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June 8, 2020

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Martinez, CA 94553

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Candace Andersen

#### Vice Chair

Diane Burgis

#### Supervisors

John M. Gioia  
Karen Mitchoff  
Federal D. Glover

### Via Email

Jennifer Cruz, Senior Planner, [Jennifer.Cruz@dcd.cccounty.us](mailto:Jennifer.Cruz@dcd.cccounty.us)

**Re: Appeal of the May 27, 2020 decision of the Contra Costa County  
Planning Commission on the Del Hombre Apartment Project  
(Agenda Items #2-5)**

Dear Chair Andersen, Honorable Members of the Board of Supervisors:

On behalf of the Contra Costa Residents for Responsible Development ("Residents"), we submit this appeal of the Contra Costa County Planning Commission's ("Planning Commission") May 27, 2020 decision to approve a Minor Subdivision and to recommend certification of the EIR and adopt CEQA findings and Conditions of Approval for the Del Hombre Apartment project ("Project"), a proposed development of a 2.4-acre site as a 284-unit apartment building. The Project is located at 112 Roble Road, approximately 0.12 miles from the Pleasant Hill BART station.

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Residents is an unincorporated association of individuals and labor organizations, including member and Pleasant Hill resident Gerald Phillips, that may be adversely affected by the potential environmental impacts of the Project. Individual members of Contra Costa Residents and the affiliated labor organizations live, work, recreate and raise their families in Contra Costa County. These members would be directly affected by the Project's environmental and health and safety impacts. Members of Contra Costa Residents may also work on the Project itself. Accordingly, these individuals will be first in line to be exposed to any health and safety hazards created by the Project.

This letter serves as Notice of Appeal under Contra Costa County Code 26-2.2406. In accordance with County requirements, this appeal is accompanied by an appeal filing fee of \$\_\_. This appeal is based on each of the reasons set forth herein and in the attached and referenced exhibits.

We reserve the right to supplement our grounds for appeal prior to the hearing of the County's Board of Supervisors.<sup>1</sup>

## **I. Decision being appealed and Board of Supervisors action sought**

Residents hereby appeals all final actions taken by the Planning Commission on May 27, 2020 with regard to the Project, including the Commission's decision to approve a Minor Subdivision and to certify the EIR, adopted CEQA findings, and Conditions of Approval for the Del Hombre Apartment project, and the decision to recommend approval for all other related Project entitlements.

Citizens respectfully requests that the Board of Supervisors uphold this appeal, vacate the Commission's May 27, 2020 decision to approve the Project, and require the County to reject certification of the Project's EIR and prepare revised EIR to account for and mitigate the potentially significant impacts of the Project outlined in our comments..

## **II. Reasons for appeal**

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<sup>1</sup> Gov. Code § 65009(b); PRC § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield ("Bakersfield")* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

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The reasons for this appeal are set forth in the attached comments and exhibits, including Resident's prior comment letters and exhibits to the County.

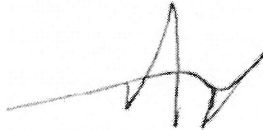
The Board must uphold this appeal and reject the EIR certification and other approvals for the Project. As discussed in the comments attached hereto and as will be further presented to the Board, the Project may result in significant air quality, greenhouse gas, and traffic impacts to Contra Costa County.

The County failed to analyze key elements of the Project that would have indicated the potential for significant environmental impacts, and as a result, the Planning Commission lacked substantial evidence on which to make the legally relevant findings to approve the Project.

### **III. Conclusion**

Residents respectfully requests that the County set a hearing on this appeal, and that the Board of Supervisors uphold this appeal and reject and vacate the Planning Commission's approval of the Project.

Sincerely,

A handwritten signature in black ink, appearing to read 'AMM', with a long horizontal line extending to the left.

Aaron M. Messing  
Associate

Attachments

AMM:acp

4714-010acp

# EXHIBITS

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May 27, 2020

### Via U.S. Mail

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Re: Comments on the Del Hombre Apartment Project for the May 27, 2020 Contra Costa County Planning Commission (Agenda Items #2-5)

Dear Honorable Planning Commission Members; Ms. Cruz

We are writing on behalf of Contra Costa Residents for Responsible Development regarding the County's Final Environmental Impact Report ("FEIR") and responses to comments prepared for the Del Hombre Apartment Project ("Project") proposed by the Hanover Company in Contra Costa County ("County").

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The Project involves developing a 2.4-acre site as a 284-unit apartment building. The Project is located at 112 Roble Road, approximately 0.12 miles from the Pleasant Hill BART station. The Project requires the demolition of two existing residential structures and the removal of 161 trees.

Contra Costa Residents for Responsible Development (“Contra Costa Residents”) is an unincorporated association of individuals and labor unions, including member and Pleasant Hill resident Gerald Phillips, that may be adversely affected by the potential environmental impacts of the Project. Individual members of Contra Costa Residents and the affiliated unions live, work, recreate and raise their families in Contra Costa County. These members would be directly affected by the Project’s environmental and health and safety impacts. Members of Contra Costa Residents may also work on the Project itself. Accordingly, these individuals will be first in line to be exposed to any health and safety hazards created by the Project.

We reviewed the County’s FEIR and response to comments with the assistance of air quality and greenhouse gas expert, Dr. James Clark. Dr. Clark’s comments and curriculum vitae are attached as Exhibit A.<sup>1</sup> Exhibit A is fully incorporated herein and submitted to the County herewith. Exhibits and references to the expert comments are included by Dropbox.

We conclude that the Project’s EIR is in violation of CEQA and must be revised. As explained below, there remain outstanding issues related to the FEIR’s greenhouse gas (“GHG”), air quality, and traffic analysis that have not been addressed by the County. The EIR cannot be certified by the County until these issues have been resolved in a revised EIR.

## **I. GREENHOUSE GASES**

Our review of the EIR and County’s response to comments found that the EIR’s GHG analysis contains inadequate analysis and mitigation in the following areas: 1) The EIR does not support its reliance on the 2.6 MT CO<sub>2</sub>e/service population/year threshold with evidence, 2) the impact of vegetation removal on carbon sequestration as a result of Project construction was not accounted for in the EIR. When the impact is properly accounted for, it increases the Project’s GHG

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<sup>1</sup> Exhibit A: Letter from James Clark to Aaron Messing re: Comment Letter on Final Environmental Impact Report (FEIR) for Del Hombre Apartments Project, Contra Costa County, California State Clearing House Number 2018102067 (May 23, 2020) (hereinafter “Clark letter”) 4714-009acp

emissions above the EIR's 2030 threshold, 3) the EIR significantly underestimates water consumption which will increase the Project's GHG impact and relies on a water consumption mitigation measure that is not adequately incorporated or guaranteed by the EIR, 4) the EIR's mobile source and Project waste emissions are unsupported in the record, and 5) the EIR's calculation of service population to calculate GHG emissions/person is not supported by evidence.

**A. The EIR uses incorrect and unsupported GHG thresholds to support its GHG analysis**

The EIR presents two thresholds for determining whether the Project will result in significant impacts from GHGs: BAAQMD's 2020 GHG significance threshold of 4.6 MTCO<sub>2</sub>e/service population and an unadopted, unsupported 2030 GHG significance threshold of 2.6 MTCO<sub>2</sub>e/service population. Neither threshold is adequate to support a conclusion based on substantial evidence that no significant impact will occur from GHGs as a result of the Project.

In its response to comments, the County "acknowledged that the buildout year (2022) would be beyond the target year (2020)" and argue it included the 2020 threshold "for informational purposes."<sup>2</sup> But the County did not attempt to establish a threshold for the full buildout year or modify the 2020 threshold in any way to make it applicable to the year 2022.<sup>3</sup> Instead, the EIR appears to rest its GHG analysis solely on satisfaction of what the FEIR describes as the "substantial progress threshold for the region." The County admits in the FEIR that this threshold was not formally adopted.<sup>4</sup> Moreover, the EIR includes no disclosure of the threshold's origin or any substantial evidence to support the County's reliance upon that threshold.

CEQA requires agencies to support their use of thresholds of significance with substantial evidence,<sup>5</sup> defined as "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts."<sup>6</sup> For GHG analysis, CEQA specifically requires that "the agency's analysis should consider a timeframe that is appropriate for the project" and that it will "reasonably reflect evolving scientific knowledge and

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<sup>2</sup> Response to comments, p. 2-191

<sup>3</sup> See CEQA Guidelines 15064.4(b); *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204, 223.

<sup>4</sup> Response to comments, p. 2-191.

<sup>5</sup> 14 CCR § 15064.7

<sup>6</sup> PRC § 21082.2

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state regulatory schemes.”<sup>7</sup> California Courts have acknowledged that “over time, consistency with year 2020 goals will become a less definitive guide, especially for long-term projects that will not begin operations for several years [after 2020].”<sup>8</sup> Further, “consistency with the State’s long-term climate stabilization objectives . . . will often be appropriate . . . under CEQA,” provided the analysis is ‘*tailored . . . specifically to a particular project.*’”<sup>9</sup>

The EIR fails to support the use of its GHG threshold with any evidence, except for the vague statement in the FEIR that this is the “substantial progress threshold.” Without substantial evidence justifying the County’s use of the 2030 threshold, the EIR cannot be approved as satisfying CEQA’s requirement of disclosure and analysis. The EIR must be revised to use a GHG emissions threshold that is tailored to the project and applicable to the Project’s buildout year and, more importantly, to justify the choice of its 2030 GHG threshold with substantial evidence. Failure to do so would render the EIR inadequate under CEQA.

**B. The EIR fails to account for the GHG impacts of vegetation removal, underestimating a significant GHG impact**

As a result of Project construction, 161 trees will be removed and replaced by only 15 trees on the Project site. These trees are characterized in the DEIR “as a mixed oak woodland, dominated by valley oak...and coast live oak...in conjunction with a variety of other mature, adult tree species.”<sup>10</sup> Trees serve a vital environmental function as a natural vehicle for carbon sequestration. Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide.<sup>11</sup> It is a prominent method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change.<sup>12</sup>

According to the DEIR, the Project would result in a reduction of more than 90% of the vegetation currently onsite; however, the DEIR fails to note that this will

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<sup>7</sup> CEQA Guidelines 15064.4(b); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354; *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204, 223.

<sup>8</sup> *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th at 223.

<sup>9</sup> *Id.* (emphasis added).

<sup>10</sup> Del Hombre Apartment Project DEIR at 2-29.

<sup>11</sup> U.S. Geological Survey, *What is Carbon Sequestration?*, available at [https://www.usgs.gov/faqs/what-carbon-sequestration?qt-news\\_science\\_products=0#qt-news\\_science\\_products](https://www.usgs.gov/faqs/what-carbon-sequestration?qt-news_science_products=0#qt-news_science_products).

<sup>12</sup> *Id.*

significantly reduce the potential carbon sequestration at the Project site.<sup>13</sup> The EIR relies on the California Emissions Estimator Model (CalEEMod), a statewide land use emissions computer model, for its GHG emissions analysis. The CalEEMod includes a default GHG accumulation per acre factor for trees which reflects GHG sequestration of different land uses. For trees the factor is 111 MT CO<sub>2</sub>/acre.<sup>14</sup>

However, the EIR does not address the increase in GHG emissions from the clearing of trees and the subsequent loss of sequestration at the site. When properly included, Dr. Clark calculated that the resulting increase in GHG emissions would be 263 MT CO<sub>2</sub>/yr in 2030, bringing the Project's total 2030 GHG emissions to 2,187 MT CO<sub>2</sub>e/yr.<sup>15</sup> Using the EIR's service population of 823 people, the Project's GHG emissions generation will be 2.7 MT CO<sub>2</sub>e/service population/year, which exceeds the EIR's stated 2030 GHG emission threshold of 2.6 MT CO<sub>2</sub>e/service population/year.

In sum, if the EIR had properly considered increased GHGs resulting from a loss of carbon sequestration, it would have found a significant impact from GHGs. Under CEQA, any significant environmental impact *must* be disclosed and analyzed for potential mitigation.<sup>16</sup> The County has not done so here and must revise its analysis before any Project approval can be made.

**C. The Project's GHG emissions from water consumption would be significantly higher than that which was assumed in the DEIR and FEIR**

The EIR underestimates the GHG emissions associated with the Project in two primary ways. First, it assumes a 20% reduction in water usage due to "Compliance with the Green Building Code Standards" and the "Water Efficient Land Use Ordinance," but does not identify the measures from those standards that would actually reduce water usage. Second, the Draft EIR and Final EIR contain significantly different and conflicting estimates of water demand, with no explanation for the differences. Even if there will, in fact, be a 20% reduction in water usage, the gallons of water per capita required by the Project would be 1.5 times higher than the usage rates assumed in the FEIR, again resulting in higher GHGs emissions from the Project.

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<sup>13</sup> Clark letter at p. 3.

<sup>14</sup> Clark letter at p. 3.

<sup>15</sup> Clark letter at p. 3.

<sup>16</sup> 14 CCR § 15002(a)(1).

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In its response to comments from Laborers International Union of North America Local Union 324, the FEIR maintains that its water consumption analysis was accurately modeled to include “Apply Water Conservation Strategy” because it incorporated Green Building Code Standards and the Water Efficient Land Use Ordinance.<sup>17</sup> However, the FEIR does not identify how these standards will lead to the reduction of water consumption.

An EIR may not completely defer analysis of potential environmental impacts to an outside regulatory scheme.<sup>18</sup> In *Californians for Alternatives to Toxics v. Dep’t of Food & Agric.*, the Court found that the lead agency “repeatedly deferred to [an applicable] regulatory scheme instead of analyzing environmental consequences of pesticide use and therefore fell short of its duty under CEQA to meaningfully consider the issues raised by the proposed project.”<sup>19</sup> Thus, the County must show meaningful consideration of the environmental impacts from Project water consumption and show how particular measures would reduce the impacts, regardless of whether the measures are incorporated into the project or included as mitigation measures.<sup>20</sup>

Additionally, the DEIR and FEIR have substantially different projected water demands, with the DEIR projecting 55.23 Mgal/yr and the FEIR projecting 30.169 MG/yr.<sup>21</sup> Dr. Clark notes that “[n]o explanation is offered for the discrepancy in water demand assumed in the CalEEMod model analysis and disclosed in the main text of either the DEIR or the FEIR.”<sup>22</sup> This change in calculation has a marked impact on the projected GHG emissions from the Project, and the EIR must disclose the justification behind this reduction before it can be approved under CEQA.

Given the unreliability of the FEIR’s water usage numbers, Dr. Clark considers the California Water Resources Control Board and County’s Water

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<sup>17</sup> Contra Costa County, Del Hombre Apartment Project Response to Comments at p. 2-199.

<sup>18</sup> See *Californians for Alternatives to Toxics v. Dep’t of Food & Agric.* (2005) 38 Cal. Rptr. 3d 638, 648; *Oro Fino Gold Mining Corp. v. County of El Dorado* (1990) 225 Cal.App.3d 872, 881–882 (court rejected assertion that noise level under proposed project would be insignificant simply by virtue of being consistent with general plan standards for zone in question).

<sup>19</sup> *Californians for Alternatives to Toxics v. Dep’t of Food & Agric.* (2005) 38 Cal. Rptr. 3d 638, 648.

<sup>20</sup> 14 CCR §15002(a)(2); see *Californians for Alternatives to Toxics v. Dep’t of Food & Agric.* (2005) 38 Cal. Rptr. 3d 638, 648; *Sierra Club v. Cty. of Fresno* (2018) 6 Cal. 5th 502, 522; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.

<sup>21</sup> Clark letter at p. 6.

<sup>22</sup> Clark letter at p. 6.

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District water usage per capita a more accurate depiction of the Project's water usage.<sup>23</sup> The Water District's numbers would increase the FEIR's water usage by 1.5 times, even if the 20% reduction was supported in the FEIR, which it is not.<sup>24</sup> Once this increase is incorporated into the FEIR's modeling analysis, it will find a 39 to 58.5 MT CO<sub>2</sub>/yr increase in 2020 and a 45 to 67.5 MT CO<sub>2</sub>/yr increase in GHG emissions from operation of the Project, further driving up the already significant GHG impact.<sup>25</sup>

**D. Mobile Source and Project waste emissions are unsupported in the record**

The EIR fails to disclose support for its modeling analysis for mobile sources and Project waste emissions. First, the EIR's modeling analysis indicates that mobile source GHG emissions from the Project will decrease from 1,644 MT CO<sub>2</sub>e/yr in 2022 to 1,305 MT CO<sub>2</sub>e/yr in 2030.<sup>26</sup> Dr. Clark notes in his letter, "the DEIR and FEIR both fail to disclose the GHG emission factors assumed for mobile sources in 2022 and 2030. Thus, the major source of GHG emissions for the project is unsupported."<sup>27</sup>

Additionally, the DEIR assumed GHG emissions from processing Project waste would be reduced by 74%, from 66 MT CO<sub>2</sub>e/yr to 49 MT CO<sub>2</sub>e/yr by complying with AB 341. However, as Dr. Clark explains in his letter, "there is no support for the assumption that a 74% reduction in waste by recycling and composting would reduce GHG emissions by 74%. If the recycling and composting program, for example, relied on composting, which releases methane emissions, a GHG gas, GHG emissions could increase compared to the assumptions in the FEIR."<sup>28</sup>

"Whether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question."<sup>29</sup> This is because CEQA analysis cannot consist of "[a] conclusory discussion of an environmental impact...without reference to substantial

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<sup>23</sup> Clark letter at p. 7.

<sup>24</sup> Clark letter at p. 7.

<sup>25</sup> Clark letter at p. 7.

<sup>26</sup> Clark letter at p. 4.

<sup>27</sup> Clark letter at p. 4.

<sup>28</sup> Clark letter at p. 7.

<sup>29</sup> *Sierra Club v. Cty. of Fresno* (2018) 6 Cal. 5th 502, 514.  
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evidence.”<sup>30</sup> Here, the EIR merely assumes reductions in GHG emissions without supporting those reductions in the record with substantial evidence or implementing specific mitigation measures to ensure those reductions actually take place. This is invalid under CEQA and the County must revise this analysis before certifying the EIR.

**E. The EIR assumes a Service Population in its analysis that underestimates GHGs**

The EIR assumes 2.88 persons per household to calculate the service population for the project, totaling 818 residents.<sup>31</sup> However, given that the majority of residential units within the Project will only have one bedroom or less, our expert finds that this number considerably overestimates the Project’s service population.

The U.S. Department of Housing believes that an occupancy policy of 2 people per bedroom, as a general rule, is an appropriate estimation of occupancy.<sup>32</sup> Dr. Clark notes that this more tailored recommendation for the service population at the Project increases the EIR’s current GHG numbers to above its stated GHG threshold.<sup>33</sup> Assuming one resident for a studio, two residents for a one bedroom, and four residents for a two bedroom, the more realistic approximation of service population would be 722 residents, as opposed to the FEIR’s 818 residents. In 2030, this would mean that GHG emissions per service population per year would be  $1,924/722 = 2.7$  MT CO<sub>2</sub>e, exceeding the FEIR’s stated 2.6 MT CO<sub>2</sub>e 2030 GHG threshold.<sup>34</sup> Thus, when following a more accurate approximation of the Project’s service population, the Project’s GHGs are significant and must be disclosed and mitigated by the EIR.

**II. AIR QUALITY**

In our comments on the DEIR, we argued that the DEIR’s mitigation measure MM AIR-3 was inadequate to secure primarily Tier IV Interim off-road

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<sup>30</sup> 14 CCR §15126.4(a)(2); *Sierra Club v. Cty. of Fresno* (2018) 6 Cal. 5th 502, 514.

<sup>31</sup> DEIR, p. 3.17-16.

<sup>32</sup> Department of Housing and Urban Development, Fair Housing Enforcement–Occupancy Standards; Statement of Policy; Notice; Republication (“Keating Memo”), p. 70984 (Dec. 22, 1998), available at [https://www.hud.gov/sites/documents/DOC\\_7780.PDF](https://www.hud.gov/sites/documents/DOC_7780.PDF).

<sup>33</sup> Clark letter at p. 4.

<sup>34</sup> Clark letter at p. 4.

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emission standard equipment for Project construction.<sup>35</sup> We argued that an exception within the mitigation measure essentially negated any requirements stated within the measure.<sup>36</sup> In response, the County rewrote the mitigation measure to remove this exception:

During construction activities, all off-road equipment with diesel engines greater than 50 horsepower shall meet either United States Environmental Protection Agency or California Air Resources Board Tier IV Interim off-road emission standards.<sup>37</sup>

The County also required monitoring for compliance with the above stated requirement:

The construction contractor shall maintain records concerning its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.<sup>38</sup>

While the rewritten mitigation measure would appear to commit to the use of Tier IV certified equipment, Dr. Clark notes that, based on publicly available records, the likelihood of this mitigation measure being achieved in practice is extremely low. Dr. Clark shows that the Tier IV equipment likely needed by the Project are in short supply in California, as can be seen by Table 2: Percent of Equipment in California DOORS Database by Emission Tier Level in Dr. Clark's letter.<sup>39</sup> This includes equipment for demolition (rubber tired dozers and tractors/loaders/backhoes), site preparation (graders, scrapers, rubber tired dozers, and tractors/loaders/backhoes), grading (graders, scrapers, rubber tired dozers, off-highway trucks, and tractors/loaders/backhoes), and paving operations (pavers, rollers, and tractors/loaders/backhoes). There is therefore no reason for the EIR to

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<sup>35</sup> Contra Costa Residents for Responsible Development, Comments on the Del Hombre Apartment Project Draft Environmental Impact Report (SCH # 2018102067) at p. 12–13 (Nov. 15, 2019) (hereinafter “Residents letter”).

<sup>36</sup> Residents letter p. 12–13.

<sup>37</sup> Response to Comments, p. 2-95.

<sup>38</sup> Response to Comments, p. 2-95.

<sup>39</sup> Clark letter p. 9–11.

assume that this mitigation measure is feasible in practice without substantial evidence. No such substantial evidence is provided in the EIR.

Without any plan for how the Project intends to achieve this mitigation measure, there is no indication that this measure will provide any mitigation against the potential health risk impacts from construction that the mitigation is intended to reduce.<sup>40</sup> The Project cannot be approved under CEQA without addressing this deficiency.

### III. TRAFFIC

In our comments on the DEIR, we presented evidence that traffic queue exceedances were substantial and that the County failed to analyze and mitigate those impacts.<sup>41</sup> The County responded that “vehicle queues often extend to and beyond driveway locations” and that “[e]liminating all instances of vehicle queue spillback at the driveways mentioned would require further roadway widening, which could be contrary to other community goals. Additionally, vehicle queue spillback is usually temporary in nature, and can be managed through signal timing adjustment and other operational strategies.”<sup>42</sup>

Here, the County in fact acknowledges the impacts outlined in our comments, argues that potential mitigation exists, but fails to provide any specific analysis or identify specific mitigation measures that would address the impacts. At the same time, the County appears above to claim that the impacts may be significant but are ultimately unavoidable. The County cannot hold the stick at both ends. Either it must acknowledge this impact as significant and unavoidable or it must implement in the EIR those “operational strategies” it claims can mitigate those impacts.<sup>43</sup>

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<sup>40</sup> CEQA §§ 21002, 21081(a); *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available); *Lotus v. Dept of Forestry* (2014) 223 Cal. App. 4th 645, 651–52.

<sup>41</sup> Residents letter p. 18–20.

<sup>42</sup> Response to Comments, p. 2-98–2-99.

<sup>43</sup> CEQA Guidelines § 15096(g)(2) (“The Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment”); CEQA Guidelines § 15093(b) (“The statement of overriding considerations shall be supported by substantial evidence in the record”).

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#### IV. CONCLUSION

The Del Hombre Apartment Project's EIR violates CEQA and cannot be certified as currently written. The EIR fails to fully analyze significant environmental impacts from greenhouse gases and fails to provide adequate analysis and mitigation for air quality and traffic impacts.

We urge the Commission not to certify the EIR and require staff to prepare a revised analysis that addresses the issues raised in our comments and includes the mitigation necessary to reduce impacts to less than significant.

Thank you for your attention to these comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'AM', with a long horizontal line extending to the left.

Aaron M. Messing  
Associate

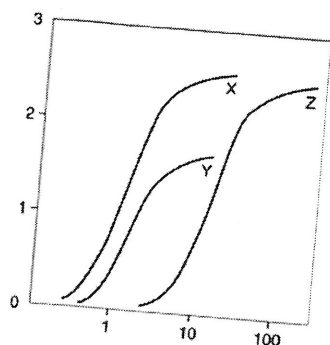
AMM:acp

Attachment

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## **EXHIBIT A**



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May 27, 2020

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**Attn: Mr. Aaron Messing**

**Subject: Comment Letter on Final Environmental Impact Report (FEIR) for Del Hombre Apartments Project, Contra Costa County, California State Clearing House Number 2018102067**

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Dear Mr. Messing:

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the May 15, 2020 Contra Costa County Final Environmental Impact Report (FEIR) of the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the plan. If we do not comment on a specific item this does not constitute acceptance of the item.

**General Comments:**

The County's analysis for calculating the impacts from greenhouse gas (GHG) emissions from the construction and operational phases of the project are unsupportable and flawed. The analysis underestimates the long term emissions by failing to account for the impact removing on-site vegetation will have, overestimating the service population, failing to account for adequate mitigation of waste and water GHG emissions, and utilizing unsupported mobile and energy GHG emissions in the calculation of total project emissions. These errors and omissions lead to the false assumption of compliance with the 2030 emission goals of GHGs. In fact, the Project will result in significant GHG emissions.



In addition, although the Proponent is committing to the use of at least Tier 4 interim certified equipment on site, the County's assessment fails to account for the availability of the equipment in the State of California and the impacts that will have on the duration of the construction phase of the project. These flaws are detailed below, making the conclusions of the FEIR suspect.

### **Specific Comments:**

#### **1. The GHG Emissions From the Removal of Mature Vegetation Onsite Are Omitted In The Analysis**

The County's analysis fails to adequately account for the impact that removing large numbers of mature trees will have on the GHG emissions for the project. An aerial view of the site shows that the site is currently heavily wooded with a large number of mature trees:



In the FEIR, the County states that the “project site can be characterized as a mixed oak woodland, dominated by valley oak...and coast live oak, ..in conjunction with a variety of other mature, adult tree species.” It is well known that trees store large amounts of GHGs. The FEIR omitted the increase in GHG from removing this existing vegetation. The FEIR goes on to describe the current vegetation of the site and plans for their removal/replacement as follows:

There are a total of 189 trees representing 27 different species across the project site. The foliage present on the project site can be characterized as a mixed oak woodland, dominated by valley oak (*Quercus lobata*) and coast live oak (*Quercus agrifolia*), in conjunction with a variety of other mature, adult tree species.<sup>2</sup> The project would remove approximately 161 trees (approximately 145 code protected trees and approximately 16 trees that are not code-protected) and impact approximately 27 additional trees. A total of ~~14~~ approximately 15 trees would be planted along Honey Trail, Del Hombre Lane, and Roble Road (see Exhibit 2-9a).

Under the County’s current plan, the Project would result in a reduction of 90% plus of the current sequestration of GHG from vegetation currently onsite (15 new trees to replace the 161 trees being removed). Additionally, the FEIR states that 10% of the site will be landscaped areas and 5% planters on the podium. However, new trees, landscaping, and podium planter plants would contribute very little to GHG retention because, for example, oaks do not begin to sequester significant carbon for at least 20 years.

The CalEEMod analysis, relied on in the FEIR, includes a “default GHG accumulation per acre factor for trees of 111 MT CO<sub>2</sub>/acre.” Additional GHG would be stored in the understory. The FEIR did not include the increase in GHG emissions from clearing vegetation from the site. The resulting increase in GHG emissions from removing the vegetation are (2.37 acres)(111 MT CO<sub>2</sub>/acre) = 263 MT CO<sub>2</sub>/yr. Thus, the total year 2030 GHG emissions are 1,924 + 263 = 2,187 MT CO<sub>2</sub>e/yr.

Conservatively assuming the FEIR’s service population of 823 people (see Comment 2 below), the Project GHG emission generation is  $2,187/823 = 2.7$  MT CO<sub>2</sub>e/service population/year. This exceeds the selected FEIR 2030 significance threshold of 2.6 MT CO<sub>2</sub>e/service population/year and is thus a significant GHG impact. Assuming the more realistic service population of 722 (see Comment 2 below), the Project GHG emission generation is  $2,187/722 = 3.0$  MT CO<sub>2</sub>e/service

population/year. This also exceeds the 2030 significance threshold of 2.6 MT CO<sub>2</sub>e/service population/year. Thus, regardless of the service population selected, Project GHG emissions in 2030 are significant.

## **2. The Service Population Used in the GHG Analysis is Overestimated.**

The total GHG emissions are divided by the service population to estimate MT CO<sub>2</sub>e/yr. The FEIR assumes a service population of 823 people, consisting of 818 residents and 5 employees.<sup>1</sup> The FEIR does not contain any support for the assumed 818 residents. The federal Department of Housing and Urban Development's Fair Housing Act recommends an occupancy limit of 2 people per bedroom.<sup>2</sup> Note that the DEIR, p. 3.17-16, assumes 2.88 persons per household for unincorporated Contra Costa County, based on the California Department of Finance, which works out to 818 residents.

The FEIR indicates the residential building would consist of 21 studio apartment (566 ft<sup>2</sup>), 178 one-bedroom apartments (773 ft<sup>2</sup>), and 85 two-bedroom apartments (1,160 ft<sup>2</sup>) for a total of 284 units, with an average unit size of 863 ft<sup>2</sup>.<sup>3</sup> Assuming 2 people per bedroom, the service populations would be  $(21 \times 1 + 178 \times 2 + 85 \times 4) = 717 + 5 = 722$ . Assuming the Table 3.7-5 2030 GHG emissions are correct, the GHG emissions per service population per year is  $1,924/722 = 2.7 \text{ MT CO}_2\text{e/service population/year}$ , which exceeds the 2030 significance threshold of 2.6 MT CO<sub>2</sub>e/service population/year and is therefore a significant 2030 GHG impact.

## **3. The Mobile Source Emission Utilized in the GHG Analysis Are Unsupported**

The FEIR increased unmitigated mobile source emissions by 3% in 2020 and 2030,<sup>4</sup> relative to estimates in the DEIR. Further, the FEIR indicates that revised mobile source GHG emissions

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<sup>1</sup> FEIR, pdf 458.

<sup>2</sup> Department of Housing and Urban Development, Fair Housing Enforcement–Occupancy Standards; Statement of Policy; Notice; Republication (“Keating Memo”), p. 70984 (Dec. 22, 1998), available at [https://www.hud.gov/sites/documents/DOC\\_7780.PDF](https://www.hud.gov/sites/documents/DOC_7780.PDF).

<sup>3</sup> FEIR, pdf 75. Square feet from FEIR, pdf 444, Table 2-3.

<sup>4</sup> FEIR, Table 3.77-5.

decrease from 1,644 MT CO<sub>2</sub>e/yr in 2022 to 1,305 MT CO<sub>2</sub>e/yr in 2030.<sup>5</sup> However, the FEIR does not reveal the basis for the increase relative to the DEIR nor the decrease from 2022 to 2030. Thus, the major source of the Project's GHG emissions is unsupported.

GHG emissions from mobile sources depend on the fleet mix, miles travelled, and vehicle emission factors. A review of the CalEEMod output files in DEIR Appendix B and FEIR Appendix C indicate that the fleet mix and miles traveled are disclosed in the CalEEMod modeling appendices and did not change between the DEIR and FEIR. Thus, the only factor that could have changed is the emission factors in MT CO<sub>2</sub>e per mile traveled. The DEIR and FEIR both fail to disclose the GHG emission factors assumed for mobile sources in 2022 and 2030. Thus, the major source of GHG emissions for the project is unsupported.

#### **4. The Water Use Emissions Is Underestimated**

The CalEEMod run in Appendix C to the FEIR assumed unmitigated 2022 and 2030 Project indoor/outdoor water use for mid-rise apartments of 18.5037 Mgal/yr and 11.6654 Mgal/yr for a total 2022 water use of 30.169 Mgal/yr. The CalEEMod run also assumed mitigated indoor and outdoor water use of 14.803 Mgal/yr and 9.33232 Mgal/yr, respectively. The mitigated use corresponds to a 20% reduction in both indoor and outdoor water use in both 2022 and 2030. These water use estimates were converted into emissions in the CalEEMod model. The stated mitigations in the CalEEMod runs assume compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

##### Water Use Mitigation

Neither the FEIR nor the DEIR specify compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance as mitigation measures. Rather, they are just mentioned in Chapter 2 and Section 3, Errata of the FEIR, as design elements. Merely stating compliance with complex codes without specifying the code sections that would be implemented and requiring evidence of compliance with the assumed 20% reduction, e.g., certificate of completion signed by licensed professional, is not valid mitigation measure. The FEIR, in response to comments, asserts that measures to achieve the 20% reduction assumed in the CalEEMod analysis are part of project design. The CalEEMod output states that water mitigation is compliance with the

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<sup>5</sup> Ibid.

Green Building Code Standards and the Water Efficient Land Use Ordinance. Neither the DEIR nor the FEIR identify the specific measures that would be selected from these standards and codes to assure a 20% reduction in water use. No evidence is offered in the FEIR or DEIR that these standards and codes can achieve a 20% reduction at the subject site. Further, the DEIR and FEIR do not include any enforceable conditions to assure that the measures would be implemented and that the apartment building and outdoor uses would consume no more water than assumed in the CalEEMod runs.

Further, the Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881) requires cities, counties, etc. to adopt the landscape water conservation ordinance by January 1, 2010.<sup>6</sup> The reductions in water use from complying with the Water Efficient Land Use Ordinance are already built into the per capita water use of the Contra Costa Water District because this ordinance is already being implemented by CCWD.<sup>7</sup> Thus, the FEIR's use of a 20% reduction of water use is double counting. The reduction from compliance is already included in the per capita water use of CCWD.

#### Water Use Underestimated

The GHG emissions from supplying water are underestimated (see below). Further, the FEIR and DEIR contain conflicting estimates of water demand, with no explanation for the differences. The various estimates are as follows:

- *Mitigated FEIR CalEEMod: 30.169 MG/yr*

The CalEEMod run in Appendix C to the FEIR assumed unmitigated 2022 and 2030 Project indoor/outdoor water use for mid-rise apartments of 18.5037 Mgal/yr and 11.6654 Mgal/yr, for a total 2022 water use of 30.169 Mgal/yr. The CalEEMod analysis also assumed that the mitigated indoor and outdoor water use for the same period of 14.803 Mgal/yr and 9.33232 Mgal/yr, respectively, for a total mitigated water use of 24.135 Mgal/yr. Thus, the FEIR assumed a 20% reduction by compliance with AB 341, which requires recycling and composting. However, the FEIR fails to indicate how this would be achieved. No mitigation is required to assure that this

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<sup>6</sup> See, for example, California Department of Water Resources, The Updated Model Water Efficient Landscape Ordinance; available at: <https://www.contracosta.ca.gov/DocumentCenter/View/34131/CDWR-2009-Model-Water-Efficient-Landscape-Ordinance-PDF>.

<sup>7</sup> See, e.g., CDWR, Model Efficient Landscape Ordinance; available at: <https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance>.



reduction is achieved. Instead, the FEIR asserts compliance without proof of how that would be achieved.

- *DEIR: 55.23 MG/yr*

The main text of DEIR assumes a Project water demand of 55.23 Mgal/yr, or nearly two times more than modeled in the CalEEMod analysis in either the DEIR or FEIR CalEEMod analyses in Appendices C. This estimate was not revised in the FEIR. The main text of the DEIR did not assume any mitigation for this water demand. No explanation is offered for the discrepancy in water demand assumed in the CalEEMod model analysis and disclosed in the main text of the DEIR.

Assuming that the water demand disclosed in the DEIR text is plausible, the GHG emissions from water use would be  $55.23/30.169 = 1.83$  times higher than disclosed in the DEIR or FEIR. Thus, mitigated GHG emissions from supplying water to the Project would be  $1.83 \times 45 = 82.4$  MT CO<sub>2</sub>/yr in 2022 and  $1.83 \times 39 = 71.4$  MT CO<sub>2</sub>/yr in 2030.

- *Per Capita Water Use*

The 2022 and 2030 mitigated indoor plus outdoor water demand assumed in the CalEEMod analysis in both the DEIR and FEIR and used to estimate GHG emissions ( $14.803 + 9.332 = 24.13$  Mgal/yr) corresponds to a per capita demand of  $24.13 \text{ Mgal}/(823 \text{ people})(365 \text{ day/yr}) = 80$  gallons of water per day per capita (GPC).

The DEIR text estimated Project water demand assuming 185 GPC. A footnote in the DEIR asserts that “The San Francisco Public Water Resources Division Annual Report 2013–2014 estimates average residential water usage to be 49 gallons per person per day which more closely resembles the high-density residential use of the project. However, as a more conservative estimate, this EIR assumes 185 gallons per person per day to account for the total increase in water demand associated with the project within the County.” In spite of this statement, the GHG analysis in both the DEIR and FEIR is based on an anomalously low estimate of water demand.

Assuming the DEIR text is correct, 2022 and 2030 water use GHG emissions would be  $185/80 = 2.3$  times higher, increasing 2022 water use GHG emissions from 39 to 90 MT CO<sub>2</sub>/yr and 2030 GHG emissions from 45 to 104 MT CO<sub>2</sub>/yr.

According to the California Water Resources Control Board’s water conservation and production reports, last year’s per-capita water use in Contra Costa County was 92 GPC.<sup>8</sup> This

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<sup>8</sup> California Water Resources Board, *Water Conservation and Production Reports*, available at [https://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/conservation\\_reporting.html](https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.html).

number, verified by the County's Water District, is a vastly more reliable indicator of the actual water usage of the Project. Assuming the unidentified but proposed generic water use mitigation in the FEIR achieves its assumed 20% reduction, the actual Project water use under the proposed mitigation would be 73.6 GPC, or  $(73.6/49) = 1.5$  times higher than assumed in the FEIR. Thus, 2020 and 2030 water use GHG emissions would be 1.5 times higher, increasing 2020 water use GHG emissions from 39 to 58.5 MT CO<sub>2</sub>e/yr and 2030 GHG emissions from 45 to 67.5 MT CO<sub>2</sub>e/yr.

- *Total GHG Emission from Water Use*

In summary, regardless of the assumptions used, the increase in GHG emissions from supplying water to the Project is much higher than revealed in the FEIR, ranging from 58.5 to 82 to 147 MT CO<sub>2</sub>e/yr in 2020 compared to the FEIR's estimate of 45 MT CO<sub>2</sub>e/yr and from 67.5 to 71 to 170 MT CO<sub>2</sub>e/yr in 2030 compared to the FEIR's estimate of 39 MT CO<sub>2</sub>e/yr in 2030.

## 5. **The Waste Mitigation Measures Assumed in The FEIR Are Unsupported.**

The CalEEMod run in Appendix C to the FEIR assumed GHG emissions from processing Project waste would be reduced by 74%, from 66 MT CO<sub>2</sub>e/yr<sup>9</sup> to 49 MT CO<sub>2</sub>e/yr<sup>10</sup> by complying with AB 341.<sup>11</sup> The responses to comments indicate that compliance with AB 341 is a design element rather than a mitigation measure. However, there is no support for the assumption that a 74% reduction in waste by recycling and composting would reduce GHG emissions by 74%. If the recycling and composting program, for example, relied on composting, which releases methane emissions, a GHG gas, GHG emissions could increase compared to the assumptions in the FEIR. Thus, even assuming compliance with AB 341 as a design element, a mitigation measure requiring measurement and reporting should be included in the FEIR to assure that GHG emissions from compliance with AB 341 would be reduced by 74% to no more than to 49 MT CO<sub>2</sub>e/yr.

## 6. **The BAAQMD Significance Threshold of 4.6 MTCO<sub>2</sub>e Does Not Apply To This**

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<sup>9</sup> FEIR, Appendix C, p. C.1-6, pdf 11.

<sup>10</sup> FEIR, Appendix C, p. C.1-7, pdf 12.

<sup>11</sup> FEIR, Appendix C, p. C.1-2, pdf 7.

## Project.

The FEIR relies on the BAAQMD's significance threshold of 4.6 MTCO<sub>2</sub>e/service population (SP) to evaluate 2022 GHG emissions from the Project. There are two problems with this use: First, the BAAQMD advises agencies not to rely on its GHG thresholds as the District is in the process of updating them.<sup>12</sup> Further, assuming it is still valid, it is valid only until 2020. The Project will not be operational until 2022 and probably will not be fully occupied until several years later.

### 7. The Revised GHG Emission Levels For The Project Show Non-Compliance With GHG Emission Levels For Project.

The revised GHG emissions, based on the elements detailed above, are summarized in Table

1. This table shows that GHG emissions are significant in both 2022 and 2030.

**Table 1: Revised GHG Emissions**

Emission Source	2022 Emissions (MT CO <sub>2</sub> e/yr)	2030 Emissions MT CO <sub>2</sub> e/yr)
Area	9	9
Energy	615	493
Mobile	1,644	1,305
Waste	49	49
Water	82-147	71-170
Tree Removal	263	263
Amortized Construction Emissions	29	29
Total Project Emissions	2,691-2,756	2,219-2,318
Service Population <sup>13</sup>	722	722
Project Emissions (MT CO <sub>2</sub> e/population	3.7-3.8	3.1-3.2
Significance Threshold (MT CO <sub>2</sub> e/pop/year	2.6	2.6
Significant	Yes	Yes

It is clearly evident from the discussions above that the Project analysis is flawed and must

<sup>12</sup> Letter from BAAQMD to Alicia Parker, City of Oakland, Re: Downtown Oakland Specific Plan – Notice of Preparation of a Draft Environmental Impact Report, February 15, 2019; available at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa-letters/2019/downtown\\_oakland\\_specific\\_plan\\_eir\\_notice\\_of\\_preparation\\_021519-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa-letters/2019/downtown_oakland_specific_plan_eir_notice_of_preparation_021519-pdf.pdf?la=en)

<sup>13</sup> If the FEIR's service population of 823 is used, the Project emissions would be 3.27-3.35 MT CO<sub>2</sub>e/pop/year in 2020 and 2.7-2.8 MT CO<sub>2</sub>e/pop/year.

be revised.

**8. Although The Proponent Is Committing To The Use Of At Least Tier 4 Interim Certified Equipment On Site, The County’s Assessment Fails To Account For The Availability Of The Equipment In The State Of California And The Impacts That Will Have On The Duration Of The Construction Phase Of The Project.**

MM AIR-3 states “During construction activities, all off-road equipment with diesel engines greater than 50 horsepower shall meet either United States Environmental Protection Agency or California Air Resources Board Tier IV Interim off-road emission standards.” Although the County has changed mitigation measure MM AIR 3 to reflect the commitment by the Proponent to only use Tier 4 interim equipment, the impact of availability is not assessed in the FEIR. If certified equipment is not available and the Proponent is taken at their word, then project development would stop until certified equipment is available, no matter what the phase of construction.

Based upon a public records act (PRA) of the California Air Resources Board’s (CARB) Diesel Off-Road Online Reporting System (DOORS) it is evident that the availability of Tier 4 interim and Tier 4 final construction equipment is highly dependent on the type of equipment. Using the CALEEMOD analysis supplied in Appendix C to the FEIR, the availability of those specific pieces of construction equipment (highlighted in yellow) across the state are identified in Table 2 below.

Table 2: Percent of Equipment in California DOORS Database by Emission Tier Level

Equipment Type (> 50 hp)	U.S. EPA Emission Tier Level						Percent Total Meeting Contra Costa Requirement MM-3
	T0	T1	T2	T3	T4F	T4I	
Aerial Lifts	1.63%	4.67%	14.86%	4.08%	<b>48.64%</b>	<b>26.12%</b>	74.76%
Boom	0.15%	0.77%	5.22%	1.59%	<b>76.20%</b>	<b>16.06%</b>	92.26%
Bore/Drill Rigs	11.53%	15.42%	16.86%	21.76%	<b>17.72%</b>	<b>14.34%</b>	32.06%
Bucket	8.33%	18.33%	10.00%	6.67%	<b>33.33%</b>	<b>23.33%</b>	56.67%
Concrete Mixer	0.00%	0.00%	0.00%	14.29%	<b>85.71%</b>	<b>0.00%</b>	85.71%
Concrete Pump	1.30%	7.79%	40.26%	1.30%	<b>32.47%</b>	<b>16.88%</b>	49.35%
Crane 35ton or more	5.57%	4.41%	5.37%	18.81%	<b>37.62%</b>	<b>27.45%</b>	65.07%
Crane less than 35ton	20.37%	2.47%	6.79%	12.35%	<b>38.27%</b>	<b>19.75%</b>	58.02%

Equipment Type (> 50 hp)	U.S. EPA Emission Tier Level						Percent Total Meeting Contra Costa Requirement MM-3
	T0	T1	T2	T3	T4F	T4I	
Cranes	27.84%	11.49%	9.13%	26.60%	10.82%	11.80%	22.62%
Crawler Tractors	26.56%	13.31%	13.11%	13.70%	22.39%	10.93%	33.32%
Crushing/Processing Equipment	0.00%	0.78%	2.34%	14.06%	74.22%	8.59%	82.81%
Drill Rig	7.09%	4.14%	8.86%	12.56%	45.79%	17.87%	63.66%
Drill Rig (Mobile)	11.51%	8.71%	11.51%	17.26%	30.95%	14.77%	45.72%
Excavators	5.24%	8.34%	13.95%	7.29%	48.67%	16.50%	65.17%
Forklifts	9.57%	10.57%	13.82%	7.99%	40.45%	17.46%	57.91%
Garbage Refuse	0.00%	0.00%	8.70%	8.70%	43.48%	39.13%	82.61%
Garbage Transfer	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%	66.67%
Graders	29.78%	14.12%	12.89%	15.27%	17.40%	10.52%	27.92%
Hopper Tractor Trailer	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	100.00%
Mower	2.44%	7.27%	13.58%	1.10%	54.40%	21.22%	75.62%
Nurse Rig Aircraft Supply	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
Nurse Rig Other	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
Off Highway Tractors	3.55%	6.28%	6.01%	8.74%	65.30%	10.11%	75.41%
Off Highway Trucks	1.69%	3.87%	11.14%	5.81%	62.23%	15.25%	77.48%
Off-Highway Tractors	18.25%	17.06%	20.98%	10.02%	17.18%	16.31%	33.49%
Off-Highway Trucks	16.96%	12.96%	17.54%	20.81%	16.13%	13.99%	30.12%
Other Construction Equipment	16.35%	14.20%	17.11%	10.53%	24.03%	17.19%	41.22%
Other General Industrial Equipment	13.18%	16.56%	27.57%	8.61%	13.80%	19.84%	33.65%
Other Material Handling Equipment	10.84%	11.39%	19.25%	15.55%	26.63%	16.26%	42.89%
Other Truck	15.64%	10.34%	5.31%	13.41%	36.87%	11.45%	48.32%
Pavers	12.11%	21.18%	16.99%	14.97%	23.34%	11.41%	34.75%
Paving Equipment	6.49%	12.80%	12.74%	12.44%	38.17%	17.05%	55.22%
Railcars or Track Cars	16.33%	8.16%	0.00%	14.29%	51.02%	10.20%	61.22%
Rollers	14.09%	15.93%	18.30%	6.46%	30.61%	14.59%	45.20%
Rough Terrain Forklifts	3.95%	9.32%	15.89%	8.11%	41.94%	20.80%	62.74%
Rubber Tired Dozers	41.04%	10.02%	9.44%	19.65%	15.22%	4.62%	19.85%
Rubber Tired Loaders	16.74%	12.71%	13.56%	14.94%	29.29%	12.76%	42.05%
Scrapers	28.91%	10.98%	15.47%	30.41%	10.15%	4.04%	14.19%
Skid Steer Loaders	3.70%	10.02%	15.81%	3.20%	54.69%	12.58%	67.27%
Spray Truck	5.56%	4.17%	19.44%	2.78%	34.72%	26.39%	61.11%
Spreader Tractor Trailer	0.00%	14.29%	28.57%	0.00%	42.86%	14.29%	57.14%


Equipment Type (> 50 hp)	U.S. EPA Emission Tier Level						Percent Total Meeting Contra Costa Requirement MM-3
	T0	T1	T2	T3	T4F	T4I	
Spreader Truck	4.17%	0.00%	4.17%	37.50%	16.67%	25.00%	41.67%
Surfacing Equipment	15.38%	14.25%	10.18%	23.08%	19.23%	17.65%	36.88%
Sweepers/Scrubbers	11.02%	20.84%	16.57%	6.61%	25.75%	19.06%	44.81%
Tank Truck	4.05%	6.76%	8.11%	27.03%	37.84%	16.22%	54.05%
Tanker Truck Trailer	0.00%	18.18%	0.00%	0.00%	63.64%	18.18%	81.82%
Telescopic Handler	1.33%	0.00%	2.67%	0.00%	80.00%	16.00%	96.00%
Tow Tractor	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Tractors/Loaders/Backhoes	13.53%	16.50%	18.73%	8.96%	29.23%	13.05%	42.28%
Trenchers	21.86%	19.57%	20.87%	3.28%	21.86%	12.57%	34.43%
Vacuum Truck	2.21%	18.38%	15.44%	25.00%	13.24%	14.71%	27.94%
Water Truck	21.79%	8.21%	16.43%	16.07%	23.57%	13.57%	37.14%
Workover Rig (Mobile)	5.99%	15.14%	9.78%	17.35%	7.10%	13.56%	20.66%
Yard Goat	4.40%	4.58%	9.41%	18.31%	41.71%	21.33%	63.04%

It is clear from the CARB data that access to Tier 4 interim certified equipment necessary for demolition (rubber tired dozers and tractors/loaders/backhoes), site preparation (graders, scrapers, rubber tired dozers, and tractors/loaders/backhoes), grading (graders, scrapers, rubber tired dozers, off-highway trucks, and tractors/loaders/backhoes), and paving operations (pavers, rollers, and tractors/loaders/backhoes), are in short supply in the State. In particular, Tier 4 interim dozers, scrapers, graders, and pavers make up a small portion of the registered fleet in California. If the Proponent does not acquire the necessary equipment during construction or delay the construction until the equipment is available, the air quality impacts detailed in the FEIR will be rendered moot, creating a serious flaw in the overall CEQA analysis of the project.

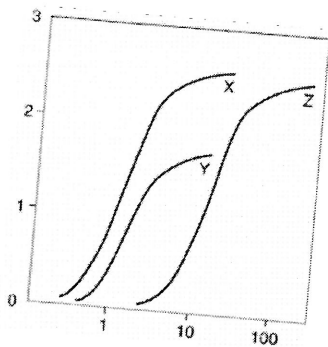
## Conclusion

The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant unmitigated impacts if the GHG analysis is not corrected and the conditions of approval are not binding.

Sincerely,



JAMES J. J. CLARK, Ph.D.



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***James J. J. Clark, Ph.D.***

*Principal Toxicologist*

**Toxicology/Exposure Assessment Modeling**

**Risk Assessment/Analysis/Dispersion Modeling**

**Education:**

Ph.D., Environmental Health Science, University of California, 1995

M.S., Environmental Health Science, University of California, 1993

B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

**Professional Experience:**

Dr. Clark is a well recognized toxicologist, air modeler, and health scientist. He has 20 years of experience in researching the effects of environmental contaminants on human health including environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); conducting and managing human health risk assessments for regulatory compliance and risk-based clean-up levels; and toxicological and medical literature research.

Significant projects performed by Dr. Clark include the following:

**LITIGATION SUPPORT**

**Case: James Harold Caygle, et al, v. Drummond Company, Inc. Circuit Court for the Tenth Judicial Circuit, Jefferson County, Alabama. Civil Action. CV-2009**

**Client: Environmental Litigation Group, Birmingham, Alabama**

Dr. Clark performed an air quality assessment of emissions from a coke factory located in Tarrant, Alabama. The assessment reviewed include a comprehensive review of air quality standards, measured concentrations of pollutants from factory, an inspection of the facility and detailed assessment of the impacts on the community. The results of the assessment and literature have been provided in a declaration to the court.



**Case Result: Settlement in favor of plaintiff.**

**Case: Rose Roper V. Nissan North America, et al. Superior Court of the State Of California for the County Of Los Angeles – Central Civil West. Civil Action. NC041739**

**Client: Rose, Klein, Marias, LLP, Long Beach, California**

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to multiple chemicals, including benzene, who later developed a respiratory distress. A review of the individual's medical and occupational history was performed to prepare an exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to respiratory irritants. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Settlement in favor of plaintiff.**

**Case: O'Neil V. Sherwin Williams, et al. United States District Court Central District of California**

**Client: Rose, Klein, Marias, LLP, Long Beach, California**

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to petroleum distillates who later developed a bladder cancer. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Summary judgment for defendants.**

**Case: Moore V., Shell Oil Company, et al. Superior Court of the State Of California for the County Of Los Angeles**

**Client: Rose, Klein, Marias, LLP, Long Beach, California**

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to chemicals while benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Settlement in favor of plaintiff.**

**Case: Raymond Saltonstall V. Fuller O'Brien, KILZ, and Zinsser, et al. United States District Court Central District of California**

**Client: Rose, Klein, Marias, LLP, Long Beach, California**

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Settlement in favor of plaintiff.**

**Case: Richard Boyer and Elizabeth Boyer, husband and wife, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-7G.**

**Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.**

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Settlement in favor of plaintiff.**

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**Case: JoAnne R. Cook, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-9R**

**Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.**

Dr. Clark performed a toxicological assessment of an individual exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Settlement in favor of plaintiff.**

**Case: Patrick Allen And Susan Allen, husband and wife, and Andrew Allen, a minor, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-W**

**Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.**

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Settlement in favor of plaintiff.**

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**Case: Michael Fahey, Susan Fahey V. Atlantic Richfield Company, et al. United States District Court Central District of California Civil Action Number CV-06 7109 JCL.**

**Client: Rose, Klein, Marias, LLP, Long Beach, California**

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Settlement in favor of plaintiff.**

**Case: Constance Acevedo, et al., V. California Spray-Chemical Company, et al.,  
Superior Court of the State Of California, County Of Santa Cruz. Case No. CV  
146344**

Dr. Clark performed a comprehensive exposure assessment of community members exposed to toxic metals from a former lead arsenate manufacturing facility. The former manufacturing site had undergone a DTSC mandated removal action/remediation for the presence of the toxic metals at the site. Opinions were presented regarding the elevated levels of arsenic and lead (in attic dust and soils) found throughout the community and the potential for harm to the plaintiffs in question.

**Case Result: Settlement in favor of defendant.**

**Case: Michael Nawrocki V. The Coastal Corporation, Kurk Fuel Company, Pautler  
Oil Service, State of New York Supreme Court, County of Erie, Index Number  
I2001-11247**

**Client: Richard G. Berger Attorney At Law, Buffalo, New York**

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the

known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

**Case Result: Judgement in favor of defendant.**

## **SELECTED AIR MODELING RESEARCH/PROJECTS**

### **Client – Confidential**

Dr. Clark performed a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model will be used to estimate acute and chronic exposure concentrations to multiple contaminants and will be incorporated into a comprehensive risk evaluation.

### **Client – Confidential**

Dr. Clark performed a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

### **Client – Los Angeles Alliance for a New Economy (LAANE), Los Angeles, California**

Dr. Clark is advising the LAANE on air quality issues related to current flight operations at the Los Angeles International Airport (LAX) operated by the Los Angeles World Airport (LAWA) Authority. He is working with the LAANE and LAX staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

**Client – City of Santa Monica, Santa Monica, California**

Dr. Clark is advising the City of Santa Monica on air quality issues related to current flight operations at the facility. He is working with the City staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

**Client: Omnitrans, San Bernardino, California**

Dr. Clark managed a public health survey of three communities near transit fueling facilities in San Bernardino and Montclair California in compliance with California Senate Bill 1927. The survey included an epidemiological survey of the effected communities, emission surveys of local businesses, dispersion modeling to determine potential emission concentrations within the communities, and a comprehensive risk assessment of each community. The results of the study were presented to the Governor as mandated by Senate Bill 1927.

**Client: Confidential, San Francisco, California**

Summarized cancer types associated with exposure to metals and smoking. Researched the specific types of cancers associated with exposure to metals and smoking. Provided causation analysis of the association between cancer types and exposure for use by non-public health professionals.

**Client: Confidential, Minneapolis, Minnesota**

Prepared human health risk assessment of workers exposed to VOCs from neighboring petroleum storage/transport facility. Reviewed the systems in place for distribution of petroleum hydrocarbons to identify chemicals of concern (COCs), prepared comprehensive toxicological summaries of COCs, and quantified potential risks from carcinogens and non-carcinogens to receptors at or adjacent to site. This evaluation was used in the support of litigation.

**Client – United Kingdom Environmental Agency**

Dr. Clark is part of team that performed comprehensive evaluation of soil vapor intrusion of VOCs from former landfill adjacent residences for the United Kingdom's Environment

Agency. The evaluation included collection of liquid and soil vapor samples at site, modeling of vapor migration using the Johnson Ettinger Vapor Intrusion model, and calculation of site-specific health based vapor thresholds for chlorinated solvents, aromatic hydrocarbons, and semi-volatile organic compounds. The evaluation also included a detailed evaluation of the use, chemical characteristics, fate and transport, and toxicology of chemicals of concern (COC). The results of the evaluation have been used as a briefing tool for public health professionals.

## **EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS**

### **Client: Ameren Services, St. Louis, Missouri**

Managed the preparation of a comprehensive human health risk assessment of workers and residents at or near an NPL site in Missouri. The former operations at the Property included the servicing and repair of electrical transformers, which resulted in soils and groundwater beneath the Property and adjacent land becoming impacted with PCB and chlorinated solvent compounds. The results were submitted to U.S. EPA for evaluation and will be used in the final ROD.

### **Client: City of Santa Clarita, Santa Clarita, California**

Dr. Clark is managing the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordinance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Imminent and Substantial Endangerment Order. Dr. Clark is assisting the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

### **Client: Confidential, Los Angeles, California**

Prepared comprehensive evaluation of perchlorate in environment. Dr. Clark evaluated the production, use, chemical characteristics, fate and transport, toxicology, and remediation of perchlorate. Perchlorates form the basis of solid rocket fuels and have recently been detected in water supplies in the United States. The results of this research

were presented to the USEPA, National GroundWater, and ultimately published in a recent book entitled *Perchlorate in the Environment*.

**Client – Confidential, Los Angeles, California**

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review if available data on the history of pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

**PUBLIC HEALTH/TOXICOLOGY**

**Client: Brayton Purcell, Novato, California**

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

**Client: Confidential, San Francisco, California**

Identified and analyzed fifty years of epidemiological literature on workplace exposures to heavy metals. This research resulted in a summary of the types of cancer and non-cancer diseases associated with occupational exposure to chromium as well as the mortality and morbidity rates.

**Client: Confidential, San Francisco, California**

Summarized major public health research in United States. Identified major public health research efforts within United States over last twenty years. Results were used as a briefing tool for non-public health professionals.



**Client: Confidential, San Francisco, California**

Quantified the potential multi-pathway dose received by humans from a pesticide applied indoors. Part of team that developed exposure model and evaluated exposure concentrations in a comprehensive report on the plausible range of doses received by a specific person. This evaluation was used in the support of litigation.

**Client: Covanta Energy, Westwood, California**

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

**Client – United Kingdom Environmental Agency**

Oversaw a comprehensive toxicological evaluation of methyl-*tertiary* butyl ether (MtBE) for the United Kingdom's Environment Agency. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MtBE. The results of the evaluation have been used as a briefing tool for public health professionals.

**Client – Confidential, Los Angeles, California**

Prepared comprehensive evaluation of *tertiary* butyl alcohol (TBA) in municipal drinking water system. TBA is the primary breakdown product of MtBE, and is suspected to be the primary cause of MtBE toxicity. This evaluation will include available information on the production, use, chemical characteristics, fate and transport in the environment, absorption, distribution, routes of detoxification, metabolites, carcinogenic potential, and remediation of TBA. The results of the evaluation were used as a briefing tool for non-public health professionals.

**Client – Confidential, Los Angeles, California**

Prepared comprehensive evaluation of methyl *tertiary* butyl ether (MTBE) in municipal drinking water system. MTBE is a chemical added to gasoline to increase the octane

rating and to meet Federally mandated emission criteria. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MTBE. The results of the evaluation have been used as a briefing tool for non-public health professionals.

**Client – Ministry of Environment, Lands & Parks, British Columbia**

Dr. Clark assisted in the development of water quality guidelines for methyl tertiary-butyl ether (MTBE) to protect water uses in British Columbia (BC). The water uses to be considered includes freshwater and marine life, wildlife, industrial, and agricultural (e.g., irrigation and livestock watering) water uses. Guidelines from other jurisdictions for the protection of drinking water, recreation and aesthetics were to be identified.

**Client: Confidential, Los Angeles, California**

Prepared physiologically based pharmacokinetic (PBPK) assessment of lead risk of receptors at middle school built over former industrial facility. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

**Client: Kaiser Venture Incorporated, Fontana, California**

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

**RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS**

**Client: Confidential, Atlanta, Georgia**

Researched potential exposure and health risks to community members potentially exposed to creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin compounds used at a former wood treatment facility. Prepared a comprehensive toxicological summary of the chemicals of concern, including the chemical characteristics, absorption, distribution, and carcinogenic potential. Prepared risk characterization of the carcinogenic and non-carcinogenic chemicals based on the exposure assessment to quantify the potential risk to members of the surrounding community. This evaluation was used to help settle class-action tort.

**Client: Confidential, Escondido, California**

Prepared comprehensive Preliminary Endangerment Assessment (PEA) of dense non-aqueous liquid phase hydrocarbon (chlorinated solvents) contamination at a former printed circuit board manufacturing facility. This evaluation was used for litigation support and may be used as the basis for reaching closure of the site with the lead regulatory agency.

**Client: Confidential, San Francisco, California**

Summarized epidemiological evidence for connective tissue and autoimmune diseases for product liability litigation. Identified epidemiological research efforts on the health effects of medical prostheses. This research was used in a meta-analysis of the health effects and as a briefing tool for non-public health professionals.

**Client: Confidential, Bogotá, Columbia**

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of a 13.7 hectares plastic manufacturing facility in Bogotá, Colombia. The risk assessment was used as the basis for the remedial goals and closure of the site.

**Client: Confidential, Los Angeles, California**

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally cadmium) and VOCs from soil and soil vapor at 12-acre former crude oilfield and municipal landfill. The site is currently used as a middle school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and was used as the basis for regulatory closure of site.

**Client: Confidential, Los Angeles, California**

Managed remedial investigation (RI) of heavy metals and volatile organic chemicals (VOCs) for a 15-acre former manufacturing facility. The RI investigation of the site included over 800 different sampling locations and the collection of soil, soil gas, and groundwater samples. The site is currently used as a year round school housing approximately 3,000 children. The Remedial Investigation was performed in a manner

that did not interrupt school activities and met the time restrictions placed on the project by the overseeing regulatory agency. The RI Report identified the off-site source of metals that impacted groundwater beneath the site and the sources of VOCs in soil gas and groundwater. The RI included a numerical model of vapor intrusion into the buildings at the site from the vadose zone to determine exposure concentrations and an air dispersion model of VOCs from the proposed soil vapor treatment system. The Feasibility Study for the Site is currently being drafted and may be used as the basis for granting closure of the site by DTSC.

**Client: Confidential, Los Angeles, California**

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally lead), VOCs, SVOCs, and PCBs from soil, soil vapor, and groundwater at 15-acre former manufacturing facility. The site is currently used as a year round school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and will be basis for regulatory closure of site.

**Client: Confidential, Los Angeles, California**

Prepared comprehensive evaluation of VOC vapor intrusion into classrooms of middle school that was former 15-acre industrial facility. Using the Johnson-Ettinger Vapor Intrusion model, the evaluation determined acceptable soil gas concentrations at the site that did not pose health threat to students, staff, and residents. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

**Client –Dominguez Energy, Carson, California**

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of 6-acre portion of a 500-acre oil and natural gas production facility in Carson, California. The risk assessment was used as the basis for closure of the site.

**Kaiser Ventures Incorporated, Fontana, California**

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

**ANR Freight - Los Angeles, California**

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

**Kaiser Ventures Incorporated, Fontana, California**

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

**Unocal Corporation - Los Angeles, California**

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

**Client: Confidential, Los Angeles, California**

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years.

**Client: Confidential, San Francisco, California**

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

**Client: Confidential, San Francisco, California**

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

**IT Corporation, North Carolina**

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

**Professional Associations**

American Public Health Association (APHA)

Association for Environmental Health and Sciences (AEHS)

American Chemical Society (ACS)

California Redevelopment Association (CRA)

International Society of Environmental Forensics (ISEF)

Society of Environmental Toxicology and Chemistry (SETAC)

**Publications and Presentations:**

**Books and Book Chapters**

Sullivan, P., **J.J. J. Clark**, F.J. Agardy, and P.E. Rosenfeld. (2007). *Synthetic Toxins In The Food, Water and Air of American Cities*. Elsevier, Inc. Burlington, MA.

Sullivan, P. and **J.J. J. Clark**. 2006. *Choosing Safer Foods, A Guide To Minimizing Synthetic Chemicals In Your Diet*. Elsevier, Inc. Burlington, MA.

Sullivan, P., Agardy, F.J., and **J.J.J. Clark**. 2005. *The Environmental Science of Drinking Water*. Elsevier, Inc. Burlington, MA.

Sullivan, P.J., Agardy, F.J., **Clark, J.J.J.** 2002. *America's Threatened Drinking Water: Hazards and Solutions*. Trafford Publishing, Victoria B.C.

**Clark, J.J.J.** 2001. "TBA: Chemical Properties, Production & Use, Fate and Transport, Toxicology, Detection in Groundwater, and Regulatory Standards" in *Oxygenates in the Environment*. Art Diaz, Ed.. Oxford University Press: New York.

**Clark, J.J.J.** 2000. "Toxicology of Perchlorate" in *Perchlorate in the Environment*. Edward Urbansky, Ed. Kluwer/Plenum: New York.

**Clark, J.J.J.** 1995. Probabilistic Forecasting of Volatile Organic Compound Concentrations At The Soil Surface From Contaminated Groundwater. UMI.

Baker, J.; **Clark, J.J.J.**; Stanford, J.T. 1994. Ex Situ Remediation of Diesel Contaminated Railroad Sand by Soil Washing. Principles and Practices for Diesel Contaminated Soils, Volume III. P.T. Kostecki, E.J. Calabrese, and C.P.L. Barkan, eds. Amherst Scientific Publishers, Amherst, MA. pp 89-96.

#### **Journal and Proceeding Articles**

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. Organohalogen Compounds, Volume 70 (2008) page 002254.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. Organohalogen Compounds, Volume 70 (2008) page 000527

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** (2007). "Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *Environmental Research*. 105:194-199.

Rosenfeld, P.E., **Clark, J. J.**, Hensley, A.R., and Suffet, I.H. 2007. "The Use Of An Odor Wheel Classification For The Evaluation of Human Health Risk Criteria For Compost Facilities" Water Science & Technology. 55(5): 345-357.

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** 2006. "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13<sup>th</sup> Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.

**Clark, J.J.J.** 2003. "Manufacturing, Use, Regulation, and Occurrence of a Known Endocrine Disrupting Chemical (EDC), 2,4-Dichlorophenoxyacetic Acid (2,4-D) in California Drinking Water Supplies." National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Minneapolis, MN. March 20, 2003.

- Rosenfeld, P. and **J.J.J. Clark**. 2003. "Understanding Historical Use, Chemical Properties, Toxicity, and Regulatory Guidance" National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Phoenix, AZ. February 21, 2003.
- Clark, J.J.J.**, Brown A. 1999. Perchlorate Contamination: Fate in the Environment and Treatment Options. In Situ and On-Site Bioremediation, Fifth International Symposium. San Diego, CA, April, 1999.
- Clark, J.J.J.** 1998. Health Effects of Perchlorate and the New Reference Dose (RfD). Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.
- Browne, T., **Clark, J.J.J.** 1998. Treatment Options For Perchlorate In Drinking Water. Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.
- Clark, J.J.J.**, Brown, A., Rodriguez, R. 1998. The Public Health Implications of MtBE and Perchlorate in Water: Risk Management Decisions for Water Purveyors. Proceedings of the National Ground Water Association, Anaheim, CA, June 3-4, 1998.
- Clark J.J.J.**, Brown, A., Ulrey, A. 1997. Impacts of Perchlorate On Drinking Water In The Western United States. U.S. EPA Symposium on Biological and Chemical Reduction of Chlorate and Perchlorate, Cincinnati, OH, December 5, 1997.
- Clark, J.J.J.**; Corbett, G.E.; Kerger, B.D.; Finley, B.L.; Paustenbach, D.J. 1996. Dermal Uptake of Hexavalent Chromium In Human Volunteers: Measures of Systemic Uptake From Immersion in Water At 22 PPM. *Toxicologist*. 30(1):14.
- Dodge, D.G.; **Clark, J.J.J.**; Kerger, B.D.; Richter, R.O.; Finley, B.L.; Paustenbach, D.J. 1996. Assessment of Airborne Hexavalent Chromium In The Home Following Use of Contaminated Tapwater. *Toxicologist*. 30(1):117-118.
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Re: Comments on the Del Hombre Apartment Project Draft Environmental Impact Report (SCH # 2018102067)

Dear Ms. Napier, Mr. Kopchik and Ms. Cruz:

We are writing on behalf of Contra Costa Residents for Responsible Development regarding the September 2019 Draft Environmental Impact Report ("DEIR") for the Del Hombre Apartment Project. The Project, proposed by the Hanover Company, involves developing a 2.4-acre site as a 284-unit apartment building. The Project is located at 112 Roble Road, approximately 0.12 miles from the Pleasant Hill BART station. The Project requires the demolition of two existing residential structures and the removal of 161 trees.

According to the DEIR, the Project will require the following approvals from Contra Costa County ("County"): (1) EIR Certification; (2) a General Plan Amendment (3) Rezoning; (4) a Final Development Plan; (5) a Vesting Tentative

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Map; (6) Variances to lots size and setback from a public road; (7) a tree removal permit; (8) an exception to drainage requirements.

As explained in these comments, the DEIR does not comply with the requirements of the California Environmental Quality Act ("CEQA") in several respects.

First, the DEIR fails to properly identify, analyze, and mitigate impacts from hazardous materials at the Project site. The DEIR fails to identify elevated concentrations of dieldrin, chlordane, and arsenic found at surface soils as a significant impact and further fails to provide mitigation measures to protect workers and neighboring residents.

Second, the DEIR fails to properly analyze and mitigate impacts on air quality. The DEIR underestimates the Project's construction emissions and fails to provide feasible mitigation to the air quality impacts it deems significant. As a result, it lacks substantial evidence for its conclusion that air quality impacts are less than significant.

Third, the DEIR fails to support its traffic analysis with substantial evidence and underestimates the Project's significant traffic impacts.

In addition, the Project exceeds density thresholds set in the Contra Costa County General Plan ("General Plan") and misuses the State Density Bonus Law to avoid providing additional low-income units.

We have reviewed the DEIR and its technical appendices with the assistance of our technical consultant, air quality and hazardous resources expert James J.J. Clark, PhD, and with the assistance of traffic and transportation expert Dan Smith of Smith Engineering & Management. Dr. Clark and Mr. Smith's comments and curriculum vitae are attached hereto as Exhibit A and Exhibit B, respectively, and are fully incorporated herein and submitted to the City herewith. The attached expert comments require separate responses under CEQA. We reserve the right to

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supplement these comments at a later date, and at any later proceedings related to this Project.<sup>1</sup>

## **I. STATEMENT OF INTEREST**

Contra Costa Residents for Responsible Development (“Contra Costa Residents”) is an unincorporated association of individuals and labor unions that may be adversely affected by the potential environmental impacts of the Project.

Individual members of Contra Costa Residents and the affiliated unions live, work, recreate and raise their families in Contra Costa County. These members would be directly affected by the Project’s environmental and health and safety impacts. Members of Contra Costa Residents may also work on the Project itself. Accordingly, these individuals will be first in line to be exposed to any health and safety hazards created by the Project. Contra Costa Residents has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there.

## **II. THE DEIR IS NOT SUPPORTED BY SUBSTANTIAL EVIDENCE AND FAILS TO INCORPORATE ALL FEASIBLE MITIGATION MEASURES TO REDUCE IMPACTS TO LESS THAN SIGNIFICANT**

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report (“EIR”) (except in certain limited circumstances).<sup>2</sup> The EIR is the very heart of CEQA.<sup>3</sup> “The foremost principle in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.”<sup>4</sup>

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<sup>1</sup> Gov. Code § 65009(b); PRC § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield (“Bakersfield”)* (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

<sup>2</sup> See, e.g., PRC § 21100.

<sup>3</sup> *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.

<sup>4</sup> *Comtys. for a Better Env’ v. Cal. Res. Agency* (2002) 103 Cal. App.4th 98, 109 (“*CBE v. CRA*”).  
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CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.<sup>5</sup> “Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR “protects not only the environment but also informed self-government.”<sup>6</sup> The EIR has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.”<sup>7</sup>

Second, CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring “environmentally superior” alternatives and all feasible mitigation measures.<sup>8</sup> The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to “identify ways that environmental damage can be avoided or significantly reduced.”<sup>9</sup> If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any unavoidable significant effects on the environment are “acceptable due to overriding concerns.”<sup>10</sup>

While the courts review an EIR using an “abuse of discretion” standard, “the reviewing court is not to ‘uncritically rely on every study or analysis presented by a project proponent in support of its position. A *clearly inadequate or unsupported study is entitled to no judicial deference.*”<sup>11</sup> Moreover, “whether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.”<sup>12</sup>

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<sup>5</sup> 14 CCR § 15002(a)(1).

<sup>6</sup> *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.

<sup>7</sup> *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal. App. 4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

<sup>8</sup> 14 CCR § 15002(a)(2) and (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564.

<sup>9</sup> 14 CCR § 15002(a)(2).

<sup>10</sup> PRC § 21081; 14 CCR § 15092(b)(2)(A) & (B).

<sup>11</sup> *Berkeley Jets*, 91 Cal. App. 4th 1344, 1355 (emphasis added), *quoting, Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 391 409, fn. 12.

<sup>12</sup> *Sierra Club v. Cty. of Fresno* (2018) 6 Cal. 5th 502, 514, 431 P.3d 1151, 1160.

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**A. The DEIR Fails to Identify, Analyze and Mitigate the Project's Impacts from Hazardous Materials in Soils at the Project Site**

CEQA requires lead agencies to consider whether a project would “create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.”<sup>13</sup> Likewise, CEQA requires lead agencies to determine whether projects create “a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.”<sup>14</sup>

The DEIR states that there are no significant impacts due to the possible release of hazardous materials from contaminated soils at the Project site.<sup>15</sup> But soil samples from the Phase II Environmental Site Assessment (“ESA”) indicate that toxins are present in the soil above residential screening levels. Grading during construction could thus release toxic chemicals and expose workers and neighbors. As discussed below, the DEIR must therefore be revised to identify this significant impact. In addition, more testing is required to determine the extent of the impact. Finally, the DEIR must be revised to include mitigation measures that protect workers and neighboring residents from contaminated soils.

**1. The DEIR Fails to Inform the Public of Specific Findings of Contaminated Soil from the May 2018 Phase II ESA**

The DEIR states that the Phase II ESA detected concentrations of metallic analytes and organochlorine pesticides in excess of respective residential screening levels in the upper one foot of soil on the project site.<sup>16</sup> However, the DEIR fails to specify which pesticides and metallic analytes were present in surface soils. Moreover, the DEIR fails to identify the presence of these toxins as a significant impact, even though the toxins were present in levels that exceed screening levels. Even worse, Appendix F of the DEIR includes the soil sampling report from August 2018, when samples showed concentrations of toxins below screening levels.<sup>17</sup> But Appendix F of the DEIR excludes the surface soil sampling report from May 2018,

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<sup>13</sup> CEQA Guidelines, Appendix G, Section IX: Hazards and Hazardous Materials.

<sup>14</sup> *Id.*

<sup>15</sup> DEIR, 3.8-17.

<sup>16</sup> DEIR, 3.8-5.

<sup>17</sup> DEIR, Appendix F.

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when samples showed concentrations of toxins *above* screening levels.<sup>18</sup> This cherry-picking of data misleads the public and violates CEQA's requirement that the DEIR serve as an informational document.

Soil samples conducted in May 2018 as part of the limited Phase II ESA found the following:

- Dieldrin concentration of 53.4 micrograms per kilogram, which is in excess of its corresponding residential Environmental Screening Level ("ESL") and Regional Screening Level ("RSL");<sup>19</sup>
- Chlordane at a concentration of 1,000 micrograms per kilogram, which exceeds the corresponding residential ESL and the [California Department of Toxic Substance Control] DTSC screening level;<sup>20</sup>
- Arsenic at a concentration of 13.1 milligrams per kilogram, which is in excess of both the respective residential screening levels and the expected range of background concentrations observed in the San Francisco Bay Area.<sup>21</sup>

Based on these findings, ENGEO, the company conducting the soil sampling, recommended that the soil "be managed and/or disposed of appropriately."<sup>22</sup> Despite this recommendation, the DEIR includes no mitigation measures for handling and removing contaminated soils, as discussed in more detail below.

## **2. The DEIR Lacks Substantial Evidence to Conclude Contaminated Soils Pose No Significant Impact**

In addition to omitting the findings described above, the limited Phase II ESA failed to determine the magnitude of the impact. Thus, the DEIR lacks substantial evidence to conclude there is no impact. As described in Dr. Clark's comments, "an objective of sampling at a site is to determine the general extent of contamination in order to assess immediate potential threats, scope of removal and

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<sup>18</sup> *Id.*; See Limited Phase II Environmental Site Assessment for Del Hombre, from ENGEO, Inc. to Kristen Gates (May 24, 2018), included as Attachment C.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

remediation needs.”<sup>23</sup> Indeed, sampling must determine both the vertical *and* lateral extent of the contamination. In other words, sampling should measure how deep the plume of contamination goes as well as how wide the plume of contamination is.

Workers who grade and remove the soil will inhale and handle contaminated soils and thus are at risk of exposure. In addition, the DEIR states that “[t]he project site is surrounded by existing residences to the north, east, and south of the project site.”<sup>24</sup> Moreover, these residences are multi-family apartment buildings, which means that many people reside near the Project site.<sup>25</sup> Indeed, the closest of these residences is only 20 feet away from Project construction.<sup>26</sup> Neighboring residents could thus be exposed to chemical-laden dust when it is disturbed during grading or when exposed soil is carried by wind. To avoid those impacts, the magnitude of the hazards must be determined and proper mitigation must be required.

Here, the soil sampling was deficient in two respects. First, the Phase II ESA performed for the DEIR used the 2008 Interim Guidance for Sampling Agricultural Properties, Third Revision (“2008 Guidance”) to determine how many soil samples to take.<sup>27</sup> In line with the 2008 Guidance, the Phase II ESA took 4 samples at the Project site. However, the 2008 Guidance also suggests taking composite samples and field duplicates. Composite samples are multiple samples combined together to show health impacts if a person is exposed at multiple points. Field duplicates ensure that sampling results are confirmed. Both are necessary to give a broader view of exposure and ensure samples are accurate. But, as stated in Dr. Clark’s comments, “[n]either the May, 2018 nor the August, 2018 sampling events performed by ENGEO included field duplicate samples or composite samples.”<sup>28</sup>

Second, while the follow-up sampling from August 2018 attempted to characterize the *vertical* extent of the contamination, it failed to characterize the *lateral* extent of the contamination. Because the May 2018 sampling found toxins at levels in excess of screening thresholds, more testing is necessary to determine the

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<sup>23</sup> Clark Comments, 3.

<sup>24</sup> DEIR, 3.2-14.

<sup>25</sup> *Id.* at 3.2-41.

<sup>26</sup> *Id.* at 3.2-14.

<sup>27</sup> Limited Phase II Environmental Site Assessment for Del Hombre, from ENGEO, Inc. to Kristen Gates (May 24, 2018), included as Attachment C.

<sup>28</sup> Clark Comments, 4.



horizontal area of the contamination. How large an area of soil surface is contaminated with toxins? The DEIR does not provide this information. CEQA requires that agency conclusions be backed by substantial evidence. By failing to determine the lateral extent of the contamination, the agency's conclusion that the hazards pose no significant impact is not supported by substantial evidence.

This failure to measure the lateral extent of the contamination is especially problematic for chlordane. As stated in Dr. Clark's comments "chlordane does not leach significantly and will remain in the top 20 centimeters (8 inches) of most soils and will stay at this level for more than 20 years."<sup>29</sup> Thus, if chlordane is present in surface soils, it is not likely to be found at depths. And the presence of chlordane in surface soils can pose a significant health impact. As Dr. Clark explains, "[s]ince the degradation of chlordane in the environment is so slow, if chlordane impacted soils at the Site are disturbed and released to the surrounding community the health impacts could last for 2 more decades."<sup>30</sup>

In addition, because soil samples showed concentrations of toxins above residential screening levels, the DEIR should conduct a health risk assessment for those chemicals. The 2008 Guidance (used in the Phase II ESA) states that:

All detected pesticides and any onsite metals above background ***should be evaluated as COPCs in a human health risk assessment*** as described in the DTSC [Preliminary Endangerment Assessment] PEA Guidance Manual or in comparison to CHHSLs. In the initial screening analysis, the highest concentration of each detected pesticide and metal above background must be used as the exposure point concentration in the risk assessment.<sup>31</sup>

However, despite this guidance, neither the Phase II ESA nor the DEIR conducted a health risk assessment to determine the public health implications of elevated concentrations of toxins at the Project site.

Because the DEIR fails to inform the public about the lateral extent of contaminants found and fails to perform a health risk assessment, the DEIR lacks

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<sup>29</sup> ATSDR. 2018. Toxicological Profile for Chlordane. February 2018.  
<https://www.atsdr.cdc.gov/ToxProfiles/tp31.pdf>

<sup>30</sup> Clark Comments, 5.

<sup>31</sup> DTSC. 2008. Sampling Agricultural Fields 2008. Section 5.3 Human Health Risk Assessment, available at <https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf>.

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substantial evidence to conclude there is no significant impact from the release of hazardous materials at the Project site. More testing is necessary to fully identify and analyze the potentially significant impact of elevated levels of dieldrin, chlordane, and arsenic.

As demonstrated below, the evidence provided in the Phase II ESA suggests that soil contaminants at the Project site *do* pose a significant impact.

### **3. Substantial Evidence shows that Contaminants in Soils Pose a Significant Health Risk**

As stated above, the 2008 Agricultural Guidance states all pesticides and metals detected above screening levels should be evaluated in a health risk assessment as described in the DTSC'S PEA Manual. The PEA Manual provides a calculation to preliminarily determine health risk:<sup>32</sup>

The basic screening risk approach is to calculate the estimated risk or hazard posed by the maximum concentration of a chemical detected in each medium (soil, water, air) using an established human health-risk-based residential screening level/concentration as a comparator, that is, the USEPA Regional Screening Level (RSL)<sup>33</sup> for residential land use, modified as necessary by DTSC in HHRA Note 3<sup>34</sup>. The basic screening risk equations for each medium (soil, water, air) are as follows.

For a carcinogenic chemical: The screening concentration is based on a target cancer risk of one-in-a-million ( $10^{-6}$ ).

$$\frac{\text{Maximum concentration}}{\text{Screening concentration}} \times 10^{-6} = \text{Cancer Risk}$$

For a non-carcinogenic chemical: The screening concentration is based on a target Hazard Quotient (HQ) of one.

$$\frac{\text{Maximum concentration}}{\text{Screening concentration}} = \text{Hazard Quotient}$$

The PEA Manual also states how to interpret the above calculation: if the cancer risk value is above  $10^{-6}$  or the Hazard Quotient is greater than 1, then:

the presence of contamination ... may pose a significant threat to human health. Exceptions will generally include sites with elevated background

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<sup>32</sup> PEA Manual at p. 34.  
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concentrations, sites where other agency criteria are more stringent, and sites with specific circumstances that allow for a risk management decision to increase the acceptable screening levels.<sup>33</sup>

In short, if contaminants are present above screening levels, there are likely significant human health impacts unless extenuating circumstances exist.

Dr. Clark calculated the cancer risk and hazards quotient for dieldrin, chlordane, and arsenic at the Project site:

Contaminant	Cancer Risk
Dieldrin	$7 \times 10^{-6}$
Chlordane	$2 \times 10^{-6}$
Arsenic	$195 \times 10^{-6}$
Cumulative	$204 \times 10^{-6}$

All values in the above chart are “in excess of the risk management range used by the State of California in the PEA Manual.”<sup>34</sup> The DEIR failed to properly analyze the Phase II ESA’s findings. As a result, the DEIR failed to identify a potentially significant impact.

The DEIR’s failure to fully analyze elevated concentrations of soil contaminants violates the law. The chemicals described above have serious health impacts. Chlordane, for example, is both a carcinogen and an endocrine disruptor that can “lead to permanent alterations in the reproductive, nervous, and immune systems that are developing during prenatal growth and childhood.”<sup>35</sup> Dieldrin may “pose a risk to the brain by altering gene expression.”<sup>36</sup> And arsenic is a known human carcinogen.<sup>37</sup> The DEIR is supposed to serve as an informational document. It is irresponsible not to alert workers and neighbors, who may be exposed to chemical-laden dust, to this potentially serious health impact.

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<sup>33</sup> PEA Manual p. 64.

<sup>34</sup> Clark Comments, 6.

<sup>35</sup> *Id.* at 9.

<sup>36</sup> *Id.* at 10.

<sup>37</sup> *Id.* at 11.

The DEIR must be revised to conduct a proper health risk assessment and document the significant impact that elevated levels of arsenic, dieldrin, and chlordane potentially pose to workers and neighbors.

**4. The DEIR Must Be Revised to Mitigate the Impact from Dieldrin, Chlordane, and Arsenic in Surface Soils at the Project Site**

Because soil testing revealed chemicals in excess of screening levels, the DEIR must include mitigation measures to protect construction workers and neighbors from chemical-laden dust. For example, the County should require clear warnings to workers before excavating soil. After testing determines the full extent of the contaminated plume, that plume should be marked. When workers grade those areas, workers must have appropriate protective equipment and should be trained in how to handle the contaminated soil. Contaminated areas should not be graded on windy days to protect neighboring residents from contaminated dust. In addition, the contaminated areas should not be left exposed to minimize the possibility of contaminants moving offsite.

As stated in Dr. Clark's comments, water spray alone only contains between 56% and 81% of dust.<sup>38</sup> So current dust suppression measures will not necessarily protect neighbors from chemical-laden dust. Moreover, such measures will certainly not protect workers who may handle exposed dirt. Thus, the Project should also include the following mitigation measures: particulate matter monitoring at the Project's fence-line, the installation of a meteorological station during this time frame to ensure excavation is only performed when winds are below 5 MPH, and the application of dust suppressants prior to excavation.<sup>39</sup> The DEIR must be revised to include robust mitigation measures to limit exposure to workers and neighbors from contaminated soil.

**B. The DEIR Fails to Analyze and Mitigate Health and Air Quality Impacts from Construction Emissions**

Under CEQA, lead agencies must consider a project's impacts on air quality, including whether the project will "expose sensitive receptors to substantial pollutant concentrations."<sup>40</sup> As demonstrated below, the Project's analysis finds a

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<sup>38</sup> Clark letter at 12.

<sup>39</sup> *Id.*

<sup>40</sup> CEQA Guidelines, Appendix G, Section III: Air Quality.  
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significant impact to sensitive receptors, but fails to effectively mitigate it. In addition, the air impact analysis underestimates emissions on sensitive receptors.

**1. Mitigation Measure Air-3 Fails to Mitigate Air Quality Impacts to Less than Significant and is Unenforceable**

CEQA requires the lead agency to adopt feasible mitigation measures that will substantially lessen or avoid a project's potentially significant environmental impacts.<sup>41</sup> A public agency may not rely on mitigation measures of uncertain efficacy or feasibility.<sup>42</sup> "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.<sup>43</sup> Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments.<sup>44</sup>

Failure to include enforceable mitigation measures is considered a failure to proceed in the manner required by CEQA that is evaluated de novo by the courts.<sup>45</sup> The court of appeal recently clarified that, to meet this requirement, mitigation measures must be incorporated directly into the Mitigation Monitoring and Reporting Program to be enforceable.<sup>46</sup>

Here, the DEIR fails to properly mitigate air impacts. The DEIR correctly concluded that unmitigated construction equipment would have a significant impact on cancer health risk.<sup>47</sup> To mitigate this impact to less than significant, the DEIR proposes Mitigation Measure (MM) AIR-3, which states that the Project will use Tier-IV Interim construction equipment.<sup>48</sup> The DEIR concludes that by using this mitigation measure, the Project's construction impacts will be mitigated to less than a significant level. However, MM AIR-3 has a glaring exception, stating:

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<sup>41</sup> CEQA §§ 21002, 21081(a)) and describe those mitigation measures in the EIR. (CEQA § 21100(b)(3); CEQA Guidelines section 15126.4

<sup>42</sup> *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available).

<sup>43</sup> 14 CCR § 15364.

<sup>44</sup> *Id.* at §15126.4(a)(2).

<sup>45</sup> *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 672.

<sup>46</sup> *Lotus v. Dept of Forestry* (2014) 223 Cal. App. 4th 645, 651-52.

<sup>47</sup> DEIR at 3.2-46.

<sup>48</sup> *Id.* at 3.2-47.

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If engines that comply with Tier IV Interim off-road emission standards are not commercially available, then the construction contractor shall use the next cleanest piece of off-road equipment (e.g., Tier III) available. .... The contractor can maintain records for equipment that is not commercially available by obtaining letters from at least two rental companies for each piece of off-road equipment where the Tier IV Interim engine is not available.<sup>49</sup>

The DEIR correctly acknowledges that Tier IV equipment is not always readily available.<sup>50</sup> However, this means that if two rental companies are out of Tier IV, the Project may use *any* level of equipment, as long as that equipment is the cleanest the rental company has.

Because any equipment might be used during Project construction, the significant impact of cancer risk to infants has not been mitigated as claimed. The DEIR must be revised to include mitigation measures that will *guarantee* the impact will be reduced to less than significant and safeguard public health. This is especially important because Project construction will take place in close proximity to multiple residences—the closest sensitive receptor is a mere 20 feet away.<sup>51</sup>

In addition, MM AIR-3 is deficient because it has no enforceability mechanism. MM AIR-3 contains no reporting or verification requirement that would ensure the Project does in fact use Tier IV equipment. This is especially important given the scarcity of Tier IV equipment, acknowledged in the DEIR. The DEIR must be revised to include reporting and verification requirements so that MM AIR-3 is enforceable, as required by law.

## **2. The Health Risk Analysis Underestimates PM 2.5 Construction Emissions**

The DEIR underestimates PM 2.5 construction emissions in two respects. First, the DEIR fails to follow BAAQMD's guidance on conducting Health Risk Assessments which recommends assuming short-term projects last a full three years. Second, the DEIR fails to account for cancer-causing components of diesel exhaust.

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<sup>49</sup> *Id.* at 3.2-49 to 3.2-50.

<sup>50</sup> *Id.*

<sup>51</sup> DEIR at 3.2-14.

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a) The DEIR Fails to Use BAAQMD's Most Recent Guidance on Health Risk Assessments

The DEIR claims to use BAAQMD's 2017 Health Risk Assessment Guidance to calculate cancer risk from chronic chemical exposure from construction emissions.<sup>52</sup> But, as stated in Dr. Clark's comments, the DEIR fails to follow this guidance. Specifically, BAAQMD's 2017 Health Risk Assessment Guidelines state that short term projects should assume a project duration of a full three years:

To ensure that short-term projects do not result in unanticipated higher cancer impacts due to short-duration high-exposure rates, the Air District recommends that the cancer risk be evaluated assuming that the average daily dose for short-term exposure lasts a minimum of three years for projects lasting three years or less.<sup>53</sup>

In contrast, the DEIR assumes cancer risk from construction emissions will last only two years, contrary to BAAQMD's guidance. The DEIR must therefore be revised to follow BAAQMD's guidance or explain how the model that the DEIR uses is backed by substantial evidence.

b) The DEIR Fails to Account for Cancer-Causing Chemicals in Diesel Exhaust

The DEIR also underestimates emissions by failing to consider all toxic components of diesel exhaust. Although both the EPA and CARB have identified 40 components of diesel exhaust that likely cause cancer, the DEIR only measures the risk from one component of diesel exhaust: DPM.<sup>54</sup> As stated in Dr. Clark's comments, gaseous components of diesel exhaust, like 1,3-butadiene, and benzo[a]pyrene, are also toxic.<sup>55</sup> The health impact of these other toxic components of diesel exhaust should be calculated *in addition* to the cancer risk from DPM. By failing to incorporate this impact, the DEIR underestimates the cancer risk from

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<sup>52</sup> *Id.* at 3.2-45.

<sup>53</sup> Bay Area Air Quality Management District (BAAQMD). 2016. Air Toxics New Source Review Program Health Risk Assessment (HRA) Guidelines, available at [http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines\\_clean\\_jan\\_2016-pdf.pdf?la=en\\_clean\\_jan\\_2016-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en_clean_jan_2016-pdf.pdf?la=en).

<sup>54</sup> Clark Comments at 16.

<sup>55</sup> *Id.*

construction emissions and thus the DEIR's conclusion that there is no significant impact lacks substantial evidence.

### 3. Substantial Evidence shows a Significant Impact from PM 2.5 Construction Emissions

As shown in Dr. Clark's comments, when the Health Risk Assessment follows BAAQMD's guidance, the DEIR fails to reduce cancer risk from construction emissions to less than a significant level. As discussed above, the DEIR does not require Tier IV equipment and essentially allows the use of Tier III or lower equipment.<sup>56</sup> In addition, the DEIR fails to follow BAAQMD guidance when conducting the Health Risk Assessment, calculating PM 2.5 emissions over a two-year period instead of a three-year period.<sup>57</sup> After correcting these mistakes, Dr. Clark demonstrates that a significant cancer risk persists, contrary to the DEIR's conclusion. As shown below, the cancer risk to infants is 10.9 in 1,000,000,<sup>58</sup> which exceeds BAAQMD's thresholds for significance.<sup>59</sup>

Exposure Year	DPM Annual Concentration (ug/m3)	Age Sensitivity Factor	Risk
3 <sup>rd</sup> Trimester	0.034	10	0.39
0-1	0.034	10	4.8
1-2	0.034	10	4.8
2-3	0.034	3	0.95
Total			<b>10.9</b>

Moreover, even the above calculation underestimates the risk since none of the additional toxic diesel exhaust gases were included.

Because the DEIR fails to use BAAQMD's Health Risk Assessment guidance and fails to require Tier IV construction equipment, the DEIR fails to reduce cancer risk from construction emissions to less than significant. The DEIR must therefore be revised to include this impact so that the DEIR accurately informs the public of the Project's environmental impacts and mitigates as necessary.

<sup>56</sup> DEIR at 3.2-49 to 3.2-50.

<sup>57</sup> Clark Comments, 14.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at 16.



### **C. The DEIR's Traffic Analysis Fails to Identify, Analyze, and Mitigate Significant Impacts**

The CEQA Guidelines state that lead agencies must consider whether a project's transportation impacts "conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities."<sup>60</sup> The General Plan's Transportation and Circulation Element enumerates a number of Contra Costa County's transportation goals, including "[t]o provide a *safe*, efficient and integrated multimodal transportation system."<sup>61</sup> The CEQA Guidelines also state that lead agencies should consider whether a project's transportation impacts would substantially increase a hazardous geometric design feature.<sup>62</sup>

Here, the DEIR's transportation analysis underestimates trip generation rates, which renders the DEIR's conclusions about traffic impacts unsupported by substantial evidence. In addition, the DEIR fails to analyze whether the Project will create queue exceedances that cause hazardous roadway conditions and thus pose a public safety impact.

#### **1. The DEIR's Trip Generation Rates Are Not Supported by Substantial Evidence**

The DEIR estimates trip generation from the Project site using the Institute of Transportation Engineers Trip Generation Manual, 10<sup>th</sup> Edition ("Manual").<sup>63</sup> The Manual provides traffic generation rates for different kinds of land use projects.<sup>64</sup> For example, the Manual has an average trip generation rate for mid-rise multi-family land use projects ranging from 3 to 10 stories, like the Project.<sup>65</sup> To calculate the Project's trip generation rate, the DEIR takes the Manual's average rate for mid-rise multi-family land use projects and discounts this rate by 20% because the Project is sited 0.12 miles from a transit center. Specifically, the DEIR states,

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<sup>60</sup> CEQA Guidelines, Appendix G, Section XVII: Transportation.

<sup>61</sup> General Plan Transportation and element, P. 5-14.

<sup>62</sup> CEQA Guidelines, Appendix G, Section XVII: Transportation.

<sup>63</sup> DEIR, 3.15-31.

<sup>64</sup> Institute of Transportation Engineers, *Trip Generation*, 10<sup>th</sup> Edition.

<sup>65</sup> DEIR, 3.15-31.

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Review of the data indicates that ITE trip generation rates alone could overestimate vehicle trip generation as compared to projects surveyed in the project vicinity, as the ITE rates are based on surveys on apartment uses in suburban settings, not well served by transit.<sup>66</sup>

However, as stated in Mr. Smith's comments and contrary to the DEIR's assertion, the ITE rates *do* account for proximity to transit centers. Thus, the 20% discount is unnecessary and unjustified. Indeed, the data used to generate rates in the Manual include 4 dense urban city center core sites and 32 dense multi-use urban sites with "comparable transit accessibility" to the Project site.<sup>67</sup> Furthermore, multi-story buildings like the Project are usually developed near transit, rather than in isolated suburban areas. This is precisely why trip generation rates in the Manual are lower for mid-rise multi-family land use projects than for single-family land use projects. The DEIR does not support its discount with substantial evidence. As stated in Mr. Smith's Comments, the DEIR's reference to two local surveys does not provide justification to deviate from the ITE rates:

In an attempt to justify the 20 percent reduction in trip generation studies carried out at two mid-rise apartment complexes near the Pleasant Hill BART station (...). Whether data measured at just two sites offers sufficient statistical reliability to decrease the multi-site based ITE rates by as much as 20 percent is highly questionable and is not in reasonable compliance with CEQA's demand of a good faith effort to disclose impacts.<sup>68</sup>

Thus, to discount an additional 20% overestimates transit use and underestimates trip generation. As a result of this improper discount, the DEIR underestimates trip generation from the Project, rendering the DEIR's conclusions about transportation impacts unsupported by substantial evidence.<sup>69</sup>

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<sup>66</sup> *Id.*

<sup>67</sup> Smith Comments, 1.

<sup>68</sup> Smith Comments, 2.

<sup>69</sup> It should be noted that the Applicant had not yet submitted a TDM plan, required under Contra Costa County Ordinance § 82-32.004, that could have provided evidence to support this assumption. 4714-006acp

## **2. The DEIR's Queuing Analysis Is Unsupported by Substantial Evidence and Fails to Disclose Safety Impacts and Hazardous Roadway Conditions**

As stated above, CEQA requires agencies to consider whether a project's transportation impacts are consistent with General Plan goals.<sup>70</sup> One stated goal of the Contra Costa General Plan is to create a safe and efficient transportation system.<sup>71</sup> The CEQA Guidelines also require lead agencies to consider whether transportation impacts will result in a hazardous design feature.<sup>72</sup> Here, the DEIR fails to properly analyze how Project-exacerbated queue exceedances could cause roadway hazards and safety impacts. Thus, the DEIR's conclusion that the Project will have no significant impact on traffic queues is not supported by substantial evidence. In fact, substantial evidence shows the Project will have significant impact from safety and hazards issues.

The DEIR states that many intersections in the Project area already exceed storage capacity.<sup>73</sup> Storage capacity is the number of cars a lane can contain before overflowing into another lane. The DEIR notes that the Project will create or exacerbate storage capacity exceedances at the following intersections:

- The north bound lane at Oak Road at the I-690 on/off ramps and Buskirk Avenue during both the AM and PM peak hours;
- The south bound lane at Treat Boulevard and Jones Road during the PM peak hours;
- The south bound lane at Oak Road and Las Juntas Way in the AM peak hours.<sup>74</sup>

As for the threshold of significance, the DEIR states:

The addition of project traffic at a study intersection would result in the 95<sup>th</sup> percentile vehicle queue exceeding the available storage or would increase 95<sup>th</sup> percentile queue by more than two vehicles where the queue already exceeds the available storage space (for example, vehicle queues extending

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<sup>70</sup> CEQA Guidelines, Appendix G, Section XVII: Transportation.

<sup>71</sup> General Plan Transportation and element, P. 5-14.

<sup>72</sup> CEQA Guidelines, Appendix G, Section XVII: Transportation.

<sup>73</sup> DEIR, 3.15-11 to 12.

<sup>74</sup> DEIR, r.15-53 to 54.

beyond the available turn pocket length, impeding travel in the adjacent lanes)[.]<sup>75</sup>

However, the DEIR fails to analyze how the above mentioned exceedances of storage capacity will *actually* impact gridlock and safety conditions. As stated in Mr. Smith's comments, this failure renders the DEIR's queue analysis "critically flawed."<sup>76</sup>

Gridlock and queue exceedances are not just a matter of inconvenience. As stated in Mr. Smith's comments, "[a]ny queue that seriously overflows storage capacity is a public safety problem. Indeed, gridlock and blockages can impede emergency services from accessing buildings. In addition, gridlock results in safety hazards when other traffic radically maneuvers to avoid being enmeshed in an overflow queue."<sup>77</sup> Here, by blocking entries to buildings and creating gridlock at intersections, the Project could make traffic conditions unsafe, contrary to stated goals in the General Plan and to CEQA Guidelines.<sup>78</sup>

For example, Mr. Smith found that the Project's impact on queue lengths will have serious impacts on transportation safety. In his comments, Mr. Smith explains that the north bound left turn queue at Oak Road at the I-690 on/off ramp and Buskirk Avenue will extend back to the intersection of Oak Road and Las Juntas Way, creating gridlock and blocking entry to buildings, including the entry to 3000 Oak Road.<sup>79</sup>

Despite these gridlock and safety concerns, the DEIR concludes that the Project's impact on queue lengths is less than significant because "[t]he addition of project traffic is not expected to cause vehicle queues to increase by more than 50-feet (or two car-lengths)."<sup>80</sup>

As stated in Mr. Smith's comments, an exceedance of two car lengths is an arbitrary threshold to determine significance.<sup>81</sup> Rather, queue exceedance can

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<sup>75</sup> DEIR, 3.15-39.

<sup>76</sup> Smith Comments, 2.

<sup>77</sup> *Id.*

<sup>78</sup> General Plan Transportation and element, P. 5-14; CEQA Guidelines, Appendix G, Section XVII: Transportation.

<sup>79</sup> Smith Comments, 3.

<sup>80</sup> DEIR, 3.15-52.

<sup>81</sup> Smith Comments, 2.

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create significant impacts at any length, depending on traffic conditions on the ground. The DEIR failed to analyze these on-the-ground queue exceedance impacts and how they would create gridlock, block emergency access, or block entry to buildings. Thus, the DEIR's conclusion that the Project's impact on vehicle queues is less than significant is not supported by substantial evidence.

### III. THE DEIR'S CUMULATIVE IMPACT ANALYSIS ON PM 2.5 CONSTRUCTION EMISSIONS IS INADEQUATE

An EIR is required to discuss the cumulative impacts of a project "when the project's incremental effect is cumulatively considerable."<sup>82</sup> Cumulative impact analyses are necessary because "environmental damage often occurs incrementally from a variety of small sources [that] appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact."<sup>83</sup> Mere conclusory statements are not sufficient to satisfy the cumulative impacts analysis requirement.<sup>84</sup> A proper cumulative impacts analysis must be supported by references to specific evidence.<sup>85</sup> As the Court in *Mountain Lion Coalition* explained, "it is vitally important that an EIR avoid minimizing the cumulative impacts. Rather, it must reflect a conscientious effort to provide public agencies and the general public with adequate and relevant detailed information about them."<sup>86</sup> "A cumulative impacts analysis which understates information concerning the severity and significance of cumulative impacts impedes meaningful public discussion and skews the decisionmaker's perspective concerning the environmental consequences of the project, the necessity for mitigation measures, and the appropriateness of project approval."<sup>87</sup>

The BAAQMD's 2017 CEQA Guidance specifically describes how agencies should conduct cumulative impact analyses for PM 2.5 emissions, stating agencies should consider "all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source plus the contribution from the project...."<sup>88</sup>

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<sup>82</sup> 14 CCR § 15130(a).

<sup>83</sup> *Communities for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 114.

<sup>84</sup> *Mountain Lion Coalition v. Fish & Game Comm'n* (1989) 214 Cal.App.3d 1043, 1047.

<sup>85</sup> *Id.*

<sup>86</sup> *Id.* at 1051

<sup>87</sup> *Id.*

<sup>88</sup> [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en).  
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The DEIR identified at least one cumulative project that is within 1000-feet from the fence line of the Project: the Habitat for Humanity Townhomes on Las Juntas way ("Habitat for Humanity Project").<sup>89</sup> The Habitat for Humanity Project is located less than 400 feet away from the Project site.<sup>90</sup> In addition, several residences are sandwiched between the Project and the Habitat for Humanity Project.<sup>91</sup> These residences could therefore be impacted by emissions from both projects, possibly at the same time. Yet the DEIR's cumulative impact analysis for health impacts from PM 2.5 emissions fails to include construction emissions from the Habitat for Humanity Project.<sup>92</sup> Instead, the DEIR only includes existing baseline TAC emissions from Treat Boulevard, and then adds the Project's emissions to these emissions.<sup>93</sup> Moreover, the DEIR fails to explain *why*, after identifying a cumulative project within 1000 feet of the proposed Project, this project was then excluded from the cumulative impact analysis.

The DEIR's analysis violates CEQA's clear guidance on the performance of cumulative impact analysis and lacks substantial evidence to support the conclusion that the Project's cancer impact from construction emissions is less than cumulatively considerable. The DEIR should be revised to properly analyze the Project's cumulative impact and require mitigation measures as needed.

#### **IV. THE PROJECT VIOLATES CEQA AND THE CONTRA COSTA GENERAL PLAN'S DENSITY THRESHOLD FOR MULTIPLE FAMILY RESIDENCES AND MISUSES THE STATE DENSITY BONUS LAW**

The Applicant seeks to increase the allowable density at the Project site in multiple ways. However, by allowing the requested density increase, the County is violating both the General Plan and CEQA by, among other things, miscalculating the net acreage of the Project site contrary to the mandates of the General Plan. The County should also enforce its own Inclusionary Housing Ordinance and require more low-income housing units, as discussed in more detail below.

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<sup>89</sup> DEIR at 3-5.

<sup>90</sup> DEIR at Exhibit 3-1.

<sup>91</sup> *Id.*

<sup>92</sup> DEIR at 3.2-53.

<sup>93</sup> *Id.*

**A. The DEIR Miscalculates the Project Site's Net Acreage Which Increases Density Above Thresholds Set in the General Plan, in Violation of the General Plan and CEQA**

The General Plan allows a maximum density of 99.9 units per *net acre* for multiple-family residences. Net acreage does not include the entire area of a project site. Rather, the Contra Costa General Plan makes clear that “net acreage includes all land area used *exclusively* for residential purpose....”<sup>94</sup> Net acreage excludes all public rights of way.<sup>95</sup> The General Plan further specifies how to calculate net acreage, stating for multiple-family residences, “Net acreage ... is assumed to comprise 80 percent” of the gross acreage of a site.<sup>96</sup>

The gross acreage of the Project site is 2.4 acres.<sup>97</sup> Under the General Plan, therefore, the net acreage of the Project site should be 80% of 2.4 acres, or 1.92 acres. Instead, the DEIR uses a net acreage of 2.37 acres.<sup>98</sup> The DEIR, contrary to the guidance of the General Plan, determined that 98% of the Project site will be exclusively used for residential purposes. Yet, elsewhere, the DEIR admits that only 79% of the gross area will be used for the apartment building, stating “[t]he new apartment building would ... cover 81,639 square feet (or 79 percent) of the project site.”<sup>99</sup> Thus, as the General Plan assumes, the net acreage of the Project should be about 80% of the gross acreage, or 1.92 acres rather than the 2.37 acre figure used in the DEIR. As a result of the miscalculation of net acreage, the Applicant has increased the density of the Project site from 99.9 units per net acre to 123.4 units per net acre, a density level 20% greater than the maximum allowed by the General Plan.

Two other factors compound this problematic density increase. First, the Project is currently designated as Multiple-Family Residential—Very High Density (MV), which allows a maximum of 44.9 multiple-family units per net acre.<sup>100</sup> To reach the maximum density allowed under the General Plan, the Applicant seeks a

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<sup>94</sup> General Plan Land Element, 3-17.

<sup>95</sup> *Id.*

<sup>96</sup> *Id.*

<sup>97</sup> DEIR, 2-1.

<sup>98</sup> *Id.*

<sup>99</sup> DEIR, ES-1.

<sup>100</sup> General Plan 3-21.

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General Plan Amendment to re-designate the Project site as Very High-Special Density (MS), which allows a maximum of 99.9 units per net acre.<sup>101</sup>

Second, the Applicant is receiving a 20% density increase under the State Density Bonus Law.<sup>102</sup> In combination, the miscalculation of the net acreage, the General Plan Amendment, and the density bonus *result in a density increase of 320% over the current allowable density level at the Project site*. A density increase of this magnitude has consequences. As discussed above and as documented in the DEIR, the planned density at the Project site will have significant traffic impacts.

Moreover, CEQA requires EIRs “to discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.”<sup>103</sup> If a general plan was adopted to avoid or mitigate an environmental impact, an EIR must address any significant impacts caused by conflicts with the plan.<sup>104</sup> Since the DEIR includes no discussion of how the Project’s density exceeds General Plan thresholds, the DEIR also violates CEQA.

The Project and the DEIR should be revised to calculate net acreage in a manner consistent with the General Plan. All density thresholds and increases should then be determined based on an accurate net acreage figure and any inconsistency should be properly addressed in the DEIR.

**B. The State Density Bonus Law Should Not Apply in this Instance and the County Should Enforce Its More Stringent Inclusionary Housing Ordinance**

Even though the Applicant already received a 20% density increase due to the miscalculation of the net acreage discussed above, the Applicant is receiving an additional 20% density bonus under the State Density Bonus Law.<sup>105</sup>

The Density Bonus Law requires, in relevant part, a 20% density increase above local residential density standards if five percent of the total units is reserved

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<sup>101</sup> General Plan 3-17.

<sup>102</sup> DEIR 3.10-16.

<sup>103</sup> CEQA Guidelines 15125(d).

<sup>104</sup> CEQA Guidelines, Appendix G, XI.

<sup>105</sup> *Id.*



for very low-income households.<sup>106</sup> Developers who receive a density bonus are also allowed one concession from the local government.<sup>107</sup>

The State Density Bonus Law states that “density bonus’ means a density increase over the otherwise maximum allowable gross residential density as of the ***date of application*** by the applicant to the .... county.”<sup>108</sup> Here, the maximum allowable gross residential density ***at the date of the Project application*** was 44.9 multiple-family units per net acre.<sup>109</sup> Thus, the State Density Bonus Law only requires the County to allow the Applicant to build a housing development that allows 53.88 units per acre (which is 20% more than 44.9). However, the Applicant seeks a density bonus not at the date of the application, but at the date when the General Plan Amendment is approved. Since the General Plan Amendment will allow a maximum density of 99.9 units per net acre, the Applicant seeks a 222.5% “density increase over the otherwise maximum allowable gross residential density as of the ***date of application***.”<sup>110</sup> The County should not provide a density increase of this magnitude.

The “spirit of the Density Bonus Law...is designed to encourage, even require, incentives to developers that construct affordable housing.”<sup>111</sup> In the same spirit, the County enacted an Inclusionary Housing Ordinance. The Inclusionary Housing Ordinance ***requires*** residential development of 126 or more units to reserve 15% for very low and low-income households or satisfy an alternative mode of compliance such as paying an in-lieu fee earmarked for affordable housing needs.<sup>112</sup> Applicants who provide the 15% low-income housing are eligible for a 15% density increase.<sup>113</sup> If the Applicant provides more than the 15% required units,

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<sup>106</sup> Gov. Code § 65915(b)(1)(B).

<sup>107</sup> Gov Code § 65915(d).

<sup>108</sup> Gov Code § 65915(f).

<sup>109</sup> General Plan 3-21.

<sup>110</sup> Gov Code § 65915(f).

<sup>111</sup> Friends of Lagoon Valley v. City of Vacaville, 154 Cal. App. 4th 807, 826, 65 Cal. Rptr. 3d 251, 266 (2007)

<sup>112</sup> Contra Costa Zoning Ordinance 822-4.418(a). For any project where inclusionary units are required by this chapter, a developer may request a density bonus for providing the required inclusionary units. The developer may request a density bonus in an amount equal to or less than fifteen percent of the total units in the development, including the inclusionary units provided in the development.

<sup>113</sup> *Id.* at § 822-4.418(b). If a project includes moderate income, lower income, very low income, or senior housing units ***at levels beyond those required by this chapter***, a developer may request a 4714-006acp

then the Applicant is eligible for a concession and a further density increase.<sup>114</sup> The Project, at 284 units, falls under the purview of the Inclusionary Housing Ordinance.

Here, the County is allowing a much larger density increase than the 20% required by the State Density Bonus Law. Although the County is free to apply its own more stringent density and affordable housing requirements, it instead grants the Applicant a concession (under the State Density Bonus Law) to avoid the mandates of the County Inclusionary Housing Ordinance. Rather than providing the additional 24 units as low-income, the Applicant requests a concession to reserve these 24 units as moderate-income: “[b]y providing 5 percent of units as affordable to very low-income households, the project is also eligible for one development incentive or concession. The project would require a concession to provide the remaining affordable units (24 total) as affordable to moderate income” rather than low-income.<sup>115</sup> Thus, the Applicant is using a state law that promotes affordable housing to get out of a more stringent County law that promotes affordable housing.

The County can and should require the Applicant to comply with the County Inclusionary Housing Ordinance. Under the County Inclusionary Housing Ordinance, the Applicant is only eligible for a 15% density bonus, and only if the Applicant provides the remaining 24 units as low-income. If the Applicant wants a larger density increase or a concession, then pursuant to the County Inclusionary Housing Ordinance, the Applicant must provide more affordable housing than the required 15%.<sup>116</sup>

## I. CONCLUSION

The DEIR is inadequate as an environmental document because the County fails to adequately disclose, analyze and mitigate the Project’s significant impacts on air quality, hazardous materials and transportation. In addition, the Project violates the County’s General Plan. The county cannot approve the Project until it prepares and re-circulates a revised DEIR that resolves these issues.

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density bonus under Section 822-2.404 and may request incentives or concessions under Section 822-2.408.

<sup>114</sup> *Id.* at 822-2.404.

<sup>115</sup> DEIR at 3.10-16.

<sup>116</sup> *Id.* at § 822-4.418(b).

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Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in cursive script that reads "Danika L. Desai".

Danika L. Desai

Associate

DLD:acp

Attachments