## Adam\_Broadwell

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January 21, 2015

### Via Email and U.S. Mail

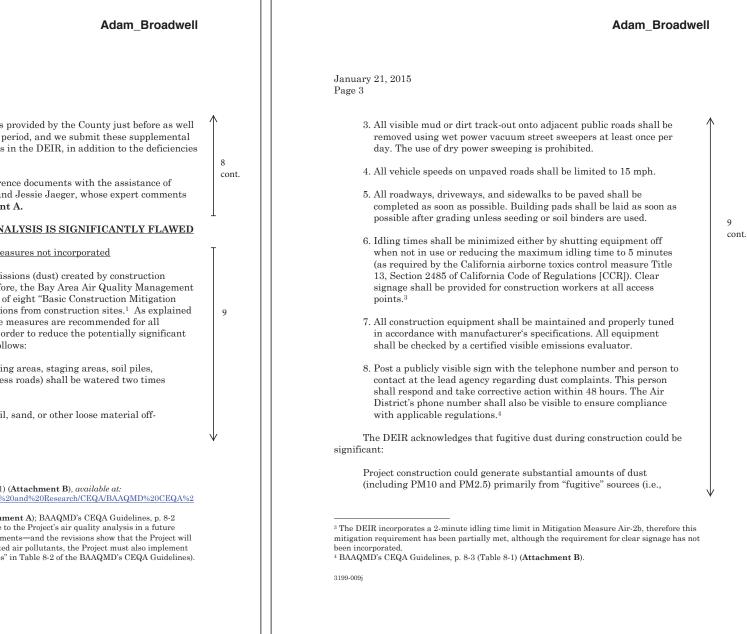
William Nelson Contra Costa County Department of Conservation and Development 30 Muir Road Martinez, CA 94553 Email: <u>William.Nelson@dcd.cccounty.us</u>

### Re: <u>Supplemental Comments on Draft Environmental Impact</u> <u>Report for Saranap Village Mixed Use Project (SCH #</u> <u>2014032060)</u>

Dear Mr. Nelson:

These comments are submitted on behalf of Saranap Area Residents for Responsible Development ("Saranap Area Residents") to supplement our previous comment letter submitted on November 17, 2014 regarding the Draft Environmental Impact Report ("DEIR") prepared for the Saranap Village Mixed Use Project ("Project") in Contra Costa County ("County").

The interests of Saranap Area Residents are described in our November 17th comment letter. In that letter we also described how the County failed to provide all documents referenced or relied upon in the EIR for the entire public comment period, as required by CEQA, and improperly denied Saranap Area Residents' November 10th request for an extension of the comment period in order to review late-received documents. The November 17th comment letter contained a notice that Saranap Area Residents may need to submit supplemental comments after reviewing all documents required by CEQA to be provided during the entire public comment period.



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We have now reviewed documents provided by the County just before as well as after the close of the public comment period, and we submit these supplemental comments to address further deficiencies in the DEIR, in addition to the deficiencies raised in our prior comments.

We have reviewed the DEIR reference documents with the assistance of technical consultants Matt Hagemann and Jessie Jaeger, whose expert comments are attached to this letter as Attachment A.

### THE DEIR'S AIR QUALITY ANALYSIS IS SIGNIFICANTLY FLAWED I.

### Α. Fugitive dust mitigation measures not incorporated

"Fugitive" particulate matter emissions (dust) created by construction projects are difficult to quantify. Therefore, the Bay Area Air Quality Management District ("BAAQMD") has adopted a list of eight "Basic Construction Mitigation Measures" to reduce fugitive dust emissions from construction sites.<sup>1</sup> As explained by Mr. Hagemann and Mr. Jaeger, these measures are recommended for all construction projects in the Bay area in order to reduce the potentially significant impacts of fugitive dust.<sup>2</sup> They are as follows:

- 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.

<sup>2</sup> Hagemann and Jaeger comments, p. 2 (Attachment A); BAAQMD's CEQA Guidelines, p. 8-2 (Attachment B). (If further revisions are made to the Project's air quality analysis in a future supplemental DEIR-as requested in these comments-and the revisions show that the Project will exceed any threshold of significance for designated air pollutants, the Project must also implement the "additional construction mitigation measures" in Table 8-2 of the BAAQMD's CEQA Guidelines).

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<sup>&</sup>lt;sup>1</sup> BAAQMD's CEQA Guidelines, p. 8-3 (Table 8-1) (Attachment B), available at: http://www.baaomd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%2 0Guidelines%20May%202011.ashx?la=en

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emissions released through means other than through a stack or tailpipe).  $^{5}$ 

However, the DEIR does not contain all of the above-listed mitigation requirements to reduce this potentially significant impact. The only overlapping mitigation measure in the DEIR is the 2-minute idling time limitation set forth in Mitigation Measure AIR-2b (the BAAQMD requirement for clear signage regarding this time limit is not incorporated).

As noted by Mr. Hagemann and Mr. Jaeger, the DEIR acknowledges that the County looks to the BAAQMD CEQA Guidelines for the air quality standards and requirements applicable to the Project.<sup>6</sup> The BAAQMD Guidelines make clear that CEQA lead agencies should require implementation of the Basic Construction Mitigation Measures for *all* construction projects. The DEIR must be revised to disclose this potentially significant impact and incorporate as mitigation the Basic Construction Mitigation Measures in Table 8-1 of the BAAQMD CEQA Guidelines. These measures constitute an adopted set of best management practices designed to reduce fugitive dust impacts, and are they apply regardless of whether the other air quality impacts of the Project are significant. Failure to reduce fugitive dust by requiring these measures means that impacts from fugitive dust would remain potentially significant and unmitigated, which is prohibited by CEQA.

B. <u>Cancer risks to on-site receptors not analyzed or mitigated</u>

The BAAQMD's CEQA Guidelines state that potentially significant impacts from the exposure of "sensitive receptors" such as residents to substantial concentrations of toxic air contaminants (TAC) and fine particulate matter (PM2.5) could occur in two ways: from siting a new TAC or PM2.5 source near existing or planned sensitive receptors, or from "siting a new receptor near an existing source of TAC and/or PM2.5 emissions."<sup>7</sup> The BAAQMD recommends that lead agencies evaluate and make a CEQA significance determination for each of these situations.<sup>8</sup> As described in the BAAQMD CEQA Guidelines: Adam\_Broadwell

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If a project is likely to be a place where people live, play, or convalesce, it should be considered a receptor. It should also be considered a receptor if sensitive individuals are likely to spend a significant amount of time there. Sensitive individuals refer to those segments of the population most susceptible to poor air quality: children, the elderly, and those with pre-existing serious health problems affected by air quality (ARB 2005). Examples of receptors include residences, schools and school yards, parks and play grounds, daycare centers, nursing homes, and medical facilities. Residences can include houses, apartments, and senior living complexes. ...

When siting a new receptor, the existing or future proposed sources of TAC and/or PM2.5 emissions that would adversely affect individuals within the planned project should be examined, including:

- the extent to which existing sources would increase risk levels, hazard index, and/or PM2.5 concentrations near the planned receptor,
- whether the existing sources are permitted or non-permitted by the BAAQMD, and
- whether there are freeways or major roadways near the planned receptor.

BAAQMD recommends that a lead agency identify all TAC and PM2.5 sources located within a 1,000 foot radius of the proposed project site. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius. Permitted sources of TAC and PM2.5 should be identified and located as should freeways and major roadways, and other potential sources. To conduct a thorough search, a lead

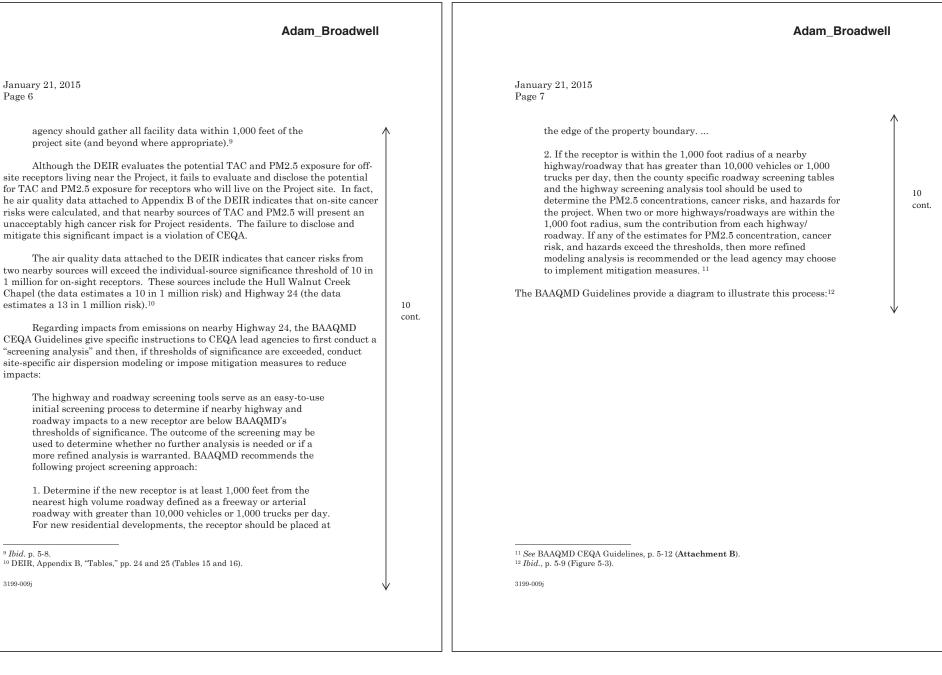
<sup>&</sup>lt;sup>5</sup> DEIR, p. 4.3-12.

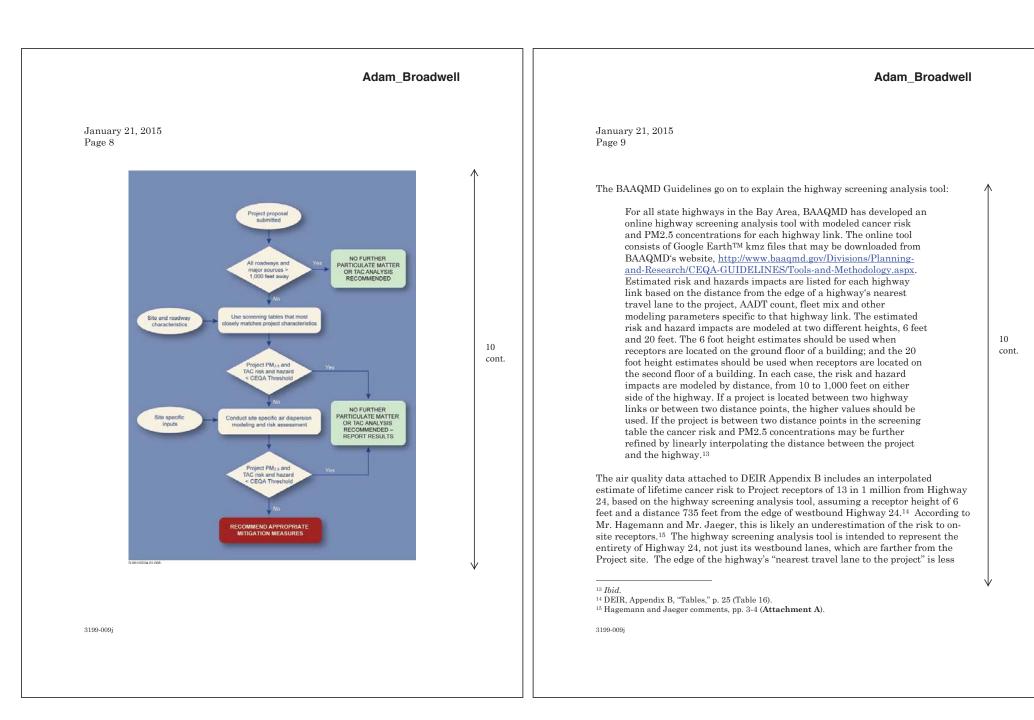
<sup>&</sup>lt;sup>6</sup> Ibid., p. 4.3-10; Hagemann and Jaeger comments, p. 3 (Attachment A).

<sup>&</sup>lt;sup>7</sup> BAAQMD CEQA Guidelines, p. 5-5 (Attachment B).

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>3199-009</sup>j





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<text></text>	<ul> <li>project-specific values, but CEQA require that such changes be justified by substantial evidence.<sup>22</sup></li> <li>CalEEMod calculates a project's air pollution by generating a "report" based on the project information entered into the model.<sup>23</sup> These project-specific reports are sometimes referred to as "output files." The output files disclose to the reader what information was used in calculating the project's air pollution emissions, such as the number and type of construction equipment that will be used on the site. The output files also disclose any changes made to the CalEEMod default settings, "to assist reviewers of the program in determining justification for values selected.<sup>224</sup></li> <li>For this Project, the DEIR's Appendix B includes part of the CalEEMod output files (or report), but does not include key parts of the report, including what assumptions were used in applying the model to the Project, what default settings were changed, and why. The omission of this information deviates from the technical appendices attached to CEQA documents for other construction projects in the Bay area.<sup>25</sup> In the opinion of Mr. Hagemann and Mr. Jaeger, without providing that were made about the Project, and cannot verify whether those assumptions are justified.<sup>26</sup> The complete CalEEMod output files should be provided as part of a recirculated DEIR.</li> <li>D. Air quality analysis incorrectly presumed the use of Tier 3 engines</li> <li>Despite the omission of key information from the CalEEMod output files, the DEIR provides some indications about the assumptions that were used in calculating the Project's air pollutant emissions. For example, the DEIR states that</li> </ul>
<ul> <li><sup>18</sup> CalEEMod website, <i>available at</i>: <u>http://www.caleemod.com/</u></li> <li><sup>19</sup> CAPCOA websites (Attachment C), <i>available at</i>: <u>http://www.capcoa.org/about/</u> and <u>http://www.capcoa.org/caleemod/</u></li> <li><sup>20</sup> BAAQMD website (Attachment C), <i>available at</i>: <u>http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES.aspx</u></li> <li><sup>21</sup> CalEEMod User Guide, pp. 2, 24 (Attachment D), <i>available at</i>: <u>http://www.caleemod.com/</u></li> <li><sup>3199-009j</sup></li> </ul>	<ul> <li>in the report.).</li> <li><sup>25</sup> Compare DEIR, Appendix A to the Technical Appendix B, "CalEEMod Output Files" (containing only the final emissions calculations) with, e.g., Appendix A-2 to the CEQA document prepared by the City of Richmond for the Bay Walk Mixed-Use project (Attachment E) (CalEEMod output files with descriptions of construction phases, equipment, and changes to default settings).</li> <li><sup>26</sup> Hagemann and Jaeger comments, p. 5 (Attachment A).</li> <li><sup>3199-009j</sup></li> </ul>

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### Adam Broadwell Adam Broadwell January 21, 2015 January 21, 2015 Page 12 Page 13 the air quality analysis assumed that all construction equipment would use "Tier 3" engines.<sup>27</sup> There is no substantial evidence to support this assumption. Although As a result, the DEIR only proposes mitigation that requires Tier 4 filters (or Tier 3 engines are currently being produced and installed in new off-road the equivalent) on small equipment like forklifts, air compressors, skip loaders and construction equipment, the vast majority of existing diesel off-road construction loaders, which can often be run on propane instead of diesel fuel. The DEIR equipment in California is not equipped with Tier 3 engines.<sup>28</sup> The California Air proposes no pollution reductions or engine tier requirements on the largest and 12 Resources Board ("CARB") currently prohibits smaller construction companies from most polluting pieces of equipment, such as graders and cranes. Substantial cont adding new engines to their fleet that have Tier 0 engines (the oldest and most evidence does not support the DEIR's assumption that construction equipment will polluting engines), and prohibits medium and large companies from adding Tier 1 be equipped with Tier 3 engines, and therefore the DEIR's conclusions regarding engines to their fleets.<sup>29</sup> However, there is no requirement that off-road environmental impacts are similarly unsupported by substantial evidence. construction fleets be comprised solely of Tier 3 engines. Regulations requiring that new additions to off-road vehicle fleets be Tier 3 engines or higher will not even take E. Number of haul trips during demolition underestimated effect for years: To make room for new Project buildings, the demolition phase of the Project 12 Beginning January 1, 2018, for large and medium fleets, and will involve demolishing and hauling away construction debris that includes cont. January 1, 2023, for small fleets, a fleet may not add a vehicle with building materials from approximately 48,000 square feet of existing on-site 13 a Tier 2 engine to its fleet. The engine tier must be Tier 3 or buildings, plus a large volume of asphalt pavement that currently covers most of the higher.<sup>30</sup> Project site.<sup>33</sup> This will require a significant number of trips by dump trucks travelling back and forth from the Project site to off-site disposal and recycling According to the BAAQMD's CEQA Guidelines, using late model engines on facilities.<sup>34</sup> Yet the DEIR indicates that only 60 total haul trips were assumed during the demolition phase.<sup>35</sup> This is much fewer than will likely be required, and construction equipment is typically used as a mitigation measure to reduce project air pollution.<sup>31</sup> The CalEEMod model does not assume that Tier 3 engines will be therefore it appears that construction-related air pollutant emissions were used, but this default can be changed if there is a binding mitigation measure that underestimated in the DEIR. requires the use Tier 3 engines. The presumption that the Project will use Tier 3 engines, with no substantial evidence that such engines will be used and no II. THE DEIR'S STORMWATER ANALYSIS IS INADEQUATE mitigation imposing this requirement, results in a significant underestimation of Project air pollution emissions.32 In conjunction with our previous comments regarding drainage and stormwater impacts, the DEIR must be revised to disclose the extent and type of 14 "low impact development" (or "LID") stormwater features that the County will <sup>27</sup> DEIR pp. 4.3-12, 4.3-13 (Table 4.3-3, footnote a); 6-16 (Table 6-4, footnote 1); 6-25 (Table 6-8, require for this Project. The DEIR incorrectly states that LID requirements are footnote 1). <sup>28</sup> Hagemann and Jaeger comments, p. 6 (Attachment A). In a 2010 white paper, the California "imposed by law and therefore no mitigation is necessary."<sup>36</sup> In fact, the County has Industry Air Quality Coalition estimated that less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 3 engines. (Attachment F, p. 3), available at: <sup>33</sup> See DEIR, Appendix B, Air Quality Technical Report dated April 17, 2014, "Tables" section, p. 4 http://www.agc-ca.org/uploadedFiles/Member Services/Regulatory-Advocacy-Page-PDFs/White\_Paper\_CARB\_OffRoad.pdf (Table 3) <sup>34</sup> Hagemann and Jaeger comments, pp. 6-7 (Attachment A) (using estimates from CalEEMod to <sup>29</sup> CARB Fact Sheet dated February 2014 (Attachment G), p. 3. available at: http://www.arb.ca.gov/msprog/ordiesel/fag/overview fact sheet dec 2010-final.pdf conclude that in order to clear 48,000 square feet of building materials, "the number of haul trips needed would be equal to at least 184 total trips, plus haul trips needed for asphalt pavement <sup>31</sup> BAAQMD Guidelines, p. 8-4 (Table 8-2) (Attachment B). removed from the Project site"). <sup>32</sup> Hagemann and Jaeger comments, p. 6 (Attachment A); CalEEMod User's Guide, Appendix D, <sup>35</sup> DEIR, Appendix B, Air Quality Technical Report dated April 17, 2014, p. 5 (Table 3). Default Data Table 3.5 (Attachment D). <sup>36</sup> DEIR p. 4.9-12. 3199-009i 3199-009i

6-39

30 Ibid

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adequate stormwater treatment features, and the se of that discretion until after the CEQA process is	↑	to the Project, "LID has been found to be feasible for nearly all development sites." <sup>42</sup> If the County will exempt the Project from 100% LID stormwater treatment, this must be disclosed to the public in a revised DEIR.
ormwater Permit ("MSP") covers more than 70 cities o Bay Area. The MSP was issued by the San Quality Control Board in 2009 and revised in 2011. <sup>38</sup> ires the County to place conditions on development ign measures, source controls, and stormwater		Furthermore, under the MSP there are four types of LID treatment measures: stormwater harvesting and re-use, infiltration, evapotranspiration, and biotreatment. <sup>43</sup> Biotreatment may only be considered "if it is infeasible to implement harvesting and re-use, infiltration, or evapotranspiration at a project site." <sup>44</sup> As explained in the MSP:
easures are intended to address stormwater runoff ent increases in runoff flows from new development accomplished through the implementation of LID unclusion in the DEIR, it is the County, and not "the effic LID requirements.		A properly engineered and maintained biotreatment system may be considered only if it is infeasible to implement harvesting and re- use, infiltration, or evapotranspiration at a project site This Provision recognizes the benefits of harvesting and reuse, infiltration and evapotranspiration and establishes these methods
a "Regulated Project" under the MSP provision C.3, te and/or replace more than 10,000 square feet of ite where past development has occurred. <sup>39</sup> The on of exempting the Project from using 100% LID easures are deemed "infeasible." <sup>40</sup> The County's must include "both technical and economic feasibility atain enough technical and/or economic detail to ility used." <sup>41</sup>	14. cont.	at the top of the LID treatment hierarchy. <sup>45</sup> The DEIR indicates that the County is not even considering a requirement that the Project incorporate one or more of the preferred methods of stormwater treatment: re-use, infiltration, or evapotranspiration. Instead, the DEIR describes potential LID features for the Project that incorporate only biotreatment measures. <sup>46</sup> The DEIR does not explain why the three preferred methods of LID stormwater treatment are infeasible. The DEIR's suggested stormwater treatment methods are not evapotre to the voltate that indicates the the forel
uately show that it would be infeasible for the e LID techniques into the design of the Project. This a later date, but must be disclosed to the public now, n of the Project's environmental impacts. As stated in Program's Stormwater C.3 Guidebook, which applies	V	methods are not supported by substantial evidence. The fact that the final treatment methods will be finalized at a later date is contrary to the requirements of CEQA. Unless the DEIR is revised and recirculated, there remain potentially significant and unmitigated stormwater impacts.
garding the Project's LID treatment techniques would be made nent in the future). ermit ( <b>Attachment H</b> ), available at: Is/R2-2009-0074_Revised.pdf		<ul> <li><sup>42</sup> Contra Costa Clean Water Program, Stormwater C.3 Guidebook (Feb. 15, 2012) (Attachment I), p. 58, available at: http://www.cccleanwater.org/Publications/Guidebook/Stormwater C3 Guidebook 6th Edition.pdf</li> <li><sup>43</sup> County's Municipal Stormwater Permit (Attachment H), p. 28, available at: http://cleanwaterprogram.org/uploads/R2-2009-0074_Revised.pdf.</li> <li><sup>44</sup> Ibid.</li> <li><sup>44</sup> Ibid.</li> <li><sup>45</sup> Did., Appendix I ("Fact Sheet"), p. App I-29.</li> <li><sup>46</sup> DEIR p. 4.9-12.</li> </ul>
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cont.

discretion to accept less-than-a County cannot defer its exercis complete.37

The City's Municipal Sto and towns in the San Francisco Francisco Bay Regional Water Provision C.3 of the MSP requi projects to incorporate site desi treatment measures. These me pollutant discharges and preve projects. The C.3 goal is to be techniques. Contrary to the co law," that imposes project-spec

The proposed Project is because the Project would crea impervious surface area on a si County, however, has the optio treatment measures if such me determination of infeasibility n or infeasibility," and must "con document the basis of infeasibi

The DEIR does not adeq proposed Project to incorporate decision cannot be deferred to during the County's evaluation the Contra Costa Clean Water

<sup>37</sup> See ibid. (a final determination reg by the County Public Works Departm

<sup>38</sup> County's Municipal Stormwater Pe

http://cleanwaterprogram.org/uploads

<sup>40</sup> *Ibid.*, pp. 33-34, 39. <sup>41</sup> *Ibid.* 

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### III. <u>THE PROJECT'S INCONSISTENCY WITH THE COUNTY</u> <u>ZONING</u> <u>CODE IS A POTENTIALLY SIGNIFICANT IMPACT</u>

The DEIR notes that the County Zoning Code requires a minimum lot size of 15 acres in the Planned Unit Development "P-1" zone in order to be approved for mixed use.<sup>47</sup> The Project occupies only 4.6 acres and is therefore inconsistent with this minimum lot size requirement. The DEIR states that the County is considering a revision to its Zoning Code and possibly to its General Plan, which would reduce the minimum lot size requirement. However, for current purposes the Project site remains inconsistent with the requirements of the Zoning Code. Pursuant to the CEQA Guidelines, this is a potentially significant impact.<sup>48</sup> There is no guarantee regarding whether and when the County will approve a revision to its Zoning Code. Accordingly, the DEIR should be revised to acknowledge that the Project will create a potentially significant land use impact.

## IV. <u>CONCURRENCE WITH OBJECTIONS RAISED BY OTHER</u> <u>COMMENTERS</u>

A number of commenters objected to the adequacy of the DEIR with respect to its analysis and mitigation of (1) visual and aesthetic impacts, particularly regarding the height of the proposed Project buildings; (2) traffic impacts and safety hazards, in light of the current limitations of the road, pedestrian, and bicycle facilities in the Project vicinity, the cumulative impacts of other nearby projects, and the DEIR's failure to analyze a number of affected intersections; (3) population and public service impacts, including emergency service impacts, school impacts (for example, there is no evidence that the Project applicant will in fact pay school impact fees), and recreational impacts, given existing strains on these public resources; and (4) greenhouse gas impacts, given the DEIR's improper deferral of mitigation (the mitigation also improperly suggests that future residents will be held responsible for compliance, rather than the Project applicant). Saranap Area Residents for Responsible Development concurs with these objections and urges the County to recirculate the DEIR to fully address these flaws.

<sup>47</sup> *Ibid.*, p. 4.10-13.
 <sup>48</sup> CEQA Guidelines, Appendix G, Section X ("Land Use")

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Thank you for your consideration of these comments.

Sincerely, Ellen L. Trescott

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Attachments\*

\* Internet links to attached reference documents are provided herein, and a compact disc with attachments is provided herewith. Paper copies of these documents will be promptly provided to the County upon request.

# Adam Broadwell Adam\_Broadwell Technical Consultation, Data Analysis and Litigation Support for the Environment SWAPE 1640 5th Street, Suite 204 Santa Monica, California 90401 Matt Hagemann, P.G, C.Hg. (949) 887-9013 mhagemann@swape.com January 21, 2015 Ellen L. Trescott ATTACHMENT A Adams Broadwell Joseph & Cardozo 520 Capitol Mall, Suite 350 Sacramento, CA 95814 Comments on the Saranap Village Mixed-Used Project, Contra Costa County Subject: Dear Ms. Trescott: We have reviewed the September 18, 2014 Draft Environmental Impact Report (DEIR) for the Saranap Village Mixed-Use Project ("Project"). The approximately 4.6-acre Project site is located in the Saranap area of unincorporated Walnut Creek in Contra Costa County, approximately one quarter of a mile west of the Walnut Creek city limits, and just south of State Route 24. The Project would allow for the development of up to approximately 43,500 square feet of commercial uses and up to 235 multi-family housing units. Our review concludes that the DEIR fails to: 1. Adequately mitigate fugitive dust emissions created by construction activities; 2. Adequately evaluate and mitigate the potential health risks to on-site receptors from toxic air contaminants (TACs) and fine particulate matter (PM2.5) emissions; 3. Provide complete CalEEMod output files; 4. Provide substantial evidence for assumptions used in the CalEEMod model. A revised DEIR should be prepared to disclose and adequately discuss these issues and to identify mitigation measures, where necessary. 1

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### Fugitive Dust Mitigation Measures Not Incorporated

Fugitive dust emissions (i.e., emissions released through means other than a stack or tailpipe) from construction activities are not adequately mitigated. According to the DEIR, the reason mitigation measures are not implemented is because "regional exhaust emissions would not exceed the Bay Area Air Quality Management District ("BAAQMD" or "District") average daily or maximum annual significance thresholds for ROG, NOX, PM10, or PM2.5 during construction" (p. 4.3-12). Therefore, construction related emissions of criteria pollutants would be less than significant, and would not require mitigation (p. 4.3-12). However, this assumption, that construction emissions would not have a significant impact because exhaust emissions alone do not exceed District thresholds, is incorrect. The DEIR even explains that PM10 and PM2.5 emissions would primarily come from "fugitive" sources; the DEIR states, "Project construction could generate substantial amounts of dust (including PM10 and PM2.5) primarily from 'fugitive' sources... and lesser amounts of other criteria air pollutants, primarily from operation of heavy equipment construction machinery and construction worker automobile trips" (p. 4.3-12). Furthermore, fugitive dust emissions created by construction activities are difficult to accurately quantify. Therefore, in an effort to ensure that fugitive criteria pollutant emissions stay below District thresholds, additional mitigation measures should be implemented.

The BAAQMD has adopted a list of eight "Basic Construction Mitigation Measures" to reduce fugitive dust emissions from construction activities.<sup>1</sup> The implementation of these mitigation measures is recommended for projects in the Bay area, in an effort to reduce the potentially significant impacts of fugitive dust.<sup>2</sup> The eight mitigation measures are as follows:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure

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Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.<sup>3</sup>

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency
  regarding dust complaints. This person shall respond and take corrective action within 48 hours.
  The Air District's phone number shall also be visible to ensure compliance with applicable
  regulations.<sup>4</sup>

The DEIR acknowledges that fugitive dust from construction of the Project could be significant. However, only one of the eight mitigation measures listed above is implemented (MM Air-2b), and is utilized in an effort to reduce impacts related to health risk exposure (Impact 4.3-2), not to reduce fugitive dust impacts (p. 4.3-15). Furthermore, MM Air-2b only requires that contractors be restricted to a "2 minute idling limit on all construction equipment" (p. 4.3-15), and does not require that clear signage be provided for construction workers at all access points.

The DEIR acknowledges that the air quality analysis "is consistent with methodologies set forth in the BAAQMD CEQA guidelines" (p. 4.3-1), and recognizes that the County should utilize the BAAQMD CEQA Guidelines as a way to show compliance with air quality standards applicable to the Project (p. 4.3-10). However, the BAAQMD CEQA Guidelines clearly state that lead agencies should require implementation of the "Basic Construction Mitigation Measures" for all projects; and by neglecting to apply all of the mitigation measures listed above, the proposed Project is not consistent with the BAAQMD CEQA Guidelines.

These mitigation measures constitute a set of best management practices designed to reduce fugitive dust impacts that apply regardless of whether the other air quality impacts of the Project are significant. Failure to implement these measures, and reduce fugitive dust emissions, would result in potentially significant and unmitigated impacts.

### Potential Health Risks to On-Site Sensitive Receptors Inadequately Analyzed and Mitigated

The BAAQMD CEQA Guidelines state that potentially significant impacts to "sensitive receptors" (i.e., residential dwellings, including apartments, houses, and condominiums) through exposure to large concentrations of toxic air contaminants (TACs) and fine particulate matter (PM2.5) could occur in two ways: (1) a new TAC or PM2.5 source is constructed near existing or planned sensitive receptors, or (2) a new receptor is constructed near an existing source of TAC and/or PM2.5 emissions.<sup>5</sup> The BAAQMD

<sup>&</sup>lt;sup>1</sup> BAAQMD's CEQA Guidelines, p. 8-3 (Table 8-1) (Attachment B), available at:

http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines% 20May%202011.ashx?la=en

<sup>&</sup>lt;sup>2</sup> Ibid., p. 8-2. (If further revisions are made to the Project's air quality analysis in a future supplemental DEIR—as requested in these comments—and the revisions show that the Project will exceed any threshold of significance for designated air pollutants, the Project must also implement the "additional construction mitigation measures" in Table 8-2 of the BAAQMD's CEQA Guidelines).

<sup>&</sup>lt;sup>3</sup> The DEIR incorporates a 2-minute idling time limit in Mitigation Measure Air-2b, therefore this mitigation requirement has been partially met, although the requirement for clear signage has not been incorporated. <sup>4</sup> BAAQMD's CEQA Guidelines, p. 8-3 (Table 8-1) (Attachment B). <sup>5</sup> BAAQMD CEQA Guidelines, p. 5-5 (Attachment B).

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recommends that lead agencies evaluate both of these situations to determine significance.<sup>6</sup> Appendix B of the DEIR shows that neither of these situations was adequately evaluated for this Project.

A revised DEIR needs to be prepared to: (1) re-evaluate and disclose cancer risk to on-site sensitive receptors from nearby off-site sources which, in our opinion, was underestimated in the DEIR's technical reports and was not disclosed in the DEIR; and (2) include a health risk assessment of Project TAC and PM2.5 emissions on existing and future receptors.

First, Tables 15 and 16 in Appendix B indicate that cancer risks from two nearby sources will exceed the individual-source significance threshold of 10 in 1 million for on-site receptors (Appendix B "Tables" p. 24-25). These sources include the (1) Hull Walnut Creek Chapel, with an estimated 10 in 1 million cancer risk, and (2) Highway 24, with an estimated 13 in 1 million risk (Appendix B "Tables" p. 24-25).

The estimated cancer risk of 13 in 1 million from Highway 24 is based on a highway screening analysis tool<sup>8</sup>, assuming a receptor height of six feet and a distance of 735 feet from the edge of the westbound Highway 24 (Appendix B "Tables" p. 25, Table 16). This is likely an underestimation of the risk to on-site receptors. The highway screening analysis tool is intended to represent the entirety of Highway 24, not just its westbound lanes, which are farther from the Project site.<sup>9</sup> Furthermore, the edge of the highway's "nearest travel lane to the project" is less than 600 feet, not 735 feet as assumed in the Project data. Accordingly, the risk is likely greater than 13 in 1 million, which is well above the threshold of significance for cancer risks from a single source of 10 in 1 million.

The BAAQMD CEQA Guidelines recommend that when the outcome of the highway screening is above thresholds, "a more refined modeling analysis is recommended or the lead agency may choose to implement mitigation measures."<sup>10</sup> The DEIR fails to disclose this significant impact, and also fails to conduct a more refined modeling analysis or impose mitigation measures. The DEIR must be revised and recirculated to disclose this potentially significant impact and to include a more robust health risk assessment or to identify mitigation consistent with Best Available Control Technologies for Toxics (T-BACTs).<sup>11</sup>

Second, the DEIR fails to adequately evaluate and disclose the potential excess cancer risk to on-site sensitive receptors from Project emissions. Appendix B of the DEIR states that the analyses of the "cumulative impacts to off-site and on-site sensitive receptors" are included in the technical report, which suggests that excess cancer risks to on-site sensitive receptors, due to Project emissions, were included in this analysis. However, this is not the case. The excess cancer risk to on-site sensitive

receptors from <u>off-site sources</u> was evaluated and included in the technical report. The Project's impacts to on-site sensitive receptors were not analyzed. An updated DEIR should include this analysis, as well as include mitigation measures, where necessary.

### The Provided CalEEMod Output Files Are Incomplete

The Air Quality assessment relies on emissions calculated from the *California Emissions Estimator Model* Version CalEEMod.2013.2.2 ("CalEEMod").<sup>12</sup> CalEEMod provides recommended default values based on Site specific information, such as land use type, meteorological data, total lot acreage, Project type, and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.<sup>13</sup> Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollution emissions, and make known which default values were changed as well as provide a justification for the values selected.<sup>14</sup>

Appendix B of the DEIR includes part of the CalEEMod output files, but does not include key parts of the report, including what assumptions were used in applying the model to the Project, what default settings were changed, and why. The omission of this information deviates from the technical appendices attached to CEQA documents for other construction projects in the Bay area.<sup>15</sup> Without providing the entire CalEEMod report, the reviewer cannot fully understand the assumptions that were made about the Project, and cannot verify whether those assumptions are justified. The complete CalEEMod output files should be provided as part of a recirculated DEIR.

### Unsubstantiated CalEEMod Input Parameters Used in Air Quality Analysis

Although the CalEEMod output files lack key information needed for the public to verify the data presented in the air quality analysis, the DEIR provides some idea of the model assumptions used. Certain assumptions used in the model, however, are not justified. For example, the DEIR explains that Tier 3 engines were assumed for all off-road construction equipment used during construction. Furthermore, the number of hauler trips needed during the "Demolition" construction phase was underestimated. These incorrect assumptions artificially reduce the true Project emissions during construction, and as a result, invalidate the resulting air pollutant emissions calculated in the Air Quality assessment.

<sup>&</sup>lt;sup>6</sup> BAAQMD CEQA Guidelines, p. 5-5 (Attachment B).

<sup>&</sup>lt;sup>7</sup> It should be noted that this 13 in 1 million cancer risk only includes Highway 24. When Boulevard Way and multiple nearby highway ramps are included, the cancer risk is equal to 18 in 1 million.

<sup>&</sup>lt;sup>8</sup> http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx

<sup>&</sup>lt;sup>9</sup> See BAAQMD CEQA Guidelines, p. 5-12 (Attachment B).

<sup>&</sup>lt;sup>10</sup> BAAQMD CEQA Guidelines, p. 5-12 (Attachment B).

<sup>&</sup>lt;sup>11</sup>See California Air Resources Board (CARB), 2012. Status of Research on Potential Mitigation Concepts to Reduce Exposure to Nearby Traffic Pollution <u>http://www.arb.ca.gov/research/health/traff-eff/research%20status%20-</u> reducing%20exposure%20to%20traffic%20pollution.pdf

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<sup>&</sup>lt;sup>12</sup> CalEEMod website (Attachment C), available at: <u>http://www.caleemod.com/</u>

<sup>&</sup>lt;sup>13</sup> CalEEMod User Guide, pp. 2, 9 (Attachment D), available at: <u>http://www.caleemod.com/</u>

<sup>&</sup>lt;sup>14</sup> CalEEMod User Guide, pp. 7, 13 (Attachment D), available at: <u>http://www.caleemod.com/</u> (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.).

<sup>&</sup>lt;sup>15</sup> Compare DEIR, Appendix A to the Technical Appendix B, "CalEEMod Output Files" (containing only the final emissions calculations) with, e.g., Appendix A-2 to the CEQA document prepared by the City of Richmond for the Bay Walk Mixed-Use project (Attachment E) (CalEEMod output files with descriptions of construction phases, equipment, and changes to default settings).

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### Incorrectly Assumed the Use of Tier 3 Engines

The DEIR calculates the Project emissions in the unmitigated scenario with the assumption that every piece of heavy-duty construction machinery is equipped with Tier 3 engines (p. 4.3-12). This assumption, however, is unsubstantiated and unrealistic. Although Tier 3 engines are currently being produced and installed in new off-road construction equipment, the vast majority of existing diesel off-road construction equipment in California is not equipped with Tier 3 engines.<sup>16</sup> In a 2010 white paper, the California Industry Air Quality Coalition estimated that less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 3 engines.<sup>17</sup> It should be noted that there are some regulations on construction equipment that can be utilized by construction companies. For example, CARB currently prohibits smaller construction companies from adding construction equipment with Tier 0 engines to their fleets, and prohibits medium and large construction companies from adding equipment with Tier 1 engines to their fleets.<sup>18</sup> However, it is not required that off-road construction fleets be comprised solely of Tier 3 engines. According to CARB, regulations requiring that new additions to off-road vehicle fleets be equipped with Tier 3 engines will not take effect for years; they state, "Beginning January 1, 2018, for large and medium fleets, and January 1, 2023, for small fleets, a fleet may not add a vehicle with a Tier 2 engine to its fleet. The engine tier must be Tier 3 or higher."<sup>19</sup> Therefore, it is highly unrealistic to assume that the entire construction fleet for this Project will be made up of construction machinery equipped with Tier 3 engines, exclusively.

According to the BAAQMD's CEQA Guidelines, using late model engines on construction equipment is typically used as a mitigation measure to reduce Project air pollution.<sup>20</sup> The CalEEMod model does not assume that Tier 3 engines will be used as a default. Rather, the off-road equipment's horsepower and load factors are based on the default average values of the mode tier according to population and construction year.<sup>21</sup> The presumption that the Project will use an entire fleet of off-road equipment with Tier 3 engines, without substantial evidence that such engines will be used, results in a significant underestimation of emissions.

### Number of Hauler Trips during Demolition Underestimated

The "Demolition" construction phase involves the demolition of approximately 48,000 square feet of existing structures on the proposed Project site, as well as a large volume of asphalt pavement that currently covers most of the site.<sup>22</sup> In order to clear the debris from the demolition of these existing structures, many hauling trips need to be made; however, the DEIR indicates that only 60 total haul trips are needed.<sup>23</sup> According to the CalEEMod User Guide Appendix A, *Calculation Details*, one truck has a 20 yd<sup>3</sup> capacity, one yd<sup>3</sup> of building waste weighs 0.5 tons, and one ft<sup>2</sup> is equal to 0.046 tons. Therefore,

- <sup>16</sup> California Industry Air Quality Coalition White Paper (Attachment F), p. 3, available at: <u>http://www.agc-ca.org/uploadedFiles/Member Services/Regulatory-Advocacy-Page-PDFs/White Paper CARB OffRoad.pdf</u> <sup>17</sup> Attachment F, p. 3.
- <sup>18</sup> CARB Fact Sheet dated February 2014 (Attachment G), p. 3, *available at:* http://www.arb.ca.gov/msprog/ordiesel/fag/overview fact sheet dec 2010-final.pdf
- <sup>19</sup> http://www.arb.ca.gov/msprog/ordiesel/faq/overview fact sheet dec 2010-final.pdf
- <sup>20</sup> BAAQMD Guidelines, p. 8-4 (Table 8-2) (Attachment B).
- <sup>21</sup> CalEEMod User Guide, p. 25 (Attachment D).

one haul truck has the capacity to carry approximately 217 square feet of building material per trip. 60 total haul trips would only clear approximately 13,020 square feet of demolished building material. In order to clear 48,000 square feet of waste, the number of haul trips needed would be equal to at least 184 total trips, plus haul trips needed for asphalt pavement removed from the Project site. The total amount of haul trips estimated in the air model is much less than will likely be required, and therefore it appears that construction-related air pollutant emissions were underestimated in the DEIR.

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Sincerely,

M Haxa

Matt Hagemann, P.G., C.Hg.

Jessie Jaeger

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 <sup>&</sup>lt;sup>22</sup> See DEIR, Appendix B, Air Quality Technical Report dated April 17, 2014, "Tables" section, p. 4 (Table 3).
 <sup>23</sup> DEIR, Appendix B, Air Quality Technical Report dated April 17, 2014, "Tables" section, p. 5 (Table 3).