Justification/Reason for Appeal

3rd and Fairfax Mixed-Use Project

DIR-2018-2770-SPR-WDI; ENV-2018-2771-EIR

I. REASON FOR THE APPEAL

The Environmental Impact Report ("EIR") prepared for the 3rd and Fairfax Mixed-Use Project (DIR-2018-2770-SPR-WDI; ENV-2018-2771-EIR) ("Project") fails to comply with the California Environmental Quality Act ("CEQA"). Furthermore, the Site Plan Review entitlements (DIR-2018-2770-SPR-WDI) was in error because (1) the City of Los Angeles ("City") must fully comply with CEQA prior to any approvals in furtherance of the Project and (2) the findings are not supported by substantial evidence. Therefore, the City of Los Angeles ("City") must set aside the Site Plan Review entitlements and circulate a revised EIR prior to considering approvals for the Project.

II. SPECIFICALLY THE POINTS AT ISSUE

The specific points at issue are set forth in the attached comment letter dated April 11, 2022, and in the expert comment letters attached thereto.

III. HOW YOU ARE AGGRIEVED BY THE DECISION

Members of appellant Supporters Alliance for Environmental Responsibility ("SAFER") live and/or work in the vicinity of the proposed Project. They breathe the air, suffer traffic congestion, and will suffer other environmental impacts of the Project unless it is properly mitigated.

IV. WHY YOU BELIEVE THE DECISION-MAKER ERRED OR ABUSED THEIR DISCRETION

The Central Los Angeles Area Planning Commission sustained the Planning Director's determination for the Project dated February 8, 2022, adopted the EIR, and approved a Site Plan Review for the Project despite evidence in the record establishing substantial evidence that the EIR fails to adequately analyze the Project's environmental impacts and fails to impose all feasible mitigation measures to reduce the Project's impacts. The Department of City Planning should therefore have prepared a revised EIR and recirculated the revised document prior to consideration of approvals for the Project. The City is not permitted to approve the Project's Site Plan Review entitlements until the EIR's deficiencies are remedied.

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April 11, 2022

Via E-mail

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**Re: 3rd and Fairfax Mixed-Use Project Appeal;
Case No. DIR-2018-2770-SPR-WDI-1A;
CEQA No. ENV-2018-2771-EIR;
Central Area Planning Commission AGENDA ITEM 8 (April 12, 2022)**

To the Honorable Central Los Angeles Area Planning Commissioners:

This letter is submitted on behalf of Supporters Alliance for Environmental Responsibility and its members living in and near the City of Los Angeles ("SAFER") regarding SAFER's appeal of the Planning Director's February 8, 2022 decision regarding the environmental impact report ("EIR") and site plan review for the 3rd and Fairfax Mixed-Use project (Case No. DIR-2018-2770-SPR-WDI-1A; CEQA No. ENV-2018-2771-EIR) ("Project") to be heard as Agenda Item 8 at the Central Area Planning Commission meeting on April 12, 2022.

After reviewing the EIR, which includes the Draft EIR ("DEIR") dated February 11, 2021 and the Final EIR ("FEIR") dated December 2021, SAFER is concerned that the EIR fails to adequately analyze significant environmental impacts and fails to mitigate significant impacts that will occur as a results of the Project. SAFER requests that the Central Area Planning Commission set aside the Planning Director's February 8, 2022 decision at this time and direct staff to prepare a revised draft EIR ("RDEIR") to reconsider the analyses and require additional mitigation measures in order to address the Project's significant impacts.

This correspondence has been prepared with the assistance of the indoor air quality expert Francis Offermann, PE, CIH and noise expert Deborah Jue of the consulting firm Wilson

Ihrig. The comments of Mr. Offermann and Ms. Jue are attached as Exhibits A and B, respectively. SAFER incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. (*Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal.App.4th 173, 191.)

PROJECT DESCRIPTION

The Project proposes the construction and operation of a new mixed-use development within the eastern portion of the existing Town & Country Shopping Center (Center or Project Site) that is currently developed with retail and commercial uses. The proposed development activities would be limited to the eastern portion of the Center and would include the demolition of 151,048 square feet of existing retail uses and the construction of a mid-rise, eight-story mixed-use structure with two levels of subterranean parking, for a maximum height of 100 feet. The Project Site includes approximately 327,121 square feet of area (7.51 acres) and is generally bounded by W. 3rd Street to the north, S. Ogden Drive to the east, the Hancock Park Elementary School to the south, and S. Fairfax Avenue to the west.

The residential component of the Project would include up to 331 multi-family dwelling units comprised of 70 studio units, 162 one-bedroom units, 66 two-bedroom units, and 33 three-bedroom units of varying sizes and configurations. The residential units would be located on Level 4 through Level 8, above the proposed commercial/retail spaces and parking podium. The Project would also include residential amenities including, but not limited to, a lobby, mail and parcel area, leasing office, outdoor courtyards, pool deck, and amenity rooms. The Project also includes 83,994 square feet of new commercial space, which would occupy two stories within the mixed-use development located on the portion of the Development Site frontingW. 3rd Street.

LEGAL STANDARD

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) "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." (*Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 109 (*CBE v. CRA*).)

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. (14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1).) "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.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.) 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." (*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.)

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. (CEQA Guidelines, § 15002(a)(2) and (3); *See also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley,* 52 Cal.3d at 564.) 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." (14 CCR § 15002(a)(2).) 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." (Pub. Res. Code, § 21081; 14 CCR § 15092(b)(2)(A) and (B).)

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.'" (*Berkeley Jets*, 91 Cal.App.4th at 1355 [quoting, *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391, 409, n. 12.) As the court stated in *Berkeley Jets*, 91 Cal.App.4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist*. (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946.)

More recently, the California Supreme Court has emphasized that:

> When reviewing whether a discussion is sufficient to satisfy CEQA, a court must be satisfied that the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted]....

(*Sierra Club v. Cty. of Fresno* (2018) 6 Cal.5th 502, 510 (2018) [citing *Laurel Heights Improvement Assn.*, 47 Cal.3d at 405].) The Court in *Sierra Club v. Cty. of Fresno* also emphasized at another primary consideration of sufficiency is whether the EIR "makes a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." (6 Cal.5th at 510.) "Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document." (*Id*. at 516.) Although an agency has discretion to decide the manner of discussing potentially significant effects in an EIR, "a reviewing court must determine whether the discussion of a potentially significant effect is sufficient or insufficient, i.e., whether the EIR comports with its intended function of including 'detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.'" (6 Cal.5th at 516, [citing *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197].) "The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency's factual conclusions." (6 Cal.5th at 516.) As the Court emphasized:

> [W]hether 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.

(*Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 514.)

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. (14 CCR § 15370.) Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. (14 CCR § 15126.4(a)(1)(B).) A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved.

DISCUSSION

I. The EIR Fails to Address Significant Indoor Air Quality Impacts to Future Residents and Employees.

The EIR fails to address the significant health risks from emissions of formaldehyde. Certified Industrial Hygienist, Francis Offermann, PE, CIH, has conducted a review of the Project, the EIR, and relevant documents regarding the Project's indoor air emissions. Mr. Offermann is one of the world's leading experts on indoor air quality, in particular emissions of formaldehyde, and has published extensively on the topic. As discussed below and set forth in Mr. Offermann's comment, the Project's emissions of formaldehyde to air will result in very significant cancer risks to future residents of the Project's residential component and to future employees of the Project's commercial component. Mr. Offermann's expert opinion and calculation is substantial evidence that the Project may have significant health risk impacts as a result of these indoor air pollution emissions, which were not discussed, disclosed, or analyzed in the EIR. These impacts must be addressed in a RDEIR. Mr. Offermann's comment is attached as Exhibit A.

Formaldehyde is a known human carcinogen and listed by the State as a TAC. The South Coast Air Quality Management Distrcict ("SCAQMD") has established a significance threshold of health risks for carcinogenic TACs of 10 in a million and a cumulative health risk threshold of 100 in a million. The EIR fails to acknowledge the significant indoor air emissions that will result from the Project. Specifically, there is no discussion of impacts or health risks, no analysis, and no identification of mitigations for significant emissions of formaldehyde to air from the Project.

Mr. Offermann explains that many composite wood products typically used in home and apartment building construction contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are commonly used in residential, office, and retail building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." (Ex. A, pp. 2-3.)

Mr. Offermann found that future residents of the Project's residential units will be exposed to a cancer risk from formaldehyde of approximately 120 per million, ***even assuming that*** all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. (Ex. A, pp. 3-4.) This is more than 12 times SCAQMD's CEQA significance threshold of 10 per million. (*Id*. at p. 4.)

Mr. Offermann found that future employees of the Project's commercial spaces will be exposed to a cancer risk from formaldehyde of approximately 17.7 per million, ***even assuming that*** all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. (Ex. A, pp. 4-5.) This exceeds SCAQMD's CEQA significance thresholds 10 per million. (*Id*. at p. 5.)

Mr. Offermann concludes that these significant environmental impacts should be analyzed in an EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. (Ex. A, pp. 5, 10-13.) He prescribes a methodology for estimating the Project's formaldehyde emissions in order to do a more project-specific health risk assessment. (*Id*. at pp. 6-10.). Mr. Offermann also suggests several feasible mitigation measures, such as requiring the use of no-added-formaldehyde composite wood products, which are readily available. (*Id*. at pp. 10-13.) Mr. Offermann also suggests requiring air ventilation systems which would reduce formaldehyde levels. (*Id*.) Since the EIR does not analyze this impact at all, none of these or other mitigation measures have been considered.

When a Project exceeds a duly adopted CEQA significance threshold, as here, this alone establishes substantial evidence that the project will have a significant adverse environmental impact. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. (See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 [County applies Air District's "published CEQA quantitative criteria" and "threshold level of cumulative significance"]; see also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 [“A ‘threshold of significance’ for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant”].) The California Supreme Court made clear the substantial importance that an air district significance threshold plays in providing substantial evidence of a significant adverse impact. (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 [“As the [South Coast Air Quality Management] District’s established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact.”].) Since expert evidence demonstrates that the Project will exceed the SCAQMD’s CEQA significance threshold, there is substantial evidence that an “unstudied, ***potentially significant environmental effect[]***” exists. (See *Friends of Coll. of San Mateo Gardens v. San Mateo Cty. Cmty. Coll. Dist.* (2016) 1 Cal.5th 937, 958 [emphasis added].) As a result, the EIR for the Project must address this impact and identify enforceable mitigation measures.

The failure of the EIR to address the Project’s formaldehyde emissions is contrary to the California Supreme Court’s decision in *California Building Industry Ass’n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 (*CBIA*). In that case, the Supreme Court expressly holds that potential adverse impacts to future users and residents from pollution generated by a proposed project ***must be addressed*** under CEQA. At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment’s effects on a project. (*CBIA*, *supra*, 62 Cal.4th at 800-01.) However, to the extent a project may exacerbate existing environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. (*Id*. at 801.) In so holding, the Court expressly held that CEQA’s statutory language required lead agencies to disclose and analyze “impacts on ***a project’s users or residents*** that arise ***from the project’s effects*** on the environment.” (*Id*. at 800 [emphasis added].)

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. People will be residing in and using the Project once it is built and begins emitting formaldehyde. Once built, the Project will begin to emit formaldehyde at levels that pose significant direct and cumulative health risks. The Supreme Court in *CBIA* expressly finds that this type of air emission and health impact by the project on the environment and a “project’s users and residents” must be addressed in the CEQA process. The existing TAC sources near the Project site would have to be considered in evaluating the cumulative effect on future residents of both the Project’s TAC emissions as well as those existing off-site emissions.

The Supreme Court’s reasoning is well-grounded in CEQA’s statutory language. CEQA expressly includes a project’s effects on human beings as an effect on the environment that must be addressed in an environmental review. “Section 21083(b)(3)’s express language, for example, requires a finding of a ‘significant effect on the environment’ (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings,* either directly or indirectly.'" (*CBIA*, 62 Cal.4th at 800 [emphasis in original].) Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." (*Id.*) It goes without saying that the thousands of future residents at the Project are human beings and the health and safety of those residents must be subjected to CEQA's safeguards.

The City has a duty to investigate issues relating to a project's potential environmental impacts. (See *County Sanitation Dist. No. 2 v. County of Kern*, (2005) 127 Cal.App.4th 1544, 1597–98. ["[U]nder CEQA, the lead agency bears a burden to investigate potential environmental impacts."].) The proposed office buildings will have significant impacts on air quality and health risks by emitting cancer-causing levels of formaldehyde into the air that will expose future residents to cancer risks potentially in excess of SCAQMD's threshold of significance for cancer health risks of 10 in a million. Likewise, when combined with the risks posed by the nearby TAC sources, the health risks inside the project may exceed SCAQMD's cumulative health risk threshold of 100 cancers in a million. Currently, outside of Mr. Offermann's comments, the City does not have any idea what risks will be posed by formaldehyde emissions from the Project or the residences. As a result, the City must include an analysis and discussion in a RDEIR which discloses and analyzes the health risks that the Project's formaldehyde emissions may have on future residents and identifies appropriate mitigation measures. Until that occurs, the EIR is insufficient in disclosing this significant impact.

II. The EIR Fails to Adequately Disclose and Mitigate the Project's Significant Noise Impacts.

Noise expert Deborah Jue of the consulting firm Wilson Ihrig reviewed the EIR's analysis of the Project's noise impacts. Ms. Jue's comment letter is attached as Exhibit B. As discussed below, Ms. Jue concluded that the EIR failed to properly analyze and mitigate the Project's noise impacts, which the City should address in a RDEIR.

First, the FEIR failed to adequately respond to concerns about the Project's noise impacts at the adjacent school. (Ex. B, pp. 1-2.) The EIR used a significance threshold of a 5 dBA increase over existing noise for the Project's construction noise impacts. (DEIR, pp. IV.F-22 through F-23.) However, as noted by Ms. Jue, the 5 dBA increase should be measured against an appropriate standard for school environments rather than general existing sound. (Ex. B, p. 1.) As such, the increase in noise should be measured against the existing exterior noise at the classrooms, which is 39 dBA. (*Id*. at p. 2.) Utilizing a significance threshold of 5 dBA above the existing 39 dBA at the classrooms "would ensure that the construction activities would not cause a significant noise increase within the classroom and cause interference to instructional activities." (*Id*.) The EIR should be revised to employ this significant threshold to evaluate the Project's noise impacts on the school.

Second, the EIR failed to disclose the actual distance of the Project's noise sources to the nearby school and residences. (Ex. B, p. 2) As Ms. Jue notes, "The distances from the construction activity to the noise sensitive receptors (school and residences) are based on a 'typical' distance to each receptor that lies in the center of the project." (*Id*.) By relying on a "typical" distance, the EIR's noise analysis overlooks the fact that construction and demolition activities actually occur much closer to the sensitive receptors. Indeed, the EIR's vibration analysis stated that equipment could operate as close as 15 feet from the school buildings and 280 feet from the nearest residences. (*Id*.) Without updating the EIR's noise analysis to account for construction noise impacts at those shorter distances, the EIR's conclusions as to the Project's impacts are not supported by substantial evidence.

Lastly, the EIR overestimates the efficacy of mitigation measures MM-NOI-1 and MM-NOI-2, which require the construction of 10-foot noise barriers for the school and Ogden Drive. (Ex. B, pp. 2-4; DEIR, p. IV.F-43.) The EIR assumes that the barriers would reduce construction noise by 20 dBA for the school and by 2 -3 dBA for the residences. However, as Ms. Jue explains,

> Sound barrier effectiveness is based on how geometry: how close the source and receiver are to the barrier, and how the source and receiver are above the ground. For construction activities close to the barrier the reduction does approach 20 dBA, but where activities are located farther from the barrier and where the receptor is on the second floor, the barrier reduction diminishes noticeably. Since the school includes 2-story structures, in particular Classroom, a 20 ft barrier would have limited effectiveness, especially as the project construction rises to upper floors. (Ex. B, pp. 2-3.)

Taking factors such as distance and height into consideration, Ms. Jue recalculated the Project's construction noise impacts to the school and La Brea Apartments. (Ex. B, pp. 3-4.) Her analysis demonstrates that when height and distance factors are properly accounted for, the Project's noise impacts to Classroom 21 (on the second floor of Hancock Park Elementary) and the Park La Brea Apartments remain significant. (*Id*.) As such, the EIR has failed to adequately mitigate the Project's construction noise impacts and it must be revised to ensure that these impacts are reduced to a less-than-significant level.

III. The EIR's Energy Analysis Is Deficient Because It Fails to Consider Renewable Energy Alternatives.

When analyzing a project's energy use to determine if it creates significant effects, CEQA requires a discussion of whether any renewable energy features could be incorporated into the project. (*League to Save Lake Tahoe Mountain Area Preservation Foundation v. County of Placer* (2022) 75 Cal.App.5th 63, 167 (*League to Save Lake Tahoe*).) As explained by the CEQA Guidelines, an EIR's analysis of a project's energy use "should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use

and any renewable energy features that could be incorporated into the project." (14 CCR § 15126.2(b) [emphasis added].) As the Court of Appeal recently explained,

> Guidelines section 15126.2, subdivision (b), and Appendix F to the Guidelines thus indicate an EIR should address the project's potential to increase its use of renewable energy sources for at least two purposes. ***First, when the EIR analyzes the project's energy use to determine if it creates significant effects, it should discuss whether any renewable energy features could be incorporated into the project.*** (Guidelines, § 15126.2, subdivision (b).) The EIR's determination of whether the potential impact is significant is to be based on this discussion. Second, if the EIR concludes the project's impact on energy resources is significant, it should consider mitigating the impact by requiring uses of alternate fuels, particularly renewable ones, if applicable. (Guidelines, Appendix F., II. D. 4.)

(*League to Save Lake Tahoe*, *supra*, 75 Cal.App.5th at 167 [emphasis added].) Thus, if an EIR does not address whether any renewable energy features can be incorporated into the Project, it did not comply with CEQA. (*Id*.)

The EIR analyzed the Project's energy impacts by evaluating the Project's consistency with adopted energy conservation plans and policies such as Title 24 energy efficiency requirements, CalGreen Code, the L.A. Green Building Code, and the SCAG 2016-2040 RTP/SCS. (DEIR, p. IV.B-17.) However, compliance with state and local regulatory programs is not sufficient to determine that a project will not result in a wasteful or inefficient use of energy. (*League to Save Lake Tahoe*, *supra*, 75 Cal.App.5th at 165.) The EIR makes no attempt to evaluate how renewable energy features, such as solar panels, could be incorporated into the Project to reduce energy impacts. Without such an analysis, the EIR is legally deficient and must be revised prior to further consideration of the Project.

CONCLUSION

For the foregoing reasons, SAFER and its members respectfully request that the City take no further action on this Project until a revised EIR addressing the above shortcomings has been prepared and circulated for review. Please include this letter and all attachments hereto in the record of proceedings for this project. Thank you for your attention to this comment.

Sincerely,

Brian Flynn
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EXHIBIT A

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Date: January 19, 2022

To: Brian Flynn
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1939 Harrison Street, Suite 150
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From: Francis J. Offermann PE CIH

Subject: Indoor Air Quality: 3rd and Fairfax Mixed-Use Project, Los Angeles, CA
(IEE File Reference: P-4535)

Pages: 19

Indoor Air Quality Impacts

Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson, 2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 µg/m^3, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 µg/m^3. The median indoor formaldehyde concentration was 36 µg/m^3, and ranged from 4.8 to 136 µg/m^3, which corresponds to a median exceedance of the 2 µg/m^3 NSRL concentration of 18 and a range of 2.3 to 68.

Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 µg/m^3, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the South Coast Air Quality Management District (SCAQMD, 2015).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 µg/m^3 to 28% for the Acute REL of 55 µg/m^3.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019), and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of 22.4 $\mu g/m^3$ (18.2 ppb) as compared to a median of 36 $\mu g/m^3$ found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of 24.1 $\mu g/m^3$, which is 33% lower than the 36 $\mu g/m^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the Fairfax Mixed-Use Project, Los Angeles, CA, the buildings consist of residential and commercial spaces.

The residential occupants will potentially have continuous exposure (e.g. 24 hours per day, 52 weeks per year). These exposures are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residential construction.

Because these residences will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor residential formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the residential occupants inhale 20 m^3 of air per day, the average 70-year lifetime formaldehyde daily dose is 482 µg/day for continuous exposure in the residences. This exposure represents a cancer risk of 120 per million, which is more than 12 times the CEQA cancer risk of 10 per million. For occupants that do not have continuous exposure, the cancer risk will be proportionally less but still substantially over the CEQA cancer risk of 10 per million (e.g. for 12/hour/day occupancy, more than 6 times the CEQA cancer risk of 10 per million).

The employees of the commercial spaces are expected to experience significant indoor exposures (e.g., 40 hours per week, 50 weeks per year). These exposures for employees are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in offices, warehouses, residences and hotels.

Because the commercial spaces will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the employees of commercial spaces work 8 hours per day and inhale 20 m^3 of air per day, the formaldehyde dose per work-day at the offices is 161 µg/day.

Assuming that these employees work 5 days per week and 50 weeks per year for 45 years (start at age 20 and retire at age 65) the average 70-year lifetime formaldehyde daily dose is 70.9 µg/day.

This is 1.77 times the NSRL (OEHHA, 2017a) of 40 µg/day and represents a cancer risk of 17.7 per million, which exceeds the CEQA cancer risk of 10 per million. This impact should be analyzed in an environmental impact report ("EIR"), and the agency should impose all feasible mitigation measures to reduce this impact. Several feasible mitigation measures are discussed below and these and other measures should be analyzed in an EIR.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from composite wood products.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City's CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment

This formaldehyde emissions assessment should be used in the environmental review under CEQA to assess the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m^2 of material/m^2 floor area, units of furnishings/m^2 floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).

3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate (µg/h) from the product of the area-specific formaldehyde emission rate (µg/m^2-h) and the area (m^2) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (µg/unit-h) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., µg/m^2-h) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than 31 µg/m^2-h, but not the actual measured specific emission rate, which may be 3, 18, or 30 µg/m^2-h. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.

If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (https://berkeleyanalytical.com), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m^3) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m^3/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \quad \text{(Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m^3)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m^3/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section 3.10.2 “Calculation of Estimated Building Concentrations” of the California Department of Health “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers”, (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

Source mitigation for formaldehyde may include:

1.) reducing the amount materials and/or furnishings that emit formaldehyde
2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.

Further, we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

According to the 3rd and Fairfax Mixed-Use Project Draft Environmental Impact Report, (Parker Environmental Consultants, 2021), the Project is close to roads with moderate to high traffic (e.g., W. Third Street, S. Fairfax Avenue, S. Ogden Drive etc.). According to the Draft Environmental Impact Report, (Parker Environmental Consultants, 2021), the future noise levels with Project (2023) traffic volumes are reported in Appendix F.2 to range from 60.51 dBA 72.09 dBA CNEL. As a result the Project site is a sound impacted site.

As a result of high outdoor noise levels, the current project will require a mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the 3rd and Fairfax Mixed-Use Project Draft Environmental Impact Report, (Parker Environmental Consultants, 2021), the Project is located in the South Coast Air Basin, which is a State and Federal non-attainment area for $PM_{2.5}$.

An air quality analyses should to be conducted to determine the concentrations of $PM_{2.5}$ in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local $PM_{2.5}$ sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average $PM_{2.5}$ exceedence concentration of 12 $\mu g/m^3$, or the National 24-hour average exceedence concentration of 35 $\mu g/m^3$, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor $PM_{2.5}$ particles is less than the California and National $PM_{2.5}$ annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of $PM_{2.5}$ will exceed the California and National $PM_{2.5}$ annual and 24-hour standards and warrant installation of high efficiency air filters (i.e. MERV 13 or higher) in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

<u>Indoor Formaldehyde Concentrations Mitigation</u>. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB, 2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not insure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with sufficient $PM_{2.5}$ removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor $PM_{2.5}$ particles are less than the California and National $PM_{2.5}$ annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to "reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California"*. In other words, the CARB ATCM regulations do not "assure healthful indoor air quality", but rather "reduce formaldehyde emissions from composite wood products".

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not "*assure healthful indoor air quality"* when CARB Phase 2 products are utilized. As shown in the Chan 2019 study of new California homes, the median indoor formaldehyde concentration was of 22.4 $\mu g/m^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California

Department of Public Health, Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m^3/h) calculated for this model residence. For the composite wood formaldehyde emission rates I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 15 ft^2 (0.7% of the floor area), or
Particle Board – 30 ft^2 (1.3% of the floor area), or
Hardwood Plywood – 54 ft^2 (2.4% of the floor area), or
Thin MDF – 46 ft^2 (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.

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Education

- M.S. Mechanical Engineering Stanford University, Stanford, CA.
- Graduate Studies in Air Pollution Monitoring and Control University of California, Berkeley, CA.
- B.S. in Mechanical Engineering Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Affiliations

ACGIH, AIHA, ASHRAE, CSI, ASTM, ISIAQ, PARMA, and USGBC

Work Experience

Mr. Offermann PE, CIH, has 36 years experience as an IAQ researcher, technical author, and workshop instructor. He is president of Indoor Environmental Engineering, a San Francisco based IAQ R&D consulting firm. As president of Indoor Environmental Engineering, Mr. Offermann directs an interdisciplinary team of environmental scientists, chemists, and mechanical engineers in indoor air quality building investigations. Under Mr. Offermann's supervision, IEE has developed both pro-active and reactive IAQ measurement methods and diagnostic protocols. He has supervised over 2,000 IAQ investigations in commercial, residential, and institutional buildings and conducted numerous forensic investigations related to IAQ.

Litigation Experience

Mr. Offermann has been qualified numerous times in court as an expert in the field of indoor air quality and ventilation for both plaintiffs and defendants. He has been deposed over 150 times in cases involving indoor air quality/ventilation issues in commercial, residential, and institutional buildings involving construction defects, and/or operation and maintenance problems. Examples of indoor air quality cases he has worked on are alleged personal injury and/or property damages from mold and bacterial contamination/moisture intrusion, building renovation activities, insufficient outdoor air ventilation, off gassing of volatile organic compounds from building materials and coatings, malfunctioning gas heaters and carbon monoxide poisoning, and applications of pesticides. Mr. Offermann has testified with respect to the scientific admissability of expert testimony regarding indoor air quality issues via Daubert and Kelly-Frye motions.

EXHIBIT B

WI #22-004.2

February 4, 2022

Mr. Brian Flynn
Lozeau | Drury LLP
1939 Harrison Street, Suite 150
Oakland, California 94612

SUBJECT: 3rd and Fairfax Mixed-Use Project, Los Angeles, CA, Comments on the Noise Analysis in the EIR

Dear Mr. Flynn,

Per your request, we have reviewed the Response to Comments and supporting documents for the 3rd and Fairfax Mixed-Use project would demolish existing structures and construct an 8-story structure with 331 residences above ground parking and retail. The noise analysis in the Final EIR and Draft EIR is supported by the Construction Noise & Vibration Technical Report provided in Appendix F of the Draft EIR (Technical Report) with a clarifying letter provided with the Final EIR.

Response to Comment 7.9 Does Not Adequately Address the Impacts on Instructional Time at the School

In the response to comments, Comment 7.9 was addressed:

> Noise during construction will be considerable and will adversely impact instructional time at the school both during the school year and during on site programs contracted by the school to provide supervised activities for youth during school breaks. It will also impact the ability of adjacent residents to work from home.

The response refers the commenter to analysis previously provided in the Draft EIR, in which the threshold of significance inside the classrooms was based on allowing construction noise to generate levels that are 5 dBA over the existing LAeq. This is not an acceptable significance threshold of noise impact for school environments.

LAUSD (District) has made a commitment to construct new facilities that comply with CHPS criteria[1], and it aims to achieve the most current high performance, resource efficient strategies into the

[1] http://learninggreen.laschools.org/high-performance-schools.html

operation of the District schools and facilities. The current criteria are outlined in CA-CHPS v2.0[2] in which a performance criteria of 40 dBA is established for background noise. This allows an adequate environment for instructional speech to be heard, providing a basic signal-to-noise ratio assuming an instructional speech level of 50 dBA.

Based on the noise data provided in Appendix F.1 of the Draft EIR, the measured time average of the LASmin is 41 to 42 dBA in the classrooms, and a linear average is 34 to 37 dBA. These values are indicators of existing background noise level, and they document that in the two classrooms measured (Classrooms 21 and 28) the environment currently achieves performance close to the CA-CHPS criteria. Increasing these background levels would reduce the quality of the learning environment, and it is especially critical to maintain these existing environments for English language learners and children who have hearing impairments.

The noise analysis in the Draft EIR Appendix F.1 Table 8 shows a difference of 22.9 dBA between exterior and interior for both classrooms. This was developed from the noise measurements conducted for the Draft EIR. In order to determine the contribution of the exterior noise to the interior environment, reducing the measured results (61.8 dBA at Classroom 28 and 61.6 dBA at Classroom 21) by 22.9 dBA results in a contribution of 38.9 and 38.7 LAeq dBA, respectively, to the interior classroom environments. For simplicity, we will use 39 dBA.

This level, 39 dBA LAeq is the basis on which the significance threshold should be established to ensure that the construction activities would not cause a significant noise increase within the classroom and cause interference to instructional activities. While zero decibel increase would be desirable, for the purposes of evaluating the significance of a temporary activity, the interior classroom threshold should be no greater than 44 dBA LAeq for the combined condition of construction and the existing exterior noise contribution to the ambient, or 43 dBA LAeq for the construction noise alone.

The EIR Does Not Disclose an Adequate Range of Construction Noise

Support from the District and the Friends of Hancock Park School notwithstanding, the range of construction noise presented in the Draft EIR is not fully disclosed. The distances from the construction activity to the noise sensitive receptors (school and residences) are based on a “typical” distance to each receptor that lies in the center of the project. Existing buildings at the southeast side of the project will need to be demolished, and these structures are closest to the noise sensitive receptors. The vibration analysis in Table IV.F-20 shows that equipment could operate as close as 15 ft from school buildings and 280 ft from the nearest residences. These closer distances should be used to demonstrate how high the demolition and construction noise levels would reach during specific phases of the project. See Tables 1, 2, and 3.

Mitigation Performance of the Wall is Overstated and Significant Impacts Remain

Furthermore, the calculations in the Draft EIR Table IV.F-11 and IV.F-19 show that the barrier would reduce construction by 20 dBA at all school locations and 2 to 3 dBA at residential locations. Sound barrier effectiveness is based on how geometry: how close the source and receiver are to the barrier, and how the source and receiver are above the ground. For construction activities close to the barrier the reduction does approach 20 dBA, but where activities are located farther from the barrier and

[2] https://www.chps.net/sites/default/files/file_attach/CAv2-requirements-only.pdf

where the receptor is on the second floor, the barrier reduction diminishes noticeably. Since the school includes 2-story structures, in particular Classroom, a 20 ft barrier would have limited effectiveness, especially as the project construction rises to upper floors.

Additional measures such as time of day limits, sound barrier curtains at the school buildings, relocating classes, or their equivalent are also required mitigation measures to minimize the significant impacts of construction activities during demolition and grading and during building erection.

Tables 1 and 2 below revisit the construction noise analysis at two of the school receptors at NSVR-1 and identifies significant noise impacts for noisy construction activities that would be conducted within 150 ft of school buildings. The construction noise levels for Building Construction are taken from the Draft EIR Appendix F.1[3].

Table 3 revisits the construction noise analysis at the nearby residences for activities that would be conducted within 375 ft of residences at NSVR-2.

Table 1 Revisit DEIR Tables IV.F-11, IV.F-19 with Closer Distances and Different Barrier Performance - NVSR-1 – Hancock Park Elementary School Property Line

Activity Distance Type	**Distance to Receptor (ft)**	**Construction Activity**	**Noise level no barrier (dBA Leq)**	**Noise Level with 20 ft barrier (dBA Leq)**	**Note**
66.6 dBA Significance Threshold					
Typical	240	Demolition/grading	77.1	60.1	17 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	74.9	63.9	11 dBA noise reduction from wall, higher elevation source
Nearest	35	Demolition/grading	93.8	**74.8**	19 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	91.6	**80.6**	11 dBA noise reduction from wall, higher elevation source
Southern half	135	Demolition/grading	82.1	66.1	19 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	79.9	63.9	16 dBA noise reduction from wall, higher elevation source

[3] Appendix II Calculation results, Table "Noise Estimation at Sensitive Receptors for Selected Construction Equipment without mitigation measures".

Table 2 Revisit DEIR Tables IV.F-11, IV.F-19 with Closer Distances and Different Barrier Performance - NVSR-1 – Hancock Park Elementary School Inside Classroom 21 (2nd floor)

Activity Distance Type	Distance to Receptor (ft)	Construction Activity	Construction Noise Level Only no barrier (dBA Leq)	Noise Level with 20 ft barrier (dBA Leq)	Note
43.0 dBA Significance Threshold					
Typical	320	Demolition/grading	**51.8**	41.8	10 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	**49.8**	**49.8**	0 dBA noise reduction from wall, higher elevation source
Nearest	55	Demolition/grading	**67.1**	**53.1**	14 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	**65.1**	**65.1**	0 dBA noise reduction from wall, higher elevation source
Southern half	155	Demolition/grading	**58.1**	**44.1**	14 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	**56.1**	**56.1**	0 dBA noise reduction from wall, higher elevation source

Table 3 Revisit DEIR Tables IV.F-11, IV.F-19 with Closer Distances and Different Barrier Performance - NVSR-2 – Park La Brea Apartments - Palazzo West at the Grove (3rd floor)

Activity Distance Type	Distance to Receptor (ft)	Construction Activity	Construction Noise Level Only no barrier (dBA Leq)	Noise Level with 20 ft barrier (dBA Leq)	Note
68.5 dBA Significance Threshold					
Typical	510	Demolition/grading	**70.9**	66.9	4 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	**68.9**	**68.9**	0 dBA noise reduction from wall, higher elevation source
Nearest	285	Demolition/grading	**76.0**	**62.0**	14 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	**74.0**	**74.0**	0 dBA noise reduction from wall, higher elevation source
Southern half	375	Demolition/grading	**73.6**	**70.6**	3 dBA noise reduction from wall
		Building Construction at 4th Fl Elevation	**71.6**	**71.6**	0 dBA noise reduction from wall, higher elevation source

Conclusions

The project construction would last approximately 32 months, with demolition requiring 2 months, excavation and grading requiring another 3 months, and building construction requiring another 22 months. Substantial noise will be generated during demolition and grading, and if those activities would occur during instructional time at the school, even with the 20 ft sound wall the demolition and construction noise will be significant, impacting the learning environment in the classrooms closest to the project. During building construction, when noise sources will rise above the 20 ft sound wall, the on-going construction activities would further affect the learning environment in the school, especially at second floor classrooms.

Additional measures such as time of day limits, sound barrier curtains at the school buildings, relocating classes, or their equivalent are required mitigation measures to minimize the significant impacts of construction activities during demolition and grading and during building erection.

The Park La Brea apartments, 3rd floor residences will experience very little noise benefit from the construction sound wall, and no reduction once the building has risen above the 2nd floor. Construction activities would be significant at these residences with direct line of site to the project, and additional measures such as time of day limits, sound barrier curtains at the residential buildings, providing temporary work from home spaces, or their equivalent are required mitigation measures to minimize the significant impacts of construction activities during all phases of the project.

Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG

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Principal

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