

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE.

3000 Shattuck Avenue

Use Permit #ZP2022-0046 to demolish the existing gas station, and construct a 10-story (114 feet) mixed-use building utilizing a Density Bonus, with 166 dwellings, including 17 Very Low-Income units, and 1,043 square-feet of commercial space.

RE: Changes to Conditions of Approval Related to Affordable Housing Provisions and Supplemental Analysis to the Initial Study-Negative Declaration Addendum Due to Minor Project Revisions

New SB 330 Preliminary Development Project Vesting Date

On May 2, 2023, the project applicant contacted staff to submit a new SB 330 preliminary development project application, superseding the preliminary housing development project application submitted in December 2021. The new preliminary application presents a project that is the same as the project before ZAB. The number of units or the size of the project has not changed. Staff invoiced the applicant for the new preliminary application, and the invoice was paid on May 5, 2023. Submittal of all the information listed in the pre-app form and payment of the permit processing fee freezes fees and development standards as of May 5, 2023, unless exceptions per Government Code § 65889.5(o) are triggered.

Table 3: Project Chronology

Date	Action
December 14, 2021	SB 330 complete preliminary housing development project application submitted
March 29, 2022	Application submitted
May 11, 2022	Application deemed incomplete
July 8, 2022	Revised application materials submitted
August 3, 2022	Application deemed complete
January 19, 2023	Design Review Committee Preliminary Design Review
January 27, 2023	Addendum to previous Initial Study published
April 27, 2023	Public hearing notices mailed/posted
May 5, 2023	SB 330 complete preliminary housing development project application submitted (supersedes previous)
May 11, 2023	ZAB hearing

The new vesting date affects the affordable housing mitigation fee and inclusionary housing requirements, Berkeley Municipal Code (BMC) 22.20.065 and 23.328, respectively. The Findings and Conditions will be revised to remove reference to BMC 22.20.065, which was repealed. The affordable housing conditions will be revised to require full compliance with all applicable provisions of BMC Chapter 23.328, Inclusionary Housing, and Council Resolution 70,698 (both are attached to this memo), which include elements such as a regulatory agreement, income requirements, approval of a final Affordable Housing Compliance Plan prior to issuance of a building permit, and timing of any required in-lieu payments.

BELOW MARKET RATE UNITS

- <u>Affordable Housing Mitigation Fee (AHMF)</u>: Consistent with BMC 22.20.065 and fee resolution No. 68,074-N.S., the applicant shall provide a schedule, consistent with a schedule approved by the City Manager or her designee, outlining the timeframe for payment of the AHMF, or provide an alternative to the fee payment as permitted by the BMC. Payment of the AHMF may be reduced if paid prior to the building permit per resolution No. 68,074-N.S., and shall be paid no later than prior to the issuance of a certificate of occupancy for the project.
- 2. <u>Number of Below Market Rate Units</u>. The project shall provide 17 (Very Low-Income) below market rate rental dwelling units ("BMR Units"), which are required to comply with the State Density Bonus Law (Government Code Section 65915). The BMR Units shall be designated in the Regulatory Agreement and shall be reasonably dispersed throughout the project; be of the same size and contain, on average, the same number of bedrooms as the non-BMR units in the project; and be comparable with the design or use of non-BMR units in terms of appearance, materials and finish quality. The designation of BMR Units shall conform to the addresses assigned to the building by the City.
- 3. <u>Regulatory Agreement</u>. Prior to the issuance of a building permit, the applicant shall enter into a Regulatory Agreement that implements Government Code Section 65915 and this Use Permit. The Regulatory Agreement may include any terms and affordability

standards determined by the City to be necessary to ensure such compliance. The maximum qualifying household income for the BMR Units shall be 50 percent of area median income (AMI), and the maximum housing payment shall be 30 percent of 50 percent of AMI, as set forth in the following paragraphs of this condition. If the BMR units are occupied by very low-income tenants receiving a rental subsidy through the Section 8 or Shelter Plus Care programs, the rent received by the project sponsor may exceed the restricted rent to the payment standards allowed under those programs so long as the rent allowed under the payment standards is not greater than the market rents charged for comparable units in the development. The applicant shall submit the Regulatory Agreement to the Housing and Community Services Department (HHCS) via email to affordablehousing@cityofberkeley.info for review and approval.

- 4. <u>Affordable Housing:</u> <u>Below Market Rate Program.</u> In addition, the following provisions shall apply:
 - A. Maximum rent shall be adjusted for the family size appropriate for the unit pursuant to California Health & Safety Code Section 50052.5 (h).
 - B. Rent shall include a reasonable allowance for utilities, as published and updated by the Berkeley Housing Authority, including garbage collection, sewer, water, electricity, gas, and other heating, cooking and refrigeration fuels. Such allowance shall take into account the cost of an adequate level of service. Utilities do not include telephone service. Rent also includes any separately charged fees or service charges assessed by the lessor which are required of all tenants, other than security deposits.
 - C.BMR units will be provided for the life of the project under Section 22.20.065.
- 5. Determination of Area Median Income (AMI).
 - The "AMI" (Area Median Income) shall be based on the income standards for the Oakland Primary Metropolitan Statistical Area reported by the United States Department of Housing and Urban Development (HUD). In the event HUD discontinues establishing such income standards, AMI shall be based on income standards determined by the California State Department of Housing and Community Development (HCD). If such income standards are no longer in existence, the City will designate another appropriate source or method for determining the median household income.
 - The applicable AMI for the purpose of determining the allowable rent for each unit (but not for the purpose of determining eligibility for occupancy of an inclusionary unit) shall be determined in accordance with the following table:

U N I T	AMI Standard
SIZE	
Studio unit	AMI for a one-person household
One-bedroom unit	AMI for a two-person household
Two-bedroom unit	AMI for a three-person household
Three-bedroom unit	AMI for a four-person household

6. Nothing in these conditions shall be interpreted to prohibit, or to require modification of the Use Permit or Regulatory Agreement to allow, the provision of additional BMR units, or additional affordability, than are required in the foregoing provisions.

ZONING ADJUSTMENTS BOARD					
May 11, 2023					

3000 SHATTUCK AVENUE Page 4 of 5

- 7. <u>Affordable Housing.</u> Nothing in conditions 24-32 shall be interpreted to prohibit, or to require modification of the Use Permit or Regulatory Agreement to allow, the provision of additional BMR units, or additional affordability, then are required in the foregoing provisions.
- 8. <u>Affordable Housing.</u> Dwellings that are approved as rental units, but in which a condo map is approved prior to issuance of an occupancy permit, shall be subject to the affordability requirements within BMC 23.328.
 - A. Residential housing projects for the construction of five or more Dwelling Units;
 - B. Residential housing projects for the construction of one to four new Dwelling Units, when such Units are added to an existing one to four-unit property, which has been developed after August 14, 1986, and the resulting number of units totals five or more. All Units in such a property are subject to the requirements of this chapter;
 - C.Residential housing projects proposed on lots whose size and zoning designation is such to

allow construction of five or more Dwelling Units.

9. <u>Affordable Housing – Density Bonus.</u> If a density bonus was granted for the project, the regulatory agreement shall reflect the number of qualifying units set forth in Section 65915(f)(4) that are needed to support the bonus that was granted.

Affordable Housing Requirements

10. Project shall comply with BMC Chapter 23.328 Inclusionary Housing, effective April 1, 2023 and Resolution 70,698-N.S. Adopting Regulations for Voucher Program and Establishing an In-Lieu Fee to Support the Provision of Affordable Housing Pursuant to Berkeley Municipal Code 23.328 and Rescinding Resolution 70,668-N.S (attached).

ZONING ADJUSTMENTS BOARD May 11, 2023 3000 SHATTUCK AVENUE Page 5 of 5

Supplemental Analysis to the Initial Study-Negative Declaration Addendum Due to Minor Project Revisions

The project applicant made minor changes to the project in 2023 after the Addendum to the Initial Study-Negative Declaration (IS-ND) had been prepared. The City's consultant has prepared a memorandum which discusses the Initial Study issue areas and the changes to the project. The changes to the project would not result in new or substantially increased impacts compared to the project studied in the original IS-ND. The consultant's memo is attached.

Attachments:

- Council Resolution No. 70,698-NS
- Berkeley Municipal Code Chapter 23.328 Inclusionary Housing
- CEQA Memorandum May 5, 2023

Staff Planner: Allison Riemer, <u>ariemer@cityofberkeley.info</u>, (510) 981-7433

RESOLUTION NO. 70,698-N.S.

ADOPTING REGULATIONS FOR VOUCHER PROGRAM AND ESTABLISHING AN IN-LIEU FEE TO SUPPORT THE PROVISION OF AFFORDABLE HOUSING PURSUANT TO BERKELEY MUNICIPAL CODE CHAPTER 23.328 AND RESCINDING RESOLUTION 70,668-N.S N.S.

WHEREAS, Berkeley Municipal Code ("BMC") Chapter 23.328 establishes a requirement that 20% of Residential Units (as defined) in market-rate developments be offered for rent or sale at affordable rents or prices, as defined ("Affordable Units"); and

WHEREAS, BMC Chapter 23.328 authorizes the City Council to establish by resolution preferences for renting Affordable Units offered for rent to tenants receiving assistance under the Section 8 Program (42 U.S.C. Section 1437f), the Shelter Plus Care Program (42 U.S.C. Section 11403 *et. seq.*), or similar state or federally funded rent subsidy programs; and

WHEREAS, BMC Chapter 23.328 authorizes developers of market-rate housing to pay a fee in lieu of complying with the requirement to provide on-site affordable housing ("In-Lieu Fee"); and

WHEREAS, BMC Chapter 23.328 authorizes the City Council to establish the In-Lieu Fee by resolution, and further authorizes the Council to differentiate among types, classes, and locations of Housing Development Projects to the extent permitted by law; to establish separate fees and criteria for the provision of units that are affordable to Very Low Income Households and units that are affordable to Low Income Households; and to establish the method for calculating the In-Lieu Fee; and

WHEREAS, the City retained Street Level Advisors to provide analysis and recommendations for updating the City's affordable housing requirements, the scope of which included a financial feasibility study of the City's affordable housing mitigation fees; and

WHEREAS, Street Level Advisors prepared a Financial Feasibility Analysis dated April 27, 2021, which determined that an In-Lieu Fee of \$45 per square foot of the residential Gross Floor Area (as defined in BMC Section 23.106.030) would be financially feasible; and

WHEREAS, Street Level Advisors recommended certain modifications to the fee that would not adversely impact the financial feasibility of housing development projects, such as charging a lower / tiered fee for smaller projects; and

WHEREAS Street Level advisors identified an equivalent rate if the In-Lieu fee were to be calculated based on an assumed 80/20 ratio of gross and net square feet of residential area in typical housing development projects of \$56.25 per square foot of Residential Unit Floor Area.

WHEREAS, this Resolution supersedes Resolution No. 70,668-N.S.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley as follows:

- All Affordable Units shall be offered to tenants in accordance with Council-adopted eligibility preference criteria. All Very Low-Income Units, comprising a portion of the Affordable Units authorized and provided for by BMC Chapter 23.328, must be offered to tenants receiving assistance under the Section 8 Program (42 U.S.C. Section 1437f) or the Shelter Plus Care Program (42 U.S.C. Section 11403 *et. seq.*) before being marketed to other income-eligible households. The allocations shall be divided equally between the Section 8 Program (50%) and the Shelter Plus Care Program (50%). The majority of the Very Low-Income units shall be designated for the Shelter Plus Care Program when there is an uneven number of units.
- 2. The initial In-Lieu Fee authorized and provided for by BMC Chapter 23.328 shall be \$56.25 per square foot of the Residential Unit Floor Area) of a Housing Development Project (as defined in BMC Chapter 23.328) and shall be automatically increased biennially based on changes to the California Construction Cost Index unless otherwise provided for by BMC Chapter 23.328 or by this Resolution.
- 3. Housing Development Projects subject to BMC Chapter 23.328 may provide less than the required number of Affordable Units in the Housing Development Project and pay a proportionately reduced In-Lieu Fee, calculated as follows: the fee per square foot multiplied by the total Residential Unit Floor Area of a Housing Development Project, multiplied by the percentage of the applicable requirement remaining after accounting for any on-site Affordable Units provided. Projects that provide no on-site Affordable Units will have an applicable requirement multiplier of one.

Residential Unit Floor	Fee per Square Foot
Area	
<u>≥</u> 12,000	\$56.25
11,000-11,999	\$53.75
10,000-10,999	\$51.25
9,000-9,999	\$48.75
8,000-8,999	\$46.25
7,000-7,999	\$43.75
6,000-6,999	\$41.25
5,000-5,999	\$38.75
4,000-4,999	\$36.25
3,000-3,999	\$33.75
2,000-2,999	\$31.25
1,000-1,999	\$28.75
<1,000	\$26.25

4. For Housing Development Projects of less than 12,000 square feet of Residential Unit Floor Area, the In-Lieu Fee shall be calculated as follows:

BE IT FURTHER RESOLVED, Resolution No. 68,074-N.S. is hereby rescinded and is of no force or effect on any Housing Development Project that obtains a building permit after the effective date of this resolution, but shall continue to apply to those projects that were approved and subject to its provisions or the provisions of predecessor resolutions and ordinances addressing the same subject matter.

BE IT FURTHER RESOLVED, the rescission of Resolution No. 70,668-N.S and this Resolution shall be effective upon the effective date of contemporaneously adopted amendments to BMC Chapter 23.328.

The foregoing Resolution was adopted by the Berkeley City Council on February 14, 2023 by the following vote:

Ayes: Hahn, Humbert, Kesarwani, Robinson, Taplin, Wengraf, and Arreguin.

Noes: Harrison.

Abstain: Bartlett.

Absent: None.

ese C

Jesse Arreguin, Mayor

Attest:

Rose Thomsen, Deputy City Clerk

Chapter 23.328 INCLUSIONARY HOUSING

Sections:

23.328.010 Findings and Purpose.

23.328.020 Definitions.

23.328.030 Affordable Housing Requirements.

23.328.040 Waiver or Modification of Affordable Housing Requirements.

23.328.050 Implementation.

23.328.010 Findings and Purpose.

A. The State of California has established a Regional Housing Needs Allocation (RHNA) process under which it allocates a "fair share" of the regional housing need, updated periodically, to each local jurisdiction. The "fair share" allocated to Berkeley increased significantly based on the regional housing needs determination finalized in late 2021. The sixth cycle of the RHNA for the San Francisco Bay Area allocates to Berkeley a "fair share" that calls for adequate sites for 8,934 housing units for the period from 2023 to 2031, including sites for 2,446 Very Low Income units, 1,408 Low Income units, and 1,416 Moderate Income units.

B. The Bay Area suffers from a shortage of affordable housing. As the Bay Area region experiences increased economic growth and a high demand for housing, housing prices continue to rise, which leads to displacement of low income residents and exacerbates the shelter crisis that has led to unacceptably high rates of homelessness in the City of Berkeley and the Bay Area region.

C. In 1990, the City established the Housing Trust Fund program to pool available funding for affordable housing development. The Housing Trust Fund program is funded by federal, state, and local revenues, including by in-lieu and mitigation fees paid by developers of market-rate housing projects under the City's existing affordable housing ordinances.

D. The City Council hereby finds that there is a legitimate public interest in the provision of affordable housing to address the crises of displacement, homelessness, and lack of housing affordability in the City, and that there is a significant and increasing need for affordable housing in the City to meet the City's regional share of housing needs under the California Housing Element Law.

E. The City Council further finds that the public interest would best be served if new affordable housing were integrated into new market-rate residential developments to facilitate economically diverse housing, while also providing alternative options to the on-site construction of affordable housing such as the payment of fees to replenish the City's Housing Trust Fund program and allowing for the construction of affordable housing on land dedicated by market-rate housing developers.

F. The City Council intends that this Ordinance be construed as an amendment to the City's existing affordability requirements, and that the repeal and re-enactment of any requirement shall not be construed to relieve a party of any outstanding obligation to comply with the requirements applicable to any previously approved Housing Development Project. (Ord. 7853-NS § 2, 2023)

23.328.020 Definitions.

A. "Affordable Unit" means a Residential Unit that is in perpetuity affordable to Very Low Income Households or Lower-Income Households, as defined in California Health and Safety Code sections 50052.5 and 50053.

B. "Affordable Housing Compliance Plan" means an enforceable commitment by an Applicant to comply with the requirements of this Chapter that identifies the number and type of Affordable Units, the amount of In-Lieu Fees, and/or the parcels of land (or portions thereof) that will be provided and/or paid by the Applicant to comply with those requirements.

C. "AMI" means the area median income applicable to the City of Berkeley, as defined by the U.S. Department of Housing and Urban Development, or its successor provision, or as established by the City of Berkeley in the event that such median income figures are no longer published by the U.S. Department of Housing and Urban Development.

D. "Applicant" means any individual, person, firm, partnership, association, joint venture, corporation, entity, combination of entities or authorized representative thereof, who applies to the City for any Housing Development Project.

E. "Housing Development Project" means a development project, including a Mixed-Use Residential project (as defined in <u>23.502.020(M)(13)</u>, involving the new construction of at least one Residential Unit. Projects with one or more buildings or projects including multiple contiguous parcels under common ownership or control shall be considered as a sole Housing Development Project and not as individual projects.

F. "Housing Trust Fund" means the program to finance low and moderate-income housing established by Resolution No. 55,504-N.S., or any successor fund established for the same purpose.

G. "Lower-Income Household" means a household whose income does not exceed the low-income limits applicable to Alameda County, as defined in California Health and Safety Code section <u>50079.5</u> and published annually pursuant to Title <u>25</u> of the California Code of Regulations, Section <u>6932</u> (or its successor provision) by the California Department of Housing and Community Development.

H. "Regulatory Agreement and Declaration of Restrictive Covenants" means, for the purposes of this Chapter, a legally binding agreement recorded against the property to codify the requirements and conditions of a Housing Development Project providing Affordable Units.

I. "Residential Unit" means, for purposes of this Chapter, any Dwelling Unit, any Live/Work Unit, or any bedroom of a Group Living Accommodation (GLA) except a GLA in a University-recognized fraternity, sorority or

co-op; provided, however, that for purposes of this Chapter, "Residential Unit" shall not include any Accessory Dwelling Unit or Junior Accessory Dwelling Unit.

J. "Residential Unit Floor Area" means, for the purpose of this Chapter, the floor area of the Residential Unit(s) of a Housing Development Project.

1. Residential Unit Floor Area shall be measured from the interior of the walls of each unit. The Residential Unit Floor Area shall exclude areas that are not habitable residential square footage such as:

- (a) Balconies, whether private or open to all residents
- (b) Storage lockers not located within residential units

(c) Vehicular (e.g., automobile or motorcycle) and bicycle parking areas that are separate areas from the residential unit

(d) Other qualifying areas that are not associated with residential units, upon approval of the Zoning Officer.

2. For Residential Units consisting of Group Living Accommodations, Residential Unit Floor Area shall also include common rooms/lounges and supporting facilities such as kitchens and restrooms.

K. "Very Low Income Household" means a household whose income is no more than 50% of AMI, as defined in California Health and Safety Code section 50105. (Ord. 7853-NS § 2, 2023)

23.328.030 Affordable Housing Requirements.

A. Requirement to Construct Affordable Units.

1. Except as otherwise provided in this Chapter, no permit for the construction of any Housing Development Project shall be issued unless at least 20% of the Residential Units are Affordable Units. When the calculation results in a fractional unit, an Applicant will round up to the nearest whole unit. The Affordable Units shall have the same proportion of unit types (i.e., number of bedrooms) and average size as the market rate units (provided, however, that no Affordable Unit may have more than three bedrooms).

2. In lieu of providing Affordable Units pursuant to Paragraph 1, an Applicant may propose an alternative mix of unit-types to comply with this Chapter by providing Affordable Units that comprise at least 20% of the Residential Unit Floor Area of the Housing Development Project in order to achieve a mix of Affordable Units including two-bedroom or three-bedroom units. The City Manager or their designee may approve the proposed alternative mix of unit-types that meet the requirements of this section.

3. Affordable Units shall be (a) reasonably dispersed throughout the Housing Development Project; and (b) comparable to other Residential Units in the Housing Development Project in terms of appearance, materials,

and finish quality. Residents of Affordable Units shall have access to the same common areas and amenities that are available to residents of other Residential Units in the Housing Development Project.

4. The City Manager or their designee shall adopt rules and regulations (a) establishing the affordable sales price or affordable rent for each Affordable Unit, consistent with the requirements of Health and Safety Code sections 50052.5 and 50053; and (b) ensuring that Affordable Units are sold or rented to Very Low Income and Lower Income Households, consistent with the requirements of this Chapter.

5. Rental Units.

(a) At least 50% of the required Affordable Units in the Housing Development Project shall be offered at a rent that is affordable to Very Low Income Households, up to a maximum requirement of 10% of the total units in the Housing Development Project if the project provides more Affordable Units than are otherwise required by this Chapter.

(b) In determining whether a unit is affordable to Very Low Income or Low Income Households, maximum allowable rent for any affordable unit shall be reduced by an amount equal to the value of the City-published utility allowance provided for Tenant-paid utilities and any other mandatory fee imposed by the property owner as a condition of tenancy.

(c) Any percentage increase in rent of an occupied Affordable Unit shall not exceed the lesser of 65% of the increase in the Consumer Price Index for All Urban Consumers (CPI-U) in the San Francisco-Oakland-San Jose region as reported and published by the U.S. Department of Labor, Bureau of Labor Statistics, for the twelve-month period ending the previous December 31, or 65% of the percentage increase in AMI for the same calendar year. In no event, however, shall the allowable annual adjustment be less than zero (0%) or greater than seven percent (7%).

(d) Affordable Units designated for Very Low Income Households shall be offered for rent to tenants receiving assistance under the Section 8 Program (42 U.S.C. Section 1437f), the Shelter Plus Care Program (42 U.S.C. Section 11403 et. seq.), or any similar state or federally funded rent subsidy program prior to being offered to other potential tenants. The Council may establish related program requirements by resolution.

(e) The owner of any Affordable Unit offered for rent must report to the City annually the occupancy and rents charged for each Affordable Unit, and any other information required pursuant to rules and regulations adopted by the City Manager or their designee.

6. *Ownership Units*. Inclusionary units in ownership projects shall be sold at a price that is affordable to an appropriate-sized household whose income is no more than 80 percent of the AMI.

7. All Affordable Units shall be subject to a recorded affordability restriction requiring in perpetuity that each Affordable Unit be sold at an affordable sales price or offered for rent at an affordable rent, as defined in this Chapter.

8. Affordable Live/Work Units shall be proactively marketed by the Applicant and/or owner to incomeeligible persons performing a work activity permitted in the district where the project is located whose type of work causes them to have a requirement for a space larger in size than typically found in residential units.

9. An Affordable Unit that is constructed to qualify for a density bonus under Government Code section<u>65915</u> that otherwise meets the requirements of this Chapter shall qualify as an Affordable Unit under this Chapter.

B. Option to Pay In-Lieu Fee.

1. In lieu of providing some or all of the Affordable Units required under this Chapter (including any fractional units), an Applicant may elect to pay a fee, the amount of which the City Council may establish by resolution ("In-Lieu Fee"). The City Council may by resolution differentiate among types, classes, and locations of Housing Development Projects to the extent permitted by law; may establish separate fees and criteria for the provision of units that are affordable to Very Low Income Households and units that are affordable to Low Income Households; and may establish the method for calculation of the In-Lieu Fee.

2. In-Lieu Fees shall be applied to the Residential Unit Floor Area of a Housing Development Project. For Live/Work units, the In-Lieu Fee shall be applied to the Residential Unit Floor Area that is designated as non-workspace in the zoning permit approvals consistent with BMC section 23.312.040.

3. In-Lieu Fees shall be estimated as part of the preliminary Affordable Housing Compliance Plan and finalized at the time of building permit issuance, consistent with the final Affordable Housing Compliance Plan.

4. In-Lieu Fees shall be paid prior to the issuance of the first Certificate of Occupancy, or if no Certificate of Occupancy is required, prior to the initial occupancy of the Housing Development Project.

5. Up to 15% of In-Lieu Fees collected may be used to pay for administration of the In-Lieu Fee or the Housing Trust Fund program. At least 85% of In-Lieu Fees collected shall be deposited into the City's Housing Trust Fund program.

C. Option to Dedicate Land.

1. At the discretion of the City Manager or their designee, the requirements of this Chapter may be satisfied by the dedication of land in lieu of constructing Affordable Units within the Housing Development Project if the City Manager or their designee determines that all of the following criteria have been met:

(a) Marketable title to the site is transferred to the City, or an affordable housing developer approved by the City, prior to issuance of building permit of the Housing Development Project pursuant to an agreement between the Applicant and the City.

(b) The site has a General Plan designation that authorizes residential uses and is zoned for residential development at a density to accommodate at least the number of Affordable Units that would otherwise be required under Paragraph A.

(c) The site is suitable for development of the Affordable Units, taking into consideration its configuration, physical characteristics, location, access, adjacent uses, and applicable development standards and other relevant planning and development criteria including, but not limited to, factors such as the cost of construction or development arising from the nature, condition, or location of the site.

(d) Infrastructure to serve the dedicated site, including, but not limited to, streets and public utilities, are available at the property line and have adequate capacity to serve the maximum allowable residential density permitted under zoning regulations.

(e) The site has been evaluated for the presence of hazardous materials and for the presence of geological hazards and all such hazards are or will be mitigated to the satisfaction of the City prior to acceptance of the site by the City.

(f) The value of the site upon the date of dedication is equal to or greater than the in-lieu fee that would otherwise be required under Paragraph A. The value of the site shall be determined pursuant to the program guidelines approved by the City Manager or their designee.

2. The City shall solicit proposals from affordable housing developers to construct restricted income units on the site dedicated to the City, but if the City is unable to obtain a qualified affordable housing developer to construct a viable affordable housing development on the property within two years of its solicitation or to commence construction within five years, the City may sell, transfer, lease, or otherwise dispose of the dedicated site for any purpose. Any funds collected as the result of a sale, transfer, lease, or other disposition of sites dedicated to the City shall be deposited into a fund designated for use in the City's Housing Trust Fund program. (Ord. 7853-NS § 2, 2023)

23.328.040 Waiver or Modification of Affordable Housing Requirements.

A. The City Manager or their designee may waive or modify up to fifty percent of the requirements of this Chapter at their sole discretion where any of the following conditions are established:

1. A project providing low- or moderate-income housing is funded in whole or in part by the City's Housing Trust Fund program;

2. The implementation of the requirements of this Chapter would violate the rights of any person under the California or United States Constitutions, any federal law, or any state law governing a matter of statewide concern and applicable to a charter city; or

3. The benefits of the project to the City outweigh the detriment of foregoing the provision of Affordable Housing or the contribution of In-Lieu fees to the Housing Trust Fund program. In weighing the benefits and detriment to the City, the following factors may be considered:

(a) The impact of the requirements of this Chapter on the feasibility of a Housing Development Project;

(b) Other economically beneficial uses of the Applicant's property;

(c) The burdens the Housing Development Project places on the City in terms of increased demand for affordable housing, childcare, public facilities or amenities, or other impacts which reasonably may be anticipated to be generated by or attributable to the Housing Development Project; and

(d) The impact on the Housing Trust Fund program of foregoing the payment of any In-Lieu fee that would otherwise be made.

B. Waivers or modifications greater than fifty percent of the amount which otherwise would be required by this Chapter shall be subject to the approval of City Council.

C. The Applicant shall bear the burden of proof to establish eligibility for a waiver or modification of the requirements of this Chapter. (Ord. 7853-NS § 2, 2023)

23.328.050 Implementation.

A. The Applicant for any Use Permit or Zoning Certificate for a Housing Development Project shall submit a preliminary Affordable Housing Compliance Plan to the Zoning Officer at the time of application. The preliminary Affordable Housing Compliance Plan shall be incorporated as a condition of approval of any Use Permit or Zoning Certificate issued to the Applicant. No building permit may be issued for the project until the final Affordable Housing Compliance Plan is approved.

B. The Applicant must execute a Regulatory Agreement and Declaration of Restrictive Covenants to regulate all Affordable Units provided in a Housing Development Project. No building permit may be issued for the project until the Regulatory Agreement and Declaration of Restrictive Covenants are executed.

C. The Affordable Housing Compliance Plan and/or Regulatory Agreement and Declaration of Restrictive Covenants may be amended administratively, provided that the Zoning Officer finds them to be in full compliance with the provisions of this ordinance and State law, prior to issuance of Certificate of Occupancy.

D. The City Manager or their designee may promulgate additional rules and regulations consistent with the requirements of this Chapter.

E. The City Council may by resolution establish fees for the implementation and administration of this Chapter and may establish administrative penalties for violations of this Chapter.

F. *Exemptions.* The following types of Housing Development Projects and Residential Units are exempt from this Chapter:

1. A Housing Development Project for which either a building permit was issued on or before April 1, 2023 or a preliminary application including all of the information required by subdivision (a) of California Government Code section 65941.1 was submitted on or before April 1, 2023 shall be subject to this Chapter's requirements that were in place as of the preliminary application's submittal date but shall otherwise be

exempt from this Chapter. This exemption shall expire upon the occurrence of any of the circumstances defined in paragraphs (2), (6), or (7) of subdivision (o) of California Government Code section <u>65589.5</u> or in subdivision (d) of California Government Code section <u>65941</u>.

2. A Housing Development Project with 5,000 square feet or less of Residential Unit Floor Area, unless it is part of a larger Housing Development Project. This exemption shall expire on April 1, 2025, or at such time as the City Council modifies or repeals this exemption, whichever date is sooner.

3. A Residential Unit that replaces a unit existing as of April 1, 2023 that has been destroyed by fire, earthquake or other disaster, or that was previously subject to a mitigation fee or inclusionary housing requirement.

4. A Residential Unit existing as of April 1, 2023 that is expanded, renovated, or rehabilitated. (Ord. 7853-NS § 2, 2023)

The Berkeley Municipal Code is current through Ordinance 7854-NS, and legislation passed through February 28, 2023.

Disclaimer: The City Clerk's Office has the official version of the Berkeley Municipal Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

<u>City Website: www.berkeleyca.gov</u> <u>Code Publishing Company, A General Code Company</u>

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 17 of 110



Rincon Consultants, Inc.

Environmental Scientists			Planners			Engineers					
	Μ	Ε	Μ	Ο	R	Α	Ν	D	U	Μ	
Oakland					Carlsbac	d:	(760) 918	9444	Sacro	amento:	(916) 706 1374
449 15 th Street Suite 303 Oakland, California 94612				Fresno: Los Angeles:		(559) 228 9925 (213) 788 4842		San Diego: (760) 918 9444 San Luis Obispo: (805) 547 0900			
											(510) 834 4455
					Oakland	l:	(510) 834	4455	Santo	a Cruz:	(831) 440 3899
					Redland	s:	(909) 253	0705	Ventu	Jra:	(805) 644 4455
					Riverside	: :	(951) 782-	0061			
Date: To:	May 5, 2023 Allison Riemer, Associate Planner										
Project:	3000 Shattuck Avenue Mixed Use Project IS-ND Addendum										
From:	Abe Leider, AICP CEP, Principal										
	Katherine Green, AICP, Senior Planner/Project Manager										
Re:	Supplemental Analysis to the IS-ND Addendum – Minor Project Revisions										

The purpose of this memorandum is to provide supplemental analysis to the Addendum to the 3000 Shattuck Avenue Mixed-Use Project Initial Study Negative Declaration (IS-ND), which was prepared in January 2023 and analyzes impacts of the proposed 3000 Shattuck Mixed Use Project in relation to the analysis in the 3000 Shattuck Avenue Mixed Use Project IS-ND dated November 27, 2018. The supplemental analysis is necessary to determine whether revisions to the proposed project that were submitted in May 2023 substantially affect the analysis or conclusions of the Addendum.

Summary of Proposed May 2023 Project Revisions

Changes to the proposed project as analyzed in the Addendum include the following items:

- Reduction of the proposed commercial area from 1,095 square feet to 1,043 square feet.
- Increase of the proposed residential area from 80,235 square feet to 80,509 square feet (no change in number of residential units).
- Reduction of front yard setbacks on Ashby Avenue from 3 feet to between 2 feet 6 inches and 3 feet.
- Reduction of street side yard setbacks on Shattuck Avenue from between 0 feet and 7 feet to between 0 feet and 6 feet 8 inches.

Supplemental Analysis to the EIR Addendum – Minor Project Revisions

- Reduction of side yard setbacks from between 5 feet 8 inches and 39 feet 5 inches to between 5 feet 7 inches and 39 feet 4 inches.
- Reduction of lot coverage by 1 percent
- Reduction in bicycle parking from 62 spaces to 61 spaces.
- Reduction in open space from 8,516 square feet to 7,879 square feet.
- Minor adjustments to the façade including the use of decorative metal screening and an increase in the area of rooftop architectural elements.

Comparison of May 2023 Project Revisions to the Addendum Analysis

The issue areas that were analyzed in the Addendum are discussed below with respect to the proposed project changes. No changes have occurred in respect to environmental conditions; however, a modification to a nearby, previously approved project at 2190 Shattuck Avenue was approved but has not yet begun construction. As such, section 4.1 of the Addendum, *Changes in Environmental Conditions*, is not discussed in this memorandum.

Aesthetics

The proposed project changes include minor adjustments to the proposed building, including reduced setbacks, the use of decorative metal screening and an increase in the area and ratio of rooftop architectural elements. Such modifications would continue to be generally consistent with Downtown Berkley Design Guidelines. As discussed in the Addendum, pursuant to California State law (Senate Bill [SB] 743, 2013), aesthetic impacts of a mixed-use residential/commercial project on an infill site within a Transit Priority Area (TPA), such as the project site, may not be considered significant impacts on the environment. Impacts would be less than significant by statute, and the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Air Quality

The marginal changes in residential and commercial space would not materially impact construction and operational air quality emissions. The elimination of one bicycle parking space would have a negligible impact on air quality emissions, as this would not measurably induce more vehicle usage. As shown in Table 2 of the Addendum, air quality net emissions for both construction and operation were substantially below Bay Area Air Quality Management District thresholds. Therefore, given the low estimated emissions of the project as analyzed in the Addendum, the proposed changes would not measurably increase air quality impacts and the analysis in the Addendum requires no revisions. Impacts would remain less than significant, and the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Cultural Resources

The proposed project changes include minor adjustments to the proposed building, including some reduced setbacks, and minor adjustments to the façade including the use of decorative metal screening and an increase in rooftop architectural elements. The proposed changes include some reduced setbacks (measured in inches) compared to the previously analyzed project; however, the lot coverage would be marginally reduced, and foundation work and the extent of excavation for the project would be substantially similar. The proposed changes would not result in new or increased cultural resources

impacts and the analysis in the Addendum would not change. There would be no impact to historical resources. Impacts related to archaeological resources, paleontological resources or human remains would remain less than significant, the same as discussed in the original IS-ND and the Addendum. Overall, the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Energy

The marginal changes in residential and commercial space would not materially impact operational energy use. Impacts would remain less than significant. Overall, the Addendum's conclusion that impacts to energy would be less than significant, and no significant new or substantially increased energy impacts would occur, remains valid.

Greenhouse Gas Emissions

Similar to the impact discussion under *Air Quality*, the marginal modifications to the commercial space residential space, setbacks, and bicycle parking would not materially change the magnitude of greenhouse gas emissions. As discussed in Section 4.4 of the Addendum, *Greenhouse Gas Emissions*, the original project would already be below Bay Area Air Quality Management District's emissions thresholds, and the proposed project modifications would not cause the project to exceed the magnitude of the original project. Given the low estimated project emissions described in the Addendum, the proposed changes would not increase greenhouse gas emissions impacts and analysis in the Addendum stands. Impacts remain less than significant. The Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Hazards and Hazardous Materials

The proposed marginal reduction in commercial space and addition of residential space would not substantially change the operational use of the project. Operationally, residential mixed uses do not typically involve the use of hazardous materials. The proposed changes would not affect the project site setting regarding proximity to schools, airports, and hazardous waste sites. There would be no impact regarding proximity to schools, airports, and hazardous waste sites and impacts would remain less than significant regarding hazards and hazardous materials during construction and operation. Excavation would remain the same and would not increase in depth or extent. The Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Land Use and Planning

The proposed marginal reduction in commercial space and addition of residential space would not change the land use of the project. The proposed land use would remain consistent with the Avenue Commercial designation, which is characterized by "pedestrian-oriented commercial development and multifamily residential structures" and General Plan policies. The number of very low-income units would remain the same and the project would continue to include affordable units in order to qualify for density bonus concessions and waivers (for height, setbacks, floor area ratio) under the Density Bonus Law (Government Code Section 65915), as discussed in Section 2, *Project Description*, of the Addendum. Impacts remain less than significant. The Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Noise

As discussed below under *Transportation*, the proposed changes would result in a negligible change to vehicle trips compared to the modified project as studied in the Addendum. As discussed in Section 4.9 of the Addendum, *Noise*, traffic volumes would not increase by 40 percent on area roadways. Construction techniques would not change. Therefore, given the negligible changes to traffic volumes, the proposed changes would not increase noise impacts and analysis in the Addendum stands. Impacts would remain less than significant. Overall, the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Population and Housing

The proposed increase in residential area is marginal and the marginal average increase of 1.65 square feet per unit would not result in an increase in the number of occupants. The number of residential units remains the same and all units remain studios. Given the marginal changes to residential space, the proposed changes would not increase population and housing impacts and analysis in the Addendum stands. No impact would occur regarding the displacement of housing or people and impacts would remain less than significant regarding population growth. Overall, the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Public Services

As discussed under *Population and Housing*, the proposed increase in residential area is marginal and would not result in an increase of occupants. The decrease in commercial space and marginal increase in residential space would not generate a need for new or expanded facilities to support fire protection and emergency response providers, parks, library services, school, or human health services and impacts would remain less than significant. Overall, the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Recreation

The proposed reduction of 637 square feet of open space could result in a marginal increase in the use of surrounding parks and recreational areas but the increase would not be great enough to result in substantial physical deterioration of these facilities and analysis in the Addendum stands. Impacts would remain less than significant. Overall, the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Transportation

The conclusions of the Traffic Impact Report, as discussed in Section 4.6 of the Addendum, *Transportation,* would not be affected by the proposed changes. As included in the *Population and Housing* impact discussion, the proposed increase in residential area is marginal and would not accommodate an increase in the number of occupants. Furthermore, the quantity of automobile parking spaces remains unchanged. As included in the *Air Quality* impact discussion, the elimination of one bicycle parking space would have a negligible impact on traffic, as this would not measurably induce more vehicle usage. Therefore, the proposed changes would not increase transportation impacts and analysis in the Addendum stands. Impacts remain less than significant. Overall, the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Utilities and Service Systems

The marginal changes in residential and commercial space would not materially impact electricity demand. The increase in residential space and decrease in commercial space would slightly offset one another, and analysis in Section 4.14 of the Addendum, *Utilities and Service Systems*, would remain generally accurate. Given the minor shift in proposed square footage of uses, the proposed changes would not increase impacts related to utilities and service systems and changes to the Addendum are not warranted. Impacts remain less than significant. Overall, the Addendum's conclusion that the project would not have new or substantially increased impacts compared to the project studied in the original IS-ND remains valid.

Other Impacts

Section 4.8 of the Addendum, *Other Impacts*, briefly analyzes issue areas including agriculture and forestry, biological resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, tribal cultural resources, and wildfire. Considering the minor nature of the proposed project changes and the initial assessment of the aforementioned issue areas discussed under Section 4.8 of the Addendum, *Other Impacts*, as less than significant in the original IS-ND for the project, the proposed changes to the project would not alter the analysis in the Addendum. Therefore, the proposed changes would not substantially increase other impacts, and changes to the Addendum are not warranted. Impacts remain less than significant.

Conclusion

The minor increase in residential space and the slight reduction in commercial area, setbacks, bicycle parking, and open space, coupled with the minor changes to the building façade, would not result in new or substantially increased impacts compared to the project studied in the original IS-ND. The proposed changes to the project do not warrant changes to the Addendum, and the impact discussions and comparisons with the original IS-ND remain the same as analyzed in the Addendum.

Jacob, Melinda

From:	Zoning Adjustments Board (ZAB)
Subject:	FW: Comments on Agenda Item 5: 3000 Shattuck Avenue Project Addendum to the Initial Study
Attachments:	Negative Declaration (6154) 6154-007j - Comments on Addendum 3000 Shattuck (5-11-23) .pdf

From: Lorrie J. LeLe <ljlele@adamsbroadwell.com>
Sent: Tuesday, May 9, 2023 5:32 PM
To: Zoning Adjustments Board (ZAB) <Planningzab@cityofberkeley.info>; Riemer, Allison
<ARiemer@cityofberkeley.info>
Cc: Kelilah D. Federman <kfederman@adamsbroadwell.com>
Subject: Comments on Agenda Item 5: 3000 Shattuck Avenue Project Addendum to the Initial Study Negative Declaration (6154)

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

On behalf of East Bay Residents for Responsible Development, we submit the attached comments on Agenda Item #5 for the 3000 Shattuck Avenue Project addendum to the IS/ND.

We are also providing you with a Dropbox link that contains the referenced documents for your convenience.

https://www.dropbox.com/scl/fo/2z49lmjzz9d4ntzu6lzu1/h?dl=0&rlkey=ctfam6kyphra9iibdmhlya9a8

If you have any questions, please contact Kelilah Federman – <u>kfederman@adamsbroadwell.com</u>

Thank you,

Lorrie LeLe Legal Assistant Adams Broadwell Joseph & Cardozo 520 Capitol Mall, Suite 350 Sacramento, CA 95814 <u>ljlele@adamsbroadwell.com</u> | Phone: 916. 444.6201 Ext. 10 | Fax: 916.444.6209 |

This e-mail may contain material that is confidential, privileged and/or attorney work product for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the send and delete all copies.

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 23 of 110

ADAMS BROADWELL JOSEPH & CARDOZO A PROFESSIONAL CORPORATION

KEVIN T. CARMICHAEL CHRISTINA M CARO THOMAS A. ENSLOW KELILAH D. FEDERMAN RICHARD M FRANCO ANDREW J. GRAF TANYA A GULESSERIAN RACHAEL E. KOSS AIDAN P. MARSHALL TARA C. RENGIFO

Of Counsel MARC D. JOSEPH DANIEL L. CARDOZO

Via Email and US Mail

ATTORNEYS AT LAW

601 GATEWAY BOULEVARD, SUITE 1000 SOUTH SAN FRANCISCO, CA 94080-7037

> TEL: (650) 589-1660 FAX: (650) 589-5062 kfederman@adamsbroadwell.com

> > May 9, 2023

Via Email Only

Yes Duffy, Chairperson Kimberly Gaffney, Vice Chairperson Igor Tregub, Member Michael Thompson, Member Holly Scheider, Member Shoshana O'Keefe, Member Charles Kahn, Member Brandon Yung, Member Debra Sanderson, Member Zoning Adjustments Board **Planning and Development** 1947 Center Street, 2nd Floor Berkeley, CA 94704 Email: zab@cityofberkeley.info

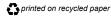
Allison Riemer, Associate Planner Email: ariemer@cityofberkeley.info

Re: Comments on Agenda Item 5: 3000 Shattuck Avenue Project Addendum to the Initial Study Negative Declaration (SCH #2017062025)

Dear Chairperson Duffy, Vice Chairperson Gaffney, Members: Tregub, Thompson, Schneider, O'Keefe, Kahn, Yung, Sanderson, and Ms. Riemer:

On behalf of East Bay Residents for Responsible Development ("East Bay Residents"), we submit these comments on the Addendum to the 3000 Shattuck Avenue Project Initial Study Negative Declaration (SCH #2017062025) prepared by the City of Berkeley (the "City") for the 3000 Shattuck Avenue Project ("Project") proposed by Mark Rhoades of the Rhoades Planning Group and Khan Shazada & Farhat (collectively, "Applicant").¹ The City adopted the IS/ND ("2018 IS/ND") for the original 3000 Shattuck Avenue Project ("original project") and approved the

¹ City of Berkeley, Addendum to the 3000 Shattuck Avenue Project Initial Study – Negative Declaration (Permit No. ZP2015-0229, SCH # 2017062025) (January 2023), https://www.dropbox.com/s/kr0fme3neozjqyf/2023-01-27_CEQA_Addendum%20to%20IS-ND_3000%20Shattuck.pdf?dl=0 (hereinafter "Addendum"). 6154-007j



SACRAMENTO OFFICE

520 CAPITOL MALL, SUITE 350 SACRAMENTO, CA 95814-4721 TEL: (916) 444-6201 FAX: (916) 444-6209

original project on November 27, 2018.² These comments precede the hearing of the City of Berkeley Zoning Adjustment Board ("ZAB") on May 11, 2023 at 7:00 pm.³

The Project consists of changes to the original project considered in the 2018 IS/ND. The Project proposes to demolish the existing 1,163-square-foot ("SF") gas station and construct 80,235 sf of residential space including 166 residential units, 1,095 SF of retail space, and zero parking spaces on the 0.31-acre site. Construction of the Project is anticipated to last eighteen (18) months. The Project site is located at 3000 Shattuck Avenue, Berkeley, CA 94705 (APNs 53-1592-1 & 53-1592-2). The Project site is designated as Avenue Commercial in the City's General Plan and is located in the South Area Commercial (C-SA) zoning district. The original project proposed 32,603 SF of residential uses, with 44 units including 4 affordable units. This Project proposes 80,235 SF of residential uses, with 166 units including 17 affordable units. The original project proposed the inclusion of 17 parking spaces for automobiles, this Project proposes zero parking spaces.⁴

We prepared these comments with the assistance of air quality and hazards expert Matt Hagemann and Paul Rosenfeld of Soil Water Air Protection Enterprise (SWAPE), whose technical comments and curriculum vitae are attached hereto as Exhibit A.⁵ Our review of the Addendum and 2018 IS/ND demonstrates that the Project fails to comply with CEQA. As explained more fully below, the Addendum fails to accurately disclose the extent of the Project's potentially significant air quality, public health, hazardous contamination, land use, and cumulative impacts which are new or more severe than the impacts analyzed in the 2018 IS/ND. There is substantial evidence to support a fair argument that the Project will result in significant, unmitigated impacts in each of these areas. Further, the Project fails to comply with the City's General Plan and Housing Element. The City may not approve the Project until the City prepares an EIR that adequately analyzes the Project's potentially significant impacts and incorporates all feasible mitigation measures to avoid or minimize these impacts.

² City of Berkeley, 3000 Shattuck Avenue Mixed Use Project Initial Study–Negative Declaration, <u>https://www.dropbox.com/s/ui1snla3csdgpik/IS-</u>

<u>ND%20with%20appendices</u> <u>3000%20Shattuck.pdf?dl=0</u> (hereinafter "2018 IS/ND"). ³ City of Berkeley Zoning Adjustments Meeting Agenda, May 11, 2023,

https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2023-05-11 ZAB Agenda Linked.pdf.

⁴ Addendum p. 3.

⁵ See **Exhibit A,** Matt Hagemann, P.G., C.Hg., Paul E. Rosenfeld, Ph.D., Comments on the 3000 Shattuck Mixed-Use Project (SCH No. 2017062025) (April 10, 2023) ("SWAPE Comments"). ^{6154-007j}

Moreover, the City prepared the Addendum in violation of CEQA and the court's holding in Friends of College of San Mateo Gardens v. San Mateo County *Community College District*. There, the court held that the Community College District improperly prepared an addendum to an MND, because there was substantial evidence to support a fair argument that the project changes may result in a significant effect on the environment.⁶ Agencies are permitted to prepare an addendum to an adopted MND, rather than a subsequent EIR or negative declaration, if only "minor technical changes or additions are necessary or none of the conditions described in [CEQA Guidelines] Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred."⁷ Here, the changes proposed in the Addendum are not "minor technical changes or additions" but constitute major revisions to the MND based on new significant environmental effects thus requiring preparation of an Environmental Impact Report ("EIR") if the impacts cannot be mitigated. Substantial evidence supports a fair argument that the Project's potentially significant impacts cannot be adequately mitigated by the measures proposed in the Addendum and 2018 IS/ND.

For the reasons discussed herein, and in the attached expert comments, East Bay Residents urges the City to remedy the deficiencies in the Addendum by preparing a legally adequate EIR and circulating it for public review and comment.⁸ East Bay Residents and their expert consultants have identified numerous potentially significant impacts that the Addendum either mischaracterizes, underestimates, or fails to identify.

I. STATEMENT OF INTEREST

East Bay Residents for Responsible Development ("ERRBD" or "Residents") is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential impacts associated with Project development. The association includes the UA Plumbers and Pipefitters Local 342, International Brotherhood of Electrical Workers Local 595, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, and their members and their families who live and/or work in the City of Berkeley and Alameda County.

⁶ Friends of College of San Mateo Gardens v. San Mateo County Community College Dist. (2022) 11 Cal.App.5th 596, 600.

 $^{^7}$ CEQA Guidelines, § 15164, subd. (b).

⁸ We reserve the right to supplement these comments at later hearings on this Project. Gov. Code § 65009(b); PRC § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124

Cal.App.4th 1184, 1199–1203; see Galante Vineyards v. Monterey Water Dist. (1997) 60 Cal.App.4th 1109, 1121.

⁶¹⁵⁴⁻⁰⁰⁷j

The individual members of EBRRD live, work, and raise their families in the City and in Alameda County. They would be directly affected by the Project's impacts. Individual members may also work on the Project itself. They will therefore be first in line to be exposed to any health and safety hazards that may exist on the Project site.

The organizational members of EBRRD also have an interest in enforcing the City's planning and zoning laws and the State's environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there. Indeed, continued degradation can, and has, caused restrictions on growth that reduce future employment opportunities. Finally, Residents' members are concerned about projects that are built without providing opportunities to improve local recruitment, apprenticeship training, and retention of skilled workforces, and without providing lifesaving healthcare expenditures for the construction workforce.

II. LEGAL BACKGROUND

CEQA is designed to inform decision-makers and the public about the potential, significant environmental effects of a project.⁹ "CEQA's fundamental goal [is] fostering informed decision-making."¹⁰ "The purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind."¹¹

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an EIR, except in certain limited circumstances.¹² The EIR is the very heart of CEQA.¹³ The EIR acts like an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return."¹⁴ The EIR aids an agency in identifying, analyzing, disclosing, and, to the extent possible, avoiding a project's significant environmental effects through implementing feasible

⁹ 14 Cal. Code Regs. ("CEQA Guidelines") § 15002, subd. (a)(1).

¹⁰ Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 402.

¹¹ Bozung v. LAFCO (1975) 13 Cal.3d 263, 283.

¹² See, e.g., Pub. Resources Code, § 21100.

¹³ Dunn-Edwards v. Bay Area Air Quality Management Dist. (1992) 9 Cal.App.4th 644, 652.

¹⁴ Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1220.
6154-007j

mitigation measures.¹⁵ The EIR also serves "to demonstrate to an apprehensive citizenry that the [agency] has analyzed and considered the ecological implications of its action."¹⁶ Thus, an EIR "protects not only the environment but also informed self-government."¹⁷

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment."¹⁸ The EIR aids an agency in identifying, analyzing, disclosing, and, to the extent possible, avoiding a project's significant environmental effects through implementing feasible mitigation measures.¹⁹ In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact. Because "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process" by allowing the agency to dispense with the duty to prepare an EIR, negative declarations are allowed only in cases where there is not even a "fair argument" that the project will have a significant environmental effect.²⁰

Under the fair argument standard, a lead agency "shall" prepare an EIR whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the environment.²¹ The phrase "significant effect on the environment" is defined as "a substantial, or potentially substantial, adverse change in the environment.²² In certain circumstances, a project with potentially significant impacts can be modified by the adoption of mitigation measures to reduce the impacts to a level of insignificance. In such cases, an agency may satisfy its CEQA obligation by preparing a mitigated

¹⁵ Pub. Resources Code § 21002.1(a); CEQA Guidelines § 15002(a), (f).

¹⁶ No Oil, Inc. v. City of Richmond (1974) 13 Cal.3d 68, 86.

¹⁷ Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 564.

¹⁸ Pub. Resources Code, § 21080, subd. (d) (emphasis added); CEQA Guidelines, § 15064; see also Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 927; Mejia v. City of Richmond (2005) 13 Cal.App.4th 322.

 ¹⁹ Pub. Resources Code, § 21002.1, subd. (a); CEQA Guidelines, § 15002, subd. (a) & (f).
 ²⁰ Citizens of Lake Murray v. San Diego (1989) 129 Cal.App.3d 436, 440; Pub. Resources Code, §§ 21100, 21064.

²¹ Pub. Res. Code §§21080(d), 21082.2(d); 14 Cal. Code Reg. §§ 15002(k)(3), 15064(f)(1), (h)(1); Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal. (1993) 6 Cal.4th 1112, 1123; No Oil, Inc. v. City of Richmond (1974) 13 Cal.3d 68, 75, 82; Stanislaus Audubon Society, Inc. v. County of Stanislaus (1995) 33 Cal.App.4th 144, 150-151; Quail Botanical Gardens Found., Inc. v. City of Encinitas (1994) 29 Cal.App.4th 1597, 1601-1602.

²² Pub. Resources Code, § 21068.

⁶¹⁵⁴⁻⁰⁰⁷j

negative declaration.²³ A mitigated negative declaration, however, is also subject to the fair argument standard. Thus, an MND is also inadequate, and an EIR is required, whenever substantial evidence in the record supports a "fair argument" that significant impacts may occur, even with the imposition of mitigation measures.

The "fair argument" standard is an exceptionally "low threshold" favoring environmental review in an EIR rather than a negative declaration.²⁴ The "fair argument" standard requires the preparation of an EIR if any substantial evidence in the record indicates that a project may have an adverse environmental effect.²⁵ As a matter of law, substantial evidence includes both expert and lay opinion.²⁶ Even if other substantial evidence supports the opposite conclusion, the agency nevertheless must prepare an EIR.²⁷ Under the "fair argument" test, CEQA always resolves the benefit of the doubt in favor of the public and the environment.

Agencies are permitted to prepare an addendum to an adopted MND, rather than a subsequent EIR or negative declaration, if only "minor technical changes or additions are necessary or none of the conditions described in [CEQA Guidelines] Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred."²⁸ "If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration," and if no subsequent EIR is required, the agency "shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation." (CEQA Guidelines, § 15162, subd. (b).) Additionally, CEQA requires preparation of an EIR where "[s]ubstantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects."

Here, the changes proposed in the Addendum are not "minor technical changes or additions" but constitute major revisions to the 2018 IS/ND based on new significant environmental effects thus requiring the preparation of a negative

²³ Pub. Resources Code, § 21064.5; CEQA Guidelines, § 15064, subd. (f)(2).

²⁴ Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 928.

²⁵ CEQA Guidelines, § 15064, subd. (f)(1); *Pocket Protectors v. City of Sacramento, supra*, 124 Cal.App.4th at 931.

²⁶ Pub. Resources Code, § 21080, subd. (e)(1); CEQA Guidelines, § 15064, subd. (f)(5).

²⁷ Arviv Enterprises v. South Valley Area Planning Comm. (2002) 101 Cal.App.4th 1333, 1346; Stanislaus Audubon v. County of Stanislaus (1995) 33 Cal.App.4th 144, 150-151; Quail Botanical Gardens v. City of Encinitas (1994) 29 Cal.App.4th 1597.

 $^{^{28}}$ CEQA Guidelines, § 15164, subd. (b).

⁶¹⁵⁴⁻⁰⁰⁷j

declaration at a minimum, and an EIR if the impacts cannot be mitigated. As shown below, SWAPE provided substantial evidence that ROG emissions, and construction and demolition emissions may be significant and were not analyzed or mitigated in the 2018 IS/ND.

The California Supreme Court held that if "the project modification introduces previously unstudied and potentially significant environmental effects that cannot be avoided or mitigated through further revisions to the project plans, then the appropriate environmental document would no longer be a negative declaration at all, but an EIR."²⁹ Thus, "an agency [must] prepare an EIR whenever there is substantial evidence that the changes to a project for which a negative declaration was previously approved might have a significant environmental impact not previously considered in connection with the project as originally approved, and courts must enforce that standard."³⁰

In Friends of College of San Mateo Gardens v. San Mateo County Community College Dist., the court held that the Community College District improperly prepared an addendum to an MND, because there was substantial evidence to support a fair argument that the project changes may result in a significant effect on the environment.³¹ In that case, the court found that the change in the Project as detailed in the Addendum was significant enough to require additional environmental review, and that an Addendum was not the appropriate CEQA document. Similarly, here, the Project's changes, including the doubling of its height, increased air quality, public health, and hazards impacts results in new significant impact such that an Addendum is inappropriate and an EIR must be prepared. The ZAB must remand the Project to Staff to prepare a legally adequate EIR for the Project, because substantial evidence supports a fair argument that the Project's changes may result in significant impacts, which have not been avoided through the revisions in the Addendum. Project impacts remain significant and unmitigated, as detailed herein.

Moreover, the ZAB lacks the evidence necessary to approve the requested Use Permit for the Project because substantial evidence demonstrates that the Project will be detrimental to the general welfare. The Project Applicant has not made a commitment to ensure the Project is built with local skilled and trained workforce, or that the Project will provide apprenticeship training opportunities or

²⁹ Friends of College of San Mateo Gardens v. San Mateo County Community College Dist. (2016) 1 Cal.5th 937, 958.

³⁰ Id. at p. 959.

³¹ (2022) 11 Cal.App.5th 596.

⁶¹⁵⁴⁻⁰⁰⁷j

healthcare benefits or other workforce benefits for City of Berkeley or East Bay residents. The Project may be built with low-wage, out-of-area workers who lack the livable wages, health benefits, stability, and basic standard of living that Berkeley has committed to ensuring for all of its workers on all housing developments constructed in the City. The Project would therefore be detrimental to the health, safety, peace, morals, comfort, and general welfare of the City and its residents, especially its local construction workforce who may not have the opportunity to build much-needed housing in their own community. The Project is also inconsistent with the workforce and economic requirements of the City of Berkeley General Plan ("General Plan").

The ZAB should remand the Project to Staff to prepare a legally adequate EIR and include conditions of approval requesting community benefits, including local hire provisions, workforce standards, and healthcare benefits for workers, to ensure the Project does not cause a detriment to the general welfare of the City.

III. THE PROJECT'S POTENTIALLY SIGNIFICANT HAZARDS IMPACTS REQUIRE PREPARATION OF AN EIR

The Project site is contaminated with hazardous contaminants from its historical use as a service station operated by Atlantic Richfield Company (ARCO).³² ARCO later became an affiliate of BP and the site was operated as BP Station No. 00414 until it was sold to Mr. Shahzada Khan on February 25, 2004.³³ The Project site is listed on the State Water Resources Control Board's Geotracker database as Site T0600100094. The site is therefore on a Cortese List per Section 65962.5 of the Government Code. The Project site is currently an operational gas station and smog check location operated by Berkeley Gas & Smog. The Project site contained three underground storage tanks (USTs) that contained gasoline, and one waste oil UST.³⁴

The Addendum tiers from the IS which states:

The site is included on the list of hazardous materials sites compiled pursuant to Government Code 65962.5 (Cortese List) as "closed" cases. As

³² Atlantic Richfield Company, Case Closure Summary Report Former British Petroleum Station #00414 City of Berkeley case #27540. 3000 Shattuck Avenue Berkeley, California (June 9, 2010), <u>https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/8836282312/T0600100094.P</u> <u>DF</u> p. 2/16 (hereinafter "Case Closure Summary Report").

 34 Id.

 $^{^{33}}$ Id.

⁶¹⁵⁴⁻⁰⁰⁷j

> described in the Environmental Setting, the RWQCB issued a case closure letter for the clean-up case in September 2014, concluding that the current plume is restricted to the site and does not present a current or potential risk to human health or the environment. Therefore, the project would not create a significant hazard to the public or the environment and the impact would be less than significant.³⁵

The IS relies on the misleading statement that the cleanup case is "closed."³⁶ The Addendum then relies on the same misleading proposition. The Addendum states that "[t]here are two closed State Water Quality Control Board GeoTracker investigations on the project site (T0600100094 [closed 2013] and T10000004483 [closed 2014])."³⁷

These statements are misleading because the site was closed to commercial/industrial screening levels, "based on the assumption that land use at the site will remain unchanged."³⁸ The Project site fails to meet the residential ESL levels necessary to place housing on the site. The site must undergo additional soil remediation to remove excess contaminants and reach acceptable residential ESLs because the site is being converted from commercial/industrial to residential use. People will live on the site, their children may play on the grounds, but the site was cleaned only to commercial/industrial screening levels. The contamination that currently remains onsite may result in health risk impacts to the residents and the community.

Moreover, the Addendum includes the Case Closure Summary Report that states that "[s]oil vapor samples have not been collected at the site."³⁹ The Case Closure Summary was required to include "Cumulative data tables for all soil, groundwater samples, including grab samples, and soil vapor <u>must</u> be included."⁴⁰ Data on soil vapor samples and cumulative data on the potential for soil vapor intrusion was not included in the Case Closure Summary, the Initial Study, or the Addendum and is not available for public review and scrutiny.

 36 Id.

38

³⁵ IS, <u>https://www.dropbox.com/s/19ieh5spqqet2qb/IS-</u>

ND%20with%20appendices 3000%20Shattuck.pdf?dl=0, p. 23.

³⁷ Addendum p. 22.

³⁹ Case Closure Summary Report, p. 10/16.

⁴⁰ *Id*. at pdf 83 of 86.

⁶¹⁵⁴⁻⁰⁰⁷j

At the time of the site's closure in 2010, "[a] station building [was] present at the site and the entire site [was] paved, with no exposed soil present at the ground surface."⁴¹ Project construction here, will disrupt and expose soil, potentially exposing dangerous and previously untested levels of soil vapor. At the time of the closure, the "potential for soil vapor intrusion was evaluated by comparing current groundwater concentrations to groundwater ESLs...for the protection of the vapor intrusion pathway in a <u>commercial setting</u>."⁴² The soil vapor and potential health risk impacts have not been analyzed for a residential setting and may pose a significant risk to residents of the Project site.

The City must draft an EIR because substantial evidence supports a fair argument that hazardous contamination and soil vapor may result in a significant environmental impact. The courts have repeatedly held that an EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that a project may have a significant environmental impact.⁴³ Here, the City cannot approve the Project based on an Addendum to the Initial Study because project modification results in potentially significant impacts from hazardous contamination and soil vapor which were unstudied at the time of preparation of the 2018 IS/ND.

The California Supreme Court held that if "the project modification introduces previously unstudied and potentially significant environmental effects that cannot be avoided or mitigated through further revisions to the project plans, then the appropriate environmental document would no longer be a negative declaration at all, but an EIR."⁴⁴ Thus, "an agency [must] prepare an EIR whenever there is substantial evidence that the changes to a project for which a negative declaration was previously approved might have a significant environmental impact not previously considered in connection with the project as originally approved, and courts must enforce that standard."⁴⁵ The City must prepare an EIR to adequately analyze and mitigate the Project's potentially significant and as yet unstudied impacts from soil vapor and hazardous contamination, before the Project can lawfully be approved.

⁴¹ Case Closure Summary Report, p. 10/16.

 $^{^{42}}$ Id.

⁴³ Pub. Resources Code § 21151; CEQA Guidelines § 15064(f); Citizens for Responsible Equitable Envt'l Dev. v. City of Chula Vista ("CREED") (2011) 197 Cal.App.4th 327, 330-31; Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist. (2010) 48 Cal.4th 310, 319 ("CBE v. SCAQMD").
⁴⁴ Friends of College of San Mateo Gardens v. San Mateo County Community College Dist. (2016) 1 Cal.5th 937, 958.

IV. THE PROJECT RESULTS IN SIGNIFICANT AIR QUALITY IMPACTS REQUIRING PREPARATION OF AN EIR

An EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that a project may have a significant environmental impact.⁴⁶ "[S]ignificant effect on the environment" is defined as "a substantial, or potentially substantial, adverse change in the environment.⁴⁷ An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial.⁴⁸ Substantial evidence, for purposes of the fair argument standard, includes "fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.⁴⁹ The Project may result in potentially significant impacts to air quality. Air quality impacts constitute new or increased significant environmental effects "not previously considered in connection with the project as originally approved."⁵⁰

A. The Project Results in Significant ROG Emissions

East Bay Resident's air quality expert consultants at SWAPE found that the Project results in significant emissions from Reactive Organic Gas ("ROG") which exceed the Bay Area Air Quality Management District ("BAAQMD") threshold. BAAQMD provides that ROG emissions shall not exceed 54 pounds per day ("lbs/day"), but the Project would result in ROG emissions of 71.55 lbs/day.⁵¹ The 2018 IS/ND makes no mention of ROG emissions, but the Addendum states that the ROG emissions would be 3 lbs/day.⁵² This conclusion is not supported by substantial evidence. SWAPE found that the changes to the Project result in a 2,285% increase in ROG emissions, far and away exceeding the BAAQMD significance threshold. Therefore, ROG emissions remain significant and the Addendum nor the 2018 IS/ND adequately mitigate such impacts. The City must prepare an EIR to satisfy CEQA.

⁴⁶ Pub. Resources Code § 21151; CEQA Guidelines § 15064(f); Citizens for Responsible Equitable Envi'l Dev. v. City of Chula Vista ("CREED") (2011) 197 Cal.App.4th 327, 330-31; Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist. (2010) 48 Cal.4th 310, 319 ("CBE v. SCAQMD").
⁴⁷ Pub. Resources Code § 21068; CEQA Guidelines § 15382; County Sanitation Dist. No. 2 v. County of Kern (2005) 127 Cal.App.4th 1544, 1581.

⁴⁸ No Oil, Inc. v. City of Los Angeles (1974) 13 Cal.3d 68, 83.

⁴⁹ Pub. Resources Code § 21080(e)(1) (emphasis added); CREED, 197 Cal.App.4th at 331.

⁵⁰ Friends of College of San Mateo Gardens v. San Mateo Community College District, supra, 1 Cal.5th at 959.

⁵¹ SWAPE Comments, p. 5.

⁵² Addendum, p. 14.

⁶¹⁵⁴⁻⁰⁰⁷j

The California Supreme Court held that if "the project modification introduces previously unstudied and potentially significant environmental effects that cannot be avoided or mitigated through further revisions to the project plans, then the appropriate environmental document would no longer be a negative declaration at all, but an EIR."⁵³ Further, "an agency [must] prepare an EIR whenever there is substantial evidence that the changes to a project for which a negative declaration was previously approved might have a significant environmental impact not previously considered in connection with the project as originally approved, and courts must enforce that standard."⁵⁴

East Bay Residents present substantial evidence, in these comments and in our expert comments attached, showing that the Project may result in potentially significant ROG emissions, which must be mitigated before the Project can be approved. These impacts were not considered in the prior 2018 IS/ND, and must be analyzed in an EIR. SWAPE's comments present dozens of effective mitigation measures to help reduce Project ROG, construction, and operational air emissions. Such measures should be implemented in an EIR's Mitigation Monitoring and Reporting Program. The City must prepare an EIR to study the previously unstudied and potentially significant air quality impacts from the Project, particularly with respect to ROG emissions, to satisfy CEQA.

B. The Addendum Underestimates the Project's Construction and Demolition Emissions

The Addendum states that Project construction will last 18 months.⁵⁵ The Addendum states that the original project included a construction period of 18 months as well.⁵⁶ But, the 2018 IS/ND provided that the construction period will last 20 months.⁵⁷ Thus, it is particularly troubling, that the Addendum's air quality analysis relies on a 21-month construction period, resulting in an underestimation of the Project's construction emissions. SWAPE concludes that the elongated construction duration results in an underestimation of the daily emissions resultant from construction equipment onsite. SWAPE concludes that the analysis improperly relies on the assumption that "there will be less construction activities

 56 Id.

⁵³ Friends of College of San Mateo Gardens v. San Mateo County Community College Dist. (2016) 1 Cal.5th 937, 958.

⁵⁴ Id. at p. 959.

⁵⁵ Addendum, p. 3.

⁵⁷ 2018 IS/ND.

⁶¹⁵⁴⁻⁰⁰⁷j

required per day and, consequently, less pollutants emitted per day."⁵⁸ The Addendum's air quality construction emissions calculations underestimate the Project's daily emissions and are therefore not supported by substantial evidence. The City must prepare a legally adequate EIR which accurately analyzes the Project's daily construction emissions with an accurate construction schedule guiding the analysis.

Further, the Addendum fails as an informational document under CEQA for failing to model the emissions associated with demolition of the existing building on the Project site. SWAPE concludes that the Addendum fails altogether to analyze the demolition phase of construction and inputted zeros into the calculations for square feet being demolished.⁵⁹ This is not an accurate assessment of the required demolition of the existing gas station, two gas pump islands, and related infrastructure.⁶⁰ Demolition of existing infrastructure will obviously exceed zero square feet of demolition activity, counter to the Addendum's unsupported calculations. SWAPE concludes that the failure to include the demolition emissions presents a significant issue, because by failing to include any amount of required demolition, the model underestimates the emissions associated with fugitive dust, debris removal, as well as exhaust from hauling trucks traveling to and from the site, which may be significant and remain unmitigated.⁶¹ These impacts were not considered in the prior 2018 IS/ND, and must be analyzed in an EIR.

C. The Addendum Underestimates the Project's Construction Emissions from Trucking the Modular Units

The Addendum fails as an informational document under CEQA for failing to quantify and analyze the Project's potentially significant air pollution impacts from trucking the modular units potentially hundreds of miles to the Project site. The Addendum and 2018 IS/ND failed to quantify the potentially significant air quality, health risk, and cumulative impact associated with trucking the modular units. These modular units may be transported from out of state or hundreds of miles from the Project site. Absent an analysis of the emissions associated with trucking these modular units, the Addendum fails as an informational document under CEQA, and the conclusion that air impacts from Project construction are less than significant is not supported by substantial evidence.

⁵⁸ SWAPE Comments, p. 4.

 $^{^{59}}$ Id.

⁶⁰ 2018 IS/ND, p. 6.

 $^{^{\}rm 61}$ SWAPE Comments, p. 5. s

⁶¹⁵⁴⁻⁰⁰⁷j

V. THE PROJECT RESULTS IN SIGNIFICANT CUMULATIVE IMPACTS REQUIRING PREPARATION OF AN EIR

CEQA requires agencies to analyze whether a project has impacts that are individually limited, but cumulatively considerable.⁶² Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects). Cumulative impacts are defined as "two or more individual effects, which, when considered together, are considerable or which compound or increase other environmental impacts."⁶³

The Addendum fails to include any analysis supported by substantial evidence to conclude that the Project does not result in cumulatively considerable impacts. In fact, the Addendum only mentions cumulative impacts for traffic and air quality impacts, but dismisses all other potentially significant cumulative impacts out of hand, without providing substantial evidence to support the conclusions. The 2018 IS/ND concluded that because the Project is "an infill location" cumulative impacts are less than significant for all resource areas.⁶⁴ But, it is particularly because this Project is an infill project, that a cumulative analysis of concurrent construction impacts is so critical. Here, the Project is proposed to be constructed concurrently with the 2920 Shattuck Project, just down the street, among other new Berkeley high rise developments. Both this Project and the 2920 Shattuck project will result in potentially cumulatively significant air quality, hazards, and land use impacts that were not analyzed in conjunction with either Project's analysis.

The City must prepare an EIR which accurately analyzes the Project's potentially significant cumulative impacts before the Project can lawfully be approved.

⁶² 14 CCR § 15355(b); City of Long Beach v. Los Angeles Unified School Dist. (2009) 176 Cal.App.4th 889, 905.
⁶³ 14 CCR § 15355.

^{64 2018} IS/ND, p. 38.

⁶¹⁵⁴⁻⁰⁰⁷j

VI. THE PROJECT MAY BE DETRIMENTAL TO THE GENERAL WELFARE OF THE CITY, RESIDENTS, AND WORKERS

In order to approve a Use Permit, under Berkeley Municipal Code Section 23.406.040, the Zoning Adjustments Board must find that the proposed project:

- 1) Will not be detrimental to the health, safety, peace, morals, comfort, or **general welfare** of persons residing or visiting in the area or neighborhood of the proposed use; and
- 2) Will not be detrimental or injurious to property and improvements of the adjacent properties, the surrounding area or neighborhood, or to the general welfare of the City.

Municipal Code Section 22.20.020 defines detrimental impacts to include, *inter alia*, increased demand for workforce housing, training, and benefits: "The increased demand for affordable housing, child care and public services, *adequate employment training and placement facilities and amenities*, and the other impacts generated by development projects, unless mitigated, are detrimental to the City's public health, safety and general welfare."⁶⁵ Under Section 22.20.020, a detriment to the general welfare occurs when the City fails to mitigate the impacts of a development project, including the increased demand for housing, workforce training, and public services that may result from the Project.⁶⁶ Pursuant to Municipal Code Section 22.20.020, the Project's impacts to the general welfare for failure to provide employment training, placement facilities, and amenities, require mitigation.⁶⁷

Further, the ZAB may approve a Use Permit for demolition of a nonresidential building or structure only if the ZAB finds that "demolition will not be materially detrimental to the commercial needs and public interest of any affected neighborhood or the City of Berkeley"⁶⁸ Here, the ZAB cannot make the necessary findings that demolition of the existing structure and construction of the Project is in the public interest, absent community and workforce benefits to promote the general welfare.

⁶⁶ Id.

 68 Id. at § 23.326.070(D)(1).

⁶⁵ BMC § 22.20.020(G) (emphasis added).

⁶⁷ BMC § 22.20.020(G).

⁶¹⁵⁴⁻⁰⁰⁷j

Housing projects, like this one, that are constructed with low-wage or uninsured construction workers are detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or visiting the City and the Project's Downtown neighborhood, as well as to the general welfare of the City. The City should request the Applicant include community benefits in the Project conditions of approval, including local hire provisions and healthcare standards and benefits in order to promote the general welfare.

A. The Project is Detrimental to the General Welfare for Failing to Hire Locally

Absent a provision requiring the Applicant to hire locally, the Project may be detrimental to the general welfare of Berkeley residents. Local hire commitments are a critical way not only to hire local residents, but to use project hiring needs to target opportunities to low-income residents and people of color who might otherwise not benefit from new development.⁶⁹ Local hire programs help address the fragmentation inherent in the development process, establishing better communication among developers, employers, community organizations, local job training resources, and the workforce development system that can provide job readiness and job retention support services.⁷⁰ Here, the Project Applicant has not made a commitment to ensure the Project is built with local skilled and trained workforce. The Project is therefore likely to be detrimental to City goals and the Berkeley community – particularly to its highly qualified construction workforce, who may not have the opportunity to build much-needed housing in their own community. The City should request the Applicant provide a local hire percentage of 30 percent as a community benefit for the Project.

B. The Project is Detrimental to the General Welfare for Failing to Provide Healthcare to Construction Workers

Further, the Project has not committed to healthcare standards or benefits for the construction workers building the Project. This results in a detriment to the general welfare of the City and its residents, including in particular, to its construction worker residents. By failing to provide healthcare for its construction

⁶⁹ Kathleen Mulligan-Hansel, *Making Development Work for Local Residents: Local Hire Programs and Implementation Strategies that Serve Low-Income Communities*, (July 2008). Available at: <u>https://s3.amazonaws.com/proggov21-</u>

uploads/uploads/asset/asset file/Making Development Work Local Residents Mulligan-HanselPWF2008.pdf.

⁷⁰ *Id*. 6154-007i

workers, the Project leaves the responsibility of providing for the health, safety, and welfare of the workers and the community on the workers themselves, or on taxpayer-funded public assistance, thus externalizing the cost of construction. By failing to provide healthcare standards, the Project would perpetuate existing income and healthcare inequities for construction workers, causing a detriment to the general welfare by failing to provide for the health and safety of its workers. The City should request the Applicant provide healthcare benefits as a community benefit of the Project.

Project construction will increase the local demand for a construction workforce. The Project's lack of workforce standards and worker healthcare may exacerbate the existing demand for local affordable housing and public services by construction workers that currently receive low pay without benefits. Without mitigation, these impacts remain significant, and the ZAB cannot make the necessary findings that the Project complies with the General Plan and zoning code. To comply with the General Plan Economic Development and Employment Element, the City must ensure that new housing developments provide jobs that go to Berkeley residents and provide job training programs and job readiness.

Moreover, the Municipal Code provides that the "Zoning Ordinance establishes *minimum* requirements to promote the public health, safety, and general welfare."⁷¹ The Municipal Code also provides that, "[t]o the extent possible, it is the government's responsibility to balance the responsibility to ensure the health, safety, and general welfare of the public at large in a fiscally and environmentally sustainable manner."⁷² It is therefore the responsibility of the Zoning Adjustment Board to promote the general welfare beyond the minimum required by law. Here, the ZAB must require the Project to include community benefits like those detailed herein, otherwise, the Project contravenes the Municipal Code and General Plan.

VII. THE PROJECT IS INCONSISTENT WITH THE GENERAL PLAN

CEQA requires an agency to analyze whether a project conforms with the applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an

⁷¹ BMC § 22.104.030.

⁷² Id. at § 2.09.020.

⁶¹⁵⁴⁻⁰⁰⁷j

environmental effect.⁷³ The Addendum fails as an informational document under CEQA for failing to analyze the Project's inconsistency with the General Plan.

A. The Project is Inconsistent with the General Plan Economic Development & Employment Element

The Project is inconsistent with the General Plan Economic Development & Employment Element, and thus cannot be approved until consistency is demonstrated.⁷⁴ The General Plan Economic Development and Employment Element Policy (ED-1) provides that the City must "[i]ncrease the number of jobs that go to Berkeley citizens by coordinating economic development efforts with employment placement."⁷⁵ Further, the General Plan provides that the City intends to "[w]ork with job training programs and encourage training for life skills, job readiness, and specific target industries."⁷⁶ The Project does not include any commitment to provide construction jobs to Berkeley or East Bay residents, and does not contribute to any apprenticeship or other construction job training programs. Housing development projects in the City must also implement the goals and policies of the General Plan, including the following:

- 1) Ensure that Berkeley has an adequate supply of decent housing, living wage jobs, and businesses providing basic goods and services.
- 2) New housing will be developed to expand housing opportunities in Berkeley to meet the needs of all income groups.⁷⁷

The City has determined that "it is in the City of Berkeley's economic interest to support a pipeline of skilled workers to accomplish the construction objectives and policies of the Berkeley General Plan."⁷⁸ The Project must support this goal by

⁷³ CEQA Guidelines Appendix G, XI Land Use and Planning.

 $^{^{74}}$ SB 330 requires conformance with applicable, objective general plan and zoning standards. Gov. Code § 65905.5. (a).

⁷⁵ Berkeley General Plan Economic Development and Employment Element, p. ED-5. Available at: <u>https://berkeleyca.gov/sites/default/files/documents/12_Economic%20Development%20and%20Employment%20Element-FINAL.pdf</u>.

⁷⁶ Id.

⁷⁷ Berkeley General Plan Economic Development and Employment Element, p. ED-5.

⁷⁸ City of Berkeley, Agenda and Staff Report, Berkeley City Council, Council Consent Item 14 Helping Achieve Responsible Development with Healthcare and Apprenticeship Training Standards (HARD HATS), <u>https://berkeleyca.gov/sites/default/files/city-council-meetings/2022-09-</u> <u>20%20Agenda%20Packet%20-%20Council%20-%20WEB.pdf</u> ("HARD HATS Staff Report") (Sept. 20, 2022) p. 7.

⁶¹⁵⁴⁻⁰⁰⁷j

including community benefits such as local hire and healthcare and workforce benefits, otherwise the Project is detrimental to the general welfare, violates the General Plan, and may not be approved.

Moreover, the Project's failure to provide sufficient affordable housing onsite contravenes the General Plan's objective that development in the City should ensure an "adequate supply of decent housing."⁷⁹ The City may allow the Applicant to pay a fee, in-lieu of providing an adequate supply of affordable housing on the Project site.⁸⁰ If the City continues this practice of allowing developers to get away with paying in lieu fees, instead of providing onsite affordable housing, the City will have an insufficient supply of decent affordable housing as required by the General Plan. The Project's failure to provide *onsite* affordable housing for local residents therefore contravenes the General Plan's Economic Development and Employment Element and cannot be approved by ZAB.

VIII. THE PROJECT IS INCONSISTENT WITH THE CITY'S HOUSING ELEMENT

CEQA requires an agency to analyze whether a project conforms with the applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.⁸¹ The Addendum fails as an informational document under CEQA for failing to analyze the Project's inconsistency with the Housing Element.

The Project proposes to construct a ten-story residential building containing 166 dwelling units (17 Very Low-Income unit).⁸² The project is seeking a 50% Density Bonus by providing 15% of the base project units as affordable to very low-income households. The Developer stated in their application for the Project that in order to "comply with City of Berkeley Affordable Housing rental requirements, the project will also be providing additional Affordable Units and/or/or-in-combination-

⁷⁹ Berkeley General Plan Economic Development and Employment Element, p. ED-5.

⁸⁰ City of Berkeley Planning and Development, Zoning Project Application, 3000 Shattuck Ave. Berkeley CA 94705 (March 14, 2022), <u>https://www.dropbox.com/s/n987ldxqb6pesmp/2022-03-29 APP PCKT 3000%20Shattuck%20%281%29.pdf?dl=0</u>.

⁸¹ CEQA Guidelines Appendix G, XI Land Use and Planning.

⁸² Addendum p. 2.

⁶¹⁵⁴⁻⁰⁰⁷j

with providing an in-lieu Mitigation Fee per the City of Berkeley requirements."⁸³ More affordable units must be provided for the Project to be consistent with the City's Housing Element and state law.

The Regional Housing Needs Assessment is the California State-required process that seeks to ensure cities and counties plan for enough housing in their Housing Element cycle to accommodate all economic segments of the community.⁸⁴ Accordingly, the Housing Element of the City's General Plan identifies the City's housing conditions and needs, evaluates the City's ability to meet its Regional Housing Needs Allocation ("RHNA"), establishes the goals, objectives, and policies of the City's housing strategy, and provides an array of programs to create mixedincome neighborhoods across the City.⁸⁵ The Housing Element, which was amended on February 17, 2023, states that "the City has a remaining RHNA of 5,033 units (1,923 very low income; 852 low income; 1,227 moderate income; and 1,031 above moderate income units)... The City must identify adequate sites capacity for this remaining RHNA."86 Accordingly, Policy H-1 – Extremely Low, Very Low, Low and Moderate-Income Housing – provides: "Increase the number of housing units affordable to Berkeley residents with lower income levels."87 Because the City has not produced and is not expected to produce enough affordable housing to meet its RHNA, projects that do not contribute to the City's RHNA are inconsistent with the City's Housing Element, a primary goal of which is to meet the RHNA.

Berkeley Municipal Code Section 23.328.010 provides that residential housing projects constructing five or more dwelling units must include at least 20 percent of the total number of dwelling units within the project as inclusionary units. As an alternative to providing inclusionary units required in an ownership project, the applicant may elect to enter in an agreement with the City to pay fees in-lieu of providing below-market rate units.⁸⁸

⁸³ City of Berkeley Planning and Development, Zoning Project Application, 3000 Shattuck Ave. Berkeley CA 94705 (March 14, 2022), <u>https://www.dropbox.com/s/n987ldxqb6pesmp/2022-03-29 APP PCKT 3000%20Shattuck%20%281%29.pdf?dl=0</u>.

⁸⁴ Cal. Gov. Code Section 65580 – 65589.9; *see* City of Berkeley, Adopted 2023-2031 Housing Element, available at <u>https://berkeleyca.gov/sites/default/files/documents/Berkeley_2023-2031%20Housing%20Element_02-17-2023v2_0.pdf</u>.

 $^{^{85}}Id.$

 $^{^{86}}$ City of Berkeley, Adopted 2023-2031 Housing Element, p 107.

 $^{^{87}}$ Id. at 15.

⁸⁸ Effective July 1, 2022, the fee is set at follows: Paid at Certificate of Occupancy: \$46,185 per rental unit; or Paid at building permit: \$43,185 per rental unit. 6154-007j

However, the City has failed to meet its RHNA in previous cycles. Under the 5th RHNA Cycle from 2015-2023, Berkeley was required to plan for 2,959 units.⁸⁹ This includes 532 at very low income, 442 at low income, 584 at moderate income, and 1,401 at above moderate income. The Housing Element states that 3,742 units have been built, or 126% of the target. However, the targets for affordable housing were missed, with 309 very low income (58%), 130 low income (29%), and 106 moderate income (18%) units completed. 3,197 units of above moderate, or market rate housing was built, which was 228% of the goal. Thus, the City already has adequate above moderate and market rate housing units to meet its RHNA requirements, but is short on production of affordable units.

Here, the Project fails to provide the City's required 20% affordable units onsite, contributing to the City's current shortage of affordable units, while at the same time taking a viable project site out of production for those additional affordable units. Although the Project will pay an in-lieu fee, the Project would not be consistent with the Housing Element because it places the burden on the City to identify alternate sites to construct affordable housing units in time to meet its RHNA requirements.⁹⁰

The Applicant's proposal to pay in lieu fees instead of providing 20% on-site affordable units for the 3000 Shattuck Project is not unique. The Project is one of at least three concurrent projects proposed by the Applicant, which similarly fail to contribute an adequate percentage of affordable units. The Applicant also proposes to construct the 2900-2920 Shattuck Avenue Project,⁹¹ a ten-story residential building containing 221 dwelling units (22 Very Low-Income unit).⁹² The 2920 Shattuck Avenue project is seeking a 46.25% Density Bonus by providing only 14% of the base project units as affordable to very low-income households.⁹³ The Applicant's 1598 University Project similarly proposes to pay an in lieu fee for the affordable units required by the City in excess of the on-site affordable necessary to qualify for a density bonus. The Applicant's decision not to provide the recommended 20% of on-site affordable units for its pending projects contributes to a cumulative shortage of affordable units that the City should address before considering approval of this Project.

⁸⁹ City of Berkeley, Adopted 2023-2031 Housing Element, pg. D-8.

⁹⁰ City of Berkeley, Adopted 2023-2031 Housing Element, p. 107.

⁹¹ Use Permit #ZP2022-0116 (APN: 053 159000501).

⁹² City of Berkeley, Zoning Project Application, 2920 Shattuck Ave. Berkeley CA 94705, APN 053 159000501, (Sept. 4, 2022), <u>https://www.dropbox.com/s/528twax3fw4fw9p/2022-09-</u>

<u>04 APP PCKT 2920%20Shattuck.pdf?dl=0</u> ("Application Packet"), pdf pg. 2108 of 2143. ⁹³ City of Berkeley, Zoning Project Application, 2920 Shattuck Ave. 6154-007j

IX. CONCLUSION

CEQA requires that an agency prepare an EIR whenever there is substantial evidence that the changes to a project for which a negative declaration was previously approved may have a significant environmental impact not previously considered in connection with the project as originally approved.⁹⁴ As discussed herein, there is substantial evidence supporting a fair argument that the Project would result in significant adverse impacts that were not considered in the prior 2018 IS/ND, and that are not adequately analyzed or mitigated. The Project is detrimental to the general welfare for failing to provide workforce and community benefits.

The Addendum also fails to contain the basic information and analysis required by CEQA, deficiencies which "cannot be dismissed as harmless or insignificant defects." ⁹⁵ The City's findings regarding Project impacts do not comply with the law and are not supported by substantial evidence. The City cannot approve the Project until it prepares an EIR that resolves these issues and complies with CEQA's requirements.

Thank you for your attention to these comments. Please include them in the record of proceedings for the Project.

Sincerely,

Helild redecen

Kelilah D. Federman

KDF:ljl

⁹⁴ Friends of College of San Mateo Gardens v. San Mateo County Community College Dist. (2016) 1 Cal.5th 937, 958.

⁹⁵ Bakersfield Citizens for Local Control v. Bakersfield ("Bakersfield") (2004) 124 Cal. App. 4th 1184, 1220.
6154-007j

EXHIBIT A

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 46 of 110



Technical Consultation, Data Analysis and Litigation Support for the Environment

> 2656 29th Street, Suite 201 Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg. (949) 887-9013 <u>mhagemann@swape.com</u>

> Paul E. Rosenfeld, PhD (310) 795-2335 prosenfeld@swape.com

April 10, 2023

Kelilah Federman Adams Broadwell Joseph & Cardozo 601 Gateway Blvd #1000 South San Francisco, CA 94080

Subject: Comments on the 3000 Shattuck Mixed-Use Project (SCH No. 2017062025)

Dear Ms. Federman,

We have reviewed the January 2023 Addendum ("Addendum") and the 2018 Final Initial Study and Negative Declaration ("FIS/ND") for the 3000 Shattuck Mixed-Use ("Project") located in the City of Berkeley ("City"). The Project proposes to demolish the existing 1,163-square-foot ("SF") gas station and construct 80,235-SF of residential space, as well as 1,095-SF of retail space on the 0.31-acre site.

Our review concludes that the Addendum fails to adequately evaluate the Project's air quality impacts. As a result, emissions associated with construction of the proposed Project are underestimated and inadequately addressed. An Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential air quality impacts that the project may have on the environment.

Air Quality

Failure to Provide Complete CalEEMod Output Files

Land use development projects under the California Environmental Quality Act ("CEQA") typically evaluate air quality impacts and calculate potential criteria air pollutant emissions using the California Emissions Estimator Model ("CalEEMod").¹ 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. Once all of the values are inputted into the model, the Project's

¹ "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* <u>https://www.aqmd.gov/caleemod/user's-guide</u>.

construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected. Regarding the evaluation of the criteria air pollutant emissions associated with Project construction and operation, the Addendum states:

"Additionally, since the adoption of the 2018 Final IS-ND, a new version (2022.1) of California Emissions Estimator Model (CalEEMod) has been published. Based on these updates, updated emissions estimates for the modified project were calculated for this analysis" (p. 14).

As stated above, the Addendum relies on CalEEMod Version 2022.1 to estimate the Project's emissions. However, this poses a problem as the currently available version of CalEEMod 2022.1 is described as a "soft release" which fails to provide complete output files.² Specifically, the "User Changes to Default Data" table no longer provides the quantitative counterparts to the changes to the default values (see excerpt below) (Appendix A, pp. 83):

8. User Changes to Default Data

Screen	Justification
Land Use	Project site plans
Construction: Construction Phases	Applicant provided
Operations: Hearths	no fireplaces or woodstoves

However, previous CalEEMod Versions, such as 2020.4.0, include the specific numeric changes to the model's default values (see example excerpt below):

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	167.00
tblConstructionPhase	PhaseEndDate	11/22/2023	8/25/2023
tblConstructionPhase	PhaseEndDate	9/27/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	10/25/2023	7/28/2023
tblConstructionPhase	PhaseStartDate	10/26/2023	7/29/2023
tblConstructionPhase	PhaseStartDate	9/28/2023	7/1/2023
tblLandUse	LandUseSquareFeet	160,000.00	160,371.00
tblLandUse	LandUseSquareFeet	119,000.00	41,155.00
tblLandUse	LotAcreage	3.67	3.68
tblLandUse	LotAcreage	2.73	2.74

Thus, the output files associated with CalEEMod Version 2022.1 fail to disclose the exact parameters utilized to calculate Project emissions. To remedy this issue, the Addendum should have provided access to the model's ".JSON" output files, which allow third parties to review the model's revised input parameters.³ Without access to the complete output files, including the specific numeric changes to the

² "CalEEMod California Emissions Estimator Model Soft Release." California Air Pollution Control Officers Association (CAPCOA), 2022, *available at:* <u>https://caleemod.com/</u>.

³ "Video Tutorials for CalEEMod Version 2022.1." California Air Pollution Control Officers Association (CAPCOA), May 2022, *available at:* <u>https://www.caleemod.com/tutorials</u>.

default values, we cannot verify that the Addendum's air modeling and subsequent analysis is an accurate reflection of the proposed Project. As a result, an EIR should be prepared to include an updated air quality analysis that correctly provides the complete output files for CalEEMod Version 2022.1, or includes an updated air model using an older release of CalEEMod.⁴

Unsubstantiated Input Parameters Used to Estimate Project Emissions

As previously discussed, the Addendum relies on CalEEMod Version 2022.1 to estimate the Project's air quality emissions and fails to provide the complete output files required to adequately evaluate model's analysis (p. 14).⁵ Regardless, when reviewing the Project's CalEEMod output files, provided as Appendix A to the Addendum, we were able to identify several model inputs that are inconsistent with information disclosed in the Addendum. As such, the Project's construction emissions are underestimated. An EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction of the Project will have on local and regional air quality.

Incorrect and Unsubstantiated Construction Schedule

Review of the CalEEMod output files demonstrates that the "3000 Shattuck Detailed Report" model includes the following construction schedule (see excerpt below) (Appendix A, pp. 70):

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase
Site Preparation	Site Preparation	7/3/2023	11/15/2023	5.00	98.0
Grading	Grading	11/16/2023	1/1/2024	5.00	33.0
Building Construction	Building Construction	1/2/2024	2/10/2025	5.00	290
Paving	Paving	1/2/2024	7/31/2024	5.00	152
Architectural Coating	Architectural Coating	2/11/2025	3/30/2025	5.00	34.0

According to the "User Changes to Default Data" table, the justification provided for this schedule is:

"Applicant provided" (Appendix A, pp. 83).

Additionally, regarding Project construction, the Addendum states:

"Site preparation, construction procedures, and proposed utility connections would remain like the original project. Please refer to the 2018 Final IS-ND for details regarding these project components. Overall construction of the modified project would occur over a similar time span as was anticipated for the original project but would be more intensive due to the height increase" (p. 2).

Furthermore, regarding the Project's anticipated construction duration, the FIS/ND states:

"The project would include demolition of the existing building and surface parking lot on the site. [...] Construction would take place over an 18-month period" (p. 7).

⁴ "CalEEMod Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* <u>http://www.aqmd.gov/caleemod/download-model</u>.

⁵ "CalEEMod Version 2022.1.0." California Air Pollution Control Officers Association (CAPCOA), May 2022, available at: <u>https://www.caleemod.com/</u>.

However, the model's construction schedule is incorrect and unsubstantiated for three reasons.

First, as discussed by the FIS/ND, the construction of the Project is anticipated to occur over 18 months. However, the model includes a 21-month total construction length, and is therefore overestimated by 3 months. By including an overestimated construction schedule, the model is incorrect and inconsistent with information provided by the Addendum and associated documents.

Second, the model does not include a demolition phase of construction. This is incorrect, as the Addendum clearly states that demolition would be required prior to Project construction:

"Like the original project, the modified project would involve demolition of the existing structures on the site, as detailed in the 2018 Final IS-ND for the original project" (p. 6)

As such, the model's construction schedule is incorrect and inconsistent with information provided by the Addendum and associated documents.

Third, the model's revised construction schedule remains unsubstantiated as the Addendum and associated documents fail to mention the Project's proposed *individual* construction phases whatsoever. This is inconsistent with guidance provided by the CalEEMod User's Guide:

"CalEEMod was also designed to allow the user to change the defaults to reflect site-or projectspecific information, when available, provided that the information is supported by substantial evidence as required by CEQA."⁶

As the Addendum and associated documents only mention the Project's total construction duration of 18 months, the Addendum fails to provide substantial evidence to support the revised individual construction phase lengths. As such, we cannot verify the changes. Instead, the model should have proportionately altered all phase lengths to match the proposed construction duration of 18 months.⁷

By including an incorrect and overestimated construction schedule, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. As a result, there will be less construction activities required per day and, consequently, less pollutants emitted per day. As such, the model underestimates the peak daily emissions associated with Project construction and should not be relied upon to determine Project significance.

Failure to Model Demolition

Regarding demolition of the existing building, the Addendum states:

"Like the original project, the modified project would involve demolition of the existing structures on the site, as detailed in the 2018 Final IS-ND for the original project" (p. 6)

⁶ "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <u>https://www.aqmd.gov/caleemod/user's-guide</u>,p. 13,14.

⁷ See Attachment A for proportionately altered construction schedule.

However, as previously mentioned, review of the CalEEMod output files demonstrates that the "3000 Shattuck Detailed Report" model fails to include a demolition phase of construction. Furthermore, the model fails to include any amount of demolition debris (see excerpt below) (Appendix A, pp. 72).

Phase Name	Material Imported (Ton of Debris)	Material Exported (Ton of Debris)	Acres Graded (acres)	Material Demolished (sq. ft.)
Site Preparation	0.00	0.00	20.5	0.00
Grading	0.00	0.00	15.8	0.00
Paving	0.00	0.00	0.00	0.00

By failing to include any amount of demolition material, the model is inconsistent with the information provided in the Addendum.

This inconsistency presents an issue, as demolition material is used by CalEEMod to determine emissions associated with the demolition phase of construction. The three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.⁸ By failing to include any amount of required demolition, the model underestimates the emissions associated with fugitive dust, debris removal, as well as exhaust from hauling trucks traveling to and from the site, and should not be relied upon to determine the significance of the Project's air quality impacts.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to more accurately estimate the Project's construction-related emissions we prepared an updated CalEEMod model, using the Project-specific information provided by the Addendum. In our updated model, we included the required amount of demolition and proportionately altered the individual construction phase lengths to match the proposed construction duration of 18 months.⁹

Our updated analysis estimates that the Reactive Organic Gas ("ROG") emissions associated with Project construction exceed the applicable BAAQMD threshold of 54 pounds per day ("lbs/day"), as referenced by the Addendum (p. 14) (see table below).¹⁰

⁹ See Attachment B for updated CalEEMod model.

⁸ "CalEEMod User's Guide Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <u>https://www.aqmd.gov/caleemod/user's-guide</u>, p. 11.

¹⁰ "California Environmental Quality Act Air Quality Guidelines." BAAQMD, May 2017, *available at:* <u>https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en&rev=0d2d971e661d41f28a56953f1776bdde</u>, p. 2-2.

SWAPE Criteria Air Pollutant Emissions	
Construction ROG (lbs/day)	
Addendum	3.0
SWAPE	71.55
% Increase	2,285%
BAAQMD Threshold	54
Exceeds?	Yes

As demonstrated above, construction-related ROG emissions, as estimated by SWAPE, increase by approximately 2,285% and exceed the applicable BAAQMD significance threshold. Our updated modeling demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed by the Addendum. As a result, an EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the environment.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant air quality impacts that should be mitigated further. As such, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Therefore, to reduce the Project's emissions, we recommend consideration of SCAG's 2020 *RTP/SCS* PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1"):¹¹

SCAG RTP/SCS 2020-2045

Air Quality Project Level Mitigation Measures – PMM-AQ-1:

In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:

a) Minimize land disturbance.

b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.

c) Cover trucks when hauling dirt.

d) Stabilize the surface of dirt piles if not removed immediately.

¹¹ "4.0 Mitigation Measures." Connect SoCal Program Environmental Impact Report Addendum #1, September 2020, available at: <u>https://scag.ca.gov/sites/main/files/file-</u>

<u>attachments/fpeir_connectsocal_addendum_4_mitigationmeasures.pdf?1606004420</u>, p. 4.0-2 – 4.0-10; 4.0-19 – 4.0-23; See also: "Certified Final Connect SoCal Program Environmental Impact Report." Southern California Association of Governments (SCAG), May 2020, *available at:* <u>https://scag.ca.gov/peir</u>.

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 52 of 110

e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.

f) Minimize unnecessary vehicular and machinery activities.

g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.

h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.

j) Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet.

k) Ensure that all construction equipment is properly tuned and maintained.

I) Minimize idling time to 5 minutes—saves fuel and reduces emissions.

m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.

n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.

o) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.

p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.

q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 equipment for all engines above 50 horsepower (hp) unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.

s) Projects located within AB 617 communities should review the applicable Community Emissions Reduction Plan (CERP) for additional mitigation that can be applied to individual projects.

t) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs.

u) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors).

x) As applicable for rail projects, the following measures should be considered...

z) Develop an ongoing monitoring, inspection, and maintenance program for the MERV filters.

bb) The following criteria related to diesel emissions shall be implemented on by individual project sponsors as appropriate and feasible:

- Diesel nonroad vehicles on site for more than 10 total days shall have either (1) engines that meet EPA on road emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%
- Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
- Nonroad diesel engines on site shall be Tier 2 or higher.
- Diesel nonroad construction equipment on site for more than 10 total days shall have either (1) engines meeting EPA Tier 4 nonroad emissions standards or (2) emission control technology verified by EPA or

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 53 of 110

	CARB for use with nonroad engines to reduce PM emissions by a minimum of 85% for engines for 50 h and greater and by a minimum of 20% for engines less than 50 hp.
-	
-	
	content of 15 ppm or less.
-	
	i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment.
	ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.
	 For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
-	The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or
	unload material on site. Such zones shall be located where diesel emissions have the least impact on
	abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
-	The contractor shall maintain a monthly report that, for each on road diesel vehicle, nonroad
	construction equipment, or generator onsite, includes:
	i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
	ii. Any problems with the equipment or emission controls.
	iii. Certified copies of fuel deliveries for the time period that identify:
	1. Source of supply
	2. Quantity of fuel
	3. Quantity of fuel, including sulfur content (percent by weight)

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation.

Furthermore, as it is policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045, we emphasize the applicability of incorporating solar power system into the Project design. Until the feasibility of incorporating on-site renewable energy production is considered, the Project should not be approved.

An EIR should be prepared to include all feasible mitigation measures, as well as include an updated air quality analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

M Hara

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

Paul Rosufeld

Paul E. Rosenfeld, Ph.D.

Attachment A: Proportionately Altered Construction Schedule Attachment B: Updated CalEEMod Output Files Attachment C: Matt Hagemann CV Attachment D: Paul Rosenfeld CV Attachment A



2656 29th Street, Suite 201 Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg. (949) 887-9013 <u>mhagemann@swape.com</u>

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization Investigation and Remediation Strategies Litigation Support and Testifying Expert Industrial Stormwater Compliance CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984. B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist California Certified Hydrogeologist Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 present);
- Geology Instructor, Golden West College, 2010 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 56 of 110

- Executive Director, Orange Coast Watch (2001 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 1998);
- Instructor, College of Marin, Department of Science (1990 1995);
- Geologist, U.S. Forest Service (1986 1998); and
- Geologist, Dames & Moore (1984 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

• Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

• Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers. Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann**, M.F. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, **M.F**., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, **M.F**., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, **M.F**., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPLcontaminated Groundwater. California Groundwater Resources Association Meeting. **Hagemann, M.F**., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

Attachment B



Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE 2656 29th Street, Suite 201 Santa Monica, California 90405 Attn: Paul Rosenfeld, Ph.D. Mobil: (310) 795-2335 Office: (310) 452-5555 Fax: (310) 452-5550 Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher) UCLA School of Public Health; 2003 to 2006; Adjunct Professor UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator UCLA Institute of the Environment, 2001-2002; Research Associate Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist National Groundwater Association, 2002-2004; Lecturer San Diego State University, 1999-2001; Adjunct Professor Anteon Corp., San Diego, 2000-2001; Remediation Project Manager Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager Bechtel, San Diego, California, 1999 – 2000; Risk Assessor King County, Seattle, 1996 – 1999; Scientist James River Corp., Washington, 1995-96; Scientist Big Creek Lumber, Davenport, California, 1995; Scientist Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld**, **P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). The Risks of Hazardous Waste. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & Rosenfeld, P.E. (2011). Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld**, **P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & Rosenfeld, P.E. (2010). Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & Rosenfeld, P.E. (2009). Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld**, **P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld**, **P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld**, **P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld**, **P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, **P.E.**, J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., Rosenfeld, P.E. (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, **P.E.**, and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality*. 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, **P.E.**, and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, **P.E.**, and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. Heritage Magazine of St. Kitts, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, **P.E**., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International*

Paul E. Rosenfeld, Ph.D.

Conferences on Soils Sediment and Water. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23rd Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

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

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. 2005 National Groundwater Association Ground Water And Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. 2005 National Groundwater Association Ground Water and Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld**, **Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants.*. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association.* Lecture conducted from Barcelona Spain.

Rosenfeld, **P.E**. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, **P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery* Association. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, **P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, **P.E.**, C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 70 of 110

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants Case No.: No. 0i9-L-2295 Rosenfeld Deposition, 5-14-2021 Trial, October 8-4-2021

In the Circuit Court of Cook County Illinois Joseph Rafferty, Plaintiff vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK, Case No.: No. 18-L-6845

Rosenfeld Deposition, 6-28-2021

In the United States District Court For the Northern District of Illinois Theresa Romcoe, Plaintiff vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail, Defendants Case No.: No. 17-cv-8517 Rosenfeld Deposition, 5-25-2021

- In the Superior Court of the State of Arizona In and For the Cunty of Maricopa Mary Tryon et al., Plaintiff vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc. Case Number CV20127-094749 Rosenfeld Deposition: 5-7-2021
- In the United States District Court for the Eastern District of Texas Beaumont Division Robinson, Jeremy et al *Plaintiffs*, vs. CNA Insurance Company et al. Case Number 1:17-cv-000508 Rosenfeld Deposition: 3-25-2021
- In the Superior Court of the State of California, County of San Bernardino Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company. Case No. 1720288 Rosenfeld Deposition 2-23-2021
- In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al. Case No. 18STCV01162 Rosenfeld Deposition 12-23-2020
- In the Circuit Court of Jackson County, Missouri Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*. Case No.: 1716-CV10006 Rosenfeld Deposition. 8-30-2019
- In the United States District Court For The District of New Jersey Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*. Case No.: 2:17-cv-01624-ES-SCM Rosenfeld Deposition. 6-7-2019

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 71 of 110

In the United States District Court of Southern District of Texas Galveston Division M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*. Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237 Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants Case No.: No. BC615636 Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants Case No.: No. BC646857 Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado Bells et al. Plaintiff vs. The 3M Company et al., Defendants Case No.: 1:16-cv-02531-RBJ Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants Cause No.: 1923 Rosenfeld Deposition, 11-17-2017

- In The Superior Court of the State of California In And For The County Of Contra Costa Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants Cause No C12-01481 Rosenfeld Deposition, 11-20-2017
- In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants Case No.: No. 0i9-L-2295 Rosenfeld Deposition, 8-23-2017
- In United States District Court For The Southern District of Mississippi Guy Manuel vs. The BP Exploration et al., Defendants Case: No 1:19-cv-00315-RHW Rosenfeld Deposition, 4-22-2020
- In The Superior Court of the State of California, For The County of Los Angeles Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC Case No.: LC102019 (c/w BC582154) Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018
- In the Northern District Court of Mississippi, Greenville Division Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants* Case Number: 4:16-cv-52-DMB-JVM Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants Case No.: No. 13-2-03987-5 Rosenfeld Deposition, February 2017 Trial, March 2017

In The Superior Court of the State of California, County of Alameda Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants Case No.: RG14711115 Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants Case No.: LALA002187 Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia Robert Andrews, et al. v. Antero, et al. Civil Action N0. 14-C-30000 Rosenfeld Deposition, June 2015

In The Iowa District Court For Muscatine County Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant Case No 4980 Rosenfeld Deposition: May 2015

- In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant. Case Number CACE07030358 (26) Rosenfeld Deposition: December 2014
- In the County Court of Dallas County Texas Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*. Case Number cc-11-01650-E Rosenfeld Deposition: March and September 2013 Rosenfeld Trial: April 2014
- In the Court of Common Pleas of Tuscarawas County Ohio John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants* Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987) Rosenfeld Deposition: October 2012
- In the United States District Court for the Middle District of Alabama, Northern Division James K. Benefield, et al., *Plaintiffs*, vs. International Paper Company, *Defendant*. Civil Action Number 2:09-cv-232-WHA-TFM Rosenfeld Deposition: July 2010, June 2011
- In the Circuit Court of Jefferson County Alabama Jaeanette Moss Anthony, et al., *Plaintiffs*, vs. Drummond Company Inc., et al., *Defendants* Civil Action No. CV 2008-2076 Rosenfeld Deposition: September 2010
- In the United States District Court, Western District Lafayette Division Ackle et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*. Case Number 2:07CV1052 Rosenfeld Deposition: July 2009

Jacob, Melinda

From:	Zoning Adjustments Board (ZAB)
Subject:	FW: SUPPLEMENTAL OBJECTIONS TO 3000 SHATTUCK PROJECT PLANS, #ZP2022-00046, 5/11/23
	ZAB MEETING

From: Larisa Cummings <pidicummings@gmail.com>
Sent: Tuesday, May 9, 2023 4:09 PM
To: Zoning Adjustments Board (ZAB) <Planningzab@cityofberkeley.info>
Cc: Gong, Sharon <SGong@cityofberkeley.info>; Burns, Anne M <ABurns@cityofberkeley.info>; All Council
<council@cityofberkeley.info>; Berkeley Mayor's Office <mayor@cityofberkeley.info>
Subject: SUPPLEMENTAL OBJECTIONS TO 3000 SHATTUCK PROJECT PLANS, #ZP2022-00046, 5/11/23 ZAB MEETING

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Dear ZAB members:

As neighbors to the proposed plans to develop 3000 Shattuck Avenue, we strenuously object to the project on numerous health and safety grounds, per applicable state law. Far from being merely obstructionist, we bring to your attention that the City is overlooking state laws that exist to protect public health and safety. Further, we are concerned about the obvious inequities at hand; clearly, this part of Berkeley is bearing the brunt of intensive multi-family housing development, whereas this kind of housing should be spread equitably throughout the city and its transit hubs.

We are asking the ZAB to deny issuance of Use Permit #ZP2022-0046 at the upcoming May 11, 2023 meeting until the concerns below are appropriately addressed:

1. The City's recommendation – that ZAB adopt the Addendum to the Initial Study/Negative Declaration and approve Use Permit #ZP2022-0046 pursuant to BMC Section 23.406.040 – is not in compliance with the California Environmental Quality Act (CEQA). To protect public health and safety, a subsequent Environmental Impact Review pursuant to CEQA is clearly required.

A. State law SB330 expressly requires the City to comply with CEQA per Govt. Code Section 65589.5(e).

The City's January 2023 Addendum to the 3000 Shattuck Avenue Project Initial Study - Negative Declaration largely fails to comply with its obligations under CEQA.

i. No Cumulative Impact Study Has Been Performed

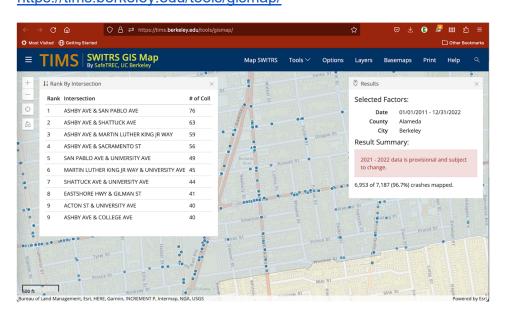
Section 15355 of the State CEQA Guidelines defines a cumulative impact as the condition under which "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. (a) The individual effects may be changes resulting from a single project or a number of separate projects. (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." Title 14, California Code of Regulations, Section 15355. Further, Section 15130 explicitly requires a

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 74 of 110

factual analysis. Section 15332 addresses in-fill development projects and requires a finding that "(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality." Section 15065 lists mandatory findings of significant effect, which must be evaluated. In other words, the City is required to evaluate these potential impacts, including analysis of cumulative impacts of all closely related projects. Note that there are quite a number of closely related current projects.

In its January 2023 Addendum (pp. 11-12) to the 3000 Shattuck Avenue Project Initial Study -Negative Declaration, the City listed only four projects in the vicinity of 3000 Shattuck: 2650 Telegraph, 2801 Adeline, 2440 Shattuck, and Ashby BART. In its January Addendum, the City made no analysis of those sites or impacts, but rather simply listed them in its determination that "The existing environmental conditions on and around the project site are substantially the same under present conditions as those described in the 2018 Final IS-ND, with the exception of two relevant changes described below in Section 4.1." Addendum p. 11. Section 4.1 similarly makes no analysis of the sites or impacts, but simply lists the same four projects. However, a careful recent search of several sources has identified fifteen projects in the vicinity. No comprehensive listing by the City could be located, which makes it very difficult for the public to follow these developments. Note the following developments:

- Five (5) projects are very intensively situated in a one to two block radius. 3000 Shattuck and two more projects are *the tallest (9-10 stories) with the most units* of the 15 projects, in the vulnerable and dangerous Russell-Shattuck-Ashby corridor, and where the Russell Bike Boulevard traverses Shattuck. None of them provide for onsite loading zones, or any planning for right-of-way improvements or features to facilitate safe loading in an age of intensive loading activity, e.g., ride-hailing, food and commercial deliveries, service vehicles, etc., which often double park. For an example of the long-standing traffic hazards, note that the Shattuck/Ashby intersection is second only to San Pablo/Ashby intersection in the City's crash rate for the period from 2011 through 2022 - https://tims.berkeley.edu/tools/gismap/



- Four (4) projects surround these projects within another one to three block radius (including where the Russell Bike Boulevard traverses Adeline),

- the remaining six (6) projects fall within the area covered by the January 2023 Addendum's original listing of four projects. See this appendix:

2023 COB Multi-family Housing Projects - in/nr S. Berk.xlsx

In summary, the City must fully comply with CEQA; the January 2023 Addendum has no analysis of cumulative impacts at all, nor does the 2018 Final Initial Study - Negative Declaration, regarding a much smaller design for 3000 Shattuck.

ii. Erroneous or Misleading Conclusions

In the January 2023 Addendum, Section 2, Project Description, two statements are inaccurate and misleading, overlooking adverse impacts on the surrounding community, including but not limited to, extra traffic congestion, noise, odors, etc. Although they pertain to the construction phase only, they need to be reconsidered or rewritten.

--Duration of construction, estimated to be 18 months to construct the five-story structure in the previously proposed project (see 2018 Final Initial Study - Negative Declaration cited in January 2023 Addendum), is estimated to be the *same length of time to build* out the revised building of ten-stories. This is highly unrealistic. Construction duration can be foreshortened somewhat, by accelerating the work, but not without incurring large amounts of additional costs, raising the overall project budget far beyond levels of competitive pricing. Addendum p. 2 and p. 3, Table 1.

--Foundation work for the ten-story building is similarly projected to be comparable to the foundation's scope for the five-story building. It might be similar in terms of foundation type (spread footings, most likely) but with a doubling of the size of the structure, a stronger type of foundation might be necessitated (drilled pier-and-grade beam) at considerable additional cost. Addendum p. 2. This increases the construction costs and duration, and is dependent on soil-types, and access at the site.

While statements of this type may not devalue the January 2023 Addendum as a whole, they reflect a very casual attitude about construction realities, and as such, raise questions about the accuracy of other assertions in the study.

We ask the ZAB either to deny the issuance of a Use Permit, or to delay issuance of such Use Permit until these and all other related concerns are appropriately addressed by the City, as required by applicable state law. Thank you for your due consideration.

Sincerely yours,

Larisa Cummings (2913 Newbury Street), Les Shipnuck, retired architect, construction manager (2071 Emerson Street), Janis Ching (1937 Oregon Street), Reed Dillingham (2903 Newbury Street), Paul Dillingham (2927 Newbury Street)

Jacob, Melinda

From:	Zoning Adjustments Board (ZAB)
Subject:	FW: Proposed Addendum for the 3000 Shattuck Avenue Project
Attachments:	2023.05.05 3000 Shattuck comments - final.pdf

From: Adam Frankel <adam@lozeaudrury.com>
Sent: Friday, May 5, 2023 9:54 AM
To: Zoning Adjustments Board (ZAB) <Planningzab@cityofberkeley.info>
Subject: Re: Proposed Addendum for the 3000 Shattuck Avenue Project

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Hello,

My apologies for the oversight. My previous submission did not include the letter's referenced **Exhibit A**. Please refer to the attached version here and include this updated version in the record for review by the Zoning Adjustment Board. Thank you.

Sincerely, Adam Frankel

On Fri, May 5, 2023 at 9:50 AM Adam Frankel <<u>adam@lozeaudrury.com</u>> wrote:

Dear Honorable Members of the Zoning Adjustments Board:

I am writing on behalf of the Laborers International Union of North America, Local Union 304 and its members living in the City of Berkeley ("LiUNA"), regarding the project known as 3000 Shattuck Avenue (Administrative Use Permit # ZP2022-0046), including all actions related or referring to the proposed development of a 10-story (114 feet) mixed-use building utilizing a Density Bonus, with 166 dwellings, including 17 Very Low-Income units, and 1,043 square-feet of commercial space, located at 3000 Shattuck Avenue in the City of Berkeley, California (the "Project").

Please see the attached letter for details. I would appreciate if you could please confirm receipt of this email.

Best, Adam

Adam Frankel Lozeau | Drury LLP 1939 Harrison St., Suite 150 Oakland, CA 94612 P: 510.836.4200

Confidentiality Notice: This message and any attachment(s) may contain privileged or confidential information. Unauthorized interception, review, use or disclosure is prohibited by law. If you received this transmission in error, please notify the sender by reply e-mail and delete the message and any attachments. Thank you.

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 77 of 110



T 510.836.4200 F 510.836.4205 1939 Harrison Street, Ste. 150 Oakland, CA 94612 www.lozeaudrury.com Adam@lozeaudrury.com

Via Email

May 5, 2023

Land Use Planning Division Attn: Samantha Updegrave (Zoning Adjustments Board Secretary) 1947 Center Street, 2nd Floor Berkeley, CA 94704 zab@cityofberkeley.info

Re: Proposed Addendum to the 2018 Initial Study-Negative Declaration for the 3000 Shattuck Avenue Project (State Clearinghouse # 2017062025) (Administrative Use Permit # ZP2022-0046) (Zoning Adjustments Board, Meeting of May 11, 2023, Agenda Item No. 5)

Dear Honorable Members of the Zoning Adjustments Board:

I am writing on behalf of the Laborers International Union of North America, Local Union 304 and its members living in the City of Berkeley ("LiUNA"), regarding the project known as 3000 Shattuck Avenue (Administrative Use Permit # ZP2022-0046), including all actions related or referring to the proposed development of a 10-story (114 feet) mixed-use building utilizing a Density Bonus, with 166 dwellings, including 17 Very Low-Income units, and 1,043 square-feet of commercial space, located at 3000 Shattuck Avenue in the City of Berkeley, California (the "Project").

LiUNA is concerned by the City's improper use of an Addendum which, if approved, would violate the California Environmental Quality Act ("CEQA"). In November 2018, the City approved the Project and adopted an Initial Study and Negative Declaration ("2018 IS-ND") for a prior iteration of the Project, which included 44 units and was 5 stories high ("2018 Project"). Now, the City proposes an Addendum to allow the development of a 10-story building with 166 units ("2023 Project"). The 2018 IS-ND did not consider the significant environmental impacts that would result from the increased scale of the new Project nor did it consider new information of substantial importance which LiUNA has presented regarding the Project's significant environmental effects.

The use of an Addendum here is improper under CEQA. CEQA prohibits the use of an addendum if a revised Project may have one or more significant impacts that were not discussed in the originating negative declaration. To comply with CEQA, the City should prepare either a

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 2 of 6

mitigated negative declaration ("MND") or an environmental impact report ("EIR") to properly analyze and mitigate the impacts of the proposed Project.

LEGAL REVIEW OF CEQA ADDENDUM

a. The Addendum Disregards Established Legal Precedent and Violates CEQA

A CEQA addendum must adhere to the courts' guidance informing when, and under what circumstances, its use is legally permissible. The courts have established a detailed, two-step inquiry for reviewing legal challenges to a CEQA addendum. This deliberative process is outlined in two important court decisions arising from the same case, *Friends of College of San Mateo Gardens v. San Mateo County Community College Dist.* (2016). The first decision was issued by the California Supreme Court and will be referred to here as "*San Mateo Gardens I.*"¹ A subsequent decision in the same case was issued by the Court of Appeal and will be referred to here as "*San Mateo Gardens II.*"²

The first step in this two-step analysis is for the reviewing court to determine whether **substantial evidence** supports the lead agency's determination that the original CEQA document, in this case the 2018 IS-ND, "retains some informational value." (*San Mateo Gardens I* at p. 952.) If the court finds that the original document "retains some informational value," it must hold that CEQA's subsequent review provisions apply (*San Mateo Gardens II* at 604-605.)

But this determination is "only the first step" in the court's analysis. (*San Mateo Gardens I* at 956.) "[T]he next—and critical—step is to determine whether the agency has properly determined how to comply with its obligations under those provisions." (*San Mateo Gardens I* at 953.) "[W]hen a project is initially approved by negative declaration, a "major revision" to the initial negative declaration will necessarily be required if the proposed modification *may* produce a significant environmental effect that had not previously been studied. (*San Mateo Gardens I*, 1 Cal. 5th 937, 958, citing CEQA Guidelines, § 15162.) "Indeed, if the project modification introduces previously unstudied and potentially significant environmental effects that cannot be avoided or mitigated through further revisions to the project plans, then the appropriate environmental document would no longer be a negative declaration at all, but an EIR." (*Id.*)

The San Mateo Gardens II opinion helpfully outlines the analysis required during this second stage of review:

[O]nce we have determined that the [CEQA] subsequent review provisions apply to a project approved through a negative declaration, **our application of the standard of review changes and is** *less deferential to the agency*. It is less deferential because a negative declaration requires a major revision—i.e., a subsequent EIR or mitigated negative declaration—whenever there is substantial evidence to support a fair argument that proposed changes 'might have a significant environmental impact not previously

¹ 1 Cal.5th 937 (2016).

² 11 Cal.App.5th 596 (2017).

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 3 of 6

considered in connection with the project as originally approved.' (quoting *San Mateo Gardens I* at 959 [additional citations omitted].)

Proposed changes might have a significant environmental impact when there is some competent evidence to suggest such an impact, even if other evidence suggests otherwise. (See *Friends of "B" Street* (1980) 106 Cal.App.3d 988, 1002.) This means that an agency's determination that a major revision to a negative declaration is not required will necessarily lack substantial evidence when a fair argument exists that the **project might have a previously unstudied significant environmental impact.** (*San Mateo Gardens II* at 607-608 [emph. added].)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. (14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928.)

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

This 'fair argument' standard is very different from the standard normally followed by public agencies in their decision making. Ordinarily, public agencies weigh the evidence in the record and reach a decision based on a preponderance of the evidence. [Citation]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact.

(Kostka & Zishcke, *Practice Under the California Environmental Quality Act*, §6.37 (2d ed. Cal. CEB 2021).) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with *a preference for resolving doubts in favor of environmental review*." (*Pocket Protectors*, 124 Cal.App.4th at 928 (emphasis in original).)

In proposing the Addendum, the City seeks to make substantial revisions to the 2018 Project without performing a legally sufficient environmental review or offering appropriate mitigation for the Project's potentially significant environmental effects. The expert evidence which LiUNA presents today constitutes substantial evidence of a fair argument that the expanded Project will have significant environmental effects which the Addendum has not adequately addressed. Therefore, to comply with CEQA, the City should refrain from approving the Addendum and undertake the necessary efforts to prepare an MND or EIR for the Project. May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 4 of 6

DISCUSSION

I. The Project Will Have Significant Indoor Air Quality Impacts.

Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH, has conducted a review of the proposed Project and relevant documents regarding the Project's indoor air emissions. Mr. Offermann concludes that the Project will likely expose future residents of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is a leading expert on indoor air quality and has published extensively on the topic. Mr. Offermann's expert comments and CV are attached as **Exhibit A**.

Mr. Offermann explains that many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states that "[t]he 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." (Ex. A., pp. 2-3.)

Formaldehyde is a known human carcinogen. Mr. Offermann estimates that future residents of the Project would be exposed to a cancer risk of 120 per million. (Ex. A., p. 4.) This calculation assumes that all materials would be compliant with the California Air Resources Board's ("CARB") Phase 2 formaldehyde airborne toxics control measure ("Phase 2 Formaldehyde ATCM"). (*Id.*, p. 3.) These potential exposure levels exceed the Bay Area Air Quality Management District's ("BAAQMD") CEQA significance threshold for airborne cancer risks of 10 per million. (*Id.*, p. 2.)

Mr. Offermann concludes that these significant environmental impacts should be analyzed in an MND or EIR and that mitigation measures should be imposed to reduce the risk of formaldehyde exposure. (*Id.*, p. 5.) Mr. Offermann identifies mitigation measures that are available to reduce these significant health risks, including the installation of air filters and a requirement that the Applicant 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, or ultra-low emitting formaldehyde (ULEF) resins, for all of the buildings' interior spaces. (*Id.*, pp. 11-13.)

Mr. Offermann's comments constitute new information of substantial importance related to the presence of a significant environmental effect which was not discussed by the 2018 IS-ND. Furthermore, they provide substantial evidence of a fair argument that the Project will likely cause significant impacts on human health and indoor air quality. The City must therefore prepare an MND or an EIR to fully evaluate and mitigate these likely impacts to future Project residents.

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 5 of 6

II. The Increased Size and Height of the Project May Cause Significant Noise Impacts on the Adjacent Residents.

The Addendum asserts that noise impacts from the expanded Project would be less than significant. However, it provides no quantified analysis of the Project's noise impacts to support this assertion. This is a clear oversight. For instance, the significantly increased height of the expanded building will likely require the use of larger construction equipment which may generate more significant noise impacts than would have resulted from construction of the original project. Additionally, operational noise impacts will be distinct from those of the original project because of the building's increased height and the differing angles from which sound will travel to surrounding receptors. The City must prepare an EIR or an MND to fully evaluate the Project's noise impacts and analyze if, and to what extent, these impacts will be greater than those that would have been generated by the original project.

III. The Project's Additional Height May Have Significant Visual Impacts From its Increased Shadow Effects.

The Addendum concedes that "the modified Project could result in potentially greater impacts associated with the increased building height." (Addendum, p. 12.) These potential impacts would be especially significant for the surrounding residences which will experience increased shadow effects from the building's significantly increased height, which itself is much higher than any of the area's surrounding structures. Appendix G of the CEQA Guidelines asks whether a Project would "[s]ubstantially degrade the existing visual character or quality of the site and its surroundings." (CEQA Guidelines, Appen. G, § I, subd. (d).) Here, there is substantial evidence of a fair argument that a Project may have significant aesthetic impacts, thus requiring the preparation of either an MND or an EIR. (*Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 938.)

CONCLUSION

The use of an Addendum to approve the proposed Project violates CEQA. An Addendum is not appropriate "if the proposed modification may produce a significant environmental effect that had not previously been studied" (*San Mateo Gardens*, 1 Cal.5th at 958). Based on the foregoing, there is a fair argument that the Project will have significant health and indoor air quality impacts which have not been previously considered, and that it may have significant noise and aesthetic impacts. These impacts were not adequately analyzed or mitigated by the Addendum.

LiUNA therefore respectfully requests that the Zoning Adjustments Board refrain from taking any action on the Project and instead return the Project to the Planning and Development Department for further consideration of its environmental impacts, including the necessary preparation and public review of either an MND or an EIR.

Sincerely,

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 6 of 6

a Rl

Adam Frankel LOZEAU | DRURY LLP

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 83 of 110

EXHIBIT A

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 84 of 110



INDOOR ENVIRONMENTAL ENGINEERING

1448 Pine Street, Suite 103 San Francisco, California 94109 Telephone: (415) 567-7700 E-mail: <u>offermann@IEE-SF.com</u> <u>http://www.iee-sf.com</u>

Date:	April 26, 2023
То:	Michael Lozeau Lozeau Drury LLP 1939 Harrison Street, Suite 150 Oakland, California 94612
From:	Francis J. Offermann PE CIH
Subject:	Indoor Air Quality: 3000 Shattuck Avenue Project, Berkeley, CA (IEE File Reference: P-4704)
Pages:	19

Indoor Air Quality Impacts

NOTE: This Indoor Air Quality letter contains similar comments as the letter I wrote for 2900-2920 Shattuck Avenue Project, but is specific for a separate adjacent project, 3000 Shattuck Avenue Project.

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 μ g/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 μ g is 2 μ g/m³, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m³, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 μ g/m³. The median indoor formaldehyde concentration was 36 μ g/m³, and ranged from 4.8 to 136 μ g/m³, which corresponds to a median exceedance of the 2 μ g/m³ 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 μ g/m³, 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 Bay Area Air Quality Management District (BAAQMD, 2017).

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 μ g/m³ to 28% for the Acute REL of 55 μ g/m³.

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 μ g/m³ (18.2 ppb) as compared to a median of 36 μ g/m³ 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 results in a median indoor concentration of 24.1 μ g/m³, which is 33% lower than the 36 μ g/m³ 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 3000 Shattuck Avenue Project, Berkeley, CA, the buildings consist of residential spaces 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 μ g/m³ (Singer et. al., 2020).

Assuming that the residential occupants inhale 20 m³ of air per day, the average 70-year lifetime formaldehyde daily dose is 482 μ g/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 μ g/m³ (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 μ g/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 μ g/day.

This is 1.77 times the NSRL (OEHHA, 2017a) of 40 μ g/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.

In addition, we note that the average outdoor air concentration of formaldehyde in California is 3 ppb, or $3.7 \ \mu g/m^3$, (California Air Resources Board, 2004), and thus represents an average pre-existing background airborne cancer risk of 1.85 per million. Thus, the indoor air formaldehyde exposures describe above exacerbate this pre-existing risk resulting from outdoor air formaldehyde exposures.

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 <u>assess</u> 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.) <u>Define Indoor Air Quality Zones</u>. 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.) <u>Calculate Material/Furnishing Loading</u>. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m² of material/m² floor area, units of furnishings/m² floor area) from an inventory of <u>all</u> 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.) <u>Calculate the Formaldehyde Emission Rate</u>. For each building material, calculate the formaldehyde emission rate (μ g/h) from the product of the area-specific formaldehyde emission rate (μ g/m²-h) and the area (m²) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (μ g/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., $\mu g/m^2$ -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 $\mu g/m^2$ -h, but not the actual measured specific emission rate, which may be 3, 18, or 30 $\mu g/m^2$ -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 (<u>https://berkeleyanalytical.com</u>), to measure the formaldehyde emission rate.

4.) <u>Calculate the Total Formaldehyde Emission Rate.</u> 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.) <u>Calculate the Indoor Formaldehyde Concentration</u>. For each IAQ Zone, calculate the indoor formaldehyde concentration (μ g/m³) from Equation 1 by dividing the total formaldehyde emission rates (i.e. μ g/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m³/h) for the IAQ Zone.

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

where:

 C_{in} = indoor formaldehyde concentration (µg/m³)

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

 Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m³/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.) <u>Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks</u>. 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.) <u>Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or</u> <u>Non-Cancer Health Risks</u>. 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 Addendum to the 3000 Shattuck Avenue Project Initial Study – Negative Declaration (City of Berkeley, 2023), the Project is close to roads with moderate to high traffic (e.g., Shattuck Avenue, Adeline Street, Ashby Avenue, Russell Street, Newbury Street etc.). As a result the Project site is a sound impacted site.

According to the Addendum to the 3000 Shattuck Avenue Project Initial Study – Negative Declaration (City of Berkeley, 2023), no assessment of the ambient noise levels resulting from the local traffic has been conducted. In order to design the building for this Project such that interior noise levels are acceptable, an acoustic study with actual on site measurements of the existing ambient noise levels and modeled future ambient noise levels should be conducted. The acoustic study of the existing ambient noise levels should be conducted over a one-week period and report the dBA CNEL or Ldn. This study will allow for the selection of a building envelope and windows with a sufficient STC such that the indoor noise levels are acceptable. A mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors will also be required. 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.

<u>PM_{2.5} Outdoor Concentrations Impact</u>. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the Addendum to the 3000 Shattuck Avenue Project Initial Study – Negative

Declaration (City of Berkeley, 2023), the Project is located in the San Francisco Bay Area Basin, which is a State and Federal non-attainment area for PM_{2.5}.

An air quality analyses should 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 µg/m³, or the National 24-hour average exceedence concentration of 35 µg/m³, 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:

Indoor Formaldehyde Concentrations Mitigation. 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.

<u>Outdoor Air Ventilation Mitigation</u>. Provide <u>each</u> 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/ft² 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.

<u>PM_{2.5} Outdoor Air Concentration Mitigation</u>. 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.

References

Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. Bay Area Air Quality Management District, San Francisco, CA. <u>http://www.baaqmd.gov/~/media/files/planning-and-</u> <u>research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en</u>

BIFA. 2018. BIFMA Product Safety and Performance Standards and Guidelines. www.bifma.org/page/standardsoverview

California Air Resources Board. 2009. Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products. California Environmental Protection Agency, Sacramento, CA. https://www.arb.ca.gov/regact/2007/compwood07/fro-final.pdf

California Air Resources Board. 2011. Toxic Air Contaminant Identification List. California Environmental Protection Agency, Sacramento, CA. https://www.arb.ca.gov/toxics/id/taclist.htm

California Building Code. 2001. California Code of Regulations, Title 24, Part 2 Volume 1, Appendix Chapter 12, Interior Environment, Division 1, Ventilation, Section 1207: 2001 California Building Code, California Building Standards Commission. Sacramento, CA. California Building Standards Commission (2014). 2013 California Green Building Standards Code. California Code of Regulations, Title 24, Part 11. California Building Standards Commission, Sacramento, CA<u>http://www.bsc.ca.gov/Home/CALGreen.aspx.</u>

California Energy Commission, PIER Program. CEC-500-2007-033. Final Report, ARB Contract 03-326. Available at: www.arb.ca.gov/research/apr/past/03-326.pdf.

California Energy Commission, 2015. 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, California Code of Regulations, Title 24, Part 6. http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf

CDPH. 2017. Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1. California Department of Public Health, Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/ DEODC/EHLB/IAQ/Pages/VOC.aspx.

City of Berkeley. 2023. Addendum to the 3000 Shattuck Avenue Project Initial Study – Negative Declaration.

EPA. 2011. Exposure Factors Handbook: 2011 Edition, Chapter 16 – Activity Factors. Report EPA/600/R-09/052F, September 2011. U.S. Environmental Protection Agency, Washington, D.C.

Hodgson, A. T., D. Beal, J.E.R. McIlvaine. 2002. Sources of formaldehyde, other aldehydes and terpenes in a new manufactured house. Indoor Air 12: 235–242.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments. OEHHA (Office of Environmental Health Hazard Assessment). 2017a. Proposition 65 Safe Harbor Levels. No Significant Risk Levels for Carcinogens and Maximum Allowable Dose Levels for Chemicals Causing Reproductive Toxicity. Available at: http://www.oehha.ca.gov/prop65/pdf/safeharbor081513.pdf

OEHHA - Office of Environmental Health Hazard Assessment. 2017b. All OEHHA Acute, 8-hour and Chronic Reference Exposure Levels. Available at: <u>http://oehha.ca.gov/air/allrels.html</u>

Offermann, F. J. 2009. Ventilation and Indoor Air Quality in New Homes. California Air Resources Board and California Energy Commission, PIER Energy-Related Environmental Research Program. Collaborative Report. CEC-500-2009-085. https://www.arb.ca.gov/research/apr/past/04-310.pdf

Offermann, F. J. and A. T. Hodgson. 2011. Emission Rates of Volatile Organic Compounds in New Homes. Proceedings Indoor Air 2011 (12th International Conference on Indoor Air Quality and Climate 2011), June 5-10, 2011, Austin, TX.

Singer, B.C, Chan, W.R, Kim, Y., Offermann, F.J., and Walker I.S. 2020. Indoor Air Quality in California Homes with Code-Required Mechanical Ventilation. Indoor Air, Vol 30, Issue 5, 885-899.

USGBC. 2014. LEED BD+C Homes v4. U.S. Green Building Council, Washington, D.C. <u>http://www.usgbc.org/credits/homes/v4</u>

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 μ g/m³ (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 ft²), 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 ft² (0.7% of the floor area), or Particle Board – 30 ft² (1.3% of the floor area), or Hardwood Plywood – 54 ft² (2.4% of the floor area), or Thin MDF – 46 ft² (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.

Jacob, Melinda

From:	Zoning Adjustments Board (ZAB)
Subject:	FW: Proposed Addendum for the 3000 Shattuck Avenue Project
Attachments:	2023.05.05 3000 Shattuck comments - final.pdf

From: Adam Frankel <adam@lozeaudrury.com>
Sent: Friday, May 5, 2023 9:51 AM
To: Zoning Adjustments Board (ZAB) <Planningzab@cityofberkeley.info>
Subject: Re: Proposed Addendum for the 3000 Shattuck Avenue Project

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Dear Honorable Members of the Zoning Adjustments Board:

I am writing on behalf of the Laborers International Union of North America, Local Union 304 and its members living in the City of Berkeley ("LiUNA"), regarding the project known as 3000 Shattuck Avenue (Administrative Use Permit # ZP2022-0046), including all actions related or referring to the proposed development of a 10-story (114 feet) mixed-use building utilizing a Density Bonus, with 166 dwellings, including 17 Very Low-Income units, and 1,043 square-feet of commercial space, located at 3000 Shattuck Avenue in the City of Berkeley, California (the "Project").

Please see the attached letter for details. I would appreciate if you could please confirm receipt of this email.

Best, Adam

Adam Frankel Lozeau | Drury LLP 1939 Harrison St., Suite 150 Oakland, CA 94612 P: 510.836.4200

Confidentiality Notice: This message and any attachment(s) may contain privileged or confidential information. Unauthorized interception, review, use or disclosure is prohibited by law. If you received this transmission in error, please notify the sender by reply e-mail and delete the message and any attachments. Thank you.

SUPPLEMENTAL ITEM #5 - 3000 SHATTUCK AVE. ZAB 05-11-2023 Page 104 of 110



T 510.836.4200 F 510.836.4205 1939 Harrison Street, Ste. 150 Oakland, CA 94612 www.lozeaudrury.com Adam@lozeaudrury.com

Via Email

May 5, 2023

Land Use Planning Division Attn: Samantha Updegrave (Zoning Adjustments Board Secretary) 1947 Center Street, 2nd Floor Berkeley, CA 94704 zab@cityofberkeley.info

Re: Proposed Addendum to the 2018 Initial Study-Negative Declaration for the 3000 Shattuck Avenue Project (State Clearinghouse # 2017062025) (Administrative Use Permit # ZP2022-0046) (Zoning Adjustments Board, Meeting of May 11, 2023, Agenda Item No. 5)

Dear Honorable Members of the Zoning Adjustments Board:

I am writing on behalf of the Laborers International Union of North America, Local Union 304 and its members living in the City of Berkeley ("LiUNA"), regarding the project known as 3000 Shattuck Avenue (Administrative Use Permit # ZP2022-0046), including all actions related or referring to the proposed development of a 10-story (114 feet) mixed-use building utilizing a Density Bonus, with 166 dwellings, including 17 Very Low-Income units, and 1,043 square-feet of commercial space, located at 3000 Shattuck Avenue in the City of Berkeley, California (the "Project").

LiUNA is concerned by the City's improper use of an Addendum which, if approved, would violate the California Environmental Quality Act ("CEQA"). In November 2018, the City approved the Project and adopted an Initial Study and Negative Declaration ("2018 IS-ND") for a prior iteration of the Project, which included 44 units and was 5 stories high ("2018 Project"). Now, the City proposes an Addendum to allow the development of a 10-story building with 166 units ("2023 Project"). The 2018 IS-ND did not consider the significant environmental impacts that would result from the increased scale of the new Project nor did it consider new information of substantial importance which LiUNA has presented regarding the Project's significant environmental effects.

The use of an Addendum here is improper under CEQA. CEQA prohibits the use of an addendum if a revised Project may have one or more significant impacts that were not discussed in the originating negative declaration. To comply with CEQA, the City should prepare either a

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 2 of 6

mitigated negative declaration ("MND") or an environmental impact report ("EIR") to properly analyze and mitigate the impacts of the proposed Project.

LEGAL REVIEW OF CEQA ADDENDUM

a. The Addendum Disregards Established Legal Precedent and Violates CEQA

A CEQA addendum must adhere to the courts' guidance informing when, and under what circumstances, its use is legally permissible. The courts have established a detailed, two-step inquiry for reviewing legal challenges to a CEQA addendum. This deliberative process is outlined in two important court decisions arising from the same case, *Friends of College of San Mateo Gardens v. San Mateo County Community College Dist.* (2016). The first decision was issued by the California Supreme Court and will be referred to here as "*San Mateo Gardens I.*"¹ A subsequent decision in the same case was issued by the Court of Appeal and will be referred to here as "*San Mateo Gardens II.*"²

The first step in this two-step analysis is for the reviewing court to determine whether **substantial evidence** supports the lead agency's determination that the original CEQA document, in this case the 2018 IS-ND, "retains some informational value." (*San Mateo Gardens I* at p. 952.) If the court finds that the original document "retains some informational value," it must hold that CEQA's subsequent review provisions apply (*San Mateo Gardens II* at 604-605.)

But this determination is "only the first step" in the court's analysis. (*San Mateo Gardens I* at 956.) "[T]he next—and critical—step is to determine whether the agency has properly determined how to comply with its obligations under those provisions." (*San Mateo Gardens I* at 953.) "[W]hen a project is initially approved by negative declaration, a "major revision" to the initial negative declaration will necessarily be required if the proposed modification *may* produce a significant environmental effect that had not previously been studied. (*San Mateo Gardens I*, 1 Cal. 5th 937, 958, citing CEQA Guidelines, § 15162.) "Indeed, if the project modification introduces previously unstudied and potentially significant environmental effects that cannot be avoided or mitigated through further revisions to the project plans, then the appropriate environmental document would no longer be a negative declaration at all, but an EIR." (*Id.*)

The San Mateo Gardens II opinion helpfully outlines the analysis required during this second stage of review:

[O]nce we have determined that the [CEQA] subsequent review provisions apply to a project approved through a negative declaration, **our application of the standard of review changes and is** *less deferential to the agency*. It is less deferential because a negative declaration requires a major revision—i.e., a subsequent EIR or mitigated negative declaration—whenever there is substantial evidence to support a fair argument that proposed changes 'might have a significant environmental impact not previously

¹ 1 Cal.5th 937 (2016).

² 11 Cal.App.5th 596 (2017).

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 3 of 6

considered in connection with the project as originally approved.' (quoting *San Mateo Gardens I* at 959 [additional citations omitted].)

Proposed changes might have a significant environmental impact when there is some competent evidence to suggest such an impact, even if other evidence suggests otherwise. (See *Friends of "B" Street* (1980) 106 Cal.App.3d 988, 1002.) This means that an agency's determination that a major revision to a negative declaration is not required will necessarily lack substantial evidence when a fair argument exists that the **project might have a previously unstudied significant environmental impact.** (*San Mateo Gardens II* at 607-608 [emph. added].)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. (14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928.)

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

This 'fair argument' standard is very different from the standard normally followed by public agencies in their decision making. Ordinarily, public agencies weigh the evidence in the record and reach a decision based on a preponderance of the evidence. [Citation]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact.

(Kostka & Zishcke, *Practice Under the California Environmental Quality Act*, §6.37 (2d ed. Cal. CEB 2021).) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with *a preference for resolving doubts in favor of environmental review*." (*Pocket Protectors*, 124 Cal.App.4th at 928 (emphasis in original).)

In proposing the Addendum, the City seeks to make substantial revisions to the 2018 Project without performing a legally sufficient environmental review or offering appropriate mitigation for the Project's potentially significant environmental effects. The expert evidence which LiUNA presents today constitutes substantial evidence of a fair argument that the expanded Project will have significant environmental effects which the Addendum has not adequately addressed. Therefore, to comply with CEQA, the City should refrain from approving the Addendum and undertake the necessary efforts to prepare an MND or EIR for the Project. May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 4 of 6

DISCUSSION

I. The Project Will Have Significant Indoor Air Quality Impacts.

Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH, has conducted a review of the proposed Project and relevant documents regarding the Project's indoor air emissions. Mr. Offermann concludes that the Project will likely expose future residents of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is a leading expert on indoor air quality and has published extensively on the topic. Mr. Offermann's expert comments and CV are attached as **Exhibit A**.

Mr. Offermann explains that many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states that "[t]he 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." (Ex. A., pp. 2-3.)

Formaldehyde is a known human carcinogen. Mr. Offermann estimates that future residents of the Project would be exposed to a cancer risk of 120 per million. (Ex. A., p. 4.) This calculation assumes that all materials would be compliant with the California Air Resources Board's ("CARB") Phase 2 formaldehyde airborne toxics control measure ("Phase 2 Formaldehyde ATCM"). (*Id.*, p. 3.) These potential exposure levels exceed the Bay Area Air Quality Management District's ("BAAQMD") CEQA significance threshold for airborne cancer risks of 10 per million. (*Id.*, p. 2.)

Mr. Offermann concludes that these significant environmental impacts should be analyzed in an MND or EIR and that mitigation measures should be imposed to reduce the risk of formaldehyde exposure. (*Id.*, p. 5.) Mr. Offermann identifies mitigation measures that are available to reduce these significant health risks, including the installation of air filters and a requirement that the Applicant 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, or ultra-low emitting formaldehyde (ULEF) resins, for all of the buildings' interior spaces. (*Id.*, pp. 11-13.)

Mr. Offermann's comments constitute new information of substantial importance related to the presence of a significant environmental effect which was not discussed by the 2018 IS-ND. Furthermore, they provide substantial evidence of a fair argument that the Project will likely cause significant impacts on human health and indoor air quality. The City must therefore prepare an MND or an EIR to fully evaluate and mitigate these likely impacts to future Project residents.

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 5 of 6

II. The Increased Size and Height of the Project May Cause Significant Noise Impacts on the Adjacent Residents.

The Addendum asserts that noise impacts from the expanded Project would be less than significant. However, it provides no quantified analysis of the Project's noise impacts to support this assertion. This is a clear oversight. For instance, the significantly increased height of the expanded building will likely require the use of larger construction equipment which may generate more significant noise impacts than would have resulted from construction of the original project. Additionally, operational noise impacts will be distinct from those of the original project because of the building's increased height and the differing angles from which sound will travel to surrounding receptors. The City must prepare an EIR or an MND to fully evaluate the Project's noise impacts and analyze if, and to what extent, these impacts will be greater than those that would have been generated by the original project.

III. The Project's Additional Height May Have Significant Visual Impacts From its Increased Shadow Effects.

The Addendum concedes that "the modified Project could result in potentially greater impacts associated with the increased building height." (Addendum, p. 12.) These potential impacts would be especially significant for the surrounding residences which will experience increased shadow effects from the building's significantly increased height, which itself is much higher than any of the area's surrounding structures. Appendix G of the CEQA Guidelines asks whether a Project would "[s]ubstantially degrade the existing visual character or quality of the site and its surroundings." (CEQA Guidelines, Appen. G, § I, subd. (d).) Here, there is substantial evidence of a fair argument that a Project may have significant aesthetic impacts, thus requiring the preparation of either an MND or an EIR. (*Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 938.)

CONCLUSION

The use of an Addendum to approve the proposed Project violates CEQA. An Addendum is not appropriate "if the proposed modification may produce a significant environmental effect that had not previously been studied" (*San Mateo Gardens*, 1 Cal.5th at 958). Based on the foregoing, there is a fair argument that the Project will have significant health and indoor air quality impacts which have not been previously considered, and that it may have significant noise and aesthetic impacts. These impacts were not adequately analyzed or mitigated by the Addendum.

LiUNA therefore respectfully requests that the Zoning Adjustments Board refrain from taking any action on the Project and instead return the Project to the Planning and Development Department for further consideration of its environmental impacts, including the necessary preparation and public review of either an MND or an EIR.

Sincerely,

May 5, 2023 Comments to the Zoning Adjustments Board Re: Addendum to the IS-ND for the 3000 Shattuck Avenue Project Page 6 of 6

a Rl

Adam Frankel LOZEAU | DRURY LLP

Jacob, Melinda

From:	Zoning Adjustments Board (ZAB)
Subject:	FW: May 11 hearing on changes to Use Permit #ZP2022-0046

-----Original Message-----

From: Nora Goodfriend Koven <norakoven@sbcglobal.net> Sent: Wednesday, May 3, 2023 8:01 PM To: Zoning Adjustments Board (ZAB) <Planningzab@cityofberkeley.info> Cc: NABART+managers@googlegroups.com Subject: May 11 hearing on changes to Use Permit #ZP2022-0046

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

As a long time South Berkeley resident (I've lived here since our phone numbers started with letters!) I am very concerned about the possibility of building a 10-story building in our neighborhood. This will completely change both the visual and also the social character of our community - and for the worse! Our neighborhood has no huge buildings and is characterized by residents who like to get to know one another, who garden and produce organic vegetables and fruits that we use and share with others, who are civically engaged, and who like to be neighborly. Many of us have solar panels or are getting them soon and would be adversely affected by giant buildings that cast a shadow on our homes and yards. We already have many issues with traffic, pedestrian accidents, and many collisions on the corner of Ashby and Shattuck. The previously approved 6 story development would put a severe strain on the neighborhood. An additional 4 stories will bring us to a breaking point. My understanding is that the developer decided that the 6 story building will not produce enough profit. Profit should not be the criteria for changing the development plans. Enhancing our community should be the only criteria, and an enormous building will not enhance the quality of life. I urge you to turn down the amended application. That is the only right thing to do. Nora Goodfriend-Koven 2125 Essex Street Berkeley 94705

norakoven@sbcglobal.net