



August 27, 2009

Contra Costa County  
Department of Conservation and Development  
651 Pine Street, 4<sup>th</sup> Floor – North Wing  
Martinez, CA 94553  
Attn: Ruben Hernandez

**Re: Contra Costa Pipeline Project Draft EIR – County File No. LP072009**

**INTRODUCTION**

Communities for a Better Environment (“CBE”) submits the following comments on the Praxair Pipeline Draft Environmental Impact Report (“DEIR”).<sup>1</sup> CBE is a 501(c)(3) environmental health and justice organization in California. CBE is a membership organization with thousands of members throughout California, including hundreds who work, live, and breath in Contra Costa County (“County”). CBE seeks to protect and enhance the environment and public health by reducing air and water pollution and minimizing hazards in California’s urban areas.

Praxair proposes a 21.3-mile hydrogen pipeline to run from Chevron’s Richmond refinery to the Shell refinery in Martinez and ConocoPhillips’ Rodeo refinery, and a 2.2-mile natural gas pipeline replacement for the Chevron refinery (“Project”).<sup>2</sup> Meanwhile, both Chevron and ConocoPhillips separately proposed projects to build massive hydrogen plants with significant excess capacity, and related construction and modifications, which would feed into the proposed hydrogen pipeline.<sup>3</sup> Air Products similarly proposes a pipeline, but one that would link the Tesoro, Valero and Shell refineries by hydrogen pipeline.<sup>4</sup> Since Shell will be connected with both pipelines, this whole project would connect, for the first time, all five bay area refineries by

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<sup>1</sup> Appended as Attachments 2, 3 and 4 are the Reports submitted on this proposed Project by CBE experts, respectively, Greg Karras, Anna Lee, and Julia May. A consolidated list of CBE attachments is appended as Attachment 1.

<sup>2</sup> DEIR 3-1.

<sup>3</sup> See Chevron Hydrogen Renewal Project (“HRP”) Consolidated EIR, 4.18-24; see also Expert Report of Greg Karras ¶ 31 (hereinafter “Karras ¶ 31”), Bloch Attachment 2; see also Appeal of CBD and CBE of ConocoPhillips Clean Fuels Expansion Project (“CFEP”), Bloch Attachment 5, pp. 2-3.

<sup>4</sup> See Notice of Preparation for Air Products Hydrogen Pipeline, Bloch Attachment 6.

hydrogen pipeline.<sup>5</sup> The impacts of this endeavor must be evaluated under CEQA.<sup>6</sup> In particular, the Project could cause significant environmental impacts related to criteria air pollutant emissions, greenhouse gas emissions, flaring, water quality, and increased hazard risks.<sup>7</sup>

Since the definition of “project” under CEQA includes project implementation, the DEIR is required to disclose and analyze all of the potentially significant impacts of implementing the Praxair Pipeline project, and mitigate significant impacts.<sup>8</sup> But the DEIR failed to provide available information on the impacts of implementation, even as presented in the DEIR’s own project description. Moreover, the project description failed to specify that the pipeline enables those refineries to process energy-intensive, highly polluting lower quality oil.<sup>9</sup> The impacts of implementing this project, including the impacts of using lower quality oil, are absent from analysis rendering the EIR legally inadequate as an informational document.<sup>10</sup>

Several other projects or phases are also involved in enabling this larger endeavor, such as the Chevron Hydrogen Renewal Project, ConocoPhillips Clean Fuels Project, and Air Products Hydrogen Pipeline Project. Each phase is being considered separately, or being piecemealed, thereby submerging environmental considerations such that each project looks relatively minor.<sup>11</sup> The County should recirculate the EIR after these projects are analyzed as part of the whole.<sup>12</sup>

The DEIR also advanced a cumulative impacts and alternatives analyses that were inconsistent with CEQA’s purposes.<sup>13</sup> While the DEIR purports to have analyzed the project’s cumulative impacts in light of past, present and reasonably foreseeable projects with the same kinds of impacts, no information is presented about these projects at all. One section of the DEIR simply lists the names of 35 projects that have supposedly been considered as cumulative impacts.<sup>14</sup> Other subsections called “cumulative impacts” within another chapter conclude that impacts have been mitigated without listing specific projects or referencing any data.<sup>15</sup> These sections must be revised. The alternatives analysis fails to consider any reduced project alternative, contains a flawed no-project analysis, and dismisses a feasible superior project alternative.

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<sup>5</sup> Karras ¶ 22.

<sup>6</sup> See *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1224

<sup>7</sup> Karras ¶ 37.

Guidelines §§ 15063(a)(1), 15126.2(d).<sup>8</sup>

<sup>9</sup> Karras ¶ 31.

<sup>10</sup> 14 Cal. Code Regs. (hereinafter “Guidelines”) §§ 15063(a)(1), 15126.2(d).

<sup>11</sup> *Bozung v. Local Agency Formation Comm’n. of Ventura County* (1975) 13 Cal.3d 263, 283-284.

<sup>12</sup> CEQA requires the lead agency to recirculate an EIR when significant new information is added after the Draft EIR has been noticed and public comment has commenced but before certification. See Pub. Res. Code (hereinafter “CEQA”) § 21092.1. “As used in this section, the term “information” can include changes in the project or environmental setting as well as additional data or other information.” Guidelines § 15088.5(a), see also *Laurel Heights Improvement Assn. of San Francisco v. Regents of the Univ. of California* (1993) 6 Cal. 4<sup>th</sup> 1112.

<sup>13</sup> *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 72.

<sup>14</sup> DEIR 5-5 – 5-9.

<sup>15</sup> See DEIR Chapter 4, generally.

Finally, the DEIR must address direct and indirect significant impacts that the DEIR overlooked or did not evaluate adequately. For instance, the EIR fails to adequately address potentially significant water quality and seismic impacts. It also fails to consider the impacts of project implementation including the hydrogen used from the pipeline and the socio-economic impacts of increased hydrogen use. This is important as a general matter, but it is even more so if the expanded hydrogen supply is used to refine lower-quality oil.<sup>16</sup>

The EIR must be revised to disclose the full impacts of this Project to ensure that the surrounding communities are not disproportionately burdened, to fulfill CEQA's goal as an informational statute, and to ensure that any decision considers the statewide implications of changing the oil refining infrastructure to refine lower-quality oil.

### **MISLEADING PROJECT DESCRIPTION**

First, the DEIR suffers from a sorely inadequate project description, which must be revised. A project under CEQA is “the whole of an action . . . which may be subject to several discretionary approvals by government agencies.”<sup>17</sup> “All phases of project planning, implementation,<sup>18</sup> and operation” must be addressed, including the project “characteristics . . . which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.”<sup>19</sup> As stated in the DEIR, “[t]he purpose of the Project is to provide a reliable source of hydrogen to local refineries,”<sup>20</sup> and “[p]roject *implementation* would provide or enhance reliability of the hydrogen supply to local refineries, thereby improving the reliability and availability of cleaner fuels for both Contra Costa County and the State of California.”<sup>21</sup> Thus, based on the DEIR's own Project description, the DEIR should have analyzed the impacts of the use of the hydrogen provided by the pipelines, which it does not. In addition, the projects related to achieving this goal are also part of the project and must be analyzed and as such to avoid piecemealing.

Moreover, the evidence overwhelmingly suggests that more than simply “provid(ing) or enhanc(ing) reliability of the hydrogen supply to local refineries, thereby improving the reliability and availability of cleaner fuels for both Contra Costa County and the State of California,”<sup>22</sup> the Project is more specifically designed to create a hydrogen network among all five bay area refineries and it is to enable the continuation and acceleration of an existing trend toward more hydrogen-intensive processing of heavier and more contaminated oil.”<sup>23</sup> The EIR must fully analyze these impacts. “An accurate, stable and finite project description is the *sine*

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<sup>16</sup> Karras ¶ 31.

<sup>17</sup> Guidelines §§ 15378(a), 15378(c).

<sup>18</sup> DEIR 2-2 (“implementation would provide or enhance reliability of the hydrogen supply to local refineries, thereby improving the reliability and availability of cleaner fuels for both Contra Costa County and the State of California.”).

<sup>19</sup> Guidelines §§ 15063(a)(1), 15126.2(d).

<sup>20</sup> DEIR 3-1.

<sup>21</sup> DEIR 2-2 (emphasis added).

<sup>22</sup> DEIR 3-1.

<sup>23</sup> Karras ¶ 56; Technical Comments of Anna Y. Lee p. 1 (hereinafter “Lee p. \_\_\_”), Bloch Attachment 3.

*qua non* of an informative and legally adequate EIR.’ However, ‘a curtailed, enigmatic or unstable project description draws a red herring across the path of public input.’”<sup>24</sup>

First, it is untenable that the project’s main objective is to “[s]upply a dependable backup source of hydrogen to local refineries during hydrogen unit outages.”<sup>25</sup> <sup>26</sup> Based on available information, all three refineries have dependable backup.<sup>27</sup> Shell is served by at least three hydrogen plants<sup>28</sup> and ConocoPhillips and Chevron are both constructing hydrogen plants with excess capacity. These supplies seem sufficient for current operations.<sup>29</sup> Moreover, the Chevron refinery has a dual train hydrogen plant<sup>30</sup> so that if one goes offline due to an outage, the other will continue to operate. ConocoPhillips’ new hydrogen plant is also dual train, but nevertheless, it is permitted to operate both its existing and new hydrogen plants. The DEIR mentions the need to comply with supposed new more stringent federal and state standards<sup>31</sup> but a description of these significantly changed rules, and why they would necessitate a new infrastructure costing tens of millions of dollars is absent.<sup>32</sup> Unless the refineries plan to change their crude slate to process lower-quality oil, the refineries already presumably have the capacity produce “clean fuels”.

Second, the primary use of hydrogen in California oil refineries is to process lower quality oil.<sup>33</sup> Hydrogen is used to remove contaminants, such as sulfur, from oil and to improve fuel combustion properties, through various processes including quenching during “hydrocracking”.<sup>34</sup> This makes sense of the massive project.<sup>35</sup>

Third, there are “at least four competing proposals by hydrogen companies to connect all or some of the Bay Area refineries with a hydrogen pipeline...”<sup>36</sup> The story as described in the DEIR is illogical and incomplete.

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<sup>24</sup> *San Joaquin Raptor*, 149 Cal.App.4th at 655 (quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199, 197-98).

<sup>25</sup> DEIR 3-3.

<sup>26</sup> It is unlikely that such a massive infrastructure would be built only for occasional use during outages. See Comments of Julia May, p. 4 (hereinafter “May p. \_\_\_”), Bloch Attachment 4, (“The Project is not designed merely for occasional backup, but to continually provide the refineries with new and large volumes of hydrogen. There are no permit limits discussed in the DEIR that would limit the supply of the backup when other sources were not available. Instead, the supply would continually be available, allowing refineries to switch to heavier, higher sulfur crude oils. In reality, the Project goes far beyond any backup needs.”)

<sup>27</sup> Karras ¶ 27, 28.

<sup>28</sup> Karras ¶ 28.

<sup>29</sup> Karras ¶ 27, 22.

<sup>30</sup> Chevron DEIR 3-2.

<sup>31</sup> DEIR 6-18

<sup>32</sup> Karras ¶ 10 FN 5 (“Accounting for 9% ethanol addition to reformulated gasoline, in-state ‘clean gasoline’ production exceeds in-state gasoline sales, which are declining even before the new Low Carbon Fuel Standard takes effect.”)

<sup>33</sup> Karras ¶¶ 10, 31.

<sup>34</sup> Karras ¶¶ 7-9; see also May p. 2.

<sup>35</sup> Karras ¶ 28.

<sup>36</sup> Karras ¶ 29.

Fourth, refiners have a strong economic incentive to switch to lower quality feedstock because it is cheaper for them.<sup>37</sup> Notably, electric powerplants are prohibited from using dirtier feedstock and must move in the other direction, toward cleaner feedstock.<sup>38</sup>

Since low quality (i.e. heavier and more contaminated) oil requires more intensive processing to turn it into higher quality product (such as gasoline) expanding the capacity to process this kind of oil can increase the impacts related to this processing.<sup>39</sup> Moreover, the process of creating the additional hydrogen itself increases pollution emissions because fuel combustion provides the energy needed to make it.<sup>40</sup> And using more hydrogen increases refinery-wide energy consumption because processing lower quality oil requires more energy per barrel, which is associated with increased hydrogen production energy.<sup>41</sup> Lower quality oil refining, which hydrogen enables, increases risk of spill, fire, and explosion hazards at the refinery<sup>42</sup> and increases refinery flaring.<sup>43</sup> It must be noted that Chevron's project is specifically stated as a design to process higher sulfur crude. This switch will require increased hydrogen because the more sulfur in the oil, the more hydrogen is needed to strip that sulfur.<sup>44</sup> Because low quality oil refining is the goal and at least a foreseeable use of the project, it must be analyzed as part of the project.

Even if there was assurance that the hydrogen would not be used to enable refineries to process low quality oil, it would have to analyze the impacts of increased hydrogen demand. For instance, even Chevron's project EIR acknowledges that if the hydrogen pipeline is not constructed, the Project's Hydrogen Plant would be constrained to operating at a lower production level.<sup>45</sup> By implication, if the pipeline is constructed, Chevron's hydrogen plant will operate at a higher production level.<sup>46</sup> Additionally, use of the pipeline would result in changes in refinery equipment and operation that could increase routine combustion emissions, and affect flare gas systems and increase flaring.<sup>47</sup> Flaring could also increase if the refinery buys hydrogen instead of spending money to maintain and upgrade existing hydrogen systems.<sup>48</sup> Market manipulation affecting gas and diesel fuel markets resulting from the concentration of market power that the pipelines establish is also an issue.<sup>49</sup> These impacts, among others, must be analyzed without regard to lower-quality oil.

## PIECEMEALING

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<sup>37</sup> May p. 2.

<sup>38</sup> *Id*

<sup>39</sup> Karras ¶¶ 13, 16-21.

<sup>40</sup> Karras ¶ 14.

<sup>41</sup> Karras ¶ 16-18.

<sup>42</sup> Karras ¶ 19.

<sup>43</sup> Karras ¶ 20.

<sup>44</sup> May pp. 3, 7.

<sup>45</sup> See Chevron HRP Consolidated EIR, 4.18-24.

<sup>46</sup> Guidelines § 15064(d)(2).

<sup>47</sup> Karras ¶ 34.

<sup>48</sup> Karras ¶ 45.

<sup>49</sup> Karras ¶ 51.

The Project is part of a larger regional infrastructure project that together with the retooling and hydrogen upgrades at the other Bay Area refineries would enable the processing of heavier crude. Several refinery projects are intimately connected with the proposed hydrogen pipeline project. For instance, the ConocoPhillips project includes a new hydrocracking train. Chevron is significantly expanding its TKC hydrocracker as part of its project. Valero has announced plans for a new 100 million scf/d hydrogen plant. Multiple refinery projects, including most notably Tesoro's new delayed coker, were said to be about processing lower quality oil in a 2007 industry news report.<sup>50</sup> The legal comments regarding piecemealing will focus on Chevron's refinery project, but the rules and law apply to all of the refineries.

### **Chevron Hydrogen Renewal Project**

Since the pipeline would originate at Praxair's new hydrogen plant (a component of Chevron's hydrogen renewal project) at Chevron's Richmond refinery, it is artificial to separate them for environmental review purposes and constitutes piecemealing. Yet this is what the DEIR does.

A project is treated as a component of a larger project if (1) it is a reasonably foreseeable consequence of the initial project, and (2) the future project will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.<sup>51</sup>

Instead of analyzing whether one project was a foreseeable consequence of the other or would change the scope of the project, the DEIR opines that the pipeline project,

“is considered a separate project because it is not a crucial or functional element of the Chevron Renewal Project. The Chevron Renewal Project does not depend on the Contra Costa Pipeline Project to proceed and would be implemented with or without a pipeline being constructed by Praxair. The scope of the Chevron Renewal Project is not dependent upon, and would not change if the Contra Costa Pipeline Project would, or would not, be constructed. Conversely, if the Chevron Renewal Project is not implemented, Praxair or a different carrier could still decide to construct the Contra Costa Pipeline Project to connect the Bay Area refineries if determined to be economically feasible.”<sup>52</sup>

The DEIR recites the very reasoning rejected by the Contra Costa County Superior Court in a ruling that this very pipeline project and Chevron's project were piecemealed.<sup>53</sup> Specifically, the

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<sup>50</sup> See Karras Attachment 20.

<sup>51</sup> *Laurel Heights Improvement Assn. v. Regents of the Univ. of California* (1988) 47 Cal.3d at 396; DEIR 2-2.

<sup>52</sup> DEIR 2-2 – 2-3.

<sup>53</sup> Chevron HRP Consolidated EIR, 5-15, Bloch Attachment 7, states,

The Contra Costa Pipeline Project is not a crucial or functional element of the Chevron Renewal Project. The Chevron Renewal Project does not depend on the Contra Costa Pipeline Project in order to proceed, and would be implemented with or without a pipeline being constructed by Praxair. The scope of the remainder of the Chevron Renewal Project is not dependent upon, and would not change if the pipeline is, or is not, constructed. Rather, the Contra Costa Pipeline Project's purpose would be to serve Bay Area hydrogen consumers and producers in addition to Chevron.

court held that,<sup>54</sup> the “City failed to consider [the] Praxair Hydrogen Pipelines which are planned to transport excess hydrogen gas Praxair will be generating at its hydrogen plant.” Published cases make the same point, holding that “the relevant inquiry was not whether the activities could or would be implemented independently or are interdependent, but whether they were part of a “single, coordinated endeavor.”<sup>55</sup> The DEIR’s approach is a clear attempt to mask significant impacts of the project and is clearly illegal.

Notwithstanding the court’s opinion, the pipelines were clearly a reasonably foreseeable consequence of the Renewal Project.

The relevant question in determining among other things, foreseeability, is whether the projects “are related in (1) time, (2) physical location, and (3) the entity undertaking the action.”<sup>56</sup> Here, the pipeline and Chevron’s project have been subject to a roughly concurrent permitting process as the Project. The Chevron draft EIR was released after the Notice of Preparation for the Praxair project was released. And a hydrogen pipeline was part of the Chevron’s vision for its project at least as far back as the 2005 Notice of Preparation. “In addition, a hydrogen pipeline, external to the Refinery, will be part of the project.”<sup>57</sup>; the pipelines will both run through the Refinery property and connect to the new Hydrogen Plant at the Refinery and thus have a location nexus; and the Pipeline and Hydrogen Plant will both be constructed by Praxair.<sup>58</sup>

Moreover, the Praxair hydrogen plant is so large that to build it without a pipeline would not be economically viable. As refinery expert Phyllis Fox explained in her comments on the Chevron refinery project, which equally applies here,

Building one-third more capacity into the new Hydrogen Plant increases its capital cost by a proportionate amount. It is unlikely that Praxair would design this much excess capacity into the new Hydrogen Plant and spend \$35 million constructing new hydrogen and natural gas pipelines to support it, but for this lucrative off-site market. Praxair Land Use App., p. 1-5. The excess capacity, for example, for on-site use is approximately 10%.<sup>59</sup>

Chevron has acknowledged that it cannot utilize the full capacity of the hydrogen plant unless the pipeline is also built.<sup>60</sup> This pipeline significantly changed the scope of the Chevron project, because it enables hydrogen to be exported for processing low quality oil, and allows Chevron to import the same when it needs additional hydrogen. From this directly flows all of the impacts discussed in these comments. The Refinery Expansion including the Praxair hydrogen plant promotes the objectives of the Contra Costa County Pipeline Project by increasing the practical and economic viability of the Hydrogen Plant and pipeline, acting as a source for hydrogen

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<sup>54</sup> Slip-opinion, *CBE et al v. City of Richmond et al*, pages 5-6, May Attachment 1.

<sup>55</sup> *Tuolumne* 155 Cal.App.4th at 1224 (citations omitted); *see also Assoc. for a Cleaner Environment v. Yosemite Community College Dist.* (2004) 116 Cal.App.4th 629, 639.

<sup>56</sup> *Tuolumne*, 155 Cal.App.4th at 1227.

<sup>57</sup> Chevron HRP Notice of Preparation, Bloch Attachment 8.

<sup>58</sup> Chevron HRP Consolidated EIR, 2-4 fn 1, Bloch Attachment 9.

<sup>59</sup> Expert Comments submitted by Phyllis Fox on Chevron’s HRP, p. 6 (excerpt), Bloch Attachment 10.

<sup>60</sup> Chevron HRP Consolidated EIR, 4.18-24; *see also id.*

available for sale and transport, and serving the projected need of the overall Project for 33 percent more natural gas by constructing the new natural gas pipeline.

When two acts are closely connected in time and location, the potential for related physical changes to the environment in that location is greater than otherwise. . . . Also, when the same entity undertakes both matters, it increases the likelihood that the matters are related – that is, are part of a larger whole.

As previously stated, lead agencies must consider “the whole of an action . . . which may be subject to several discretionary approvals by government agencies.”<sup>61</sup> “All phases of project planning, implementation, and operation” must be addressed, including the project “characteristics . . . which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.”<sup>62</sup>

It is also reasonably foreseeable that the project will be used to process lower-quality oil for the reasons illuminated in Mr. Karras’ Report.<sup>63</sup> This is what should be analyzed unless there is substantial evidence that the hydrogen pipeline will not be used for this purpose.

### **A cumulative impacts analysis is not a substitute**

The EIR assures that “the Chevron Energy and Hydrogen Renewal Project is considered within the cumulative analysis for this Project.”<sup>64</sup> First, as described below, the EIR provides no such analysis. But second, a cumulative impacts analysis is no substitute for a project level analysis. A cumulative impacts analysis only considers impacts of the same type as those resulting from the primary project, while the latter considers the full scope of environmental impacts that may be significant.<sup>65</sup> For instance, if the main aspect of the project causes severe water impacts while another aspect of the project causes minimal water impacts but extremely significant hazard impacts, those hazard impacts will not be considered in determining how to mitigate the project’s impacts, or whether the environmental costs of project outweigh the benefits. Thus, the environmental considerations become submerged by chopping one project into many smaller ones.<sup>66</sup> Segmented or “piecemealed” environmental reviews “eliminate the opportunity to mitigate interactive impacts effectively.”<sup>67</sup> <sup>68</sup>

### **ConocoPhillips’ CFEP**

The ConocoPhillips Clean Fuels Expansion Project includes construction of a hydrogen plant that would produce 120 million scf of hydrogen per day.<sup>69</sup> That project EIR acknowledges that the hydrogen plant was designed with surplus capacity, but the County never fully revealed the project objectives, why there is a need for hydrogen produced from fossil fuels, or what the

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<sup>61</sup> Guidelines §§ 15378(a), 15378(c).

<sup>62</sup> Guidelines §§ 15063(a)(1), 15126.2(d); *see also Tuolumne*, 155 Cal.App.4th at 1230-31.

<sup>63</sup> Karras ¶¶ 10, 31.

<sup>64</sup> DEIR 2-3.

<sup>65</sup> Guidelines § 15130(a)(1).

<sup>66</sup> *Bozung v. Local Agency Formation Comm’n. of Ventura County*, 13 Cal.3d at 283-284.

<sup>67</sup> *Tuolumne*, 155 Cal.App.4th at 1230-31.

<sup>68</sup> In this case, segmentation will also foreclose clean alternative fuel options. *See* May p. 14.

<sup>69</sup> *See* Karras Attachment 18.

hydrogen will be used for.<sup>70</sup> <sup>71</sup>But we now know that this excess capacity likely would be used to pipe excess hydrogen to Shell and Chevron. Since, like Chevron, Conoco is constructing an oversized hydrogen plant, and the Conoco EIR was released more or less concurrently with the NOP for the Praxair project and after Praxair had contracted with Chevron, it is reasonably foreseeable that Conoco would use the additional capacity to pipe this hydrogen through Praxair's pipelines. This must be considered part of the overall hydrogen project.

### **Air Products Pipeline**

The Project also piecemealed the proposed Air Products Pipeline project, a 6-mile pipeline network that would connect the Tesoro, Valero and Shell refineries.<sup>72</sup> The Air Products NOP was filed on January 16, 2008.<sup>73</sup> The DEIR in Chapter 5 lists this project as a potential cumulative impact, but as a result of these two pipeline networks, all 5 bay area refineries will be connected by pipeline, changing both the nature and the scope of the project. Taken together there are obviously tremendous direct and indirect impacts of such a network, particularly if the hydrogen is used to enable dirty oil refining. None of the implications of this project was analyzed. CEQA requires that an EIR describe and analyze all reasonably foreseeable future activity.<sup>74</sup> The DEIR should be revised to include this critical information.

### **CUMULATIVE IMPACTS**

The DEIR failed to actually describe and evaluate the Project's cumulative impacts in connection with other past, present and foreseeable future projects. Cumulative impacts "refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."<sup>75</sup> "The significance of a comprehensive cumulative impacts evaluation is stressed in CEQA'... Proper cumulative impacts analysis is vital 'because the full environmental impact of a proposed project cannot be gauged in a vacuum.'"<sup>76</sup>

CEQA requires that an EIR include a "summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available"<sup>77</sup> and "a reasonable analysis of the cumulative impacts of the relevant projects."<sup>78</sup> The EIR states that the discussion includes a "summary of expected environmental

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<sup>70</sup> The EIR vaguely stated that "[h]ydrogen from these types of plants has the potential to meet the anticipated transportation demands associated with hydrogen fuel cell technology," but it provides no analysis of the impacts of such use, timing, or, most importantly, what this actual facility would use its hydrogen for. We know that hydrogen produced from fossil fuels is not a "clean fuel." To the contrary, using hydrogen fuel cells for transportation could potentially increase the total greenhouse gas emissions compared to petroleum, in part because production of hydrogen from fossil fuels is so carbon-intensive p. 3, Bloch Attachment 5.

<sup>71</sup> See Appeal Comments submitted by CBE and CBE of ConocoPhillips CFEP, Bloch Attachment-5.

<sup>72</sup> The DEIR describes this pipeline as being 2.7 miles, the Air Products Notice of Preparation self-describes the Project as a six-mile pipeline network.

<sup>73</sup> Air Products NOP, Bloch Attachment 7.

<sup>74</sup> *Laurel Heights*, 47 Cal.3d at 396-399.

<sup>75</sup> CEQA § 21061; see also Guidelines §15355.

<sup>76</sup> *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214 (citations omitted).

<sup>77</sup> Guidelines § 15130(b)(4).

<sup>78</sup> Guidelines § 15130(b)(5).

effects to be produced by those projects with specific reference to where that information is available,” but no such summary exists.

The DEIR also claims to contain a “reasonable analysis” of the cumulative impacts of the relevant projects.<sup>79</sup> Certainly, the list of projects with the categories of general resource areas (air, water) listed next to them is not an analysis. The DEIR refers the reader to review each resource area in Chapter 4 for an “evaluation and description.”<sup>80</sup> But there is no analysis there, either. For example, in the hazards section, the cumulative impacts discussion is as follows:

#### **4.7.8 Cumulative Impacts**

The proposed Project could result in significant impacts from hazards and hazardous materials. When viewed in combination with those of other reasonably foreseeable projects listed in Table 5.3-1 [a list of 35 projects – ed.], Projects Considered in Cumulative Impact Analysis for Contra Costa Pipeline Project, Project implementation would result in cumulative impacts from hazards and hazardous materials and the Project’s contribution to this impact would be cumulatively considerable and thus significant. The proposed Project’s contribution to this significant cumulative impact would be reduced to less than significant through the implementation of Mitigation Measures HAZ-1A through HAZ-1D, HAZ-2A through HAZ-2D, HAZ-4A, HAZ-4B, HAZ-7, HAZ-8A, and HAZ-8B, described above.

This is wholly inadequate. The DEIR does not quantify the impact, describe the contributing project, describe the types of hazards each project causes, or describe how the mitigation measures will reduce the particular impact. Similarly, all 35 projects listed are attributed as having “air quality” impacts. But there is no description of the pollutant released, the seriousness of the problem, a quantification of the projects causing an increase in a given pollutant, or any other relevant information.<sup>81</sup> As the DEIR correctly notes, the cumulative “discussion” “need not provide as great detail as is provided for the effects attributable to the proposed project alone,”<sup>82</sup> but this EIR provides no detail about effects from other projects at all.

An EIR must determine whether the impacts of a project are cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. CEQA § 21083. This EIR does not evaluate the effects of the project with past, current and probable future projects at all, it only describes the baseline environment (environment as it existed at the time the NOP was issued) skipping the cumulative impacts analysis completely. Consequently, the EIR does not provide information sufficient to determine that the project will not cause significant environmental impacts. This is a clear violation of CEQA.

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<sup>79</sup> CEIR 5-2

<sup>80</sup> *Id.*

<sup>81</sup> DEIR 5-5 – 5-9, DEIR 4.7.

<sup>82</sup> Guidelines § 15130(b), DEIR 5-2.

The EIR also does not evaluate the cumulative impacts in light of increased hydrogen supply from the Project. With regard to whether the project's increasing hydrogen supply might "encourage or facilitate other activities that could have significant environmental effects," the DEIR states that "the likelihood and content of new permit applications and the findings of their related environmental compliance evaluations are *too remote and speculative* to predict and evaluate at this time or in this EIR."<sup>83</sup> This position is disingenuous. As is described in greater detail in the expert report submitted by Mr. Karras, "processing changes required for more hydrogen-intensive refining are known, plans to use it for lower-quality oil are known, and resultant emissions can be predicted with readily available information. These impacts are not 'too speculative' to predict."<sup>84</sup>

Similarly, CEQA requires that with regard to the indirect impact of urban decay, the EIR is expected to "trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes (focusing) the analysis...on the physical changes."<sup>85</sup> Particularly since this is a project to provide hydrogen, the direct and indirect impacts of such provision cannot be viewed as speculative and must be disclosed.

## PROJECT ALTERNATIVES

The alternatives and mitigation sections are "[t]he core of an EIR."<sup>86</sup> An EIR alternatives analysis, "must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation."<sup>87</sup> CEQA prohibits agencies from approving projects as proposed if there are feasible alternatives that would substantially lessen the significant environmental effects of such projects.<sup>88</sup> The DEIR's "no project" alternative is incomplete, and the section generally fails to analyze a reasonable range of project alternatives. This section must be recirculated.

### The no-project alternative

The EIR must analyze the "no project" alternative.<sup>89</sup> This analysis "...shall discuss the existing conditions at the time the notice of preparation is published... as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."<sup>90</sup> But the DEIR's no project alternative discussion consists solely of the acknowledgement that if there is no project, there will be no impacts, and states that:

This alternative would avoid any impacts associated with Project construction and operation. Because no pipeline would be built, the use of construction equipment, site clearing, grading, and excavation would not occur. Impacts associated with

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<sup>83</sup> DEIR 5-15, 5-16 (emphasis added).

<sup>84</sup> Karras ¶ 36.

<sup>85</sup> Guidelines 15131(a) *see also Bakersfield Citizens for Local Control*, 124 Cal.App.4th at 1205.

<sup>86</sup> *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564.

<sup>87</sup> Guidelines § 15126.6(a).

<sup>88</sup> *See* CEQA §§ 21002, 21081(a); *County of San Diego v. Grossmont-Cuyamaca Community College Dist.* (2006) 141 Cal.App.4th 86, 98.

<sup>89</sup> Guidelines § 15126.6 (e)(1).

<sup>90</sup> Guidelines § 15126.6 (e)(2).

these activities would also not occur. However, if the pipeline were not constructed the Project objectives would not be met. In addition, since the section of pipeline being converted from natural gas to hydrogen would have a smaller hazard footprint under the proposed Project, this decrease in public safety impact would not occur.<sup>91</sup>

The EIR did not include any of the required discussion. Consequently, the DEIR failed to disclose that without the Project, Chevron and ConocoPhillips could provide their own backup capacity, and Shell is served by at least three hydrogen plants.<sup>92</sup> Under CEQA, the agency should adopt a superior alternative even if it impedes to some degree the project objectives.<sup>93</sup> Since available information suggests that this is a superior alternative, and no substantial analysis is provided to support the conclusion that it is not, the analysis is fatally flawed.

### **Reduced project alternative**

The EIR does not include a single reduced project alternative. An EIR must describe a reasonable range of alternatives that attain the most basic goals of the project and reduce the environmental effects of the project, “even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.”<sup>94</sup> Reduced project alternatives are reasonably calculated to reduce the Project’s environmental impacts,<sup>95</sup> and are designed to strike a balance, fulfilling most of the project objectives while reducing to some extent the project’s negative impacts.<sup>96</sup> For instance, this reduced project would include reduced capacity or reduced locations (e.g. no spur to ConocoPhillips). So here, a pipeline with reduced capacity could still (1) supply a dependable backup source of hydrogen to local refineries during hydrogen unit outages, (2) maximize the use of existing pipeline infrastructure to reduce disturbance associated with new construction, (3) create pipeline infrastructure to allow the safe and efficient transport of hydrogen between refineries, and (4) maintain an existing back up natural gas supply<sup>97</sup> but limit the adverse impact on habitat – by eliminating the spur – or degree to which refineries could depend on the pipeline to process low quality oil – by reducing the size of the pipeline thereby reducing increased pollution. The DEIR’s failure to consider even one reduced project alternative was improper.<sup>98</sup>

### **Alternatives Not Analyzed**

The DEIR concludes that increasing hydrogen production at each refinery would be infeasible, and excluded it from its alternatives discussion. Its conclusion was not well-founded and

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<sup>91</sup> DEIR 6-20. The same type of treatment is given for the “no project” alternative for each type of impact within the alternatives section: 6-26, 31, 33, 35, 36, 38-45, 47.

<sup>92</sup> Karras ¶ 28; *see also supra* page 4.

<sup>93</sup> Guidelines § 15126.6(b).

<sup>94</sup> *Id.*

<sup>95</sup> *See Friends of Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 872-73.

<sup>96</sup> Note that the “rail corridor alternative” is not a reduce project alternative, it’s actually an expansion: “This alternative would be the same length as the proposed Project (21.3 miles), but the entire line would be new pipeline whereas the proposed alignment would reuse 7.8 miles of existing pipeline.” (DEIR 6-22.)

<sup>97</sup> DEIR 3-1.

<sup>98</sup> *See Village Laguna of Laguna Beach, Inc. v. Bd. of Supervisors* (1982) 134 Cal.App.3d 1022, 1028-29.

ignored several pertinent facts.<sup>99</sup> First, each Bay Area refinery already has dedicated onsite and/or adjacent hydrogen production.<sup>100</sup> Second, ConocoPhillips' recent project includes a hydrogen plant with excess capacity<sup>101</sup>, and third, the Air Products pipeline also plans to supply hydrogen to Shell refinery, and the Shell refinery already has three hydrogen plants servicing it.<sup>102</sup> This analysis was improperly excluded and should be considered in a new EIR.

### **Alternative Project Locations**

Aside from the inadequate “no project” alternative the alternatives section only discusses alternate routes.<sup>103</sup> “An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project . . . .”<sup>104</sup> These different routes are not part of an “alternative location” analysis because all of the routes originate at Chevron, pass through the Shell, and terminate at ConocoPhillips. While it is essential to determine the least damaging and most efficient route, the purpose of this section is to consider alternatives to the project.

### **SIGNIFICANT AND POTENTIALLY SIGNIFICANT IMPACTS**

CEQA requires that an EIR identify and analyze all of a proposed project's “significant effects on the environment.”<sup>105</sup> A significant effect on the environment means “a substantial or potentially substantial, adverse change in the environment.”<sup>106</sup> An EIR should contain “a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences.”<sup>107</sup> The DEIR failed to address important potentially significant and significant direct and indirect impacts of the Project. These impacts were described in depth in the expert comments submitted by Mr. Karras, Ms. Lee and Ms. May.

Most generally, the DEIR left out information that was necessary to fully assess the Project's environmental impacts and understand the scope of the project's environmental consequences.<sup>108</sup> The DEIR excluded, among other things, the Project's anticipated operational life, the pipeline's design capacity for hydrogen flow, and the refiners' hydrogen production or consumption capacity.<sup>109</sup> This information is typically available and must be provided.

### **Re-evaluating existing sections in the DEIR**

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<sup>99</sup> DEIR 6-18-19.

<sup>100</sup> Karras ¶ 22.

<sup>101</sup> The new plant's capacity would be 120 mmscf/d as compared with 88 mmscf/d of existing hydrogen steam reforming capacity at the Rodeo refinery. Karras Attachments-2, 18.

<sup>102</sup> Air Products NOP, p. 2, Bloch Attachment 7.

<sup>103</sup> See DEIR Chapter 6, generally.

<sup>104</sup> Guidelines § 15126(a).

<sup>105</sup> CEQA § 21100(b); Guidelines § 15126.2(a).

<sup>106</sup> CEQA § 21068.

<sup>107</sup> Guidelines § 15151.

<sup>108</sup> Karras ¶¶ 25-34.

<sup>109</sup> Karras ¶ 25, 26, 27.

The EIR maintains that impacts from this project would come primarily from construction of the project.<sup>110</sup> This has been shown to be erroneous and minimizes the increased presence of contaminants and pollution from Bay Area refineries.<sup>111</sup>

All areas of the DEIR should be revised to reflect the true scope of this project, which is to enable lower quality oil refining at Bay Area refineries. As stated earlier, hydrogen is necessary to remove the sulfur and certain other heavy metals from heavily contaminated oil, and to make lighter and more valuable products, such as gasoline.<sup>112</sup> So, for instance, in the water quality context, Bay Area refineries are already discharging significant pollutants from air emissions fallout and from their outfalls that would increase as a result of lower quality oil refining. This must be taken into account as the County assesses the Project's impacts and formulates mitigation measures.

### **Greenhouse Gas Impacts**

Because California is "particularly vulnerable to the impacts of climate change," the California Global Warming Solutions Act of 2006 (AB 32) establishes a goal of reducing emissions of greenhouse gases ("GHGs") in California to 1990 levels by 2020.<sup>113</sup> As a result, impacts from GHG emissions associated with a project are subject to CEQA, as reflected in OPR's proposed CEQA Guidelines amendments for greenhouse gas emissions, which provide that "a lead agency should make a good-faith effort . . . to describe[], calculate or estimate the amount of greenhouse gas emissions resulting from a project."<sup>114</sup>

The EIR's complete and total failure to evaluate the GHG emissions associated with the project, the impacts associated with those emissions, and measures to mitigate those impacts renders the EIR defective. Hydrogen production itself creates extremely high greenhouse gas emissions, and the higher energy needs of processing higher sulfur and heavier oil increases greenhouse gases increases even more.<sup>115</sup> This project could directly and indirectly increase greenhouse gas emissions by 2.16 to 8.61 million metric tons per year<sup>116</sup>, however, the DEIR did not attempt this calculation.<sup>117</sup> The determination that these impacts were "too speculative"<sup>118</sup> was not supported by substantial evidence and has been demonstrated as false in an expert report<sup>119</sup>.<sup>120</sup> Since CO<sub>2</sub> is generally unregulated in Air District permits, and methane, another greenhouse gas but one common in combustion activities, is generally exempt from the Air District's smog regulations, this analysis is even more critical.<sup>121</sup> Consequently, the County must make a good faith effort to calculate and mitigate those significant impacts and recirculate the EIR.<sup>122</sup>

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<sup>110</sup> DEIR 1-7.

<sup>111</sup> Karras ¶¶ 42-46.

<sup>112</sup> Lee p.1.

<sup>113</sup> Health & Safety Code §§ 38550, 38501(a).

<sup>114</sup> Proposed Guidelines § 15064.4(a).

<sup>115</sup> May p. 10.

<sup>116</sup> Karras ¶ 41.

<sup>117</sup> DEIR 5-15, 5-16.

<sup>118</sup> *Id.*

<sup>119</sup> Karras ¶¶ 36-41.

<sup>120</sup> *San Joaquin Raptor v. County of Merced* (2007) 149 Cal. App. 4th 645, 655-57.

<sup>121</sup> May p. 6.

<sup>122</sup> *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007)

## **Air Quality**

The project could cause a huge collective increase in criteria air pollutant emissions from multiple refineries, increased flaring and releases from pressure relief devices (PRD) but the DEIR did not address the impacts from these releases. An analysis is doubly important because it will not be done elsewhere and yet is significant. “Upsets” accidents, startup and shutdown of equipment are often unregulated or exempt from permit limits.<sup>123</sup> Therefore, the EIR must disclose the impacts of these releases and mitigate significant impacts.

## **Hazards**

Refineries release toxins into the environment, regularly, due to fugitive leaks, which are ongoing, and accidents.<sup>124</sup> There were nearly 700 tons per year of VOC emissions through fugitive leaks alone from Bay Area refineries based on the 2005 Ozone Attainment Plan Strategy,<sup>125</sup> but the real number is probably higher.<sup>126</sup> These toxins can be odiferous and can cause health impacts.<sup>127</sup> The higher the level of sulfur compounds in refineries, the higher the level in the environment when releases occur.<sup>128</sup>

The DEIR also failed to adequately address the issue of pipeline embrittlement.<sup>129</sup> Embrittlement can cause the metals to weaken, which over time can cause leaks and cracks in the pipes.<sup>130</sup> This has the potential to cause significant impacts, particularly at the time of earthquake, because the pipelines will transport flammable and explosive material through vast and sensitive areas.<sup>131</sup> The EIR should identify additional methods for preventing and identifying embrittlement weaknesses and leaks, implement an inspection program, and disclose how long this equipment can safely be used before embrittlement becomes imminent.<sup>132</sup>

## **Water Quality**

The pipeline will pass through numerous watersheds, crossing creeks, wetland, riparian, and other habitat,<sup>133</sup> putting these areas at risk for potential significant direct and indirect impacts, exacerbated by the use of the hydrogen to process low quality oil.<sup>134</sup> Yet the EIR fails to address the aerial deposition of dioxin, mercury and other bioaccumulative toxins and their effects on water bodies, fish, or subsistence anglers, nor will these effects be considered at a later time by

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40 Cal.4th 412, 449 (The failure to disclose significant impacts in a recirculated EIR “deprived the public of meaningful participation.”)

<sup>123</sup> May p. 6.

<sup>124</sup> May p. 10.

<sup>125</sup> May p. 11.

<sup>126</sup> May p. 12 (EPA findings report that refinery fugitive leaks are much higher than reported.).

<sup>127</sup> May p. 10.

<sup>128</sup> May pp. 10, 12, 13.

<sup>129</sup> May p. 15.

<sup>130</sup> *Id.*

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*

<sup>133</sup> Lee p. 1.

<sup>134</sup> Lee pp. 1-5.

another agency;<sup>135</sup> it fails to mitigate or provide sufficient information on erosion from compacted soils by having heavy construction equipment, trucks and automobiles traveling in an out of sensitive habitats;<sup>136</sup> it fails to disclose the effectiveness of the filters and methods to prevent chloramines and chlorine residuals from being discharged into the waterways, or provide sufficient information on their disposal or points of discharge;<sup>137</sup> and fails to ensure that a stormwater plan, to be developed in the future, could mitigate significant impacts due to stormwater run-off.<sup>138</sup> CEQA requires that an EIR identify and analyze all of a proposed project's "significant effects on the environment", regardless of the jurisdiction of the agency performing the environmental review.<sup>139</sup> And mitigation cannot be deferred until a later date.<sup>140</sup>

Ultimately, the DEIR fails to provide complete information sufficient for the public, including the communities who could bear the burden of intensified discharges and exposures, to evaluate the Project's water quality impacts. The DEIR must address each of these issues, as elaborated in the Technical Comments submitted by Ms. Lee, in order to comply with CEQA's mandate to disclose and analyze potentially significant impacts and mitigate significant impacts.

### **Seismic Issues**

The EIR must evaluate imminent earthquake hazards combined with increased pipeline transport and increased refinery use of explosive and hazardous materials.<sup>141</sup> In particular, the DEIR fails to mitigate impacts from liquefaction and landslide, fails to evaluate or mitigate the impacts of fires triggered by earthquakes, and fails to prevent structural damage from earthquakes.<sup>142</sup>

The proposed Project can cause leaks (and related air and ground pollution), spills and fires in the event of an earthquake.<sup>143</sup> The DEIR acknowledges that these impacts would be significant without mitigation.<sup>144</sup> It is critical that effective mitigation measures are imposed. The pipelines would lie along the Hayward fault line, arguably one of the most hazardous faults in the world.<sup>145</sup> It experiences severe shaking an average of once every 140 years, with the last one occurring 141 years ago.<sup>146</sup>

### **earthquakes and liquefaction**

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<sup>135</sup> Lee p. 3. (Increased refinery energy intensity will increase "emissions of toxins, such as dioxins, mercury, polycyclic aromatic hydrocarbons and polychlorinated biphenyls since these pollutants are emitted from refinery fuel combustion and burning more of the same fuels will increase those emissions.")

<sup>136</sup> See Lee p. 3.

<sup>137</sup> *Id*

<sup>138</sup> Lee pp. 3-4.

<sup>139</sup> CEQA § 21100(b); Guidelines §§ 15126.2(a), 15151.

<sup>140</sup> *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671 (improper to defer mitigation when it could be considered in the EIR).

<sup>141</sup> May p. 16.

<sup>142</sup> May p. 18.

<sup>143</sup> *Id*

<sup>144</sup> May p. 17, 20.

<sup>145</sup> May p. 17.

<sup>146</sup> *Id*

Liquefaction causes severe differential movement of the pipeline leading to structural damage.<sup>147</sup> The pipelines would be constructed in the worst and second worst areas for ground shaking in the area<sup>148</sup>, but the DEIR does not mitigate, i.e. avoid or lessen these impacts. Instead, an engineer will monitor earthquakes, inspect after earthquakes, and make recommendations on corrective action that will be implemented within year of the report, unless more time is needed.<sup>149</sup>

When monitoring indicates that seismic shaking in excess of 0.1 g has occurred in the Project area, the pipeline alignments shall be inspected by a qualified Professional Engineer to determine if adverse conditions, including liquefaction or seismically induced landslides have occurred. The engineer shall prepare a report (within 2 months of pipeline inspection) to the Contra Costa County Department of Conservation and Development that describes the results of the inspection and provides recommendation for any necessary corrective action. Upon approval by Contra Costa County, all *recommendations would be implemented within 1 year*. Additional time for remedial actions would be granted if deemed appropriate by Contra Costa County.<sup>150</sup>

While certainly corrective action for damaged pipelines is needed, it will not reduce exposure to fires and spills, and the leaks will occur after the earthquake. Strictly speaking, these are not mitigation measures. The County should prepare modeling and evaluate site-specific issues to evaluate mitigation measures that will identify, mitigate, and prevent impacts from occurring, and then present that information in an EIR.<sup>151</sup> CEQA requires the lead agency to impose measures that mitigate significant environmental impacts caused by the proposed project.<sup>152</sup> Consistent with this requirement, the agency bears the burden to show that it considered all feasible mitigation measures, including project alternatives, before adopting a statement of overriding considerations.<sup>153</sup> However, the County can adopt a Statement of Overriding Considerations if the Project may cause significant environmental impacts, but a transparent balancing of the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks reveals that the Project's benefits outweigh its impacts.<sup>154</sup> This Statement must be supported by substantial evidence in the record.<sup>155</sup> The EIR here neither mitigates significant impacts nor provides a Statement of Overriding Considerations. One of them is required. Similar concerns apply to the discussion of landslide.<sup>156</sup>

## earthquakes and fire

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<sup>147</sup> May p. 19.

<sup>148</sup> May p. 23.

<sup>149</sup> DEIR GS 1.3; May p. 20.

<sup>150</sup> DEIR GS 1.3.

<sup>151</sup> May p. 18.

<sup>152</sup> CEQA § 21002.

<sup>153</sup> See Remy et al., *Guide to CEQA* (Solano Press 1994 ed.) The EIR Process, pp. 167-169.

<sup>154</sup> Guidelines § 15093(a).

<sup>155</sup> Guidelines § 15093(b).

<sup>156</sup> May p. 20.

Fire has been identified as the “single most destructive agency of damage from earthquakes.”<sup>157</sup> The DEIR does not discuss fire in the earthquake context.<sup>158</sup> Fire in the earthquake context is a different animal because, among other things, in this situation the fire service is already overwhelmed and the fire may be difficult to reach.<sup>159</sup> Moderate fires can significantly impact the health of healthy adults with even greater affects on schoolchildren and people with asthma, other respiratory problems, and heart conditions.<sup>160</sup> The County has access to materials that describe an analytical framework to evaluate and mitigate impacts from fires in the earthquake context.<sup>161</sup> The DEIR should evaluate the impacts of such a scenario given the foreseeability of a major earthquake, the seriousness of the hazard, and the size of the area covered by the pipeline – increased ignition points, and intensified impact of wind.<sup>162</sup>

### **reliance on building codes**

The DEIR relies on the building codes to prevent impacts from severe ground shaking, but these codes do not necessarily prevent major damage in a moderate shaking or total collapse with major ground shaking.<sup>163</sup> Mitigation technologies are available to prevent significant impacts, relative to the size of the earthquake, but this evaluation was not undertaken.<sup>164</sup> The DEIR must analyze the impacts of earthquake damage instead of relying solely on the building codes.

### **earthquakes and hazard risk**

Communities along the pipeline corridor have already repeatedly been exposed to major releases and “Shelters in Place”.<sup>165</sup> The Project significantly increases the gross hazardous materials that will be present in the area.<sup>166</sup> The volume issue is exacerbated by the earthquake risk.<sup>167</sup> The DEIR should have evaluated earthquake interactions with the Project’s hazard risks, which could result in heat radiation, smoke plumes, hazardous air and other pollutant releases, and burning petrochemicals, and onsite spills.<sup>168</sup>

### **Socio-economic impacts/blight**

An EIR must discuss a project’s economic and social impacts where there is “a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic and social changes.”<sup>169</sup> Furthermore, “[w]here a physical change is caused by economic or social effects of a project,” an agency should consider that change just as it considers “any other physical change

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<sup>157</sup> May p. 24.

<sup>158</sup> *Id.*

<sup>159</sup> May pp. 25, 32.

<sup>160</sup> May p. 32.

<sup>161</sup> May p. 26.

<sup>162</sup> May p. 25; *see also Residents of Sanborn Court v. DTSC*, No. 95CS01074 (Sacramento Super. Ct. Apr. 1, 1996) (An EIR must evaluate the risk of a foreseeable catastrophic event for a hazardous waste facility, even if the likelihood of its occurrence is low.)

<sup>163</sup> May p. 21.

<sup>164</sup> *Id.*

<sup>165</sup> May p. 22.

<sup>166</sup> *Id.*

<sup>167</sup> *Id.*

<sup>168</sup> *Id.*

<sup>169</sup> Guidelines § 15131(a).

resulting from the project.”<sup>170</sup> Thus, physical changes to the urban environment, such as urban decay, must be evaluated as effects of a proposed project.

The DEIR did not consider the impacts of refining increasingly lower quality oil on businesses or the economy of the areas surrounding the pipelines and refineries that would use the hydrogen. This proposed regional hydrogen pipeline network in the second largest West Coast refining center, where no such pipelines exist today, would concentrate control over hydrogen-related energy resource production and invite the exercise of concentrated market power with possible environmental and energy resource impacts that should be analyzed and addressed by the EIR. This is a socio-economic impact that must be analyzed in the EIR.

Impacts due to increased risk of fires spills and explosions, increased flaring and increased criteria pollutants and localized GHG impacts also may result in socio-economic impacts must be considered. Impacts due to an earthquake should also be considered. One report finds that damage to Bay Area industry could be widespread and that economic impacts to the region, including those in manufacturing, could be greater than Hurricane Katrina’s.<sup>171</sup> Especially where, as here, the earthquake impacts are not mitigated per se but rather impacts that have occurred are remediated over time, consideration of socio-economic impacts and cumulative impacts must be analyzed.

## COMMUNITY HEALTH

The DEIR ignores the high levels of pollution and hazard risks that communities fence-line to the oil refineries and along the pipeline corridor already face. These communities already suffer disproportionate increased health risks due to toxins in the environment. For example, the ConocoPhillips refinery operates next to the Bayo Vista Housing Projects. Six of the twenty-two housing projects in Contra Costa County have high toxic risks.<sup>172</sup> Residents of Contra Costa County and the San Francisco Bay Area to the North and East of the refinery have the combined impacts of both refineries and other industrial facilities nearby. Many of these communities are low-income communities of color; for instance, approximately 97.9% of North Richmond residents, located near the Chevron refinery are minority.<sup>173</sup> Moreover, environmental compliance by these refineries, particularly Chevron and ConocoPhillips, has not always been that of responsible neighbors.<sup>174</sup> Residents and workers are also exposed to air pollution impacts from refineries fires and flaring. For instance,

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<sup>170</sup> Guidelines § 15064(e).

<sup>171</sup> May p. 22.

<sup>172</sup> Craig Flournoy, *Refinery accidents, anxiety increase Minorities face 'ticking time bombs,' Series: Toxic Traps: Public Housing and Pollution*, Dallas Morning News (Oct. 1, 2000), Bloch Attachment 11.

<sup>173</sup> Scotts Valley Band of Pomo Indians Fee-to-Trust and Gaming Development Project Final Environmental Impact Statement, March 2008, Chapter 3.11, Bloch Attachment 12.

<sup>174</sup> U.S. Environmental Protection Agency, *Chevron Richmond Refinery to Pay \$540,000 Environmental Penalty* (Oct. 15, 1998), <http://yosemite.epa.gov/opa/admpress.nsf/4b779454038214c1852572a000651fe2/fb476240c30ba96b852570d8005e12e0!OpenDocument>, Bloch Attachment 13, (On October 15, 1998, the U.S. Environmental Protection Agency and the U.S. Department of Justice announced that Chevron's Richmond oil refinery agreed to install additional water pollution controls and to pay \$540,000 to settle allegations that the facility violated federal environmental laws when it intermittently bypassed a wastewater treatment system in the years 1991

- **Chemical Fire Risks-** “On January 15, 2007 at 9:06 a.m. EST the National Response Center received a report about a release of unknown amounts of hydrogen sulfide, nitric oxide, and sulfur dioxide due to a fire at the Chevron Refinery in Richmond, CA. The incident began at 5:15 am PST...There was one employee that was injured and sent to the hospital. Five employees were also evacuated from the refinery, a shelter is in place, and the community warning system was activated. The fire has not been extinguished at this time but the fire department is on the scene.”<sup>175</sup> This Crude Unit fire contributed to massive flaring that lasted 38 days, 6 hours and 27 minutes and emitted 19,231 pounds of sulfur dioxide and 32,561 pounds of hydrocarbons.<sup>176</sup>
- **Flaring and Air Pollution-** Chevron increased flaring at its refinery by 80% since 2005 when the BAAQMD passed a new rule limiting harmful refinery flaring to emergencies, through 2006, while other area refineries had decreased flaring. In those years the Chevron Richmond refinery and the ConocoPhillips refinery in Rodeo were emitting 30 to 50 times more pollution than the Shell refinery in Martinez. A single flaring event can release as much as 10,000 to 100,000 pounds of pollutants into the air.<sup>177</sup> With the proposed increase in processing of dirtier crude oils, the amount of flaring is likely to increase.

The proposed Project would add to the already disproportionate health and environmental impacts suffered by neighborhood residents due to the increase in criteria pollutants, flaring and hazard risk, as well as other impacts, caused by the Project. Asthma and other respiratory illness rates are already at dangerously high levels in the neighborhoods surrounding the Contra Costa County refineries.<sup>178</sup> Residents of neighborhoods near the refinery frequently complain of odors, smoke, and flaring. During the time period of 2000 to 2007 alone, the Bay Area Air Quality Management District received at least 256 such complaints due to the Chevron refinery.<sup>179</sup> These issues described above should be evaluated in the context of the baseline, the socio-economic impacts, and as an environmental justice issue.

## RECIRCULATION

CEQA requires the lead agency to recirculate an EIR when significant new information is added after the Draft EIR has been noticed and public comment has commenced but before

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to 1995, and failed to make proper notifications regarding toxic releases to the environment.); *see also* Matthew Green, *Flare-up: Crude Awakening*, East Bay Express (May 30, 2007), Bloch Attachment 14.

<sup>175</sup> 2007 National Response Team Incident Summaries, <http://www.nrc.uscg.mil/insum2007/refineryfire.html>, May Attachment 14.

<sup>176</sup> *See* Chevron Richmond Refinery January 2007 Flaring Cause Investigation Report submitted to BAAQMD March 29, 2007, Bloch Attachment 15.

<sup>177</sup> Communities for a Better Environment (CBE), *Flaring Prevention Measures* at 3 (Apr 2007); Tom Butt, *No Comment from Chevron*, E-Forum (Apr. 19, 2007) *reposting Regional: Report: Chevron Refinery Among Worst Polluters* (Apr. 17, 2007). *See also* Karras ¶ 35; Karras Attachment 22.

<sup>178</sup> CBE, Kids Against Environmental Pollution, *State of the Neighborhood, Bayo Vista Youth Health Survey* (Dec. 2001), Bloch Attachment 16.

<sup>179</sup> Bay Area Air Quality Management District, response to Public Records Act request, received by CBE on June 27, 2007, Bloch Attachment 17.

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certification.<sup>180</sup> “‘Information’ can include changes in the project or environmental setting as well as additional data or other information.”<sup>181</sup>

Recirculation is required, for example, when the new information added to an EIR discloses: (1) a new substantial environmental impact resulting from the project or from a new mitigation measure proposed to be implemented; (2) a substantial increase in the severity of an environmental impact unless mitigation measures are adopted that reduce the impact to a level of insignificance (3) a feasible project alternative or mitigation measure that clearly would lessen the environmental impacts of the project, but which the project's proponents decline to adopt, or (4) that the draft EIR was so fundamentally and basically inadequate and conclusory in nature that public comment on the draft was in effect meaningless.<sup>182</sup>

Failure to disclose significant information in an EIR, can thwart the goals of the EIR process “by not disclosing to the public and government agencies critical information necessary to evaluate the significance” of the project.<sup>183</sup> Here, the EIR should be recirculated after the requested information is provided because the DEIR does not currently contain an analysis of a major component of the project, the project to use the hydrogen from the pipeline to enable the Bay Area refineries to process low quality oil. Known and unknown new substantial environmental impacts flow from this disclosure. There will be substantial increases in the severity of the environmental impacts unless mitigation related to greenhouse gas emissions, earthquake, and air pollution are imposed. In failing to prepare an adequate alternatives analysis, the EIR failed to adopt a feasible project alternative that would substantially lessen the projects’ environmental impact. And the cumulative impacts analysis was so inadequate and conclusory that it was meaningless. The County should recirculate the EIR for these reasons.

## CONCLUSION

The legislature designed CEQA to provide long-term protection to the environment by providing “public agencies and the general public with detailed information about the effects of a proposed project on the environment.”<sup>184</sup> The EIR is the “heart of CEQA,” an “environmental ‘alarm bell’ whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return.”<sup>185</sup> This EIR does not fulfill that mandate. The Praxair Pipeline Project is part of a regime change to lower quality oil refining in the Bay Area and is a lynch pin in enabling at least three of the five Bay Area refineries to make this switch. Processing lower quality oil is associated with increased pollution and increased risk to area communities. CEQA requires that these impacts be disclosed, analyzed and if significant, mitigated. Moreover, the EIR’s cumulative impacts section only further conceals the project’s

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<sup>180</sup> CEQA § 21092.1.

<sup>181</sup> Guidelines § 15088.5(a), *see also Laurel Heights*, 6 Cal 4<sup>th</sup> 1112.

<sup>182</sup> *Laurel Heights*, 6 Cal.4<sup>th</sup> at 1130 (citations omitted).

<sup>183</sup> *Cadiz Land Co. v Rail Cycle* (4<sup>th</sup> Dist 2000) 83 Cal.App.4<sup>th</sup> 74, 95-96; *see also* CEQA Guidelines §15120(c); *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (6<sup>th</sup> Dist. 2001) 87 Cal.App.4<sup>th</sup> 99, 134.

<sup>184</sup> *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 72.

<sup>185</sup> *Laurel Heights*, 47 Cal.3d at 392 (citations omitted)

impacts, the alternatives are incomplete, and significant and potentially significant impacts still must be discussed. Due to the significant nature of these changes, the EIR should be revised and recirculated before a final EIR is issued.

Sincerely yours,

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