Project even occur were it not inextricably linked with a plan to increase supplies to the area? Those supplies must come from a source, and with the Project's marine receipt expansion, those supplies will come from the Tesoro Savage Terminal.<sup>112</sup> The need for the Tesoro Savage Terminal Project was, therefore, wholly foreseeable at the inception of this Project and necessary for the LAR's objectives.<sup>113</sup> Because the Tesoro Savage Terminal and LARIC Projects together implicate greater and significant environmental impacts from transporting and refining lower quality oil feedstocks at the LAR, the two projects are piecemealed, and thus, the DEIR is unacceptable under CEQA guidelines.

# **B.** The DEIR should also include environmental review of other interrelated projects.

In addition to analyzing the environmental impacts associated with the VET Project, the DEIR must also evaluate the environmental impacts associated with the following interrelated projects in order to provide an accurate environmental impact analysis:

• Los Angeles International Airport ("LAX") Pipeline and Storage Tanks: Despite Tesoro Logistics' 2015 purchase of "crude oil and refined product storage and [a sixteen mile] pipeline . . . from Tesoro, which includes "97 . . . storage tanks . . . with a capacity of 6.6

<sup>&</sup>lt;sup>109</sup> See Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1213 (*Bakersfield*) (Due to the unique effects of 24-hour supercenters on urban development, the EIR was required to disclose information about its expected retail tenants); *see also American Canyon Community* United for Responsible Growth v. City of American Canyon (2006) 145 Cal.App.4th 1062, 1075 (same scenario as in Bakersfield).

<sup>&</sup>lt;sup>110</sup> May Technical Report, § IV(A)(3).

<sup>&</sup>lt;sup>111</sup> See Orinda Association v. Board of Supervisors, 182 Cal. App. 3d 1145, 1172 (1986) (The construction of new buildings and the demolition of older buildings were all part of the same development project, despite separate agency approvals); see also Cal. Code Regs., tit. 14, §15378(c).

<sup>&</sup>lt;sup>112</sup> May Technical Report, § II(C).

<sup>&</sup>lt;sup>113</sup> See Issuance of DEIS for Vancouver Energy Project in November 24, 2015, available at <u>http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-</u>%20DEIS/DEIS%20Chapters/20151124DEIS\_CvtLtr.pdf.

million barrels" to store and provide fuels for LAX,<sup>114</sup> the DEIR fails to investigate the impacts that the LAR Project may have on the LAX Project. These impacts must be evaluated.

- <u>Expansion of the Pipeline at the Marine Terminal to the Storage Tanks:</u> The DEIR fails to analyze the impacts related to its plan to expand its pipeline at the marine terminal from 12 to 42 inches, as was proposed in its 2014 Neg. Dec.<sup>115</sup>
- <u>Tesoro Logistics Operations</u>: The DEIR must also evaluate the cumulative impacts associated with other Tesoro Logistics operations, since Tesoro has identified future plans of synergism between the LARIC and Tesoro Logistics. In the past, Tesoro has sold many of its facilities to Tesoro Logistics for "gathering, moving, storing, and distributing petroleum inputs and products."<sup>116</sup> The environmental impacts associated with any modifications that the LARIC Project will impose on the relationship between the two businesses must be evaluated.
- <u>Offsite Hydrogen Baseline Sales and Sales of Hydrogen:</u> The DEIR should include an evaluation of the baseline of hydrogen purchased from offsite companies and changes in sales of hydrogen from offsite companies, such as Air Products, to establish whether the Project will increase overall hydrogen use at the refinery.<sup>117</sup>
- <u>San Pedro's Butane Storage Tanks</u>: Because the LARIC Project will require more LPG to be transported by rail, the DEIR must address the environmental impacts associated with San Pedro's butane storage tanks, including details about the parties using the San Pedro products, the volume of the products transported, the methods of transportation, and explosion risks. While Tesoro asserts that it does not store butane at the San Pedro site, it has noted that it sells LPG products to third parties in the area.<sup>118</sup> The impacts of these sales must also be assessed.

By failing to analyze these projects in relation to this project, the DEIR has piecemealed the Project in violation of CEQA.

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

The DEIR fails to consider a reasonable range of alternatives. It distorts the "No Project" alternative and fails to consider alternatives that would meet project objectives while mitigating adverse environmental impacts. CEQA includes a substantive mandate that public agencies not

<sup>&</sup>lt;sup>114</sup> May Technical Report, § VI(2).

<sup>&</sup>lt;sup>115</sup> May Technical Report, § V(C).

<sup>&</sup>lt;sup>116</sup> May Technical Report, § VI(2).

<sup>&</sup>lt;sup>117</sup> May Technical Report, § VI(2).

<sup>&</sup>lt;sup>118</sup> May Technical Report, § VI(2).

approve projects with significant environmental effects if "there are feasible alternatives or mitigation measures" that can substantially lessen or avoid those effects.<sup>119</sup>

The DEIR does not consider an alternative that makes only the changes necessary to achieve the "synergies [that] will benefit the environment by lowering greenhouse gases and emissions" as required by the settlement agreement with the Attorney General.<sup>120</sup> For example, significantly increasing tank throughput is not necessary to gain the benefits of more efficient marine vessel unloading.<sup>121</sup> Nonetheless, the DEIR project description includes an increase of 25.5 million bbl/year throughput in new tanks.<sup>122</sup>

Moreover, the DEIR does not include a crucial alternative that limits changes to the refinery's crude slate because DEIR project description fails to consider likely changes to the crude slate.<sup>123</sup> This has resulted in an "impermissibly truncated project description" causing a "severely distorted" range of alternatives.<sup>124</sup> Currently the DEIR claims no changes to the "crude operating envelope," however Canadian tar sands and fracked Bakken crude can be mixed to achieve a similar "operating envelope." <sup>125</sup> This will cause increased emissions of methane, benzene and toxics, <sup>126</sup> which can undo the emissions gains required by the settlement agreement. Limiting changes to the current baseline will address the true environmental impact caused by the likely switch to Canadian tar sands and fracked Bakken crude.

An alternative that includes explicit limitations to deviations from current crude baselines is feasible. In fact, the DEIR states that the modifications to the plants' operations will not affect the types of crude oil processed.<sup>127</sup> While this is misleading and modifications will allow changes to overall crude quality,<sup>128</sup> an alternative that explicitly limits deviations from current crude slate baselines does not interfere with the project's stated objectives.

Furthermore, the adverse impacts of the "No Project" alternative are distorted. The DEIR states that the "No Project" alternative "could be infeasible" because the refinery would be in violation of future federal Tier 3 gasoline requirements and local and state emissions requirements.<sup>129</sup> However, this implies that the proposed project is the only means of complying with these requirements, but the DEIR never states whether or not this is the case. CEQA guidelines do not always equate disapproval of a project with no development whatsoever. Instead, the EIR should "project[] what would reasonably be expected to occur in the foreseeable

<sup>&</sup>lt;sup>119</sup> Mountain Lion Foundation v. Fish and Game Commission (1997) 16 Cal. 4th 105, 134.

<sup>&</sup>lt;sup>120</sup> Letter from Kamala Harris, Attorney General, to Robert Weisenmiller, CEC Chair,

https://oag.ca.gov/system/files/attachments/press\_releases/AG%20Letter%20to%20CEC%20(Tesoro).pdf (May 17, 2013).

<sup>&</sup>lt;sup>121</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>122</sup> May Technical Report, § III(E).

<sup>&</sup>lt;sup>123</sup> May Technical Report, § III(C).

<sup>&</sup>lt;sup>124</sup> See County of Inyo v. City of Los Angeles (1981) 124 Cal. App. 3d 1, 9.

<sup>&</sup>lt;sup>125</sup> DEIR, at 4-2.

<sup>&</sup>lt;sup>126</sup> May Technical Report, § IV.

<sup>&</sup>lt;sup>127</sup> DEIR, at 4-2.

<sup>&</sup>lt;sup>128</sup> Fox Negative Declaration Report, at 12-13.

<sup>&</sup>lt;sup>129</sup> DEIR, at 6-5.

future if the project were not approved."<sup>130</sup> Here, a reasonable expectation would be that Tesoro will make only the modifications needed to comply with federal, state and local emissions requirements. Including and describing this foreseeable outcome will inform decision-makers by outlining which components are actually needed to comply with emissions requirements.

While an EIR is not expected to identify every single possible alternative to a proposed project, it is unacceptable for an EIR to fail to describe an alternative that accomplishes the goals of complying with the mandates imposed by law and by the Attorney General, and then distort the environmental impacts of the No Project Alternative. By failing to adequately describe the "No Project" alternative and failing to analyze an alternative that implements legal requirements without imposing the Project's impacts, the DEIR's analysis of project alternatives fails to meet CEQA's requirements because it does not include the alternatives necessary for decision-makers to make a "reasoned choice."<sup>131</sup>

#### VI. THE DEIR FAILS TO IDENTIFY A LEGALLY SUFFICIENT BASELINE.

The DEIR employs a misleading and wholly inaccurate baseline to measure air quality and other impacts.

"The fundamental goal of an EIR is to inform decision makers and the public of any significant adverse effects a project is likely to have on the physical environment."<sup>132</sup> Such effects cannot be known without first "delineat[ing] environmental conditions prevailing absent the project, defining a 'baseline' against which predicted effects can be described and quantified."<sup>133</sup> "[B]aseline determination is [therefore] the first . . . step in the environmental review process[,]"<sup>134</sup> and critical to the entirety of an EIR. A baseline must "give the public and decision makers the most accurate picture practically possible of the project's likely impacts"<sup>135</sup> An inaccurate baseline can drastically alter the outcome of environmental review—if baseline emissions are set too low, insignificant impacts become significant, and if baseline emissions are set too high, an EIR can overlook significant impacts on the environment.

Here, the DEIR both improperly underestimates the baseline for certain conditions, and inflates the baseline for others.

<sup>&</sup>lt;sup>130</sup> CEQA Guidelines, §15126.6(e)(2)

<sup>&</sup>lt;sup>131</sup> CEQA Guidelines, §15126.6(f)

<sup>&</sup>lt;sup>132</sup> Neighbors for Smart Rail v. Exposition Metro Line Const. Authority (2013) 57 Cal.4th 439, 447.

 $<sup>^{133}</sup>_{124}$  Id.

<sup>&</sup>lt;sup>134</sup> Save our Peninsula Committee v. Monterey County Board of Supervisors (2001) 87 Cal.App.4th 99, 125.

<sup>&</sup>lt;sup>135</sup> Neighbors for Smart Rail, 57 Cal.4th at 449 (citing Communities for a Better Environment v. SCAQMD (2010) 48 Cal.4th 310).

#### A. The DEIR Fails to Identify Required Baselines for Crude Throughput.

It cannot be disputed that the volume of crude throughput determines environmental impacts, yet, the DEIR's baseline for throughput is entirely unclear. The DEIR fails to disclose a certain throughput baseline, and appears to rely instead on fluctuations in operations, maximum capacities, and permitted levels of various operation components in discussing throughput.

Further, evidence regarding the total crude oil rate capacity and Refinery throughput is unclear and inconsistent, leaving the public without reliable information as to the existing throughput baseline. For example, the DEIR states that the "total crude oil rate capacity for the Los Angeles Refinery is 363,000 bbl/day[,]"<sup>136</sup> while Tesoro has publicly reported that its full capacity is 380,000 barrels per day.<sup>137</sup> Not only does the DEIR fail to establish an ascertainable baseline for overall refinery throughput, but the information provided as to Refinery throughput is not supported by data. Conclusions and baselines reflected in environmental documents must be based on actual data, and that data must be publicly accessible. The DEIR fails these requirements. May's technical analysis of the Refinery throughput raises whether the Refinery could be processing larger volumes than the DEIR has evaluated, including whether it already increased its throughput, even before receiving approval.<sup>138</sup>

The DEIR also fails to establish a baseline for storage tank throughput, although the record and evidence shows its significant increase. May explains that the six largest new tanks "increase [] throughput . . . [by more] than 153 million bbl/year (or 419,000 bbls/day average)," increasing volume by 3.4 million bbls. The DEIR provides only the volume capacity for the Wilmington tanks, but not for the Carson facility. Moreover, the SCAQMD questioned whether a No. 51 Vacuum Distillation Unit heater may result in increased crude oil throughput, but the DEIR fails to evaluate the issue.<sup>139</sup> The DEIR states that "[t]here is no change proposed to crude oil throughput at the Carson Operations" and "no changes to the Crude Units are being made that would affect the crude oil throughput of the Wilmington Operations."<sup>140</sup> As May explains, however, "[t]his conclusory statement fails to account for the large permitted throughput increases that were modeled in the DEIR[.]"<sup>141</sup> The increased tank throughput will result in undisclosed impacts, whether as a result of that throughput being exported or refined. If the latter, the overall Refinery input will further increase.

Because evidence shows that the Project will result in an increased throughput, at the very least as to storage tank and overall refinery throughput, the DEIR must identify the pre-Project throughputs and establish baselines against which the increased throughputs can be examined to determine any significant impacts from the increase.

<sup>&</sup>lt;sup>136</sup> DEIR, at 2-17.

<sup>&</sup>lt;sup>137</sup> May Technical Report, § II(A) (quoting Los Angeles Refinery Fact Sheet 2016, Tesoro, <u>https://tsocorpsite.files.wordpress.com/2016/04/tesoro-los-angeles-fact-sheet.pdf</u> (emphasis added)).

<sup>&</sup>lt;sup>138</sup> May Technical Report, § II(A).

<sup>&</sup>lt;sup>139</sup> May Technical Report, § V(B)(1).

<sup>&</sup>lt;sup>140</sup> DEIR, at 4-26 & 4-28.

<sup>&</sup>lt;sup>141</sup> May Technical Report, § III(E).

### **B.** The DEIR Fails to Identify Critical Baseline Information Relating to the Refinery's Current Crude Slate.

Substantial evidence, as discussed above, shows that the Project proposes to make numerous process and equipment modifications that newly enable the processing of "advantaged crude" feedstock at the Refinery, consistent with Tesoro's publicly stated business plans. It is well-known that the type of crude oil feedstock processed at a refinery directly affects the amount and composition of resulting emissions and other environmental impacts.<sup>142</sup> Because the Project's change in crude slate is likely to result in significant impacts, the DEIR must establish a crude slate baseline against which impacts can be measured.

The court in *Richmond* established that an "EIR fails as an informational document [where] the [] project description is inconsistent and obscure as to whether the Project enables the Refinery to process heavier crude[.]"<sup>143</sup> The DEIR must "properly establish, analyze, and consider an environmental baseline" of crude slate.<sup>144</sup> Here, however, the DEIR never discloses the characteristics of the current baseline oil feedstock at the Carson and Wilmington facilities, and much less compares pre- and post-Project crude quality. As in *Richmond*, the failure to do so is fatal to the DEIR.

As detailed in the May Technical Report, the DEIR fails to disclose exact specifications of the change in crude quality, information that is integral to this project.<sup>145</sup> Although the DEIR insists on its maintenance of throughput limits, it fails to properly acknowledge the inevitable changes in air emissions, hazard risks, and other significant impacts from refining a lower quality oil feedstock. As May explains:

[E]ven if [the new advantage crude slate is blended to] match[] ANS exactly in API gravity, the switch would still introduce new impacts not evaluated in the DEIR, due to other crude oil characteristics. For example, explosion hazards would increase from Bakken crude introduction, additional content of toxics such as benzene that was not investigated in the DEIR discussion, and increased introduction of waxy residue which can cause processing difficulties requiring more maintenance. Further, increased sulfur mass from Canadian crudes would increase corrosion hazardous and increase acutely hazardous sulfur gases (for example hydrogen sulfide).<sup>146</sup>

In short, Refinery modifications that enable processing of Bakken and potentially Canadian crudes have major impacts that must be analyzed, unless permit conditions explicitly preclude use of these crudes.

<sup>&</sup>lt;sup>142</sup> May Technical Report, § III(A).

<sup>&</sup>lt;sup>143</sup> *Richmond*, 184 Cal.App.4th at 89.

<sup>&</sup>lt;sup>144</sup> *Id*.

<sup>&</sup>lt;sup>145</sup> May Technical Report, § III(B).

<sup>&</sup>lt;sup>146</sup> May Technical Report, § III(C).

Instead of determining the required crude slate baseline, the DEIR impermissibly provides general information regarding the full range of possible crude that could be used at the Refinery, including outliers.<sup>147</sup> While, as the May Technical Report explains, some of this information can be obtained through research,<sup>148</sup> "decision makers and general public should not be forced to . . . ferret out the fundamental baseline assumptions that are being used for purposes of the environmental analysis[.]"<sup>149</sup> Rather, "[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project."<sup>150</sup>

When crude slate changes are at issue, the DEIR must divulge data as to crude slate currently processed at the Refinery, otherwise, a "conclusion that the future crude slate would be 'similar to that which is currently processed' is meaningless."<sup>151</sup> The DEIR must provide "objective quantification of the continuing mix that [the] Refinery was designed to process[,]" and examine whether it "is heavier than [the] mix [the] Refinery is currently processing."<sup>152</sup> As May concludes in her technical report, "[t]his will require documentation of the baselines of the individual Wilmington and Carson crude and intermediate product inputs from before the purchase of BP Carson by Tesoro, to the present."<sup>153</sup>

Specifically, the DEIR should disclose a "specific baseline for the both the Carson and Wilmington refinery, including the last 5 years' domestic and imported crudes, volumes, geographic origin, transportation method, sulfur content, API gravity, TAN, metal content, other important data such as benzene content, special handling issues due to volatility or waxiness, etc."<sup>154</sup> The DEIR must further evaluate impacts of the planned and foreseeable changes in the crude slate as part of the overall Project.

Unless and until the DEIR is revised to provide the proper crude slate baseline and examination of crude slate modifications, it will remain deficient as an informational document and also impair a significant impacts analysis.

#### C. The DEIR Fails to Ascertain the Refinery Sulfur Baseline.

The DEIR also fails to include a baseline for sulfur in the refinery, percent of sulfur in crude oil sulfur and the desulfurization capacity. Such a baseline is necessary because evidence shows that the Project could "introduce a larger mass of sulfur into the refinery compared to the past baseline,"<sup>155</sup> which requires impacts evaluation.

<sup>&</sup>lt;sup>147</sup> May Technical Report, § II(D); see, e.g., DEIR, at 2-2.

<sup>&</sup>lt;sup>148</sup> May Technical Report, § III(B).

<sup>&</sup>lt;sup>149</sup> San Joaquin Raptor Rescue Center 149 Cal.App.4th at 659, as modified (Apr. 11, 2007).

<sup>&</sup>lt;sup>150</sup> Id. (quoting Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 405). <sup>151</sup> *Richmond*, 184 Cal.App.4th at 85.

<sup>&</sup>lt;sup>152</sup> *Id*.

<sup>&</sup>lt;sup>153</sup> May Technical Report, § II(A).

<sup>&</sup>lt;sup>154</sup> May Technical Report, § III(B).

<sup>&</sup>lt;sup>155</sup> May Technical Report, § IV(C)(2).

The May Technical Report explains that the Project has the potential to result in "increases in desulfurization processes within the refinery due to higher sulfur content, as well as additional cracking, coking, and additional use of hydrogen, all of which require more energy and increase criteria and toxic pollutant emissions."<sup>156</sup> Further, if "Canadian crude replaces a crude at the Tesoro refinery average shown in the previous estimation of about 1.5% sulfur, the Canadian crude would increase the percent sulfur up to 3.5 or more percent sulfur for that number of barrels."<sup>157</sup> "It would also increase the desulfurization processing needed, the processing in the Sulfur Recover Unit, and the energy use and resultant emissions of those processes."<sup>158</sup> Accordingly, "a specific crude oil sulfur baseline is needed, and the potential for that to change, because this impacts the amount of desulfurization downstream."<sup>159</sup>

The DEIR must provide a refinery sulfur baseline, as outlined by the May Technical Report, in order to inform decision makers and the public of any significant adverse effects the Project will likely to have.

### D. Inclusion of FCCU Shutdown Emission Reductions in the Baseline Violates CEQA.

The DEIR's air emissions baseline is flawed because it improperly includes emissions from the Wilmington FCCU,<sup>160</sup> and thereby artificially inflates the baseline. Because the FCCU shutdown was a condition of approval prior to, and independent from, this Project, the baseline should reflect the environmental conditions as they will exist without the FCCU in operation. The pre-Project air quality baseline should therefore remove the FCCU emissions in order to provide the public with an accurate measurement of significant impacts resulting from this Project.<sup>161</sup>

While CEQA provides that the baseline is *normally* "the physical environmental conditions in the vicinity . . . as they exist at the time the notice of preparation is published[,]"<sup>162</sup> environmental review must depart from the general baseline rule when circumstances require in order to provide an accurate measurement of a project's likely impacts. The State Supreme Court instructed in *Neighbors for Smart Rail* ("*Neighbors*") that a baseline reflecting expected future conditions should be employed if a baseline reflecting current conditions "would be uninformative or misleading to decision makers and the public."<sup>163</sup> A lead agency may therefore define a baseline consisting of expected future environmental conditions if there is substantial evidence showing that it provides "a more accurate picture of a proposed project's likely impacts[.]"<sup>164</sup>

<sup>&</sup>lt;sup>156</sup> May Technical Report, § IV(B).

<sup>&</sup>lt;sup>157</sup> May Technical Report, § IV(C)(2).

<sup>&</sup>lt;sup>158</sup> May Technical Report, § IV(C)(2).

<sup>&</sup>lt;sup>159</sup> May Technical Report, § IV(C)(2).

<sup>&</sup>lt;sup>160</sup> DEIR, at 4-16.

<sup>&</sup>lt;sup>161</sup> CEQA Guidelines, § 15125(a).

<sup>&</sup>lt;sup>162</sup> *Id*.

<sup>&</sup>lt;sup>163</sup> Neighbors for Smart Rail v. Exposition Metro Line Const. Authority (2013) 57 Cal.4th 439, 455.

<sup>&</sup>lt;sup>164</sup> *Id.* at 453.

In *Neighbors*, the SCAQMD argued that the Court should recognize an exception to the existing conditions baseline rule where "factual conditions [exist] in which use of an existing conditions baseline would arguably mask potentially significant project impacts that would be revealed by using a future conditions baseline."<sup>165</sup> The Court agreed. The AQMD provided the following example of such factual conditions, which the Court reviewed and concurred with:<sup>166</sup>

[A]n existing industrial facility currently emits an air pollutant in the amount of 1,000 pounds per day. By the year 2020, if no new project is undertaken at the facility, emissions of the pollutant are projected to fall to 500 pounds per day *due to enforcement of regulations already adopted* and to turnover in the facility's vehicle fleet. The operator proposes to use the facility for a new project that will emit 750 pounds per day of the pollutant upon implementation and through at least 2020. An analysis comparing the project's emissions to existing emissions would conclude the project would reduce pollution and thus have no significant adverse impact, while an analysis using a baseline of *projected year 2020 conditions* would show the project is likely to increase emissions by 250 pounds per day, a (presumably significant) 50 percent increase over baseline conditions.<sup>167</sup>

The factual circumstances concerning the Wilmington refinery FCCU are precisely those where use of an existing conditions baseline would mask potentially significant Project impacts, and therefore where use of a future conditions baseline is necessary to reveal the impacts and fulfill CEQA's mandate.

The FCCU shutdown is a binding requirement that already existed prior to the Project proposal. The replacement of the Wilmington FCCU was a precondition to the Tesoro-BP acquisition, and thus not a part of the Integration Project. Indeed, government approval of the acquisition was conditioned on the unit's shutdown. Crediting the LARIC Project for the Wilmington FCCU's shutdown creates the type of distortion of baseline measurements that *Neighbors* warned against as "uninformative or misleading to decision makers and the public."

On May 17, 2013, the California Attorney General's office ("AG") announced in a letter to the Chairman of the California Energy Commission ("CEC") the approval of the Tesoro acquisition of BP's Carson operations.<sup>168</sup> This approval came as a result of a nine-month investigation led by the California Department of Justice and other State agencies. During that process, the State identified as primary concerns preventing the approval of the acquisition based on its impact on market competition and the environment.<sup>169</sup> While the AG's competition

<sup>&</sup>lt;sup>165</sup> *Id.* at 453, n.5.

<sup>&</sup>lt;sup>166</sup> *Id*.

<sup>&</sup>lt;sup>167</sup> *Id.* (emphasis added).

<sup>&</sup>lt;sup>168</sup> AG Letter to Tesoro, CA DOJ, available at

http://oag.ca.gov/system/files/attachments/press\_releases/AG%20Letter%20to%20CEC%20%28Tesoro%29.pdf?.

<sup>&</sup>lt;sup>169</sup> *Id*.

concerns were addressed after a thorough investigation on market conditions,<sup>170</sup> the acquisition's environmental impact concerns continued to present an obstacle to approval. As identified in the AG's letter to the CEC, the acquisition's approval was conditioned on certain concessions agreed to by Tesoro, including the shutdown of the Wilmington FCCU.<sup>171</sup> Replacement of the FCCU was a "binding commitment" upon Tesoro used to satisfy environmental impact concerns associated with the acquisition.<sup>172</sup> This precondition is also recognized in an April 8, 2013 letter cited by the AG, in which Governor Brown stresses upon Tesoro the importance of shutting down the FCCU units "should the acquisition proceed."<sup>173</sup>

Further, the DEIR itself shows that the current LARIC Project was not an inevitable component or requirement for the acquisition, but rather a subsequent, voluntary measure Tesoro chose to pursue to "more fully integrate" operations.<sup>174</sup> At the time the acquisition was approved, pipeline connections between the Wilmington and Carson operations already allowed the "transfer of crude oil, feedstocks, and refined products between the two Operations."<sup>175</sup> The requirement to shutdown the Wilmington FCCU became effective at the time of acquisition, and would be required even in the absence of the current Integration Project. To interpret the AG's conditional approval otherwise would render the established preconditions illusory.

The Supreme Court's holding and illustration in *Neighbors* could not be more analogous to this instance and must be followed here. Because the Wilmington FCCU shutdown is a preexisting requirement, "if no new project is undertaken at the facility, emissions of the [FCCU] pollutant are projected to . . [be eliminated] due to enforcement of [the acquisition shutdown condition]."<sup>176</sup> However, Tesoro now "proposes to use the facility for a new project that will emit" additional pollutants.<sup>177</sup> "An analysis comparing the [P]roject's emissions to existing emissions would conclude the [P]roject would reduce pollution and thus have no significant adverse impact,"<sup>178</sup> which is similar to the outcome reached in the DEIR where the DEIR projected generally less than significant emissions increases. The DEIR in fact relies on the shutdown of the Wilmington FCCU unit in order to obtain a finding of no significant impact. However, "an analysis using a baseline of projected [] conditions would show the project is likely to increase emissions . . . over baseline conditions."<sup>179</sup>

The DEIR's conclusion that the Project will not cause significant emissions impacts relies on an underlying baseline that incorporates FCCU emissions. Because the shutdown of the

<sup>&</sup>lt;sup>170</sup> Id.

<sup>&</sup>lt;sup>171</sup> *Id.* at 2.

<sup>&</sup>lt;sup>172</sup> *Id*.

 $<sup>^{173}</sup>$  *Id*.

<sup>&</sup>lt;sup>174</sup> See DEIR at 2-1 (Stating that "[t]he proposed project would greatly *enhance* the integration of overall Refinery operations." This supports the understanding that the Integration Project was not implicitly required for the acquisition to be feasible at the time of the AG's approval, but is rather a subsequent, independent project).

<sup>175</sup> Id. at 2-1.

<sup>&</sup>lt;sup>176</sup> See Neighbor, 57 Cal.4th 453, n. 5.

<sup>&</sup>lt;sup>177</sup> *Id*.

<sup>&</sup>lt;sup>178</sup> *Id.* 

<sup>&</sup>lt;sup>179</sup> Id.

FCCU is required to happen even without the Project, and its emissions will be eliminated from environmental impacts, the DEIR's conclusion is misleading and false. The DEIR's inclusion of the FCCU emissions in the air quality baseline artificially and improperly inflates the baseline emissions, allowing it to overlook significant impacts resulting from the Project. The DEIR's baseline thus fails to include relevant information, precluding informed decisionmaking and denying the public the most accurate picture practically possible of the project's likely impacts. Inclusion of FCCU emissions in the air quality baseline thus thwarts CEQA's statutory goals"<sup>180</sup> and is in grave error.

For these reasons, the DEIR must be revised to correct the air emissions baseline to reflect the FCCU shutdown and resulting future environmental conditions.

### VII. THE DEIR'S IMPACTS ANALYSES ARE SEVERELY FLAWED.

### A. Volatile Organic Compound Emissions for Project Operation are Significant.

The DEIR claims that because the Project will purchase emission reduction credits (ERCs) offsetting Project emissions of volatile organic compound emissions (VOCs), operation of the Project will result in less than significant increases of VOCs and therefore no mitigation is required. Because the DEIR estimates this Project will have operational VOC emissions of 401.15 pounds per day (lb/day) —more than 7 times greater than the South Coast air basin's 55 lb/day significance threshold, this Project plainly has significant VOC emissions. SCAQMD must therefore revise the DEIR to find that air emissions will be significant and propose enforceable mitigation measures.

An EIR must "separately identify and analyze the significance of the impacts [of the project] before proposing mitigation measures."<sup>181</sup> In *Lotus*, Caltrans approved an EIR for a highway construction project through a stand of old growth redwoods. The project would result in tree removal and potential damage to the structural root zones of the trees, but Caltrans determined that this potential damage would not be significant because the project included certain measures designed to reduce or eliminate the damage to the redwoods, including "restorative planting and replanting, invasive plant removal, and use of an arborist and of specialized equipment."<sup>182</sup> The Court of Appeal, in ordering that the EIR be set aside, explained that Caltrans' failure to "separately identify and analyze the significance of the impacts to the root zones of old growth redwood trees before proposing mitigation measures is not merely a harmless procedural failing."<sup>183</sup> Instead, Caltrans was required to first identify "the potential environmental consequences arising from the project" and then thoughtfully analyze "the sufficiency of measures to mitigate those consequences" and adopt an enforceable monitoring program to ensure that the mitigation measures are carried out.<sup>184</sup>

<sup>&</sup>lt;sup>180</sup> Kings County Farm Bureau v. City of Hanford, 221 Cal.App.3d 692, 714 (Cal. Ct. App., 1990).

<sup>&</sup>lt;sup>181</sup> Lotus v. Dept. of Transportation (2014) 223 Cal.App.4th 645, 658 (hereafter Lotus).

<sup>&</sup>lt;sup>182</sup> Lotus, supra, 223 Cal.App.4th at p. 656, n.8.

<sup>&</sup>lt;sup>183</sup> *Id.* at 658.

<sup>&</sup>lt;sup>184</sup> *Id*.

The DEIR suffers from the same deficiency as in the *Lotus* case. SCAQMD has set a significance threshold of 55 lb/day of VOC operational emissions.<sup>185</sup> Thus, any project emitting over 55 lb/day has significant emissions that must be mitigated under CEQA.<sup>186</sup> This DEIR has stated operational emissions of 401.15 lb/day.<sup>187</sup> Its VOC emissions are therefore significant under CEQA.

The EIR, however, erroneously concludes that VOC emissions are not significant because the Project will offset these emissions by retiring emission reduction credits.<sup>188</sup> Emission reduction credits are created when a facility voluntarily reduces its air emissions in excess of reductions required by law. These credits, once created, are "banked" to be retired later by the same facility in order to permit new emissions, or can be sold to other facilities for use.<sup>189</sup> Again, just like in *Lotus*, the use of emission reduction credits to offset an increase in emissions is not a project component, but rather akin to a potential mitigation measure.<sup>190</sup> The DEIR should thus conclude that the emissions from this Project are significant, and separately propose enforceable and monitorable mitigation measures.

Failure to properly analyze the significance of the VOC emissions of this Project means that SCAQMD has failed to evaluate whether "other more effective measures than those proposed should be considered."<sup>191</sup> CEQA requires that "[w]here several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified."<sup>192</sup> But here, by inappropriately including offsets as part of the Project, SCAQMD has failed to discuss why offsets were chosen in favor of other on-site mitigation. On-site mitigation could include shutdown of additional equipment at the refinery, or installation of control technology to reduce operational emissions from the new components. These options should be disclosed as potential mitigation measures, and their effectiveness discussed.

Under CEQA, mitigation measures must be enforceable and effective, and there must be a mitigation monitoring and reporting program in place to ensure compliance.<sup>193</sup> There is no evidence in the EIR of what emission reduction credits Tesoro plans to use to offset emissions, and that these credits are valid. We submitted a Public Records Act request for information on the credits on May 9, but SCAQMD failed to provide records before the comment deadline.<sup>194</sup> As the Ninth Circuit has pointed out—EPA has never validated the emission credits in the ERC

<sup>194</sup> See Public Records Act Request (May 9, 2016).

<sup>&</sup>lt;sup>185</sup> DEIR 4-8, Table 4.2-1 "Mass Daily Thresholds.

<sup>&</sup>lt;sup>186</sup> See CEQA Guidelines, § 15064.7(a).

<sup>&</sup>lt;sup>187</sup> DEIR, at 4-16 - 4-17, Table 4.2-4.

<sup>&</sup>lt;sup>188</sup> DEIR, at 4-36; DEIR, at 4-16 - 4-17, Table 4.2-4.

<sup>&</sup>lt;sup>189</sup> SCAQMD Rule 1309.

<sup>&</sup>lt;sup>190</sup> CEQA Guidelines, § 15370(e)

<sup>&</sup>lt;sup>191</sup> *Lotus, supra,* 223 Cal.App.4th at 656.

<sup>&</sup>lt;sup>192</sup> CEQA Guidelines, §15126.4(a)(B).

<sup>&</sup>lt;sup>193</sup> *Federation of Hillside and Canyon Assns. v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261; CEQA Guidelines, at §§ 15126.4(a)(2), 15097; *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1115-17.

bank, so there is no guarantee that the credits used for this project are valid.<sup>195</sup> To the extent Tesoro proposes to use emission reduction credits as mitigation measures, the credits proposed to be used should be disclosed and their validity analyzed.

But more importantly, there is no evidence that the use of emission reduction credits will effectively mitigate the harm to the local community from exposure to increased VOC emissions onsite from this Project. Emission reduction credits could have been generated from any location within the South Coast Air Quality Management District—a 10,743 square mile area,<sup>196</sup> and the emission reductions could have occurred decades ago.<sup>197</sup> The Wilmington/Carson area, home to predominantly low income communities of color, is already overburdened by pollution, due to being home to the largest concentration of refineries in the state, proximity to the Port of Los Angeles, and presence of heavy diesel truck and rail traffic.<sup>198</sup> This Project's significant addition of VOC emissions is likely to only exacerbate the pollution burden of these communities, and lead to increased health conditions such as asthma and other respiratory ailments.<sup>199</sup> The DEIR contains no demonstration of how the use of offsets would somehow reduce this localized increase in exposure to VOCs to less than significant, and how the use of offsets would be superior mitigation to other on-site measures.

#### Early Compliance with the NOx RECLAIM Shave and Retention of RTCs Does **B**. Not Equate to Emissions Reductions.

The DEIR proposes to mitigate the significant construction impacts by early compliance with installation of Selective Catalytic Reduction (SCR) on three units. Importantly, we are deeply disappointed that the SCAQMD has a NOx RECLAIM program that means refineries could delay installation of SCRs for many years when "[t]hese change-outs would not require additional approvals and would not require major construction."<sup>200</sup> But beyond this flaw in the NOx RECLAIM program, the DEIR cannot rely on these "early" compliance projects for the NOx RECLAIM to claim credit for mitigation. Importantly, there is nothing in the DEIR that commits to retiring any credits associated with this project. Thus, Tesoro could simply sell any

<sup>&</sup>lt;sup>195</sup> Communities for a Better Environment v. U.S. E.P.A. (9th Cir. 2015) 609 Fed.Appx. 461, 462. <sup>196</sup> See http://www.aqmd.gov/home/about.

<sup>&</sup>lt;sup>197</sup> See generally, SCAQMD Rule 1309; see also Rule 1303(b)(3) [limiting Tesoro to obtaining new emission reduction credits originating in zone 1, which includes the coastal portions of SCAQMD, including Catalina Island].

<sup>&</sup>lt;sup>198</sup> See The Increasing Burden of Oil Refineries and Fossil Fuels in Wilmington, California, available at http://www.cbecal.org/wp-content/uploads/2012/05/wilmington\_refineries\_report.pdf; Morello-Frosch, et al., Integrating Environmental Justice and the Precautionary Principle in Research and Policy Making: The Case of Ambient Air Toxics Exposures and Heath Risks among Schoolchildren in Los Angeles, 584 Annals of the American Academy of Political and Social Science 47 (Nov. 2002), attached as Exhibit A. <sup>199</sup> See, e.g., Ware, et al., Respiratory and Irritant Health Effects of Ambient Volatile Organic Compounds, 137-12 Am. J. of Epidemiology 1287 (June 15, 1993) [correlating exposure to VOCs with increased rates of asthma and chronic lower respiratory symptoms], attached as Exhibit B; Curtis, et al., Adverse Health Effects of Outdoor Air Pollutants, 32 Environment International 815 (2006) [meta analysis linking exposure to outdoor air pollution, including exposure to VOCs, to many types of health problems], attached as Exhibit C. <sup>200</sup> DEIR, at 4-40.

credits generated or use the credits for other emissions, which would provide no NOx benefits to the region. Overall, if this strategy is being used to mitigate the significant construction impacts, there must be a surrender of the RTCs to make any reductions associated with the new SCRs enforceable.

Also, the DEIR misleads decision-makers in assuming that the FCCU that will be shut down in Wilmington will actually achieve emissions reductions. This is nothing more than sleight of hand. Tesoro plans to keep 491.63 of NOx RECLAIM Trading Credits (RTCs) to be used for its operations. Thus, characterizing the closing of the FCCU as an actual emission reduction project is misleading because Tesoro plans to keep these reductions to allow it to continue to emit NOx or increase its NOx emissions. This violates CEQA informational disclosure requirement. If Tesoro intends to rely on the reductions, it must retire any RTCs associated with the shutdown of the FCCU in Wilmington permanently.

#### C. The Air Quality Cumulative Impact Analysis is Flawed.

The DEIR falsely concludes that there is a not a significant cumulative impact related to operations of this project, in addition to other projects in the vicinity.<sup>201</sup> The DEIR comes to this conclusion based on two false assumptions. First, the DEIR assumes that the Southern California International Gateway (SCIG) Project will result in major emissions reductions in the project area.<sup>202</sup> Second, the DEIR relies on the false assumption that unless there are significant direct project impacts, there cannot be cumulative operational impacts from a Project. These assumptions are not supported in the DEIR and contradict CEQA's mandates.

The DEIR cannot rely on reductions from the SCIG project. The SCIG project is a neardock intermodal railyard proposed to be built in Los Angeles adjacent to west Long Beach. The project was an immensely important environmental justice and health case that garnered significant opposition. Importantly, several entities filed lawsuits challenging the SCIG project, including the SCAQMD itself.<sup>203</sup> The SCAQMD and others challenging the project prevailed in that litigation, and they have received a favorable decision by the Superior Court.<sup>204</sup> In fact one of the critical issues in which the SCAQMD prevailed was whether the EIR could assume reductions in operations at another railyard based on opening this wholly new railyard. The SCAQMD also prevailed on several other issues related to the air quality analysis. This agency flatly critiqued the validity of the emissions reductions estimates in the SCIG project, so these reductions cannot be relied upon in the DEIR. Moreover, the strength of the SCAQMD's arguments were further bolstered in the strong opinion showing the SCIG EIR is unlawful.

<sup>&</sup>lt;sup>201</sup> DEIR, at 5-19.

<sup>&</sup>lt;sup>202</sup> DEIR, at 5-18, Table 5.2-2 [Finding the SCIG project results in a reduction of 316 lbs/day VOC, 2,905 lbs/day CO, 5,619 lbs/day NOx, 139 lbs/day SOx, 313 lbs/day PM10, and 228 lbs/day PM2.5].

<sup>&</sup>lt;sup>203</sup> Petition of SCAQMD challenging SCIG Project, attached as Exhibit D. For context of the legal arguments and the critiques of the air quality analysis and the assumptions that formed this analysis, these comments include Attachments E and F, which are the Opening and Reply Briefs filed by SCAQMD in that case.

<sup>&</sup>lt;sup>204</sup> Decision in SCIG Case, attached as Exhibit G.

Even beyond the dramatic underestimation of pollution that these comments and the May Technical Report have identified, using the emissions estimates in the DEIR, there will be increases in VOCs, NOx, PM10 and PM2.5 associated with this Project.<sup>205</sup> Without the unsubstantiated SCIG reductions, Table 5-2-2 emissions add up to: 646.97 lbs/day of VOCs, 825.15 lbs/day of CO, 832.01 lbs/day of NOx, 3.63 lbs/day of SOx, 340.46 of PM10, and 51.37 lbs/day of PM2.5.

|  | VOC    | СО     | NOx      | SOx  | PM10   | PM2.5 |
|--|--------|--------|----------|------|--------|-------|
| 6 ILWU Local 13 Dispatch Hall(b)           | 19.9   |        | 26.9     |      | 16.9   | 1.5   |
| 8 Valero Cogen(c)                          | 33.4   | 201.8  | 0        | 0    | 95.8   | 20.6  |
| 9 WesPac(d)                                | -27    | -266   | -40      | <1   | -33    | -30   |
| 10 LAUSD Span K-8 School(e)                | 8.76   |        |          |      |        |       |
| 12 Warren E&P(f)                           | 19     | 14.4   | 4.4 20.5 |      | 3.7    | 4.3   |
| 15 Sepulveda/Panama Project(g)             | 339.1  | 546.9  | 521.6    | 2.82 | 203.9  | 32.4  |
| 16 Shell Revitalization Project(h)         | 50.83  | 0      | 0        | 0    | 0      | 0     |
| 21 Phillips 66 Crude Oil Storage(i)        | 166.8  | 109.1  | 249.4    | 0.3  | 18.9   | 12.8  |
| 22 Carson Facility E10 Project(j)          | 0      | 0      | 0        | 0    | 0      | 0     |
| 23 Carousel Tract(k)                       | 30     | 200    | 50       | 0.48 | 32     | 9.1   |
| 32 CSULB Foundation Retail Project(l)      | 4.89   | 18.95  | 3.61     | 0.03 | 2.26   | 0.67  |
| 34 Tesoro LPG Recovery Unit                | 0.46   | 0      | 0        | 0    | 0      | 0     |
| 35 Tesoro Dehexanizer Unit                 | 0.68   | 0      | 0        | 0    | 0      | 0     |
| 40 Tesoro Storage Tank 956                 | 0.15   | 0      | 0        | 0    | 0      | 0     |
| Total                                      | 646.97 | 825.15 | 832.01   | 3.63 | 340.46 | 51.37 |
| <b>Operational Significance Thresholds</b> | 55     | 550    | 55       | 150  | 150    | 55    |
| Significant?                               | Yes    | Yes    | Yes      | No   | Yes    | No    |

| Table: 12: Cumulative Operational Emission | s (lbs/day) are significant with the SCIG subtracted |
|--|--|
|--|--|

When combining the Project emissions with the additional emissions from the projects identified in Table 5.2-2 on page 5-18, there will be a significant increase cumulatively in emissions.

Because the evidence clearly shows the cumulative impacts – even using the underestimated emissions estimates in the DEIR – exceed SCAQMD significance thresholds, there is no basis for the DEIR's conclusion that no significant increase in cumulative air quality emissions exists.

Finally, the Project cannot shield itself from identifying a significant cumulative air quality impact by relying on the SCAQMD policy that generally allows projects to conclude no significant cumulative air impact when direct project emissions are below significance thresholds. This SCAQMD policy undermines CEQA's requirement to look at the incremental effects of a project when viewed in connection with the effect of past projects, other current

<sup>&</sup>lt;sup>205</sup> See generally DEIR section 4.2.

projects, and probably future projects.<sup>206</sup> This SCAQMD policy renders the cumulative impacts analysis meaningless, which is not supported by the CEQA Guidelines and CEQA itself. This is particularly the case here where the DEIR itself shows other projects adding significant pollution levels in the project vicinity. Including the additional pollution from the Project makes this significant impact even greater, requiring disclosure and a significance determination under CEQA.

Because there is clearly a significant cumulative air quality impact from operation of this project, the EIR must be recirculated.

### D. The Project's Climate Change and Greenhouse Gas Emissions Impacts are Underestimated.

The DEIR inadequately and inaccurately analyzes the GHG impacts from the Project. As described above, the DEIR fails to admit the likelihood that the facility will shift its operations to process Bakken or tar sands crude oil. This omission precludes an adequate assessment of potentially significant environmental impacts, including the potential increase of GHGs. It precludes meaningful mitigation, and the only alternative that would address its impacts is the No Project Alternative. Further, the DEIR claims beneficial GHG impacts of the Project, despite the fact that, even if the Project were exactly as described, Tesoro anticipates trading GHG allowances for the emissions reductions, resulting in no cumulative benefit at all. The DEIR is extremely deceptive in describing the Project as having climate change benefits, directly undermining its informational purpose. In addition, the DEIR errs in relegating analysis of GHGs solely to the cumulative impacts analysis. The Project's direct and indirect impacts must be analyzed, independently of cumulative impacts.

### 1. The DEIR Fails to Describe and Analyze Significant Climate Change Implications of this Project.

The DEIR recognizes that climate change is an important problem for our future although it is mildly stated compared to the severe threats.<sup>207</sup> GHGs, especially combustion of fossil fuels for energy, transportation, and manufacturing, are the main contributors to global warming that causes rapid changes in the way a number different types of ecosystems typically function. Climate change, due to GHG emissions, also creates disastrous health effects. For example, higher temperatures lead to increased formation of ground-level ozone, projected to undermine smog reduction progress made in Southern California. Ozone is a well-known lung irritant and a major trigger of respiratory problems like asthma attacks. Local changes in temperature and rainfall also alters the distribution of some waterborne illnesses and diseases. For example, warmer freshwater makes it easier for pathogens to grow and contaminate drinking water.<sup>208</sup> Climate change also threatens California's agriculture and water supplies, causes extreme weather events, sea level rise, and threatens catastrophic change worldwide.

<sup>&</sup>lt;sup>206</sup> CEQA Guidelines, §§ 15064(h)(1), 15065(a)(3).

<sup>&</sup>lt;sup>207</sup> DEIR, at 5-22.

<sup>&</sup>lt;sup>208</sup> *Id.* at 5-22.

In the face of these severe global and local effects, the DEIR fails to admit a climate change impact that is significant and unavoidable. The DEIR concludes that "the proposed project is expected to result in local GHG emission reduction of approximately 66,139 metric tons per year, providing a net GHG emission reduction from the Refinery, thus, reducing the Refinery's contribution to global climate change."<sup>209</sup> This conclusion is incorrect on at least two bases. First, as described above, the DEIR fails to admit the likelihood that the facility will shift its operations to process a different crude slate, including more Bakken or tar sands crude oil. In addition to being fatal to the Project Description, and pervasively throughout the DEIR, the DEIR's failure to account for this potential shift is a serious flaw in its cumulative impact analysis. Second, while asserting that the Project reduces GHGs, the DEIR admits that, under the AB 32 regulatory scheme, the Project does not reduce GHG emission, but rather must be assumed to be neutral.<sup>210</sup> It is not clear, based on the DEIR, whether Tesoro intends to claim reductions from the Project as credits under the AB 32 trading program. This lack of clarity renders the DEIR incomplete and deceptive. Moreover, in calculating the GHG emissions for the Project, the DEIR fails to include the life-cycle emissions of the crudes the Refinery processes daily. By failing to include these emissions, the Project inaccurately reports the emissions of the Refinery. Additionally, the DEIR only considers the cumulative impacts of GHG emission and does not include any direct or indirect analysis for GHG emission. All these deficiencies create an inadequate analysis of GHGs.

### a. The DEIR Fails to Analyze a Switch to Heavier and Dirtier Crude Slate due to the Project.

First, the DEIR fails to include the composition of the Refinery's crude slate to determine its current baseline of GHG emissions.<sup>211</sup> According to the DEIR, the crude slate processed by the Refinery is business confidential information and therefore cannot be disclosed by the Refinery.<sup>212</sup> However, this undisclosed data from the Refinery "does not meet the "informational" goals of CEQA.<sup>213</sup> In *Richmond*, the California Appellate Court invalidated an EIR that relied in part on expert testimony using undisclosed, proprietary industry data from Chevron.<sup>214</sup> Similarly, here, the DEIR relies on an expert report to determine that the crude slate will not change.<sup>215</sup> However, this determination is based on analyzing crude slate data unavailable to the public in the DEIR. Withholding the crude slate data prevents "the information necessary for an informed decision from reaching the decisionmakers and the public."<sup>216</sup> The DEIR needs to disclose its current crude slate as well as its anticipated change due to the Project in order to comply with CEQA.

<sup>211</sup> May Technical Report, §I.

<sup>&</sup>lt;sup>209</sup> *Id.* at 5-26.

<sup>&</sup>lt;sup>210</sup> *Id.* at 5-26.

<sup>&</sup>lt;sup>212</sup> DEIR, at F-7 (McGovern Report, Appendix F).

<sup>&</sup>lt;sup>213</sup> See Richmond, 184 Cal.App.4th 70, 88.

 $<sup>^{214}</sup>$  *Id*.

<sup>&</sup>lt;sup>215</sup> DEIR, at F-7 (McGovern Report, Appendix F).

<sup>&</sup>lt;sup>216</sup> Richmond, 184 Cal.App.4th at p. 88.

Second, the DEIR claims that despite the changes made to the Refinery, the proposed facility will only process a crude slate similar to the crude slate currently processed.<sup>217</sup> However, the Project will very likely lead to the processing of a different crude slate that will result in higher GHG emissions.<sup>218</sup> Many of the improvements to the Refinery will allow the processing of a different crude slate. For example, the increased storage and new storage tanks will allow for the handling of Canadian tar sands and Bakken crude.<sup>219</sup> The Project also plans to expand its sulfur treatment operations allowing for the processing of crude oil higher in sulfur such as Canadian tar sands.<sup>220</sup> In addition, the DEIR admits the facility will most likely be switching away from the Alaskan North Slope crude oil due to its lack of availability.<sup>221</sup>

Tesoro has informed its investors that it will be supplying more advantaged crude oil to the West Coast.<sup>222</sup> Tesoro is currently undertaking a joint project with Savage to construct a crude-by-rail to oil tanker marine terminal in Vancouver, Washington to export advantaged crude oil to the West Coast.<sup>223</sup> With the construction of the Washington marine terminal, Tesoro will increase its capacity to import heavy crude from Canada and light crude from the Bakken oil fields in North Dakota.<sup>224</sup> The May Technical report finds that extraction and transport of both these crudes increase greenhouse gases.<sup>225</sup> Tesoro has expressed its intentions of using the marine terminal to ship crude oil from mid-continent North America (most likely Bakken crude) to West Coast oil refineries.<sup>226</sup> The Project will allow the Refinery to accept these new sources of oil including Canadian tar sands and the crude from the Bakken oil fields.<sup>227</sup> In addition, with this Project, the Refinery has the potential to process up to 50% California heavy and Bakken crude oil, up from 15%.<sup>228</sup>

Despite this evidence, the DEIR then states that the Refinery will continue to use a similar crude slate by mixing the dirtier crude oils with cleaner crude oils from around the world.<sup>229</sup> However, the DEIR assumes the composition of the crude slate will remain relatively similar but does not include any data as evidence. As in *Richmond*, the DEIR "does not provide any objective quantification" as to the crude slate being used and the crude that will be used.<sup>230</sup>

<sup>&</sup>lt;sup>217</sup> DEIR, at 1-18.

<sup>&</sup>lt;sup>218</sup> May Technical Report, § IV(C)(2). .

<sup>&</sup>lt;sup>219</sup> May Technical Report, § IV(C).

<sup>&</sup>lt;sup>220</sup> May Technical Report, § IV(C)(2).

<sup>&</sup>lt;sup>221</sup> DEIR, at 2-16.

<sup>&</sup>lt;sup>222</sup> Morgan Stanley Corporate Access Day, Tesoro Corporation, 15 (May 12, 2016) http://phx.corporateir.net/phoenix.zhtml?c=79122&p=irol-presentations.

<sup>&</sup>lt;sup>223</sup> https://www.vancouverenergyusa.com/

<sup>&</sup>lt;sup>224</sup> Tesoro Investment Thesis, July 24, 2013,

http://analysisreport.morningstar.com/stock/archive?t=TSO&region=USA&culture=en-

US&productcode=MLE&docId=604033.

<sup>&</sup>lt;sup>225</sup> May Technical Report, § IV.

<sup>&</sup>lt;sup>226</sup> May Technical Report, § II(C).

<sup>&</sup>lt;sup>227</sup> May Technical Report, § II(C)..

<sup>&</sup>lt;sup>228</sup> Simmons Energy Conference, *Transformation through Distinctive Performance*, February 27, 2014, http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations.

<sup>&</sup>lt;sup>229</sup> DEIR at 1-18.

<sup>&</sup>lt;sup>230</sup> *Richmond*, 184 Cal.App.4th at p. 87.

In order to act as a proper informational instrument under CEQA, the DEIR needs to provide more than conclusory statements.

Even if the characteristics of the crude slate were similar, the sources of the crude oil would not be. For example, the characteristics of Alaskan North Slope oil can be approximated by blending Canadian tar sands and Bakken crude.<sup>231</sup> Although the characteristics such as sulfur content and API gravity would be similar, the GHG impacts from this switch would not be. And despite these indications of switching the crude slate at the Refinery, the DEIR does not analyze the GHG emissions from this likely switch.

The DEIR fails to analyze the impact of GHG emissions from the change in the crude slate. Increased emissions from the Project include, but are not limited to, GHG emissions from increased use of Bakken crude, as compared to the current baseline feedstock. However, this impact cannot be adequately analyzed since the baseline is not provided in the DEIR.<sup>232</sup> In addition, changing the crude stock to include Canadian tar sands and Bakken crude can increase GHG emissions at the refinery itself. The climate change impacts of refining are correlated to the quality of the feedstock refined and changing the feedstock would therefore change the climate change impacts.<sup>233</sup> Generally, heavier crude oils have higher GHG emission intensities based over the life cycle of the oil.<sup>234</sup> Crude oils higher in sulfur and heavier crude oil are more GHG intensive because they require additional energy to crack, coke and de-sulfurize.<sup>235</sup> Based on the world oil prices and evidence from Tesoro's statements, a switch to heavier and more GHGintensive crude is reasonably foreseeable and therefore should be included in the DEIR. Under CEQA, an EIR must analyze the environmental impacts of future expansion or other actions if this other action is a reasonably foreseeable consequence of the initial project.<sup>236</sup> Thus, the DEIR does not comply with CEQA because it is "inconsistent and obscure" as to whether the Project will process a different crude slate and the resulting GHG emission impact is not included in the DEIR<sup>237</sup>

<sup>&</sup>lt;sup>231</sup> May Technical Report, § III(C).

<sup>&</sup>lt;sup>232</sup> See Richmond, 184 Cal.App.4th at 89 (holding that failure to identify the possibility that the project would allow the refinery to change its crude stock raises concerns about appropriate baseline against which to compare impacts).

<sup>&</sup>lt;sup>233</sup> See generally Karras, Greg, "Combustion Emissions from Refining Lower Quality Oil: What is the Global Warming Potential," *Environ. Sci. Technol.* 44, 9584-9589 (2010), for an analysis of the significant increases in GHG emissions caused by refining dirtier, heavier crudes from increased energy intensity needed to refine these oils and from direct emissions from the refining process.

<sup>&</sup>lt;sup>234</sup> CARNEGI ENDOWMENT FOR INTERNATIONAL PEACE, KNOW YOUR OIL: CREATING A GLOBAL OIL-CLIMATE INDEX, <u>http://carnegieendowment.org/files/OCI\_TwoPager.pdf</u>.

<sup>&</sup>lt;sup>235</sup> May Technical Report, § IV(C)(2).

<sup>&</sup>lt;sup>236</sup> Laurel Heights Improvement Assn. v. Regents of Univ. of California (1988) 47 Cal.3d 376, 396.

<sup>&</sup>lt;sup>237</sup> See Richmond, 184 Cal.App.4th at p. 89.

#### b. Because Tesoro Intends to Claim Credits, Rather Than Allowing GHG Emission Reductions to Improve the Environment, DEIR Assertions that the Project Has GHG Emission Benefits are Deceptive.

The DEIR continuously reiterates the beneficial GHG impacts of the Project.<sup>238</sup> However, these benefits are misleading and do not accurately describe the impacts of the Project. If the Project were exactly as described, Tesoro anticipates securing GHG credits under the new Cap and Trade Program for the emissions reductions, resulting in no air quality benefit at all.<sup>239</sup> The DEIR is extremely deceptive in describing the Project as having climate change benefits, directly undermining its informational purpose.

Under the Cap and Trade Program of AB 32, the state allocates a certain amount of allowances for the entire state and then apportions these allowances to all the facilities that emit GHG.<sup>240</sup> No polluter is allowed to emit GHGs without an allowance. Before apportioning the allowances, the state keeps four percent of the allowances in reserve and then holds ten percent to sell in an auction where companies may buy allowances to make up for their additional emissions.<sup>241</sup> Once these allowances have been withheld, the state then calculates how many free allowances each facility is given using a complex formula that takes into account the facility's previous output.<sup>242</sup> If a facility produces fewer emissions than the amount of free allowances allotted, the facility could bank the allowances to use in years where its emissions exceed the allowances allotted by the state.<sup>243</sup> Additionally, it could sell the allowances on the secondary market to other facilities that need allowances.<sup>244</sup>

The DEIR claims that the Project will lead to a net reduction of GHGs, thereby potentially falling under its allotted allowances.<sup>245</sup> In fact, the DEIR continuously states the Project will improve air quality. However, in assessing the cumulative impacts, the DEIR then states that the reductions in GHG emissions will then be reintroduced to the AB 32 Cap and Trade Allowance Program.<sup>246</sup> This could mean that Tesoro is banking these allowances under the cap and trade program. Alternatively, Tesoro could sell its excess allowances to other facilities in the secondary market under AB 32. By doing so, the Project would simply be shifting its GHG impacts to another facility. This shifting would reduce the GHG emissions from the facility but not from the atmosphere. Therefore, whether Tesoro intends to bank or sell its allowances, the Project's GHG impacts will not be positive; at best they would be neutral. By obscuring the climate impacts of the allowance program, the DEIR becomes deceptive and inaccurately reports its GHG emissions and its impacts.

<sup>&</sup>lt;sup>238</sup> DEIR, at 1-5.

<sup>&</sup>lt;sup>239</sup> *Id.* at 5-26.

<sup>&</sup>lt;sup>240</sup> Cal. Code Regs., tit., 17 § 95841.

<sup>&</sup>lt;sup>241</sup> Cal. Code Regs., tit., 17 § 95870 (a)–(b).

<sup>&</sup>lt;sup>242</sup> Cal. Code Regs., tit., 17 § 95891(b).

<sup>&</sup>lt;sup>243</sup> Cal. Code Regs., tit., 17 § 95922(a).

<sup>&</sup>lt;sup>244</sup> ENVIRONMENTAL DEFENSE FUND, CARBON MARKET CALIFORNIA 11, <u>http://www.edf.org/sites/default/files/content/ca-cap-and-trade\_1yr\_22\_web.pdf</u>.

<sup>&</sup>lt;sup>245</sup> DEIR, at 5-26.

<sup>&</sup>lt;sup>246</sup> *Id.* at 5-26, Table 5.2-8.

#### Although Information is Available, the DEIR Fails to Include Life Cycle c. **GHG Emissions from the Project.**

Although the South Coast Air Quality Management District ("SCAQMD") requires life cycle analysis when information is available, the DEIR fails to provide a life cycle analysis of the GHG impacts from extracting and burning the oil related to this Project. According to the DEIR, the Project would result in a "net GHG emission reduction" of approximately 66,139 metric tons per year, mainly due to the closure of the FCCU unit in Wilmington.<sup>247</sup> However, this calculation of GHG emissions fails to include the life cycle emissions of the crude oil processed in the refinery. Thus the DEIR erroneously concludes that there are no significant GHG impacts.<sup>248</sup>

The SCAQMD created a threshold of significance in order to determine when GHG emissions from a project become significant. When acting as lead agency for industrial projects, SCAOMD relies on a threshold of 10,000 metrics tons per year over existing conditions.<sup>249</sup> In adopting this interim threshold, the SCAQMD board mandated that in "determining whether or not GHG emissions from affected projects are significant, project emissions will include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation."<sup>250</sup> While the DEIR relies on SCAQMD's threshold of significance, the document entirely ignores the need to include life cycle emissions during operation when determining whether GHG impacts may be significant.

The DEIR does not provide a rationale for excluding life cycle emissions analysis in the GHG impact. As evidenced in the DEIR and Tesoro's investment reports, Tesoro has extensive knowledge of Bakken crude oil and its total import for processing in the Refinery.<sup>251</sup> Tesoro plans to bring Bakken crude through Washington to Los Angeles.<sup>252</sup> Tesoro is also purchasing crude oil storage and transport facilities *within* the Bakken extraction region, specifically to bring to West Coast refineries.<sup>253</sup> Furthermore, Tesoro recently announced its plans for *added* capacity to pump 65,000 bpd of crude oil out of the Bakken oil field, and to store and transport this crude for West Coast use.<sup>254</sup> Extensive studies have been conducted regarding GHG emissions

<sup>&</sup>lt;sup>247</sup> *Id.* at 5-26.

<sup>&</sup>lt;sup>248</sup> *Id.* at 5-26.

<sup>&</sup>lt;sup>249</sup> SCAQMD Board Approval of Interim GHG Threshold, 5, http://www.aqmd.gov/docs/defaultsource/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significancethresholds/ghgboardsynopsis.pdf?sfvrsn=2).

<sup>&</sup>lt;sup>251</sup> May Technical Report, § II(B).

<sup>&</sup>lt;sup>252</sup> May Technical Report, § II(B).

<sup>&</sup>lt;sup>253</sup> Elizabeth Alford, *Tesoro Buys Bakken Midstream Assets*, BAKKEN SHALE, December 22, 2105, http://bakkenshale.com/bsp-news/news/tesoro-buys-bakken-midstream-assets.

<sup>&</sup>lt;sup>254</sup> Jessica Holdman, *Tesoro plans to purchase Bakken pipeline, storage*, BISMARCK TRIBUNE, Dec. 17, 2015, http://tsocorp.com/customers-and-suppliers/wholesale/terminals/ (Acquisitions include the 97-mile BakkenLink crude oil pipeline, which connects to several third-party gathering systems, a 28-mile gathering system in the core of the Bakken, "where most of the drilling in today's low price environment is being done," a 154,000 bpd rail loading and a 657,000 bbl storage facility in Fryburg.)

associated with extraction and transport of Bakken crude oil.<sup>255</sup> Additional data has also been collected specific to Bakken extraction impacts, including studies by NOAA, showing significantly higher methane leakages of field gases, and reports in the scientific journal, *Nature*.<sup>256</sup> Since the data is available to include in the DEIR, the life cycle emissions of these crude oils should be identified and included in the DEIR for Tesoro's LARIC Project. As described above, the extraction of the crude in the region must be evaluated as a direct consequence of this Project. Tesoro's activities in the Bakken region do not stay in North Dakota, but are inextricably part of the same Project, and have local and global impacts, including impacts in Los Angeles due to adding to the burden of climate change, and other impacts.<sup>257</sup> Without these emissions, the DEIR ignores SCAQMD's guidance in determining whether the project falls under the threshold of significance for GHG.

Furthermore, the inclusion of life cycle emissions must also extend to the foreseeable processing of Canadian tar sands under SCAQMD's mandate. As is the case with Bakken crude oil, Canadian tar sands extraction and transport is a GHG-intensive process, which should be included in the DEIR.<sup>258</sup> According to a 2015 study, introduction of Canadian tar sands was found to cause about 20% more GHGs than domestic crude oil.<sup>259</sup> Because information indicating the life cycle emissions attributable to the Project is relevant for the significance threshold calculation, the DEIR errs in failing to include those emissions. Without the inclusion of these GHG emissions, the DEIR is inadequate because it cannot be determined whether the Project falls under the threshold of significance. The DEIR then errs in concluding that GHG emissions are not significant.

In addition, as the DEIR mentions, AB 32 requires that all refineries include the GHG emissions from the burning of the oils they process in their environmental impact reports.<sup>260</sup> SCAQMD's life cycle emission mandate would also require including the GHG emissions from burning of the oil even if AB 32 did not require it. The DEIR appears to include these emissions in its final calculation of GHG emissions in Table 5.2-6 and Table 5.2-8. However, it is unclear from the discussion in the DEIR or any of its subsequent appendices, exactly how the DEIR arrived at these numbers. Without data substantiating these numbers, the DEIR fails as an informational tool for the public.

<sup>&</sup>lt;sup>255</sup> *See* Energy Intensity and Greenhouse Gas Emissions from Crude Oil Production in the Bakken Formation: Input Data and Analysis Methods, Argonne National Laboratory, September 2015, https://greet.es.anl.gov/publication-bakken-oil.

<sup>&</sup>lt;sup>256</sup> See National Oceanic and Atmospheric Administration, North Dakota's Bakken oil and gas field leaking 275,000 tons of methane per year, May 10, 2016, <u>http://www.noaa.gov/north-dakota's-bakken-oil-and-gas-field-leaking-275000-tons-methane-year</u>; see also Jeff Tollefson, Oil boom raises burning issues, 495 NATURE 290,

http://www.nature.com/polopoly\_fs/1.12632!/menu/main/topColumns/topLeftColumn/pdf/495290a.pdf.<sup>257</sup> May Technical Report, § IV(C)(1).

<sup>&</sup>lt;sup>258</sup> May Technical Report, IV(C)(1). <sup>258</sup> May Technical Report, IV(C)(2).

<sup>&</sup>lt;sup>259</sup> May Technical Report, IV(C)(2).

<sup>&</sup>lt;sup>260</sup> DEID 4 5 26

<sup>&</sup>lt;sup>260</sup> DEIR, at 5-26.

### d. By Relegating Discussion to Cumulative Impacts, the DEIR Fails to Analyze the Direct and Indirect Impacts of All GHG Emissions from the Project.

The DEIR incorrectly concludes that because GHG emissions will both increase and decrease, but in its analysis, decrease overall, and because GHGs have global effect, GHG emissions are to be analyzed only as cumulative impacts. The DEIR relies on the SCAQMD's significance threshold concludes that the cumulative impacts are insignificant.

CEQA requires an EIR to consider both direct and indirect impacts of a proposed project. 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."<sup>261</sup> As described above, it is foreseeable that the crude stock will change. The DEIR fails to analyze the ways in which the change could impact GHG emissions. Increased emissions from the Project include, but are not limited to, GHG emissions from increased use of Bakken, as compared to the current baseline feedstock.<sup>262</sup>

### E. The Project Lacks An Adequate Analysis of Hazards.

### 1. The DEIR fails to adequately disclose, analyze, and mitigate project-related hazards and public safety risks.

An EIR must provide sufficient information to evaluate all potentially significant impacts of a project, including public safety risks due to accidents, and it must state sufficient information to determine "how adverse [an] adverse impact will be."<sup>263</sup> 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. In this respect, the DEIR is inadequate and fails to meet CEQA requirements.

### 2. The DEIR does not disclose the LAR Project's baseline crude slate mixes.

The DEIR does not adequately disclose the LAR Project's current or historic crude slate mixes. Rather than providing detailed information, including volume, geographic origin, transportation method, sulfur content, API gravity, TAN, metal content, and other important data about the crudes within the DEIR, Tesoro states that its crude oil slate decisions will not change. Without knowing the composition of its current and historic crude slates, each with their own specific chemical and physical compositions, the Project does not allow for an intelligent or accurate hazards analysis.<sup>264</sup>

<sup>&</sup>lt;sup>261</sup> CEQA Guidelines, § 15358 (a)(2).

<sup>&</sup>lt;sup>262</sup> See Richmond, 184 Cal.App.4th at p. 89 (holding that failure to identify the possibility that the project would allow the refinery to change its crude stock raises concerns about appropriate baseline against which to compare impacts).

<sup>&</sup>lt;sup>263</sup> See Santiago County Water District v. County of Orange (1981) 118 Cal.App.3d 818, 831.

<sup>&</sup>lt;sup>264</sup> Fox Neg. Dec. Report, at 19.

### **3.** A switch to cost-advantaged crudes will introduce new hazards that were not discussed in the DEIR.

The DEIR states that the Project will not impact the types of crudes used at the refinery, yet plans to transition from the dwindling ANS and California crudes to more affordable North American mid-continent crudes, such as Bakken and Canadian crudes.<sup>265</sup> While these more abundant, cost-advantaged crudes can be blended to approximate ANS yields with the same API gravity, the DEIR does not take into account that these cost-advantaged crudes have different chemical and physical compositions that will increase the risk of hazards and impact refinery safety.<sup>266</sup> Even if Tesoro blends crudes to approximate ANS yields, the switch would still introduce new hazards not discussed in the DEIR.<sup>267</sup>

A switch to lower quality feedstock, including Bakken and Canadian crudes, necessarily implicates a greater risk of corrosion of refinery components.<sup>268</sup> Refining Bakken, in some instances, can lead to dangerous levels of hydrogen sulfide (H2S) gas, which is acutely hazardous and corrosive.<sup>269</sup> Because of this, refineries that process shale oil often must use scavenging agents, but these also lead to corrosion.<sup>270</sup> Canadian tar sands crudes also are highly corrosive because of their high sulfur content and high TANs, leading to the same hazards, and also contain many corrosive contaminants that must be removed during the refining process.<sup>271</sup> 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.<sup>272</sup> By denying any shift to lower quality oil feedstocks, the DEIR fails to adequately discuss the resulting significant impacts of refining these more hazardous materials at the LAR.<sup>273</sup> 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.

Additionally, Bakken crude is extremely volatile due to its large concentration of natural gas liquids ("NGLs"), which include methane, propane, butane, ethane, and pentane.<sup>274</sup> These components are susceptible to volatize, burn, or explode when they come into contact with sparks in an accident, and can easily form fireballs and BLEVES.<sup>275</sup> Thus, the introduction of Bakken crude to the LARIC would greatly increase explosion hazards. These explosions can be fatal, as was the case at Lac-Megantic, Quebec in 2013, when a freight train transporting Bakken

- <sup>271</sup> May Technical Report, § IV(B).
- <sup>272</sup> May Technical Report, § IV(A)(4).

<sup>&</sup>lt;sup>265</sup> *See* DEIR, at 4-2

<sup>&</sup>lt;sup>266</sup> Fox Neg. Dec. Report at 5.

<sup>&</sup>lt;sup>267</sup> Id.

<sup>&</sup>lt;sup>268</sup> May Technical Report, §§ IV(A)-(B).

<sup>&</sup>lt;sup>269</sup> May Technical Report, § IV(A)(4).

<sup>&</sup>lt;sup>270</sup> May Technical Report, § IV(A)(4).

<sup>&</sup>lt;sup>273</sup> DEIR, at 2-20: "The changes being made as a result of this project will not allow the refinery to process a different slate of crude oil. As such, there will be no crude oil changes that make the refinery more prone to upset or potential leaks of hazardous or toxic substances . . . "

<sup>&</sup>lt;sup>274</sup> Fox Neg. Dec. Report, at 17-18.

<sup>&</sup>lt;sup>275</sup> *Id.* at 18.

crude derailed, killing many people.<sup>276</sup> Additional accidents associated with the transport of Bakken crude have occurred in North Dakota and Alabama. Because of the immense flammability risk, the US Department of Transportation Pipeline and Hazardous Material Safety Administration requires additional testing and characterization for Bakken crudes, as well as additional handling procedures, but these measures were left out of DEIR analysis.<sup>277</sup>

Because of the risks associated with lower-quality feedstocks, the types of crudes that will be processed and refined at the LAR need to be adequately disclosed.

# 4. The waxiness of Bakken crude and the associated dispersants were not evaluated as a hazard in the DEIR.

Bakken crude oil, which will make up a large portion of the LAR's feedstock, causes transfer problems in marine vessels and refinery storage tanks due to its paraffinic content.<sup>278</sup> Due to this waxiness, multiple chemical dispersants must be used for smooth transfer and full throughput.<sup>279</sup> These chemical dispersants should have been identified in the DEIR to assess the impacts and hazards of their use.<sup>280</sup>

### 5. Fire hazards are significant, but many aspects of fire hazards were left out of the DEIR.

The DEIR conducted a fire hazard analysis to determine whether accidents involving the modified storage tanks would result in significant impacts, but this analysis was inadequate. The DEIR selected a heat flux significance threshold of 5 kw/m<sup>2</sup>, at which point one would experience a serious injury from thermal radiation.<sup>281</sup> While the DEIR analyzed heat flux impacts, it failed to analyze other significant impacts of a fire, including explosions (BLEVES) and inhalation of smoke and toxics. Additionally, the DEIR did not evaluate fire hazards for onsite receptors, even though refinery workers would be the most exposed to risk. According to Dr. Fox's report, any person located between the accident site up to the reported impact distance would experience a significant impact. At a heat flux of 5 kW/m2, a 10% injury would be experienced, which is significant.<sup>282</sup>

Also, fire hazards from the new crude oil tanks would be significant. In an accident, the amount of crude oil involved would increase, because of their increased storage capacities and throughput. If an accident were to occur while the tanks were being filled, more than just the capacity of one tank could be spilled.<sup>283</sup> The DEIR, in its worst-case scenario analysis, however, only considers the maximum capacity of each tank, and thus, underestimates the associated fire impacts. For instance, multiple tanks could catch on fire at once, due to their close proximity to

<sup>&</sup>lt;sup>276</sup> May Technical Report, § IV(A)(3).

<sup>&</sup>lt;sup>277</sup> May Technical Report, § IV(A)(3).

<sup>&</sup>lt;sup>278</sup> May Technical Report, § IV(A)(1).

<sup>&</sup>lt;sup>279</sup> May Technical Report, § IV(A)(1).

<sup>&</sup>lt;sup>280</sup> May Technical Report, § IV(A)(1).

 $<sup>^{281}</sup>$  Fox Neg. Dec. Report at 48-49.

<sup>&</sup>lt;sup>282</sup> Id.

<sup>&</sup>lt;sup>283</sup> *Id.* at 49-50.

one another. These types of accidents are realistic and have occurred before. In 1990, a fire at the Stapleton IAP Denver, CO, tank farm burned multiple tanks for over fifty hours, and at the Pennzoil Refinery in Pennsylvania in 1995, burning liquid from one tank caused the ignition of flammable vapors in another tank.<sup>284</sup>

Assuming the two 300,000 bbl tanks were involved in a pool fire, the blast zone would encompass Alameda Street, outside the Wilmington Operations boundary, and reach a public highway. Additionally, because of the close proximity of the tanks, a pool fire from one or both of these tanks could spread to others.<sup>285</sup> This, however, would not necessarily be the worst-case scenario – if the tanks were filled with Bakken crude oil, it is possible that a flash fire, rather than a pool fire could occur, which would be much more significant.<sup>286</sup>

Additionally, the worst-case scenario calculations for the tanks assumed that all of the tanks would be filled with the same petroleum product. This, however, is misguided, since the tanks could be filled with different products. The hazard calculations then are inaccurate, as the distance to the chosen heat flux threshold depends on many factors, including the qualities of the specific crudes involved.<sup>287</sup> This piece was excluded. Lastly, the fire hazard analysis for the tanks is based on a wind speed of 20 mi/hour, however, in Long Beach, wind speeds can be much higher.<sup>288</sup> This could enable vapor clouds to travel long distances where they could then ignite.<sup>289</sup>

#### 6. Fire hazards from pipeline accidents were not considered.

The DEIR states that the purpose of the Project is to increase the rate of unloading from ships. To accommodate this increase, the Project seeks to replace a 12-inch diameter pipeline with a 24-inch diameter pipeline, which would allow the loading rate to increase from 5,000 bbl/hr to 15,000 bbl/hr.<sup>290</sup> Thus, with a larger pipeline, an accidental spill would be significantly larger, and vapor clouds formed from such a spill could travel long distances before igniting, causing more damage than just the spill.<sup>291</sup> While a pipeline accident could occur anywhere along its route, it would be most likely to occur near the Tank Farm. An accident at the Tank Farm resulting in a fire could have significant impacts on nearby residents, as the closest resident is located 2,000 feet southwest of the Wilmington operations.<sup>292</sup>

<sup>&</sup>lt;sup>284</sup> *Id.* at 50.

 $<sup>^{285}</sup>$  *Id.* at 51.

<sup>&</sup>lt;sup>286</sup> *Id*.

<sup>&</sup>lt;sup>287</sup> *Id.* at 52.

<sup>&</sup>lt;sup>288</sup> See *Id.* and DEIR Appendix C at C-16.

<sup>&</sup>lt;sup>289</sup> Fox Neg. Dec. Report at 42.

<sup>&</sup>lt;sup>290</sup> DEIR at 4-26.

<sup>&</sup>lt;sup>291</sup> Fox Neg. Dec. Report at 53-54.

<sup>&</sup>lt;sup>292</sup> Id.

## 7. Ship accidents should also have been evaluated, as well as smoke and inhalation hazards.

While the DEIR states that the throughput at the Marine Terminal would not increase, throughput could increase and ship accidents should have been evaluated. Further, smoke and inhalation hazards should have been assessed, as fires release toxic air contaminants and smoke that can cause significant health impacts.

# 8. The DEIR fails to adequately discuss flaring emissions, which will increase levels of particulate matter in the air.

The DEIR should not have omitted baseline emissions data for flaring events. Instead of assuming that flaring events pose insignificant hazard risks because of their rarity, the DEIR should have provided flaring data based on their Potentials to Emit.<sup>293</sup> Data from the draft Title V engineering calculations show that the LAR flares would have huge Potentials to Emit, at thousands of pounds per hour, due to the LAR's proposed connections of refinery processes to pressure relief devices or pressure safety valves that would be vented to existing refinery flares.<sup>294</sup> This is concerning because oil refineries, including Tesoro, are major sources of flaring emissions in the Los Angeles Basin, and contribute to increased particulate matter in the air, including PM10 and PM2.5.<sup>295</sup>

### 9. LPG rail loading and unloading will increase risks.

The DEIR ignores the potentially catastrophic consequences of an accidental release of LPG from a tank car by focusing on the alleged improbability of one occurring.<sup>296</sup> Although the DEIR lists flash fires, torch fires, pool fires, and explosions, including BLEVES, it nevertheless determines that these potential impacts are not significant.<sup>297</sup>

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.<sup>298</sup> 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 highly flammable LPG poses such a hazard, as the proposed plan would increase the Wilmington facility's receiving capacity by about 4,000 BPD, or ten additional rail cars per

<sup>&</sup>lt;sup>293</sup> May Technical Report, V(A)(2); *see also* DEIR, at 4-52: "The project is not expected to increase flaring at the Refinery . . . "while the number of pressure relief valves tied into the flare systems will increase with new installation of new or modified processing unites, this will not cause an increase in flaring."

 $<sup>^{294}</sup>$  Id.

 $<sup>^{295}</sup>$  *Id*.

<sup>&</sup>lt;sup>296</sup> DEIR, at 4-58.

<sup>&</sup>lt;sup>297</sup> Id.

<sup>&</sup>lt;sup>298</sup> CEQA Guidelines, § 15382.

day.<sup>299</sup> It is remarkable that the DEIR does not even address first response or other emergency precautions in regards to controlling such accidental releases.

Further, the DEIR fails to adequately assess the increased risk that LPG railcars will pose on California's environmental justice communities. Communities in Wilmington, which already suffer disparate impacts, often face a total environmental health hazard that is in the worst twenty percent among all communities statewide, along with communities in Carson.<sup>300</sup> Further, most Wilmington residents face the risk of a direct impact from an oil train derailment, explosion, and fire, as most of live within the blast zone.<sup>301</sup> The DEIR must be revised to include such an analysis integral to the safety of community members.

### F. The DEIR Fails to Identify or Mitigate Significant Impacts Resulting from the Project's Change in Crude Slate.

The DEIR fails to meet one of CEQA's most pivotal purposes by neglecting to assess the significant impacts associated with the Project's proposed modifications that will enable the Refinery to import, store, export, and refine advantaged crudes. It is indisputable that the quality and characteristics of crude slate processed at a refinery directly impact byproducts and contamination discharged. Yet the DEIR ignores both this fact and evidence indicating that the Refinery may change its crude slate. Significant impacts from a change in crude slate to incorporate Bakken and tar sands crude include increased energy consumption, air emissions, toxic air contaminants, flaring, and catastrophic incident risks. The DEIR's failure to account for a crude slate change in assessing impacts is particularly deficient in light of the Refinery's location in one of the most polluted air sheds in the nation. Any environmental review document for the Project must analyze the full scope of these impacts.

In order to effectuate the fundamental purpose of CEQA, it is axiomatic that an EIR must meaningfully inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made."<sup>302</sup> 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, and identify necessary mitigation measures prior to project approval.<sup>303</sup> Accordingly, an EIR must include changes in crude processed as part of environmental and impacts analysis.<sup>304</sup>

<sup>&</sup>lt;sup>299</sup> DEIR, at 1-18.

<sup>&</sup>lt;sup>300</sup> Matt Krogh, Greg Karras, Tyson Waldo & Eddie Scher, Crude Injustice on the Rails: Race and the Disparate Risk from Oil Trains in California 22 (2015).

 $<sup>^{301} \</sup>hat{I} d.$ 

<sup>&</sup>lt;sup>302</sup> 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).

<sup>&</sup>lt;sup>303</sup> 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.

<sup>&</sup>lt;sup>304</sup> See Richmond, 184 Cal.App.4th at 89.

CEQA provides, and the courts have instructed, that an environmental review document must address the impacts of reasonably foreseeable activities related to a proposed project.<sup>305</sup> A lead agency has a duty to "use its best efforts to find out and disclose all that it reasonably can.<sup>306</sup> It is irrelevant whether it definitively has been established that a change in crude slate will occur. Rather, the duty to investigate and disclose significant impacts from a project is triggered when it is reasonably foreseeable that impacts may result from a project, otherwise, the environmental review document is legally defective.<sup>307</sup>

Here, there is ample evidence indicating that the Project enables the Refinery to receive, store, and process a new crude slate consisting of Bakken and also likely tar sands crude oil.<sup>308</sup> Accordingly, the SCAOMD was required, but failed to, evaluate the significant impacts of the crude slate change.

The impacts to air quality and other safety and environmental harms caused by a refinery's use of Bakken and tar sands crude are outlined in May's Technical Report.<sup>309</sup> The Report explains that incorporating Bakken into the Refinery has many significant impacts that must be evaluated in the DEIR, "including problems with processing waxy Bakken crude, corrosion problems, specific problems when blending Bakken crude with heavy crude oils, higher volatility that has caused explosions and fires, and higher levels of toxic components such as benzene."<sup>310</sup> "Bakken crude oil has been demonstrated as fatally volatile and explosive, as in the case of the tragic explosions at Lac Megantic in Canada, and in other instances."<sup>311</sup> Most recently, a crude oil railcar bearing Bakken crude oil exploded in Oregon along the Columbia River gorge, dangerously close to elementary school and homes.<sup>312</sup>

May also quoted a report by Dr. Phyllis J. Fox showing significant amounts of benzene in shale crudes including both Bakken and Candian crudes, which also outlined methods for assessing these Toxic Air Contaminants in the crude oil : "The pollutants in the diluent blended with these DilBit crudes and in the light sweet shale crudes include significant amounts of hazardous air pollutants, such as benzene, a potent carcinogen."<sup>313</sup>

May's Technical Report also states that in some instances "Bakken crude refining can also increase levels of acutely hazardous and corrosive Hydrogen Sulfide in the refinery[,]" a

<sup>&</sup>lt;sup>305</sup> CEOA Guidelines, § 15378 (a) (a "[p]roject means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment[.] "); *see Laurel Heights I*, 47 Cal.3d at 398-399. <sup>306</sup> CEQA Guidelines, § 15144.

<sup>&</sup>lt;sup>307</sup> Vinevard Area Citizens for Responsible Growth. Inc. v. Citv of Racho Cordova (2007) 40 Cal.4th 412 ("The ultimate question under CEQA...is not whether an EIR establishes likely sources of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project."). <sup>308</sup> See May Technical Report, §§ II(D), VI(A).

<sup>&</sup>lt;sup>309</sup> See May Technical Report, §§ IV, VI(1).

<sup>&</sup>lt;sup>310</sup> May Technical Report, § IV.

<sup>&</sup>lt;sup>311</sup> May Technical Report, § IV(A)(3).

<sup>&</sup>lt;sup>312</sup> May Technical Report, § IV(A)(3).

<sup>&</sup>lt;sup>313</sup> May Technical Report, n.56.

known "particularly aggressive corrosive agent."<sup>314</sup> The same is true of tar sands crude oil.<sup>315</sup> Indeed, sulfur corrosion was the cause of a severe explosion at the Chevron Richmond Refinery.<sup>316</sup> These issues must be evaluated through a full EIR to prevent severe safety risks associated with crude slate changes.

The Project is also likely to result in significant import and processing of Canadian tar sands crude oil. Because of its higher carbon content and need to remove these contaminants, tar sands crude requires significantly more energy to refine, leading to both direct and indirect increased emissions of greenhouse gases and ozone-precursors. These emissions have significant direct, indirect, and cumulative impacts on air pollution and climate.<sup>317</sup> Tar sands crude also requires additional "cracking, coking, and [] use of hydrogen, all of which require more energy and increase criteria and toxic pollutant emissions."<sup>318</sup> Evaluating the potentially significant increase in criteria, toxic, and GHG emissions due to introduction of Bakken and tar sands crude is required.

Additional emissions that may be caused "from transport, piping, tank loading, and in refinery operations from volatile diluents used with expanded tar sands crudes have not been identified, and should be, with emissions quantified."<sup>319</sup> May's Technical Report lists "volatile and toxic compounds such as BTEX VOCs (Benzene, Toluene, Ethylbenzene, and Xylene)[,]" which are ozone-precursors, explosive, and toxic air contaminants that are carcinogenic.<sup>320</sup>

As detailed throughout the May Technical Comments, other significant impacts, such as flaring and major accident risks, are also heavily impacted by the quality of crude oil processed at the facility.

For these reasons, the DEIR fundamentally violates CEQA's requirements by failing to examine and disclose the significant impacts that may result from the Project's enabling of a crude slate change. The DEIR must provide an inventory and evaluation of specific crude oils previously processed at the Wilmington and Carson refineries and those that may foreseeable be processed at the integrated Refinery in the future, and evaluate the significant environmental impacts associated with such a change.

<sup>&</sup>lt;sup>314</sup> May Technical Report, § IV(A)(4).

<sup>&</sup>lt;sup>315</sup> May Technical Report, § IV(C)(2).

<sup>&</sup>lt;sup>316</sup> May Technical Report, §§ III(D), IV(A)(4).

<sup>&</sup>lt;sup>317</sup> May Technical Report, § IV(C); *see also* Karras, Greg, "Combustion Emissions from Refining Lower Quality Oil: What is the Global Warming Potential," *Environ. Sci. Technol.* 44, 9584-9589 (2010), for an analysis of the significant increases in GHG emissions caused by refining dirtier, heavier crudes from increased energy intensity needed to refine these oils and from direct emissions from the refining process. <sup>318</sup> May Technical Report, § IV(B).

<sup>&</sup>lt;sup>319</sup> May Technical Report, § IV(B).

<sup>&</sup>lt;sup>320</sup> May Technical Report, § IV(B).

### Conclusion

We appreciate your consideration of these comments. Please do not hesitate to contact us if you have questions about these comments.

Sincerely,

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