FY 2018-2019 CITY OF SAN LEANDRO PLANNING SERVICES | www.sanleandro.org/planning

PLANNING APPEAL APPLICATION TO CITY COUNCIL

City Clerk's Office | 835 East 14th Street, San Leandro, CA 94577 | (510) 577-3367

MUST BE SUBMITTED IN PERSON

General Information + Appeal Timing

Decisions of the Board of Zoning Adjustments, Planning Commission, or the Site Development Sub-Commission may be appealed to City Council and are filed with the City Clerk's Office.

This appeal application must be submitted within fifteen (15) calendar days of the decision, and within ten (10) calendar days of a Tentative Map approval. If the appeal period ends on a weekend or holiday, the time limit shall be extended to the next working day.

Appeal Application + Fees

Bring the following items to the City Clerk's Office:

1. Signed and completed Appeal Application (front side.)
2. Signed and completed Agreement for Payment of Appeal Fees (back side.)
3. Check payable to City of San Leandro or credit card (with a 2.5% fee) to pay the planning deposit (check with a Planner.)
4. Check payable to City of San Leandro or credit card (2.5% fee) to pay the separate $534 city clerk fee

OFFICIAL USE ONLY

APPEAL RECEIVED

By: A. Mogensen

Date: 5/19/2021

DEPOSIT PAID *(attach copy of receipt)*

FEE PAID *(attach copy of receipt)*: 1129.55

CC: ☒ Planning ☐ CAO

I wish to appeal the decision of the: ☒ Board of Zoning Adjustments ☐ Planning Commission ☐ Site Development Sub-Commission

Project Address

1188 E 14th Street San Leandro CA 94577

Project # **PLN** 18 - 0036

Date of Action: 05/06/2021

☒ Approved ☐ Denied

Reasons for Appeal - List all grounds relied upon in making this appeal. *(Attach additional sheets if necessary)*

Please see attached.

APPELLANT INFORMATION

Print Full Name

East Bay Residents for Responsible Development c/o Kelilah Federman

☐ Applicant ☒ Concerned Resident ☐ Concerned Business Owner ☐ Other: _____

Mailing Address

Adams Broadwell Joseph & Cardozo 601 Gateway Boulevard Suite 1000

Address

South San Francicso *City* | CA *State* | 94080 *Zip*

Phone #: (650)589-1660

Email: kfederman@adamsbroadwell.com

Kelilah Federman

Signature of Appellant

May 19, 2021

Date

v. 08/22/18

AGREEMENT FOR PAYMENT OF PLANNING APPEAL FEES

835 East 14th Street, San Leandro, CA 94577 | (510) 577-3325 | planner@sanleandro.org

Project Address
1188 E 14th St
Address
San Leandro *City* | CA *State* | 94577 *Zip*

Assessor's Parcel #
77-447-14-6, 77-447-7-1, 77-447-14-7, 77-447-15-6.

Project #
PLN 18 ___ – 0036 ___ ___

Date of Action
05/06/2021

☒ Approved
☐ Denied

APPELLANT INFORMATION

Print Full Name
East Bay Residents for Responsible Development c/o Kelilah Federman

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Adams Broadwell Joseph & Cardozo 601 Gateway Blvd Suite 1000
Address
South San Francisco *City* | CA *State* | 94080 *Zip*

Phone #
(650)589-1660

Email
kfederman@adamsbroadwell.com

I (We) hereby agree to pay all direct costs as listed in the City's adopted fee schedule for the review and processing of application(s) for the subject project, at such time as requested by the Community Development Director. Direct costs include, but are not limited to, hourly personnel charges plus a factor of 3.38 for benefits and administrative overhead; legal fees; communications via telephone or written correspondence with the appellant, property owner, architect, engineer, etc.; analysis and preparation of staff reports and findings; and attendance at public hearings. If applicable, I (we) also hereby agree to pay all contract costs for preparation of an environmental document in compliance with the California Environmental Quality Act.

A deposit is required along with this form. Future payments are due and payable within 30 days. At the completion of the appeal process, any unused balance will be returned to the appellant. Interest will accrue on all costs unpaid 30 days after billing at the maximum legal rate and the City is entitled to recover its costs, including attorney's fees, in collecting unpaid accounts. Delinquent accounts may be sent to a collection agency.

Furthermore, I (we) hereby agree to hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City or held to be the liability of the City in connection with the City's defense of its actions in any proceeding brought in any State or Federal Court challenging the City's actions with respect to my (our) project.

Signature of Appellant

May 19, 2021
Date

STAFF COMMENTS

APL21-0001
Filing fees paid by credit card 5/19/21

$595.55 Planning
$534.00 City Clerk

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May 19, 2021

Via Email and Overnight Delivery

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City of San Leandro
835 East 14th Street
San Leandro, CA 94577

Re: **Appeal to City Council re 1188 E 14th Street (PLN18-0036, APN 77-447-14-6, 77-447-7-1, 77-447-14-7, 77-447-15-6)**

Dear Ms. Miguel, Ms. Robustelli, Mr. Mogenson:

We are writing on behalf of East Bay Residents for Responsible Development ("East Bay Residents" or "Residents") to appeal the San Leandro Board of Zoning Adjustments' ("PC-BZA" or "Board of Zoning Adjustments") May 6, 2021 approval of the 1188 E 14th Street Project / Callan & E. 14th Street Project (PLN18-0036, APN 77-447-14-6, 77-447-7-1, 77-447-14-7, 77-447-15-6) (collectively, "Project") as well as the CEQA Infill Environmental Checklist ("CEQA Checklist") prepared for the Project by the City of San Leandro ("City") pursuant to the California Environmental Quality Act ("CEQA").[1] This Appeal is taken from the following actions[2]:

[1] Pub. Resources Code ("PRC") §§ 21000 et seq.; 14 Cal. Code Regs. ("CCR" or "CEQA Guidelines") §§ 15000 et seq.

[2] This appeal is also accompanied by payment of the appeal fee of $534.00 for the City Clerk and $568 for the Planning Department in accordance with the City of San Leandro Fee Schedule ("Appeal Fee"). Receipts documenting concurrent payment of the Appeal Fee are attached hereto as **Exhibit 1.**

1. PC-BZA's May 6, 2021 approval of Staff's environmental determination and approval of the CEQA Findings of Fact and Determinations for Approval of PLN18-0036 for the Project.
2. PC-BZA's May 6, 2021 related approval of the Project, including adoption of Resolution 2021-002, approval of a Conditional Use Permit ("CUP"), Site Plan Review for PLN18-0036, and Parking Exception, subject to the condition that the Project include solar panels, electric HVAC instead of gas, and ten inclusionary housing units instead of five units.
3. Any and all other May 6, 2021 actions taken by the PC-BZA to approve the Project.[3]

The Project, proposed by 14th & Callan Street Developer LLC ("Applicant"), includes the development of a 196-unit five-story mixed-use residential development with an approximately 23,000 square foot ("SF") supermarket and an approximately 5,600 SF ground floor retail space with 286-space parking garage located on the 1.6-acre site. The Project is located in the DA-1(S), Downtown Area 1 (Special Policy Area 3) zoning district. The Applicant originally proposed to provide five units of inclusionary housing. However, at the May 6, 2021 hearing, the Board of Zoning Adjustments ("Board") required that an additional five units of inclusionary housing be added to the Project.

This Appeal letter, and Resident's attached May 6, 2021 comments to the Board ("Comments") demonstrate that the Board's decision to approve the Project violated CEQA, zoning laws and the City's municipal codes, and was not supported by substantial evidence in the record. Specifically, our prior comments, as well as the comments of local residents and members of the public that were submitted to the Board, identified several flaws in the City's environmental analysis, and provided new information and substantial evidence demonstrating that the Project will have new and more significant impacts than previously analyzed in the City's 2035 General Plan Update Final Environmental Impact Report ("General Plan EIR") and the 2007 Downtown San Leandro Transit-Oriented Development Strategy EIR ("TOD EIR") and the San Leandro General Plan, and that these impacts will not be substantially mitigated by the Uniformly Applicable

[3] The PC-BZA's May 6, 2021 actions related to the Project were identified as Agenda Items 6.C and 6.D on the PC-BZA hearing agenda.

Development Standards laid out in the 2006 General Plan EIR.[4] Additionally, at the May 6, 2021 hearing, Board members raised issues related to the Project's compliance with current Zoning Code requirements for inclusionary housing. These issues were not fully resolved by the Board prior to its approval of the Project.

The City's CEQA Infill Checklist purports to evaluate the Project's potential environmental impacts and consistency with these prior EIRs, and erroneously asserts that the Project is exempt from further CEQA review pursuant to the Qualified In-fill Exemption under Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3. However, as explained in our Comments and more fully below, the CEQA Infill Checklist fails to disclose, analyze, and mitigate the Project's specific significant impacts, and new information shows that the effects will be more significant than described in the prior EIRs.[5]

The CEQA Infill Checklist failed to adequately disclose and mitigate the impacts of the Project, in violation of CEQA. The Board failed to resolve these deficiencies, and failed to remand the Project to Staff to prepare an Infill EIR, prior to approving the Project. The Board of Zoning Adjustments lacked substantial evidence to support its decision to approve the Project. As explained herein, the City Council should vacate the Board's approvals and remand the Project to Staff to prepare a legally adequate EIR before the Project can be presented to City decisionmakers for approval.[6]

This Appeal letter and its attachments raise the issues that are contested on appeal, and address issues and evidence that was previously presented to the Board of Zoning Adjustments prior to its approval of the Project. We previously filed comments on the Project on May 6, 2021 with the assistance of technical experts Matt Hagemann and Paul E. Rosenfeld, Ph.D. of Soil Water Air Protection Enterprises ("SWAPE"), Daniel T. Smith, Jr., P.E., principal at Smith Engineering & Management and Deborah Jue, acoustics, noise and vibration expert of Wilson Ihrig.[7] Our members submitted oral comments at the May 6, 2021 Board meeting regarding the hazardous materials in the soil and groundwater on the Project site,

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[4] Environmental Impact Report San Leandro General Plan Update, SCH# 2001092001, November, 2001, p. III.K-8.
[5] 14 Cal. Code Regs. § 15183.3.
[6] PRC § 21094.5(a); 14 CCR § 15164(e); see *Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal. 3d 506, 515.
[7] East Bay Residents' May 6, 2021 written comments to the Board of Zoning Adjustments are attached hereto as **Exhibit 2** and incorporate by reference.

as well as the unmitigated health risk, air quality and greenhouse gas emissions from the Project. Residents' prior comments are incorporated by reference herein, and support this Appeal.

East Bay Residents urges the City Council to grant this Appeal and remand the Project to City Staff to prepare an Infill EIR for the Project. The Project should not be rescheduled for a further public hearing until these issues have been addressed. East Bay Residents reserves the right to submit supplemental comments and evidence at any later hearings and proceedings related to the Project, in accordance with State law.[8]

I. STATEMENT OF INTEREST

East Bay Residents is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards and environmental and public service impacts of the Project. The association includes San Leandro residents Gene Jones, Anthony Haynes, and Mario Oliveira, UA Plumbers and Pipefitters Local 342, International Brotherhood of Electrical Workers Local 595, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, their members and families, and other individuals that live and/or work in the City of San Leandro and Alameda County.

Individual members of East Bay Residents and its affiliated labor organizations live, work, recreate and raise their families in Alameda County, including in the City of San Leandro. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. Accordingly, they will be first in line to be exposed to any health and safety hazards that exist onsite.

The organizational members of East Bay Residents also have an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for

[8] Gov. Code § 65009(b); PRC § 21177(a) (allowing members of the public to submit additional evidence to the lead agency regarding a project's CEQA compliance "until the close of the final hearing on the project"); *Bakersfield Citizens for Local Control v. Bakersfield ("Bakersfield")* (2004) 124 Cal. App. 4th 1184, 1199-1203; *see Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

businesses to locate and people to live there. Indeed, continued degradation can, and has, caused restrictions on growth that reduce future employment opportunities. Finally, East Bay Residents members are concerned about projects that present environmental and land use impacts without providing countervailing economic and community benefits.

I. LEGAL BACKGROUND

CEQA has two basic purposes, neither of which is satisfied by the CEQA Analysis. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental impacts of a project before harm is done to the environment.[9] The EIR is the "heart" of this requirement.[10] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[11]

To fulfill this function, the discussion of impacts in an EIR must be detailed, complete, and reflect a good faith effort at full disclosure."[12] An adequate EIR must contain facts and analysis, not just an agency's conclusions.[13] CEQA requires an EIR to disclose all potential direct and indirect, significant environmental impacts of a project.[14]

Further, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring imposition of mitigation measures and by requiring the consideration of environmentally superior alternatives.[15] If an EIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts.[16] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible

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[9] 14 Cal. Code Regs. § 15002(a)(1) ("CEQA Guidelines"); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[10] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.
[11] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[12] CEQA Guidelines § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.
[13] *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568.
[14] Pub. Resources Code § 21100(b)(1); CEQA Guidelines § 15126.2(a).
[15] CEQA Guidelines § 15002(a)(2) and (3); *Berkeley Jets,* 91 Cal.App.4th at 1354; *Laurel Heights Improvement Ass'n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.
[16] Pub. Resources Code §§ 21002.1(a), 21100(b)(3).

project alternatives or mitigation measures.[17] Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon the EIR to meet this obligation.

Under CEQA, an EIR must not only discuss measures to avoid or minimize adverse impacts, but must ensure that mitigation conditions are fully enforceable through permit conditions, agreements or other legally binding instruments.[18] A CEQA lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility.[19] This approach helps "ensure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug."[20]

Following preliminary review of a project to determine whether an activity is subject to CEQA, a lead agency is required to prepare an initial study to determine whether to prepare an EIR or negative declaration, identify whether tiering or another appropriate process can be used for analysis of the project's environmental effects, or determine whether a previously prepared CEQA document could be used for the project, among other purposes.[21] The initial study must accurately describe the project, identify the environmental setting, identify environmental effects and show "some evidence" to support those conclusions, and a discussion of ways to mitigate the significant effects of the project, if any.[22] CEQA requires an agency to analyze the potential environmental impacts of its proposed actions in an EIR except in certain limited circumstances.[23] A negative declaration may be prepared instead of an EIR when, after preparing an initial study, a lead agency determines that a project "would not have a significant effect on the environment."[24] If the project has potentially significant environmental effects but those effects can be reduced to a level of insignificance by mitigation measures that the project's

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[17] *Id.*, §§ 21002-21002.1.
[18] CEQA Guidelines § 15126.4(a)(2).
[19] *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28 (a groundwater purchase agreement found to be inadequate mitigation because there was no record evidence that replacement water was available).
[20] *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.
[21] CEQA Guidelines §§ 15060, 15063(c).
[22] CEQA Guidelines § 15063(d) (emphasis added).
[23] *See, e.g.,* Pub. Resources Code § 21100.
[24] *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597; Pub. Resources Code § 21080(c).

proponent has agreed to undertake, the lead agency may prepare a mitigated negative declaration ("MND").[25]

This appeal is file pursuant to Title 5 of the San Leandro Zoning Code Chapter 5.04 which provides, decisions by Board of Zoning Adjustments may be appealed to the City Council.[26] An appeal shall be initiated within 15 days of the date of the decision.[27] Here, the appeal period ends on May 21, 2021. This Appeal is timely filed within the time authorized by the Code.

A. CEQA Infill Exemption

The Board of Zoning Adjustments relied on a narrow CEQA exemption that allow approval of projects without an EIR in very narrow circumstances, CEQA Section 21094.5[28] and CEQA Guidelines Section 15183.3 ("Infill Exemption").[29] The Infill Exemption provides that, if an EIR was previously certified for a planning level decision of a city or county, subsequent CEQA review may be limited to evaluating a project's effects on the environment that are either (A) specific to the project or to the project site and were not addressed as significant effects in the prior environmental impact report or (B) where substantial new information shows the effects will be more significant than described in the prior environmental impact report.[30] The Infill Exemption allows a lead agency to forego preparation of an EIR if neither of these situations occur, or if the lead agency determines that uniformly applicable development policies or standards adopted by the agency will substantially mitigate the new effects. A lead agency's determination pursuant to this section must be supported by substantial evidence.[31]

As discussed in our Comments and below, there is substantial new information demonstrating that the Project is likely to result in significant effects related to hazardous materials, health risk, air quality, greenhouse gas emissions, noise, and transportation that are not mitigated, let alone substantially mitigated, by the City's standard conditions of approval. These impacts require that an EIR be prepared.

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[25] Pub. Resources Code § 21080 (c)(2); 14 CCR § 15064(f)(2).
[26] San Leandro Zoning Code § 5.20.100.
[27] San Leandro Zoning Code § 5.20.108(A).
[28] Pub. Res. Code § 21094.5.
[29] 14 Cal. Code Regs. § 15183.3.
[30] Pub. Res. Code § 21094.5(a); 14 Cal. Code Regs. § 15183.3(a), (c).
[31] Pub. Res. Code § 21094.5(a).

Additionally, under the City's Zoning Code, in order to approve a CUP, the Board of Zoning Adjustments was required to determine "on the basis of the application, plans, materials, and testimony submitted… [t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to the properties or improvements in the vicinity, or to the general welfare of the City."[32] Further, the Zoning Code requires that the Board may approve a use permit if the Board finds that "That the proposed use will not create adverse impacts on traffic or create demands exceeding the capacity of public services and facilities, which cannot be mitigated."[33] There is substantial evidence demonstrating that the Project will be detrimental to the public health, safety and the general welfare of San Leandro residents, and that the Project would create adverse impacts that were not adequately analyzed in the Checklist. These impacts render the Project inconsistent with mandatory Zoning Code requirements, resulting in an additional CEQA violation.[34] The Board, therefore, should not have approved this Project without first mitigating such impacts in an Infill EIR. The City Council must remand this Project to Staff to complete a thorough environmental review in an Infill EIR in order to satisfy CEQA.

B. Subsequent CEQA Review

CEQA Guidelines § 15183.3(d)(2)(C) requires that "If the infill project would result in new specific effects or more significant effects, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA. With respect to those effects that are subject to CEQA, the lead agency shall prepare an infill EIR if the written checklist shows that the effects of the infill project would be potentially significant. In this circumstance, the lead agency shall prepare an infill EIR."[35]

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[32] San Leandro Zoning Code § 5.08.124(A)(2).
[33] *Id.* at § 5.08.124(A)(4).
[34] Under CEQA, a significant environmental impact results if there is a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. *Pocket Protectors v. Sacramento* (2005) 124 Cal.App.4th 903; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4 (Project's inconsistencies with local plans and policies constitute significant impacts under CEQA).
[35] CEQA Guidelines § 15183.3(d)(2)(C).
5005-004acp

An Infill EIR must be prepared for this Project, based on the limitations in Public Resources Code section 21094.5(b), because the Project includes new specific effects, and the significant effects of the infill project were not address in the prior EIR, and are more significant than the effects addressed in the prior EIR.[36] A new specific effect may result if, for example, the prior EIR stated that sufficient site-specific information was not available to analyze the significance of that effect.[37] Here, the new specific effects include: air quality; hazardous materials; health risk; noise; and greenhouse gas emissions.

Further, additional review is required to explain whether substantial new information shows that the adverse environmental effects of the infill project are more significant than described in the prior EIR. "More significant" means an effect will be substantially more severe than described in the prior EIR.[38] More significant effects include those that result from changes in circumstances or changes in the development assumptions underlying the prior EIR's analysis.[39] An effect is also more significant if substantial new information shows that: (1) mitigation measures that were previously rejected as infeasible are in fact feasible, and such measures are not included in the project; (2) feasible mitigation measures considerably different than those previously analyzed could substantially reduce a significant effect described in the prior EIR, but such measures are not included in the project; or (3) an applicable mitigation measure was adopted in connection with a planning level decision, but the lead agency determines that it is not feasible for the infill project to implement that measure.[40]

Here, the City must prepare an Infill EIR because the Project would result in new specific effects and more significant effects, and uniformly applicable development standards would not substantially mitigate such effects.[41]

When a previously approved project for which an EIR or an MND has been prepared is modified, CEQA requires the lead agency to conduct subsequent or supplemental environmental review when one or more of the following events occur:

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[36] CEQA Guidelines § 15183.3(d)(1)(C).
[37] CEQA Guidelines § 15183.3(d)(1)(C).
[38] *Id.* at § 15183.3(d)(1)(D).
[39] *Id.*
[40] *Id.*
[41] CEQA Guidelines § 15183.3(d)(2)(C).

(a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report;
(b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; or
(c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.[42]

In assessing the need for subsequent or supplemental environmental review, the lead agency must determine, on the basis of substantial evidence in light of the whole record, if one or more of the following events have occurred:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant effects or a substantial increase in the severity of previously identified effects;
(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce

[42] Pub. Resources Code § 21166; CEQA Guidelines § 15162.

> one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.[43]

Only where ***none*** of the conditions described above calling for preparation of a subsequent or supplemental EIR have occurred may the lead agency consider preparing a subsequent negative declaration, an addendum or no further documentation.[44] The decision must be supported by substantial evidence.[45]

"Substantial evidence" under CEQA means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached."[46] Further, "[w]hether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence."[47] Substantial evidence "shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts."[48] Here, the Board's decision to approve the Project violated CEQA, land use laws and the City's municipal codes, and was not supported by substantial evidence in the record.

II. THE CITY COUNCIL MUST PREPARE AN INFILL EIR BECAUSE THE PROJECT WILL RESULT IN NEW AND MORE SIGNIFICANT EFFECTS AND UNIFORMLY APPLICABLE DEVELOPMENT POLICIES DO NOT SUBSTANTIALLY MITIGATE SUCH EFFECTS

CEQA Guidelines § 15183.3(d)(2)(C) requires that "If the infill project would result in new specific effects or more significant effects, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA. With respect to those effects that are subject to CEQA, the lead agency shall prepare an infill EIR if the written checklist shows

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[43] CEQA Guidelines §§ 15162(a)(1)-(3).
[44] CEQA Guidelines § 15162(b).
[45] *Id.* §§ 15162 (a), 15164(e), and 15168(c)(4).
[46] CEQA Guidelines § 15384(a).
[47] *Id.*
[48] *Id.* at § 15384(b).

that the effects of the infill project would be potentially significant. In this circumstance, the lead agency shall prepare an infill EIR."[49]

Here, the City must prepare an Infill EIR because the Project would result in new specific effects and more significant effects to housing, air quality, health risk, hazardous materials, greenhouse gas emissions, noise, and traffic; and uniformly applicable development standards would not substantially mitigate such effects.[50]

A. The Project Will Cause New Significant and Unmitigated Housing Impacts

The failure to provide sufficient inclusionary housing in this Project violates the City's Zoning Ordinance. The San Leandro Zoning Code provides that projects with 50 or more units must provide 15% of total units as Inclusionary Units.[51] "Inclusionary Unit" means a dwelling unit that must be offered at Affordable Rent or available at an Affordable Housing Cost to moderate-, low- and very low-income Households.[52] At the current rate required by the Zoning Code, this Project would be required to include 29 inclusionary units.[53] But, the Board of Zoning Adjustment approved this Project with only ten inclusionary units.[54] This dearth of inclusionary housing is contrary to the goals set forth in the San Leandro Zoning Code and Housing Element.

Title 6 of the San Leandro Zoning Code provides that the purpose of the Inclusionary Housing Chapter is to:

> Offset the demand on housing that is created by new development and mitigate environmental and other impacts that accompany new residential and commercial development by protecting the economic diversity of the City's housing stock, reducing traffic, transit and related air quality impacts, promoting jobs/housing balance and reducing the demands placed on transportation infrastructure in the region; and

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[49] CEQA Guidelines § 15183.3(d)(2)(C).
[50] CEQA Guidelines § 15183.3(d)(2)(C).
[51] San Leandro Zoning Code §6.04.112(B).
[52] San Leandro Zoning Code §6.04.108(P).
[53] San Leandro Zoning Code §6.04.112(B).
[54] City of San Leandro, California, Planning Commission and Board of Zoning Adjustments, 5/6/2021 7:00 PM, Meeting Video available here: http://sanleandro.granicus.com/MediaPlayer.php?view_id=2&clip_id=1667.

> Increase the supply of affordable ownership and rental housing in San Leandro as identified in the established Housing Element Goal 53, Affordable Housing Development. Policy 53.04 of Goal 53 requires the inclusion of affordable housing in new housing developments. (Ord. 2020-002 § 4; Ord. 2004-023 § 3).[55]

The Zoning Code provides no exception to these requirements for properties purchased prior to the Inclusionary Housing requirements enactment. Exemptions from the rule are limited to:[56]

> A. The reconstruction of any structures that have been destroyed by fire, flood, earthquake or other act of nature.
> B. Developments that already have more units that qualify as affordable to moderate-, low- and very low-income Households than this chapter requires.
> C. Housing constructed by other government agencies.
> D. Accessory dwelling units.

Applicants are therefore not "grandfathered" in under the prior inclusionary housing requirements, as was stated at the Board of Zoning Adjustments May 6, 2021 hearing.[57] The Inclusionary Zoning requirement may therefore be retroactively applied to the Project.[58]

While there is a strong policy against construing statutes to be retroactive[59], there is no constitutional prohibition against retroactive legislation that does not impair contract or vested rights.[60] "It is well settled that [a] new ordinance may operate retroactively to require a denial of the application, or the nullification of a permit already issued, provided that the applicant has not already engaged in substantial building or incurred expenses in connection therewith."[61] Further, "[t]here is no law of California to prevent the enforcement of a retroactive measure

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[55] San Leandro Zoning Code § 6.04.100.
[56] San Leandro Zoning Code § 6.04.116.
[57] City of San Leandro, California, Planning Commission and Board of Zoning Adjustments, 5/6/2021 7:00 PM, Meeting Video *available here:* http://sanleandro.granicus.com/MediaPlayer.php?view_id=2&clip_id=1667.
[58] See *Melton v. City of San Pablo* (1967) 252 Cal. App. 2d 794.
[59] *Aetna Cas. & Surety Co. v. Industrial Acc. Comm.*, 30 Cal.2d 388.
[60] McCann v. Jordan, 218 Cal. 577.
[61] *Id.* at 580; *Brougher* v. *Board of Public Works,* 205 Cal. 426; *Wheat* v. *Barrett,* 210 Cal. 193.

so long as it does not result in impairing the obligations of a contract or interfere with vested rights existing prior to the enactment of the law."[62] In this case, the Project is not grandfathered out of compliance with the Zoning Code's Inclusionary Housing requirements, and the Project does not fall under any of the exceptions. The Project's failure to comply with Inclusionary Housing requirements is therefore a violation of the Zoning Code which the City must enforce. Following the filing of this Appeal, the Project's permits will not receive final approval unless or until they are approved by the City Council. There are therefore no vested rights related to the Project which would be impaired by retroactive application of the City's Inclusionary Housing requirements in response to this Appeal. If the City Council were to approve the Project without requiring the full number of inclusionary housing units set forth in the Zoning Code, it would increase the deficit of affordable housing in the City, to the detriment of the City and the welfare of its residents. It could also cause the City to fall farther behind in meeting State RHNA requirements related to affordable housing. The City Council should retroactively apply these requirements to the Project to require the full number of inclusionary housing.

The Board of Zoning Adjustments voted to increase the number of inclusionary housing units at the May 6, 2021 hearing from five to ten.[63] If the Board of Zoning Adjustments felt it appropriate to change the number of inclusionary units from five to ten, in the best interest of the people of San Leandro, then the City Council should act in line with the Board, and in compliance with the Zoning Code, and require an additional 19 inclusionary units be added to the Project. The San Leandro City Council should not approve the Project without bringing the Project up to modern day standards for inclusionary housing. The Project should, therefore, add an additional 19 inclusionary units to provide the required 29 units of inclusionary housing under the Zoning Code.

B. The Project Will Cause New Significant and Unmitigated Air Quality Impacts

The decision by the Board of Zoning Adjustments to approve the Project violated CEQA and San Leandro Zoning Code Section because the Checklist failed to accurately analyze the Project's construction and operational air quality

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[62] Roth Drug, Inc., v. Johnson (1936) 13 Cal.App.2d 720; *City of Los Angeles* v. *Oliver,* 102 Cal.App. 299, 309; *McCann* v. *Jordan,* (1933) 218 Cal. 577.

[63]

emissions as well as the public health risks to the surrounding community from exposure to toxic air contaminants ("TACs") generated by the Project, which are new or more severe than previously analyzed.

The Checklist and the 2035 General Plan EIR were inconsistent in their analysis of air quality impacts. The Checklist determined the Air Quality impacts would be less than significant, but the General Plan EIR determined they would be significant and unavoidable.

Our experts determined the Project's construction and operational emissions are underestimated, and therefore the Board's approval of the Project was not based on substantial evidence in violation of CEQA. Further, SWAPE determined that the Checklist's calculation regarding off-road vehicles is not supported by substantial evidence.[64] SWAPE also determined that the Checklist underestimated the Project's mobile source operational emissions. The Project's mobile-source emissions may constitute a new and potentially significant impact in the Project, that was not addressed or mitigated in the prior EIR. An Infill EIR is required to remedy these significant construction and operational emission analysis deficiencies, in order to adequately mitigate such issues prior to Project approval by the City Council.

The Project's air quality impacts remain unmitigated. The Project is not consistent with the General Plan because General Plan Policy 31.04 provides that the City must "Require new development to be designed and constructed in a way that reduces the potential for future air quality problems, such as odors and the emission of any and all air pollutants."[65] The Board therefore cannot approve the Conditional Use Permit due to the inconsistency with the General Plan policy. Further, the mitigation measures presented in the General Plan and Checklist would not substantially mitigate the impacts of the Project.

The Checklist approved by the Board does not ensure that best available control technologies are used for operations that could generate air pollutants as required by General Plan Policy EH-3.4.[66] Further, the use of Tier-4 Interim mitigation measures does not constitute sufficient mitigation. As SWAPE describes in their comments, Tier 4 Interim measures do not constitute adequate mitigation

[64] SWAPE Comments, p. 7.
[65] General Plan p. 7-49.
[66] General Plan p. 7-49.

because they do not go above-and-beyond existing laws, regulations, and requirements that would reduce environmental impacts.[67] Tier 4 Interim measures would already be considered part of the Project, as the Checklist states they are required by the EPA. But, CEQA requires that mitigation measures are measures which are not part of the original project design. In *Trisha Lee Lotus et al. v. Department of Transportation et al.* the court held that "[b]y compressing the analysis of impacts and mitigation measures into a single issue, the EIR disregards the requirements of CEQA."[68]

But, as our experts at SWAPE determined, the Tier 4 Interim measures are not within the mitigation monitoring and reporting plan ("MMRP").[69] As such, these mitigation measures are not enforceable. "As Tier 4 Interim construction equipment is not formally included as a mitigation measures, we cannot guarantee that Tier 4 Interim emission standards would be implemented, monitored, and enforced on the Project site. Thus, the model's assumption that the entire off-road construction fleet would meet Tier 4 interim emission standards is incorrect."[70] The Checklist's air quality analysis is therefore not based on substantial evidence. An Infill EIR must be prepared to remedy this inadequacy and adequately analyze and mitigate air quality impacts prior to Project approval by the City Council.

C. The Project Will Cause New Significant and Unmitigated Health Risk Impacts

The Board of Zoning Adjustments approved this Project in violation of CEQA and San Leandro Zoning Code Section 5.08.124(A)(2) which prohibits the Board of Zoning Adjustments from approving a Use Permit where the Project would be detrimental to the general welfare of the City.[71] Here, the Project exceeds allowable Cancer Risk thresholds. The Project's unmitigated construction health risk assessment indicates that the Project would pose an excess cancer risk of 54.7 in one million to people living nearby.[72] This health risk exceeds the BAAQMD

[67] SWAPE Comments, p. 12; "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[68] Lotus v. Department of Transportation (2014) 223 Cal.App.4th 645,656.
[69] SWAPE Comments p. 13.
[70] SWAPE Comments p. 13.
[71] San Leandro Zoning Code Section 5.08.124(A)(2).
[72] Checklist p. 4-17, Table 4-3.

significance threshold of 10 in one million, and should have been disclosed as a significant impact in the Checklist, but was not.[73]

The Checklist conflates analysis and mitigation by concluding that impacts would be less than significant because Uniformly Applicable Development Policies would decrease cancer risk impacts to the off-site residential MER from 54.7 in a million to 4.9 in a million.[74] This is an additional CEQA violation.[75]

In light of the inadequate health risk analysis presented in the Checklist, SWAPE conducted their own health risk analysis using the Project's construction and operational emissions, as seen in the table below.[76]

The Closest Exposed Individual at an Existing Residential Receptor

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Construction	0.25	*	361	10	*
3rd Trimester Duration	***0.25***			***3rd Trimester Exposure***	
Construction	1.42	*	1090	10	*
Operation	0.58	0.3138	1090	10	2.6E-05
Infant Exposure Duration	***2.00***			***Infant Exposure***	***2.6E-05***
Operation	14.00	0.3138	572	3	8.2E-05
Child Exposure Duration	***14.00***			***Child Exposure***	***8.2E-05***
Operation	14.00	0.3138	261	1	1.3E-05
Adult Exposure Duration	***14.00***			***Adult Exposure***	***1.3E-05***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**1.2E-04**

* Construction-related cancer risk calculated separately in the Checklist.

[73] Checklist, p. 4-18, concluding that construction-related health impacts would be less than significant.
[74] Checklist, p. 4-18.
[75] *Lotus v. Dep't of Transp*. (2014) 223 Cal. App. 4th 645, 651-52.
[76] SWAPE Comments p. 21

As demonstrated in the table above, SWAPE estimated the excess cancer risk of approximately 124.9 in one million over the course of a residential lifetime from Project construction and operation combined.[77] The infant, child, adult, and lifetime cancer risks all exceed the BAAQMD threshold of 10 in one million, thus resulting in a potentially significant impact which is more severe than the health risk identified in the Checklist, and was not previously addressed in the General Plan EIR or the Checklist.

SWAPE concluded that the screening-level health risk analysis ("HRA") demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used.[78] SWAPE further explains that the Checklist contains no mitigation to address the Project's operational health risk, and that the Project's construction-related health risk would not be substantially mitigated by the Uniformly Applicable Development Policies because the Checklist applied Tier 4 Interim emissions reductions in its health risk modeling which is not required by the City's Standard Conditions of Approval. Thus, the Project's health risk remains significant and unmitigated.

Since SWAPE's screening-level HRA indicates a potentially significant impact, the City should prepare an Infill EIR with an HRA which makes a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, the City should prepare an updated, quantified air pollution model as well as an updated, quantified refined HRA which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.[79]

General Plan Action EH-3.4.B requires a Health Risk Assessment for projects near freeways and high-volume roadways, as here. But the health risk analysis in the Checklist fails to satisfy General Plan requirements.[80] Additionally, SWAPE determined that without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the Project is inconsistent with CEQA's requirement to correlate the increase in TAC emissions with potential adverse impacts on human health.[81] SWAPE

[77] SWAPE Comments p. 21.
[78] SWAPE Comments p. 22.
[79] *Id.*
[80] SWAPE Comments p. 18.
[81] SWAPE Comments p. 17.

recommends that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in a full CEQA analysis for the Project.[82]

The Cancer Risk for this Project exceeds allowable thresholds. As analyzed above, the health risk analysis in the Checklist is inadequate under CEQA, an Infill EIR must be prepared to adequately analyze and mitigate the impacts to human health from this Project.

D. The Project Will Cause New Significant and Unmitigated Hazardous Materials Impacts

The Project site has a history of contamination from the site's former use as an auto repair facility and a dry cleaner and from the nearby gas station which stores petroleum in underground storage tanks.[83] The Project may remain contaminated by hazardous materials and is listed on the Geotracker site (Cortese list),[84] which states[85]:

> The Phase II investigations indicate groundwater in the vicinity of the Site contains low levels of total petroleum hydrocarbons as diesel. Shallow soil samples collected at the Site had reported low levels of total petroleum hydrocarbons as diesel and motor oil and various metals; pesticides and lead were detected exceeding risk-based screening levels. Soil gas samples collected off-site exceeded commercial or residential risk-based screening levels for volatile organic compounds including benzene, tetrachloroethene, ethylbenzene, naphthalene and chloroform; soil gas samples collected on-Site exceeded commercial or residential risk-based screening levels for volatile organic compounds including benzene, tetrachloroethene, ethylbenzene, naphthalene, chloroform and vinyl chloride. The primary chemicals of potential concern identified during investigations conducted to date include volatile organic compounds (VOCs), lead, pesticides, and petroleum.

The Checklist fails to disclose the Project site's Cortese listing, and fails to disclose the existing contamination described on the Geotracker website. As

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[82] *Id.* at p. 18.
[83] Checklist p. 4-61.
[84] SWAPE Comments, pp. 1-4.
[85] 14th & Callan Redevelopment (T10000016541) 1120 E 14th Street (Former address)

SWAPE explains, the State Geotracker's description of contamination at the Project site is entirely inconsistent with the Checklist's conclusion that "the project site does not contain outstanding surface or subsurface recognized environmental conditions that require further investigation."[86] Absent mitigation, disturbance of contaminated soil during Project construction may release contaminants which could pose significant health and safety risks to workers and sensitive receptors near the Project site. This is a more significant impact than analyzed in the General Plan EIR, and is not disclosed in the Checklist, resulting in violations of CEQA's disclosure requirements. Moreover, to the extent the City relies on CEQA Guidelines exemption 15183.3, the Project site's presence on the Cortese list precludes reliance on the exemption.[87]

In order to approve a Conditional Use Permit, the Board of Zoning Adjustments must determine "on the basis of the application, plans, materials, and testimony submitted… [t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to the properties or improvements in the vicinity, or to the general welfare of the City."[88] The Checklist does not show, with substantial evidence, that the soil contamination onsite will not be detrimental to public health, safety or welfare of people living and working on the Project site.

General Plan Policy EH-5.2 provides for the clean-up of contaminated sites to "[e]nsure that the necessary steps are taken to clean up residual hazardous wastes on any contaminated sites proposed for redevelopment or reuse. Require soil evaluations as needed to ensure that risks are assessed and appropriate remediation is provided."[89] Here, appropriate remediation for onsite contamination has not been provided.

SWAPE concludes that the Checklist fails to adequately disclose and mitigate this potentially significant impact from hazardous materials, and identifies specific mitigation measures that should be incorporated into an EIR and mitigation plan for the Project to protect future occupants from exposure to contaminated soil vapor,

[86] SWAPE Comments, pp. 2-3; Checklist p. p. 4-63.
[87] Pub. Res. Code § 21084(d).
[88] San Leandro Zoning Code § 5.08.124(A)(2).
[89] General Plan p. 7-55.

and to ensure removal of contaminated soil prior to Project construction. These mitigation measures must be included as binding mitigation in an Infill EIR.

E. The Project Will Cause New Significant and Unmitigated Greenhouse Gas Emission Impacts

In order to approve a Conditional Use Permit, the Board of Zoning Adjustments must determine "on the basis of the application, plans, materials, and testimony submitted… [t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to the properties or improvements in the vicinity, or to the general welfare of the City."[90] The excessive GHG emissions of this Project, absent adequate mitigation, would be detrimental to the public health, safety and welfare of San Leandro residents and would be detrimental to the general welfare of the City. The Board violated the Zoning Code in approving this Project.

SWAPE determined that the Checklist's conclusion that GHG emissions will be less than significant is not based on substantial evidence. SWAPE conducted accurate GHG modeling which found that the Project will exceed allowable thresholds of GHG emissions "thus resulting in a potentially significant impact not previously mitigated in the Checklist or General Plan EIR."[91] The GHG impact from this Project is therefore more significant than addressed in the prior EIR. The City Council and Staff must prepare an Infill EIR to adequately address and mitigate GHG emissions.

F. The Project Will Cause New Significant and Unmitigated Noise Impacts

Approval of the Project by the Board violated San Leandro Zoning Code Section 5.08.124(A)(2) which prohibits the Board of Zoning Adjustments from approving a Use Permit where the Project would be detrimental to the general welfare of the City.[92] Approval of the Project with unmitigated noise pollution would constitute a detriment to the general welfare of the City. The Checklist

[90] San Leandro Zoning Code § 5.08.124(A)(2).
[91] SWAPE Comments p. 24.
[92] San Leandro Zoning Code Section 5.08.124(A)(2).

concluded that noise impacts from construction, traffic, parking and truck loading, building mechanical equipment and rooftop deck would not be more significant than the impacts that were evaluated in the prior EIR.[93] This statement is not supported by substantial evidence because the Checklist and the General Plan EIR failed to provide a threshold of significance for noise impacts.[94] Therefore, the decision by the Board of Zoning Adjustments to approve the Project was not based on substantial evidence, in violation of CEQA.

The increased traffic resulting from Project construction and operation will constitute an exacerbation of noise impacts in the area and must be analyzed. It is not sufficient that the Checklist relies on the analysis in the 2035 General Plan EIR and the TOD EIR, because this Project will exacerbate existing noise impacts. An Infill EIR must be prepared to adequately analyze and mitigate the exacerbation of noise impacts from this Project.

Further, this Project contains noise impacts which were not mentioned or analyzed in either the Checklist or the General Plan EIR. Neither analysis mentions the refrigeration and ventilation equipment that may be required for a grocery store, nor the exhaust fans that may be required for a restaurant. Further, the Checklist and the General Plan EIR do not conduct any analysis about an emergency generator that may be required by the California Building Code for elevators onsite.[95] This type of emergency generator must be tested for an hour each month.[96] "Without proper equipment selection and mitigation design, these additional noise sources would possibly exceed the "normally acceptable" land use standards at nearby noise receptors."[97] This would constitute an environmental impact that is more significant than was represented in the General Plan EIR. An Infill EIR is therefore required to adequately analyze and mitigate the impacts from noise and vibration from construction and operation of this Project.

General Plan Action EH-7.5.A and EH7.5.B establish conditions of approval for projects likely to have noise and vibration impacts. But, Wilson Ihrig determined that the Uniformly Applicable Development Standards detailed in the General Plan would "likely be ineffective at reducing actual construction noise."[98] Additionally,

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[93] Checklist p. 4-90 - 92.
[94] Wilson Ihrig Comments p. 2.
[95] California Building Code 2016 § 3003.1.3.
[96] Wilson Ihrig Comments, p. 4.
[97] Wilson Ihrig Comments, p. 4.
[98] Wilson Ihrig Comments, p. 1.

Wilson Ihrig determined that the Checklist lacks sufficient discussion of noise impacts and the corresponding necessary mitigation measures to assure the community that all rooftop and mechanical equipment will be designed to meet applicable land use standards.[99] Further, Wilson Ihrig determined that the noise impacts from refrigeration noise and other noise sources from the Project are missing from the analysis, and are therefore unmitigated. An Infill EIR is required to adequately analyze and mitigate noise impacts prior to Project approval by the City Council.

G. The Project Will Cause New Significant and Unmitigated Traffic Impacts

The Zoning Code provides that the Board may only approve a project if it determine "[t]hat the proposed use will not create adverse impacts on traffic or create demands exceeding the capacity of public services and facilities..."[100] The Project was approved by the Board in violation of the Zoning Code because the Project would create adverse impacts on traffic that are not adequately mitigated.

The Project will have significant new impacts from traffic. Our traffic expert Mr. Smith determined that the Project's non-residential component would create a significant transportation impact. The increased transportation impact would be an exacerbation of existing environmental conditions in San Leandro and requires adequate analysis under an Infill EIR.

The Project will generate significant levels of vehicle miles travelled ("VMT"). The statement that the Project would generate less VMT than the average in the area is not supported by substantial evidence.[101] Mr. Smith determined that the Checklist miscalculated the Project trip generation.[102] Absent this correct calculation, the City's traffic calculations are not supported by substantial evidence. Mr. Smith found that the "extra discounting on the residential trips in the PM peak eliminates 45 of the 71 (over 63 percent) of residential trips… the discount of residential trips amounts to almost 29 percent of the 156 net new PM peak hour trips that are ultimately assigned to the street system. So, this one error alone is sufficient to result in substantial understatement of the Project's impacts on PM

[99] Wilson Ihrig Comments, p. 4.
[100] San Leandro Zoning Code Section 5.08.124.
[101] Smith Comments p. 2.
[102] Smith Comments p. 2.

peak hour delay/level of service and traffic queues."[103] Additionally, Mr. Smith found that the exit into Hyde Street for large trucks may constitute a safety issue that was not analyzed or mitigated in the Checklist. This discrepancy and the issues addressed in Mr. Smith's comments constitute inadequate traffic analysis and must be remedied in an Infill EIR to satisfy CEQA.

Further, Mr. Smith determined that the Project will have significant adverse impacts on traffic and create demands exceeding the capacity of public services and facilities[104], these cannot be mitigated by the proposed Uniformly Applicable Development Standards laid out in the General Plan.[105] Mr. Smith determined that the Checklist failed to disclose potentially significant cumulative effects that are specific to the Project, that were not analyzed, and are more severe than, the traffic issues raised in the General Plan EIR.[106] An Infill EIR must be prepared to adequately address and mitigate impacts from traffic prior to final Project approval by the City Council.

III. THE BOARD LACKED SUBSTANTIAL EVIDENCE TO MAKE THE REQUIRED FINDINGS TO APPROVE THE PROJECT UNDER THE ZONING CODE

Under the City's Zoning Code, in order to approve a CUP, the Board of Zoning Adjustments was required to determine "on the basis of the application, plans, materials, and testimony submitted… [t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to the properties or improvements in the vicinity, or to the general welfare of the City."[107] Further, the Zoning Code requires that the Board may approve a use permit if the Board finds that "That the proposed use will not create adverse impacts on traffic or create demands exceeding the capacity of public services and facilities, which cannot be mitigated."[108]

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[103] Smith Comments, p. 4.
[104] Smith Comments p. 6.
[105] General Plan Appendix A, p. 6-7.
[106] Smith Comments p. 6.
[107] San Leandro Zoning Code § 5.08.124(A)(2).
[108] *Id.* at § 5.08.124(A)(4).

As discussed in our Comments and herein, there is substantial new information demonstrating that the Project is likely to result in significant effects related to hazardous materials, health risk, air quality, greenhouse gas emissions, noise, and transportation that are not mitigated, let alone substantially mitigated, by the City's standard conditions of approval. There is therefore substantial evidence demonstrating that the Project will be detrimental to the public health, safety and the general welfare of San Leandro residents, and that the Project would create adverse impacts that were not adequately analyzed or mitigated before the Board approved the Project. The Board, therefore, lacked substantial evidence to support its findings to approve the Project under the Zoning Code.

The City Council must remand this Project to Staff to complete a thorough environmental review in an Infill EIR in order to satisfy Zoning Code and State land use law requirements.

IV. THE CITY'S "AGREEMENT FOR PAYMENT OF PLANNING APPEAL FEES" VIOLATES APPELLANTS' DUE PROCESS RIGHTS

Pursuant to City Codes and the Appeal Fee Schedule, Residents were charged $568 for the Planning appeal fee and $534 for the City Clerk fee.[109] These Appeal fees were reasonable and are not contested by Residents.

However, in order to file this Appeal, Residents were also required to sign a form titled "Agreement For Payment Of Planning Appeal Fees" which purports to require Appellants to "pay all direct costs as listed in the City's adopted fee schedule for the review and processing of application(s) for the subject project" including but not limited to "hourly personnel charges plus a factor of 3.38 for benefits and administrative overhead; legal fees; communications via telephone or written correspondence with the appellant, property owner, architect, engineer, etc.; analysis and preparation of staff reports and findings; and attendance at public hearings."[110] The Form also purports to require the appellant to "hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City or held to be the liability of the City in connection with the City's defense of its

[109] See Exhibit 1.
[110] See Exhibit 1, p. 2.

actions in any proceeding brought in any State or Federal Court challenging the City's actions with respect to [the] project."[111]

Residents presumes that these terms on the Form are intended to apply to the applicant seeking entitlements from the City for a development project, and not to members of the public seeking to enforce the City's compliance with local, State, or federal land use and environmental laws, as Residents seek to do here. However, in the event that the City subsequently seeks to charge Residents or its representatives any of the above-described fees, Residents reserves its right to object to additional Appeal fees as a violation of Residents' due process rights to petition the government, and/or to pay any subsequent fees under protest.

If the City were to require appellants to pay undetermined fees and costs associated with an administrative appeal, as set forth in the Firm, the City would violate appellants' due process rights to a hearing. A party must first exhaust its administrative remedies before it can bring a lawsuit challenging a CEQA determination.[112] If an appeal of a CEQA decision is available to a higher administrative body and that remedy is not pursued, an action challenging the agency decision is therefore barred. For CEQA decisions made by a nonelected decision making body, CEQA specifically allows for appeals of these decisions to an agency's elected decision making body.[113] Agencies have the power to charge reasonable fees for filing administrative appeals of decisions.[114] However, such a fee cannot impose a burden upon the exercise of the due process right to a hearing.[115]

Here, if members of the public seek to challenge the Board's approval of the Project, they must appeal the Planning Commission's decision to the City Council, as required by the City's Zoning Code, as well as CEQA and State land use laws. Just as the statute did in *California Teachers Association*, if the City were to charge appellants for the entire (and, as yet, unknown) costs of both filing an administrative appeal, and of challenging any future project approval in court, the potentially substantial and unknown monetary obligation to challenge the City's decision to approve the Project will chill appellants' required exercise of a due process hearing in order to exhaust administrative remedies. It would also conflict

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[111] *Id.*
[112] Pub. Res. Code § 21177; *Tomlinson v. County of Alameda* (2012) 54 Cal.4th. 281, 291.
[113] See Pub. Res. Code § 21151(c).
[114] See *Friends of Glendora v. City of Glendora* (2010) 182 Cal.App.4th 573, 579–80; see also *Sea & Sage Audubon Society, Inc. v. Planning Com*. (1983) 34 Cal.3d 412, 419.
[115] *California Teachers Association v. State of California* (1999) 20 Cal. 4th 327, 331-32;

with CEQA and mandamus statutory requirements which provide that agencies and the recipients of project approvals may not recover their attorneys fees from petitioners in lawsuits challenging the agency's approval of a project pursuant to CEQA, State land use and planning, or other environmental laws.

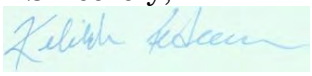
The threat of substantial monetary obligations on appellants would place too great a burden on the exercise of a due process right to a hearing that is required under CEQA in order to access the courts. Any attempt by the City to collect the costs identified on page 2 of the Form from Residents or other appellants would therefore constitute a due process violation.

V. CONCLUSION

The City cannot rely on the Infill Exemption for all the reasons stated in East Bay Residents May 6, 2021 Comments and herein including, but not limited to, unmitigated air quality, health risk, hazardous materials, greenhouse gas emissions, noise, traffic, and housing. The City must prepare an Infill EIR before the Project can be approved because the Project would result in new specific effects and more significant effects to air quality, health risk, hazardous materials, greenhouse gas emissions, noise, and traffic; and uniformly applicable development standards would not substantially mitigate such effects.[116]

Thank you for your consideration of these comments.

Sincerely,



Kelilah D. Federman
Associate Attorney

KDF:acp
Attachment

[116] CEQA Guidelines § 15183.3(d)(2)(C).

EXHIBIT 1

CITY OF SAN LEANDRO

Payment Receipt

Check #: CREDIT CARD
Receipt #: 109012
Payment Received By: AMOGENSEN
Customer Number:
Paid By: Kelilah Federman
Address: 1188 E 14th St, San Leandro, Ca 94577
Parcel #: 77-447-15-6

Case Number	Account Number	Description	Date Paid	Amount Due	Amount Paid
010-3711					
APL21-0001	010-3711	Appeal to City Council	5/19/21	$535.85	$535.85
Comment: Credit Card Payment from East Bay Residents for Responsible Development c/o Kelilah Federm					
				Total Paid:	$535.85
010-3842					
APL21-0001	010-3842	Credit Card Processing Fee	5/19/21	$27.55	$27.55
Comment: Credit Card Payment from East Bay Residents for Responsible Development c/o Kelilah Federm					
				Total Paid:	$27.55
010-3845					
APL21-0001	010-3845	Technology Fee (Dollar Amt.)	5/19/21	$32.15	$32.15
Comment: Credit Card Payment from East Bay Residents for Responsible Development c/o Kelilah Federm					
				Total Paid:	$32.15

Grand Total: **$595.55**
Balance Due: **$0.00**

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CREDIT CARD

VISA SALE

Card #	XXXXXXXXXXX0199
SEQ #:	1
Batch #:	58
INVOICE	1
Approval Code:	019007
Entry Method:	Manual
Mode:	Online
Tax Amount:	$0.00
Cust Code:	
Avs Code:	NYZ
Card Code:	M

SALE AMOUNT $1129.55

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EXHIBIT 2

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May 6, 2021

VIA EMAIL AND OVERNIGHT MAIL

Planning Commission and Board of Zoning Adjustments
Andrew Mogensen, Planning Manager
City of San Leandro
835 East 14th Street
San Leandro, CA 94577
Email: amogensen@sanleandro.org; planner@sanleandro.org

Re: Agenda Item No. 6.C.: Comments on 1188 E 14th Street Project, Request for Conditional Use Permit, Parking Exception, and Site Plan Review (PLN18-0036)

Dear Vice Chair Boldt, Board Members Breslin, Mendoza, Pon, Santos, Solis, Tejada, and Mr. Mogenson:

These comments are submitted on behalf of East Bay Residents for Responsible Development ("EBRRD" or "East Bay Residents") regarding the Agenda Item 6.C., Conditional Use Permit, Parking Exception, and Site Plan Review for the 1188 E. 14th Street Project (PLN18-0036) ("Project") proposed by 14th & Callan Street Developer LLC ("Applicant") and the City's CEQA Infill Checklist ("Checklist") prepared by the City of San Leandro ("City") pursuant to the California Environmental Quality Act ("CEQA").[1]

The Project proposes to demolish existing buildings to construct a 196-unit five-story mixed-use residential development with an approximately 23,000 square foot ("SF") supermarket and an approximately 5,600 SF ground floor retail space with 286-space parking garage located on the 1.6-acre site. The proposed project is to be located 1188 E. 14th Street in San Leandro, California (Assessor's Parcel

[1] Pub. Resources Code, § 21000 et seq.; 14 Cal. Code regs. §§ 15000 et seq. ("CEQA Guidelines").

Number ("APN") 77-447-14-6, 77-447-7-1, 77-447-14-7, 77-447-15-6. The Project is located in the DA-1(S), Downtown Area 1 (Special Policy Area 3) zoning district. The anticipated construction schedule assumes that the Project would be built over a 20-month period.[2] Required Project approvals include a Conditional Use Permit ("CUP") and Site Plan Review, a Parking Exception, and approval of a CEQA document for this Project.

The Checklist evaluates the Project's potential environmental impacts and consistency with the City's 2035 General Plan Update Final Environmental Impact Report ("GP EIR") and the 2007 Downtown San Leandro Transit-Oriented Development Strategy EIR ("TOD EIR"). We reviewed the Checklist and Staff Report for the Project in conjunction with our technical consultants, and have identified a number of significant deficiencies in the City's analysis, as well as new and more severe impacts than previously analyzed in the GP EIR and the TOD EIR. Specifically, the Checklist fails to accurately analyze the Project's construction and operational air quality emissions as well as the public health risks to the surrounding community from exposure to toxic air contaminants ("TACs") generated by the Project, which are new or more severe than previously analyzed. Further, cumulative noise and greenhouse gas ("GHG") emissions were not accurately analyzed. Therefore, the City lacks substantial evidence to support the conclusions in its Checklist and an Infill Environmental Impact Report ("EIR") is required.

We reviewed the Checklist and Staff Report for the May 6, 2021 Planning Commission / Board of Zoning Adjustments hearing ("Staff Report") and prepared our comments on air quality, public health, and GHG emissions with the assistance of air quality and GHG expert Paul E. Rosenfeld, Ph.D. and hazardous materials expert Matt Hagemann, P.G., C.Hg of Soil Water Air Protection Enterprises, whose comments are included in the SWAPE Comments ("SWAPE Comments"). The SWAPE Comments, Dr. Rosenfeld's and Mr. Hagemann's expert curriculum vitae ("CV") are attached hereto as **Exhibit A.** We have prepared our comments on traffic and transportation with the assistance of Daniel T. Smith, Jr., P.E., principal at Smith Engineering & Management. The Smith Comments ("Smith Comments") and Mr. Smith's CV are attached hereto as **Exhibit B.** We have prepared our comments on noise impacts with the assistance of Deborah Jue, acoustics, noise and vibration expert of Wilson Ihrig. The Wilson Ihrig Comments ("Wilson Ihrig Comments") and Ms. Jue's CV are attached hereto as **Exhibit C.** The attached

[2] Checklist p. 4-38.

expert reports are incorporated by reference into this comment letter as if fully set forth herein and must be considered part of the record for this Project. East Bay Residents reserves the right to submit supplemental comments at any later hearings and proceedings related to the Project.[3]

I. STATEMENT OF INTEREST

East Bay Residents is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards and environmental and public service impacts of the Project. The association includes San Leandro residents Gene Jones, Anthony Haynes, and Mario Oliveira, UA Plumbers and Pipefitters Local 342, International Brotherhood of Electrical Workers Local 595, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, their members and families, and other individuals that live and/or work in the City of San Leandro and Alameda County.

Individual members of East Bay Residents and its affiliated labor organizations live, work, recreate and raise their families in Alameda County, including in the City of San Leandro. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. Accordingly, they will be first in line to be exposed to any health and safety hazards that exist onsite. East Bay Residents has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there.

II. THE CITY MUST PREPARE AN INFILL EIR WHICH DISCLOSES, ANALYZES, AND MITIGATES THE PROJECT'S POTENTIALLY SIGNIFICANT IMPACTS TO AIR QUALITY, PUBLIC HEALTH, GHG, NOISE, AND TRAFFIC.

CEQA has two basic purposes, neither of which is satisfied by the CEQA Checklist. First, CEQA is designed to inform decision makers and the public about

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

the potential, significant environmental impacts of a project before harm is done to the environment.[4] The EIR is the "heart" of this requirement.[5] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[6]

To fulfill this function, the discussion of impacts in an EIR must be detailed, complete, and "reflect a good faith effort at full disclosure."[7] An adequate EIR must contain facts and analysis, not just an agency's conclusions.[8] CEQA requires an EIR to disclose all potential direct and indirect, significant environmental impacts of a project.[9]

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring imposition of mitigation measures and by requiring the consideration of environmentally superior alternatives.[10] If an EIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts.[11] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures.[12] Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon the EIR to meet this obligation.

Under CEQA, an EIR must not only discuss measures to avoid or minimize adverse impacts, but must ensure that mitigation conditions are fully enforceable through permit conditions, agreements or other legally binding instruments.[13] A CEQA lead agency is precluded from making the required CEQA findings unless the

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[4] 14 Cal. Code Regs. § 15002(a)(1) ("CEQA Guidelines"); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[5] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.
[6] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[7] CEQA Guidelines § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.
[8] *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568.
[9] Pub. Resources Code § 21100(b)(1); CEQA Guidelines § 15126.2(a).
[10] CEQA Guidelines § 15002(a)(2) and (3); *Berkeley Jets,* 91 Cal.App.4th at 1354; *Laurel Heights Improvement Ass'n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.
[11] Pub. Resources Code §§ 21002.1(a), 21100(b)(3).
[12] *Id.*, §§ 21002-21002.1.
[13] CEQA Guidelines § 15126.4(a)(2).

record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility.[14] This approach helps "insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug."[15]

A. CEQA Infill Exemption

The City seeks to rely on narrow CEQA exemptions that allow approval of projects without an EIR in very narrow circumstances, CEQA Section 21094.5[16] and CEQA Guidelines Section 15183.3 ("Infill Exemption").[17] The Infill Exemption provides that, if an EIR was previously certified for a planning level decision of a city or county, subsequent CEQA review may be limited to evaluating a project's effects on the environment that are either (A) specific to the project or to the project site and were not addressed as significant effects in the prior environmental impact report or (B) where substantial new information shows the effects will be more significant than described in the prior environmental impact report.[18] The Infill Exemption allows a lead agency to forego preparation of an EIR if neither of these situations occur, or if the lead agency determines that uniformly applicable development policies or standards adopted by the agency will substantially mitigate the new effects. A lead agency's determination pursuant to this section must be supported by substantial evidence.[19]

San Leandro Planning Staff recommends the Board of Zoning Adjustments adopt Resolution 2021-002, approving a Conditional Use Permit, Site Plan Review, and Parking Exception for 1188 E. 14th Street, PLN18-0036, based on the Findings of Fact and subject to the Conditions of Approval.[20] The Staff Report states that pursuant to Public Resources Code Section 21094.5, no additional environmental review is required under CEQA for the Project as an infill project. This statement is

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[14] *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28 (a groundwater purchase agreement found to be inadequate mitigation because there was no record evidence that replacement water was available).
[15] *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.
[16] Pub. Res. Code § 21094.5.
[17] 14 Cal. Code Regs. § 15183.3.
[18] Pub. Res. Code § 21094.5(a); 14 Cal. Code Regs. § 15183.3(a), (c).
[19] Pub. Res. Code § 21094.5(a).
[20] City of San Leandro, Staff Report File # 21-241, SR BZA 1188 E. 14th St. PLN18-0036, https://sanleandro.legistar.com/LegislationDetail.aspx?ID=4924565&GUID=C7DDB6F8-BD7C-4FFE-A1C6-2772FFE10226&FullText=1.

not supported by substantial evidence, additional review in the form of an Infill EIR is required. CEQA Guidelines §15183.3 specifies the content of the Infill EIR, which is to analyze only those new or substantially more severe potentially significant impacts that are not substantially mitigated by the application of uniform development policies or standards.[21]

In order to approve a Conditional Use Permit, the Board of Zoning Adjustments must determine "on the basis of the application, plans, materials, and testimony submitted… [t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to the properties or improvements in the vicinity, or to the general welfare of the City."[22] Further, the Zoning Code requires that the Board may approve a use permit if the Board finds that "That the proposed use will not create adverse impacts on traffic or create demands exceeding the capacity of public services and facilities, which cannot be mitigated."[23] This Project has been found to be detrimental to the public health, safety and the general welfare of San Leandro residents, and the Project would create adverse impacts that were not adequately analyzed in the Checklist. The Board, therefore, cannot approve this Project without first mitigating such impacts in an Infill EIR.

III. THE INFILL EXEMPTION DOES NOT APPLY TO THE PROJECT BECAUSE THE PROJECT WILL RESULT IN NEW AND MORE SIGNIFICANT EFFECTS THAN PREVIOUSLY ANALYZED AND UNIFORMLY APPLICABLE DEVELOPMENT POLICIES DO NOT SUBSTANTIALLY MITIGATE SUCH EFFECTS

An Infill EIR must be prepared for this Project, based on the limitations in Public Resources Code section 21094.5(b), because the Project includes new specific effects, and the significant effects of the infill project were not address in the prior EIR, and are more significant than the effects addressed in the prior EIR.[24] A new specific effect may result if, for example, the prior EIR stated that sufficient site-

[21] Stephen L. Kostka, Michael H. Zischke, *Practice Under the California Environmental Quality Act* §10.36-10.41.
[22] San Leandro Zoning Code § 5.08.124(A)(2).
[23] *Id.* at § 5.08.124(A)(4).
[24] CEQA Guidelines § 15183.3(d)(1)(C).

specific information was not available to analyze the significance of that effect.[25] Here, the new specific effects include: air quality; hazardous materials; noise; and greenhouse gas emissions.

Further, additional review is required to explain whether substantial new information shows that the adverse environmental effects of the infill project are more significant than described in the prior EIR. "More significant" means an effect will be substantially more severe than described in the prior EIR.[26] More significant effects include those that result from changes in circumstances or changes in the development assumptions underlying the prior EIR's analysis.[27] An effect is also more significant if substantial new information shows that: (1) mitigation measures that were previously rejected as infeasible are in fact feasible, and such measures are not included in the project; (2) feasible mitigation measures considerably different than those previously analyzed could substantially reduce a significant effect described in the prior EIR, but such measures are not included in the project; or (3) an applicable mitigation measure was adopted in connection with a planning level decision, but the lead agency determines that it is not feasible for the infill project to implement that measure.[28]

CEQA Guidelines § 15183.3(d)(2)(C) requires that "If the infill project would result in new specific effects or more significant effects, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA. With respect to those effects that are subject to CEQA, the lead agency shall prepare an infill EIR if the written checklist shows that the effects of the infill project would be potentially significant. In this circumstance, the lead agency shall prepare an infill EIR."[29]

Here, the City must prepare an Infill EIR because the Project would result in new specific effects and more significant effects, and uniformly applicable development standards would not substantially mitigate such effects.[30]

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[25] CEQA Guidelines § 15183.3(d)(1)(C).
[26] *Id.* at § 15183.3(d)(1)(D).
[27] *Id.*
[28] *Id.*
[29] CEQA Guidelines § 15183.3(d)(2)(C).
[30] CEQA Guidelines § 15183.3(d)(2)(C).

A. The Project Will Result in New Specific Effects, Including Air Quality, Health Risk, Hazardous Materials, Noise, and Traffic Impacts

The Project will result in new significant environmental impacts from air quality, health risk, hazardous materials, noise, and traffic.

i. Air Quality Impacts

Air quality impacts constitute a new specific effect for this Project. CEQA provides that a new specific effect may result if the prior EIR stated that sufficient site-specific information was not available to analyze the significance of that effect.[31] The Checklist states that "[s]ite-specific impacts on a project site were not evaluated in Section 4.2, Air Quality, in the prior 2035 General Plan EIR."[32] Further, the General Plan EIR states that "[A]dditional measures to reduce criteria air pollutant emissions would be considered during individual project-level review based on site-specific and project-specific characteristics to reduce significant impacts as applicable. *Because those projects and measures cannot be known at this time,* the impact is considered significant and unavoidable."[33] The air quality impacts on this Project site are new specific significant impacts because the prior EIR specifically stated that there was not sufficient information to analyze project-specific impacts "because those projects and measures cannot be known" at the time of drafting.[34] New specific effects from air quality are derived from numerous sources: a) construction and operational emissions; b) emergency generator; and c) traffic.

a. Construction and Operational Emissions

Air Quality expert SWAPE determined that the Project's construction and operational emissions were not consistent with information disclosed in the Checklist. "As a result, [SWAPE] found the Project's construction and operational emissions are underestimated."[35] This constitutes a new specific effect for this

[31] CEQA Guidelines § 15183.3(d)(1)(C).
[32] Checklist p. 4-19.
[33] General Plan EIR, p. 3-4.
[34] *Id.*
[35] SWAPE Comments p. 4.

Project that was not analyzed in the General Plan EIR which stated "the projects and measures cannot be known" at the time of drafting.[36]

Further, SWAPE determined that the Checklist's calculation regarding off-road vehicles is not supported by substantial evidence.[37] SWAPE also determined that the Checklist underestimated the Project's mobile source operational emissions. The Project's mobile-source emissions may constitute a new and potentially significant impact in the Project, that was not addressed or mitigated in the prior EIR.

Additionally, the Project's impacts from gas fireplaces may be a new specific effect because the 2035 General Plan EIR did not analyze or substantially mitigate the potentially significant impacts from gas fireplaces. SWAPE determined that the Checklist failed to provide substantial evidence to support the gas fireplace calculations in the Checklist.[38] SWAPE also found that the unsubstantiated reductions to the default Title 24 electricity energy intensity and Title 24 natural gas intensity values, may cause the Checklist to underestimate the Project's energy-source operational emissions.[39] This constitutes a new and significant impact that was not analyzed or mitigated in the prior EIR. The Checklist also underestimates indoor and outdoor water use rates, which cause the Checklist to underestimate the Project's water related operational emissions. This represents a new and potentially significant impact that must be adequately address in an EIR.

An Infill EIR is required to remedy these significant construction and operational emission analysis deficiencies, in order to adequately mitigate such issues prior to Project approval.

b. Health Risk

The Cancer Risk for this Project exceeds allowable thresholds. The Project's unmitigated construction health risk assessment indicates that the Project would pose an excess cancer risk of 54.7 in one million to people living nearby.[40] This health risk exceeds the BAAQMD significance threshold of 10 in one million, and

[36] General Plan EIR, p. 3-4.
[37] SWAPE Comments, p. 7.
[38] *Id.* at p. 8.
[39] SWAPE Comments, p. 9-10.
[40] Checklist p. 4-17, Table 4-3.

should have been disclosed as a significant impact in the Checklist, but was not.[41] When an impact exceeds a CEQA significance threshold, the agency must disclose in the EIR that the impact is significant.[42] The EIR must then analyze mitigation measures and alternatives to reduce the impact.[43] The Checklist fails to comply with CEQA by failing to disclose a significant construction-related health impact from the Project's unmitigated construction emissions. Instead, the Checklist conflates analysis and mitigation by concluding that impacts would be less than significant because Uniformly Applicable Development Policies would decrease cancer risk impacts to the off-site residential MER from 54.7 in a million to 4.9 in a million.[44] This is an additional CEQA violation.[45]

In light of the inadequate health risk analysis presented in the Checklist, SWAPE conducted their own health risk analysis using the Project's construction and operational emissions, as seen in the table below.[46]

[41] Checklist, p. 4-18, concluding that construction-related health impacts would be less than significant.
[42] *Comtys. for a Better Env't v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 110-111; *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD's "published CEQA quantitative criteria" and "threshold level of cumulative significance"); *CBE v. SCAQMD*, 48 Cal.4th at 327 (impact is significant because exceeds "established significance threshold for NOx … constitute[ing] substantial evidence supporting a fair argument for a significant adverse impact")
[43] *Id.*
[44] Checklist, p. 4-18.
[45] *Lotus v. Dep't of Transp*. (2014) 223 Cal. App. 4th 645, 651-52.
[46] SWAPE Comments p. 21

The Closest Exposed Individual at an Existing Residential Receptor

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Construction	0.25	*	361	10	*
3rd Trimester Duration	***0.25***			***3rd Trimester Exposure***	
Construction	1.42	*	1090	10	*
Operation	0.58	0.3138	1090	10	2.6E-05
Infant Exposure Duration	***2.00***			***Infant Exposure***	***2.6E-05***
Operation	14.00	0.3138	572	3	8.2E-05
Child Exposure Duration	***14.00***			***Child Exposure***	***8.2E-05***
Operation	14.00	0.3138	261	1	1.3E-05
Adult Exposure Duration	***14.00***			***Adult Exposure***	***1.3E-05***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**1.2E-04**

* Construction-related cancer risk calculated separately in the Checklist.

As demonstrated in the table above, SWAPE estimated the excess cancer risk of approximately 124.9 in one million over the course of a residential lifetime from Project construction and operation combined.[47] The infant, child, adult, and lifetime cancer risks all exceed the BAAQMD threshold of 10 in one million, thus resulting in a potentially significant impact which is more severe than the health risk identified in the Checklist, and was not previously addressed in the General Plan EIR or the Checklist.

SWAPE concluded that the screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used.[48] SWAPE further explains that the Checklist contains no mitigation to address the Project's operational health risk, and that the Project's

[47] SWAPE Comments p. 21.
[48] SWAPE Comments p. 22.

construction-related health risk would not be substantially mitigated by the Uniformly Applicable Development Policies because the Checklist applied Tier 4 Interim emissions reductions in its health risk modeling which is not required by the City's Standard Conditions of Approval. Thus, the Project's health risk remains significant and unmitigated.

Since SWAPE's screening-level HRA indicates a potentially significant impact, the City should prepare an Infill EIR with an HRA which makes a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, the City should prepare an updated, quantified air pollution model as well as an updated, quantified refined HRA which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.[49]

c. Emergency Generator

This Project may include an emergency generator. The California Building Code requires that "[w]here two or more elevators are controlled by a common operating system, all elevators shall automatically transfer to standby power within 60 seconds after failure of normal power where the standby power source is of sufficient capacity to operate all elevators at the same time."[50]

The Air Quality Appendix references an Emergency Generator,[51] but provides no analysis thereon. The Checklist only references generator sets required for building construction.[52] The Checklist and the General Plan EIR fail to analyze the potentially significant impact of a diesel-powered emergency generator.

Diesel-powered generators emit diesel particulate matter ("DPM") a TAC. The Checklist concluded that the impact of TACs on sensitive receptors would be less than significant after mitigation. But without analysis of the impacts from the diesel-powered generator, this statement is not supported by substantial evidence.

The Checklist states that the Project's impacts in exposing sensitive receptors to substantial pollutant concentrations would be less than significant with

[49] *Id.*
[50] California Building Code 2016 § 3003.1.3.
[51] Checklist, Appendix A, p. 183.
[52] *Id.* at 63

mitigation and was analyzed in the prior EIR, and would substantially be mitigated by uniformly applicable development policies.[53] But these determinations are not supported by substantial evidence. The impacts of an emergency generator emitting DPM was not analyzed in the Checklist nor the General Plan EIR. The Uniformly Applicable Development Policies would therefore not substantially mitigate the impact of TACs on sensitive receptors.

d. Diesel Particulate Matter from Traffic

The Checklist states "The approximately 23,000-sf grocery store would generate 8 to 10 truck trips of various size per day. This amount of heavy-duty truck trips would not be a significant source of diesel particulate matter (DPM)." This statement is not supported by substantial evidence. As shown in SWAPE's comments, the increase in DPM from this Project would be significant and remains unmitigated. An Infill EIR is required to adequately analyze and mitigate air quality impacts from traffic to satisfy CEQA.

ii. Noise Impacts

The Checklist concludes that noise impacts from construction, traffic, parking and truck loading, building mechanical equipment and rooftop deck would all be less than significant and no more significant than the impacts that were evaluated in the prior EIR.[54] This statement is not supported by substantial evidence because the Checklist and the General Plan EIR failed to provide a threshold of significance for noise impacts.[55]

Wilson Ihrig determined that the noise level from the building mechanical equipment on the rooftop deck would actually exceed the City's "normally acceptable" land use standard.[56] This runs counter to the conclusion of the CEQA Checklist. An Infill EIR is required to adequately analyze these new specific impacts.

The Checklist seeks to rely on *California Building Industry Association v. Bay Area Air Quality Management District*[57], (hereinafter "CBIA") stating "it is

[53] Checklist p. 4-3.
[54] Checklist p. 4-90 - 92.
[55] Wilson Ihrig Comments, p. 2.
[56] Wilson Ihrig Comments, p. 2.
[57] 62 Cal. 4th 369.

generally no longer the purview of the CEQA process to evaluate the impact of existing environmental conditions on any given project. As a result, while the noise from existing sources is taken into account as part of the baseline, the direct effects of exterior noise from nearby noise sources relative to land use compatibility of the project is no longer a required topic for impact evaluation under CEQA and no determination of significance is required."[58]

Reliance on *CBIA* is misplaced here. *CBIA* explicitly provides that when a proposed project risks exacerbating environmental conditions that already exist, an agency must analyze the potential impacts on future residents or users.[59] "In those specific instances, it is the project's impact on the environment—and not the environment's impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions."[60] Here, the increased traffic resulting from Project construction and operation will constitute an exacerbation of noise impacts in the area and must be analyzed. It is not sufficient that the Checklist relies on the analysis in the 2035 General Plan EIR, because this Project will exacerbate existing noise impacts. An Infill EIR must be prepared to adequately analyze and mitigate the exacerbation of noise impacts from this Project.

iii. Traffic Impacts

The Project will have significant new impacts from traffic. Our traffic expert Mr. Smith determined that the Project's non-residential component would create a significant transportation impact. The increased transportation impact would be an exacerbation of existing environmental conditions in San Leandro and requires adequate analysis under an Infill EIR.

The Zoning Code provides that the Board can only approve a project if they determine "[t]hat the proposed use will not create adverse impacts on traffic or create demands exceeding the capacity of public services and facilities..."[61] The Project cannot be approved by the Board because the Project would create adverse impacts on traffic and are not adequately mitigated in the Checklist.

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[58] Checklist p. 4-92.
[59] *California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)*, 62 Cal. 4th 369.
[60] *Id.*
[61] San Leandro Zoning Code § 5.08.124(A)(4).

The Project will generate significant levels of vehicle miles travelled ("VMT").[62] The statement that the Project would generate less VMT than the average in the area is not supported by substantial evidence.[63] Mr. Smith determined that the Checklist miscalculated the Project trip generation.[64] Absent this correct calculation, the City's traffic calculations are not supported by substantial evidence. Mr. Smith found that the "extra discounting on the residential trips in the PM peak eliminates 45 of the 71 (over 63 percent) of residential trips… the discount of residential trips amounts to almost 29 percent of the 156 net new PM peak hour trips that are ultimately assigned to the street system. So, this one error alone is sufficient to result in substantial understatement of the Project's impacts on PM peak hour delay/level of service and traffic queues."[65] Additionally, Mr. Smith found that the exit into Hyde Street for large trucks may constitute a safety issue that was not analyzed or mitigated in the Checklist.[66] This discrepancy and the issues addressed in Mr. Smith's comments constitute inadequate traffic analysis and must be remedied in an Infill EIR to satisfy CEQA.

B. The Project Will Result in More Significant Effects to Air Quality, Health Risk, GHGs, Hazards, Noise, Traffic, and Cumulative Impacts Than Analyzed in the General Plan EIR and Is Inconsistent With General Plan Policies

The Project will result in more significant environmental impacts than was represented in the 2035 General Plan EIR. An effect is more significant if substantial new information shows that: (1) mitigation measures that were previously rejected as infeasible are in fact feasible, and such measures are not included in the project; (2) feasible mitigation measures considerably different than those previously analyzed could substantially reduce a significant effect described in the prior EIR, but such measures are not included in the project; or (3) an applicable mitigation measure was adopted in connection with a planning level decision, but the lead agency determines that it is not feasible for the infill project to implement that measure.[67]

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[62] Smith Comments, p. 2.
[63] Appendix F Section 2.6.1; Smith Comments, p. 2.
[64] Smith Comments, p. 2.
[65] Smith Comments, p. 4.
[66] Smith Comments, p. 6.
[67] 14 CFR § 15183.3(d)(1)(D).

i. Air quality

Air quality impacts are more significant for this Project than was represented in the 2035 General Plan EIR. The San Leandro Zoning Code provides that the Board of Zoning Adjustment may approve an application for a use permit, if on the basis of the application, plans, materials, and testimony submitted, the Board finds "[t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to properties or improvements in the vicinity, or to the general welfare of the City."[68] Here, the Conditional Use Permit for this Project cannot be approved at this time, because the Project is not consistent with the General Plan and our experts have determined the Project may have significant detrimental effects to public health due to air quality impacts.

Further, General Plan Action EH-3.4.A requires air quality studies, stating that the City must "Work with BAAQMD in the review and monitoring of businesses and activities with the potential for air quality impacts."[69]

Cancer risk for the maximum exposed off-site resident from construction activities related to the proposed Project were calculated by the City to be 54.7 in a million, and would exceed the 10 in a million-significance threshold.[70] As discussed above, SWAPE calculates an even higher health risk.

The Project would result in demolition and debris hauling, site preparation and soil hauling, grading and soil hauling, building construction, paving, and architectural coating activities.[71] Construction would last approximately 20 months.[72] The Checklist states that the impact of the proposed Project's construction emissions would be less than significant and would not be more significant than described in the prior EIR. This statement is not supported by substantial evidence.

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[68] San Leandro Zoning Code § 5.08.124(A)(2).
[69] General Plan p. 7-49.
[70] Checklist p. 4-18.
[71] Checklist p. 4-12.
[72] Checklist p. 4-12.

According to SWAPE, the air quality impacts from construction would be significant. SWAPE determined that off-road construction equipment usage constitutes an impact more significant than was analyzed in the General Plan EIR or the Checklist.[73]

These impacts are not adequately mitigated through the Uniformly Applicable Development Policies in the General Plan and are not sufficiently mitigated in the Checklist.

ii. Health risk

The CUP for this Project cannot be approved at this time because the Project is not consistent with the General Plan and our experts have determined the Project may have significant detrimental effects to public health. The Zoning Code states that a Use Permit can only be approved by the Board of Zoning Adjustments if the Board determines that the Project will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to properties or improvements in the vicinity, or to the general welfare of the City.[74]

Our air quality and health risk experts at SWAPE determined that the Project will cause an excess cancer risk of approximately 124.9 in one million over the course of a residential lifetime (30 years).[75] Additionally, SWAPE's screening-level Health Risk Analysis indicates a potentially significant impact. Therefore, the City should prepare an Infill EIR to adequately analyze and mitigate health risk impacts.

General Plan Action EH-3.4.B requires a Health Risk Assessment for projects near freeways and high-volume roadways, as here. But the health risk analysis in the Checklist fails to satisfy General Plan requirements. Additionally, SWAPE determined that without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the Project is inconsistent with CEQA's requirement to correlate the increase in TAC emissions with potential adverse impacts on human health.[76] SWAPE

[73] SWAPE Comments p. 6.
[74] San Leandro Zoning Code § 5.08.124(A)(2).
[75] SWAPE Comments, p. 18.
[76] SWAPE Comments p. 17.

recommends that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in a full CEQA analysis for the Project.[77]

The Cancer Risk for this Project exceeds allowable thresholds. The Project's unmitigated construction HRA indicates that the Project would pose an excess cancer risk of 54.7 in one million to people living nearby.[78] As analyzed above, the health risk analysis in the Checklist is inadequate under CEQA, an Infill EIR must be prepared to adequately analyze and mitigate the impacts to human health from this Project.

iii. Greenhouse Gas Emissions

In order to approve a Conditional Use Permit, the Board of Zoning Adjustments must determine "on the basis of the application, plans, materials, and testimony submitted… [t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to the properties or improvements in the vicinity, or to the general welfare of the City."[79] The excessive GHG emissions of this Project, absent adequate mitigation, would be detrimental to the public health, safety and welfare of San Leandro residents and would be detrimental to the general welfare of the City. The Board must not approve the Conditional Use Permit on this basis.

SWAPE determined that the Checklist's conclusion that GHG emissions will be less than significant is not based on substantial evidence. SWAPE conducted accurate GHG modeling which found that the Project will exceed allowable thresholds of GHG emissions "thus resulting in a potentially significant impact not previously mitigated in the Checklist or General Plan EIR."[80] The GHG impact from this Project is therefore more significant than addressed in the prior EIR. An Infill EIR must be prepared to adequately address and mitigate GHG emissions.

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[77] *Id.* at p. 18.
[78] Checklist p. 4-17, Table 4-3.
[79] San Leandro Zoning Code § 5.08.124(A)(2).
[80] SWAPE Comments p. 24.

iv. Hazards and Hazardous Materials

The Project site has a history of contamination from the site's former use as an auto repair facility and a dry cleaner and from the nearby gas station which stores petroleum in underground storage tanks.[81] The Project may remain contaminated by hazardous materials and is listed on the Geotracker site (Cortese list),[82] which states[83]:

> The Phase II investigations indicate groundwater in the vicinity of the Site contains low levels of total petroleum hydrocarbons as diesel. Shallow soil samples collected at the Site had reported low levels of total petroleum hydrocarbons as diesel and motor oil and various metals; pesticides and lead were detected exceeding risk-based screening levels. Soil gas samples collected off-site exceeded commercial or residential risk-based screening levels for volatile organic compounds including benzene, tetrachloroethene, ethylbenzene, naphthalene and chloroform; soil gas samples collected on-Site exceeded commercial or residential risk-based screening levels for volatile organic compounds including benzene, tetrachloroethene, ethylbenzene, naphthalene, chloroform and vinyl chloride. The primary chemicals of potential concern identified during investigations conducted to date include volatile organic compounds (VOCs), lead, pesticides, and petroleum.

The Checklist fails to disclose the Project site's Cortese listing, and fails to disclose the existing contamination described on the Geotracker website. As SWAPE explains, the State Geotracker's description of contamination at the Project site is entirely inconsistent with the Checklist's conclusion that "the project site does not contain outstanding surface or subsurface recognized environmental conditions that require further investigation."[84] Absent mitigation, disturbance of contaminated soil during Project construction may release contaminants which could pose significant health and safety risks to workers and sensitive receptors near the Project site. This is a more significant impact than analyzed in the General Plan EIR, and is not disclosed in the Checklist, resulting in violations of CEQA's disclosure requirements. Moreover, to the extent the City relies on CEQA

[81] Checklist p. 4-61.
[82] SWAPE Comments, pp. 1-4.
[83] 14th & Callan Redevelopment (T10000016541) 1120 E 14th Street (Former address)
[84] SWAPE Comments, pp. 2-3; Checklist p. p. 4-63.

Guidelines exemption 15183.3, the Project site's presence on the Cortese list precludes reliance on the exemption.[85]

In order to approve a Conditional Use Permit, the Board of Zoning Adjustments must determine "on the basis of the application, plans, materials, and testimony submitted… [t]hat the proposed location of the use and the proposed conditions under which it would be operated or maintained will be consistent with the General Plan; will not be detrimental to the public health, safety or welfare of persons residing, or working in, or adjacent to, the neighborhood of such use; and will not be detrimental to the properties or improvements in the vicinity, or to the general welfare of the City."[86] The Checklist does not show, with substantial evidence, that the soil contamination onsite will not be detrimental to public health, safety or welfare of people living and working on the Project site.

General Plan Policy EH-5.2 provides for the clean-up of contaminated sites to "[e]nsure that the necessary steps are taken to clean up residual hazardous wastes on any contaminated sites proposed for redevelopment or reuse. Require soil evaluations as needed to ensure that risks are assessed and appropriate remediation is provided."[87] Here, appropriate remediation for onsite contamination has not been provided.

SWAPE concludes that the Checklist fails to adequately disclose and mitigate this potentially significant impact from hazardous materials, and identifies specific mitigation measures that should be incorporated into an EIR and mitigation plan for the Project to protect future occupants from exposure to contaminated soil vapor, and to ensure removal of contaminated soil prior to Project construction. These mitigation measures must be included as binding mitigation in an Infill EIR.

v. Noise

The Checklist concluded that construction noise from the Project would not be more significant than the impacts that were evaluated in the prior EIR. But the prior EIR, nor the Checklist contain any significance thresholds or quantitative analysis of construction noise.[88] Therefore, the statement that the impacts would

[85] Pub. Res. Code § 21084(d).
[86] San Leandro Zoning Code § 5.08.124(A)(2).
[87] General Plan p. 7-55.
[88] Wilson Ihrig Comments, p. 2.

not be more significant than those in the General Plan EIR is not supported by substantial evidence. An Infill EIR must be prepared to adequately analyze these impacts.

Additionally, approval of this Project with unmitigated impacts would violate San Leandro Zoning Code Section 5.08.124(A)(2) which prohibits the Board of Zoning Adjustments from approving a Use Permit where the Project would be detrimental to the general welfare of the City.[89] Approval of the Project with unmitigated noise pollution would violate CEQA, and constitutes a detriment to the general welfare of San Leandro in violation of the Zoning Code. An Infill EIR must be prepared to adequately analyze and mitigate the potentially significant noise pollution of the Project construction and operation.

This Project contains noise impacts which were not mentioned or analyzed in either the Checklist or the General Plan EIR. Neither analysis mentions the refrigeration and ventilation equipment that may be required for a grocery store, nor the exhaust fans that may be required for a restaurant. Further, the Checklist and the General Plan EIR do not conduct any analysis about an emergency generator that may be required by the California Building Code for elevators onsite.[90] This type of emergency generator must be tested for an hour each month.[91] "Without proper equipment selection and mitigation design, these additional noise sources would possibly exceed the "normally acceptable" land use standards at nearby noise receptors."[92] This would constitute an environmental impact that is more significant than was represented in the General Plan EIR. An Infill EIR is therefore required to adequately analyze and mitigate the impacts from noise and vibration from construction and operation of this Project.

vi. Traffic

In order to approve a CUP, the Board of Zoning Adjustments must determine "That the proposed use will not create adverse impacts on traffic or create demands exceeding the capacity of public services and facilities, which cannot be mitigated."[93] This Project *does* create adverse impacts on traffic and these impacts cannot and have not been mitigated. Thus, the Board cannot approve the CUP.

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[89] San Leandro Zoning Code Section 5.08.124(A)(2).
[90] California Building Code 2016 § 3003.1.3.
[91] Wilson Ihrig Comments, p. 4.
[92] Wilson Ihrig Comments, p. 4.
[93] San Leandro Zoning Code § 5.08.124(A)(4).

Our traffic expert determined that the Project will have significant adverse impacts on traffic and create demands exceeding the capacity of public services and facilities[94], these cannot be mitigated by the proposed Uniformly Applicable Development Standards laid out in the General Plan.[95] Our expert determined that the Checklist failed to disclose potentially significant cumulative effects that are specific to the Project, but were not analyzed, and are more severe than, the traffic issues raised in the General Plan EIR.[96] An Infill EIR must be prepared to adequately address and mitigate impacts from traffic prior to Project approval by the Board.

C. The Uniformly Applicable Development Standards Would Not Substantially Mitigate Project Impacts

Our experts determined that the uniformly applicable development policies would not substantially mitigate the impacts from air quality, energy usage, GHG emissions, noise, traffic, and water quality.

i. Air Quality

The Project is not consistent with the General Plan because General Plan Policy 31.04 provides that the City must "Require new development to be designed and constructed in a way that reduces the potential for future air quality problems, such as odors and the emission of any and all air pollutants."[97] The Board therefore cannot approve the Conditional Use Permit due to the inconsistency with the General Plan policy. Further, the mitigation measures presented in the General Plan and Checklist would not substantially mitigate the impacts of the Project.

a. Tier 4 Interim Measures

The Checklist does not ensure that best available control technologies are used for operations that could generate air pollutants as required by General Plan Policy EH-3.4.[98] Further, the use of Tier-4 Interim mitigation measures does not constitute sufficient mitigation. As SWAPE describes in their comments, Tier 4 Interim measures do not constitute adequate mitigation because they do not go

[94] Smith Comments p. 6.
[95] General Plan Appendix A, p. 6-7.
[96] Smith Comments p. 6.
[97] General Plan p. 7-49.
[98] General Plan p. 7-49.

above-and-beyond existing laws, regulations, and requirements that would reduce environmental impacts.[99] Tier 4 Interim measures would already be considered part of the Project, as the Checklist states they are required by the EPA. But, CEQA requires that mitigation measures are measures which are not part of the original project design. In *Trisha Lee Lotus et al. v. Department of Transportation et al.* the court held that "[b]y compressing the analysis of impacts and mitigation measures into a single issue, the EIR disregards the requirements of CEQA."[100]

But, as our experts at SWAPE determined, the Tier 4 Interim measures are not within the mitigation monitoring and reporting plan ("MMRP").[101] As such, these mitigation measures are not enforceable. "As Tier 4 Interim construction equipment is not formally included as a mitigation measures, we cannot guarantee that Tier 4 Interim emission standards would be implemented, monitored, and enforced on the Project site. Thus the model's assumption that the entire off-road construction fleet would meet Tier 4 interim emission standards is incorrect." The Checklist's air quality analysis is therefore not based on substantial evidence. An Infill EIR must be prepared to remedy this inadequacy and adequately analyze and mitigate air quality impacts.

b. Energy Usage

SWAPE concluded that the energy use values in the modeling for the Checklist is not supported by substantial evidence. The unsubstantiated calculations in the Checklist make it impossible to determine whether the mitigation measures proposed would adequately mitigate such impacts. An infill EIR is therefore required to ensure that sufficient analysis of energy-source operational emissions and mitigation measures is undergone before Project approval.

ii. Noise

General Plan Action EH-7.5.A and EH7.5.B establish conditions of approval for projects likely to have noise and vibration impacts. But, Wilson Ihrig determined that the Uniformly Applicable Development Standards detailed in the General Plan

[99] SWAPE Comments, p. 12; "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[100] Lotus v. Department of Transportation (2014) 223 Cal.App.4th 645,656.
[101] SWAPE Comments, p. 13.

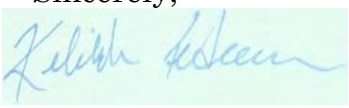
would "likely be ineffective at reducing actual construction noise."[102] Additionally, Wilson Ihrig determined that the Checklist lacks sufficient discussion of noise impacts and the corresponding necessary mitigation measures to assure the community that all rooftop and mechanical equipment will be designed to meet applicable land use standards.[103] Further, Wilson Ihrig determined that the noise impacts from refrigeration noise and other noise sources from the Project are missing from the analysis, and are therefore unmitigated. An Infill EIR is required to adequately analyze and mitigate noise impacts.

IV. CONCLUSION

The City must prepare and circulate a legally adequate Infill EIR for the Project which fully discloses and mitigates the Project's potentially significant impacts that were not addressed in the Checklist, 2035 General Plan EIR and TOD EIR before the Project can be approved.

Thank you for your consideration of these comments.

Sincerely,



Kelilah D. Federman
Associate Attorney

KDF:acp

Attachments

[102] Wilson Ihrig Comments, p. 1.
[103] Wilson Ihrig Comments, p. 4.

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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May 5, 2021

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Subject: Comments on the Callan & E 14th Street Project

Dear Ms. Federman,

We have reviewed the April 2021 Infill Environmental Checklist ("Checklist") for the Callan & E 14th Street Project ("Project") located in the City of San Leandro ("City"). The Project proposes to demolish 31,000-SF of building area and construct 196 residential dwelling units, a 23,189 -SF grocery store, and 5,660 SF of retail space, as well as 286 parking spaces in an above-ground parking garage, on the 1.6-acre site.

Our review concludes that the Checklist fails to adequately evaluate the Project's hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. A full CEQA analysis should be prepared to adequately assess and mitigate the potential hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Hazards and Hazardous Materials

Two Phase I Environmental Site Assessments (ESAs) and two Phase II ESAs were completed for the Project site. The Checklist concludes "the project site does not contain outstanding surface or subsurface recognized environmental conditions that require further investigation" (p. 4-63). The Checklist goes on to conclude:

> Two internet databases are hosted by the boards and departments referenced in the Government Code: The Department of Toxic Substances Control (DTSC) online EnviroStor database and the State Water Resources Control Board (WRCB) online GeoTracker database.

> According to the EnviroStor database, there are 45 inactive cleanup sites, one active cleanup site and two permitted facilities in San Leandro.32 None of these are located at or near the proposed project site. The facility nearest the project site is at 800 Davis Street, about 0.5 miles to the west According to the GeoTracker database there are 28 open (i.e., undergoing or still requiring investigation and/or cleanup) RWQCB Cleanup Sites within the city.33 . None are within 1,000 feet of the project site. Therefore, the impact would not be more significant than described in the prior EIR.

This conclusion that there are no Geotracker cleanup sites within 1,000 feet of the Project site is incorrect. The Geotracker website lists the Project site as a cleanup site. The Geotracker website identifies the Project site as the "14th and Callan Redevelopment[1]" and describes it as consisting of four parcels located at 1120, 1124, and 1118 East 14th Street (Assessor Parcel Numbers 77-447-15-6; 77-447-14-7; 77-447-14-6; 77-447-7-1), entirely consistent with the addresses and APNs as described in the Project Description on p. 3-1 of the Checklist. Therefore, the Checklist's conclusion that there are no Geotracker sites within 1,000 feet of the Project site is incorrect. In fact, the Project site itself is a Geotracker-listed cleanup site.

The Geotracker website provides the following description of contaminants associated with the Project site:

> The Site was initially developed in the late 1800s with houses and commercial buildings. An auto repair facility was present at the Site beginning in 1907. Further commercial development occurred in the late 1920s and 1950s with a dry cleaner present in the 1940s/1950s. Currently, there are three vacant buildings and an asphalt parking lot present at the Site that were historically used as office and retail space and a drug store. The Phase II investigations indicate groundwater in the vicinity of the Site contains low levels of total petroleum hydrocarbons as diesel. Shallow soil samples collected at the Site had reported low levels of total petroleum hydrocarbons as diesel and motor oil and various metals; pesticides and lead were detected exceeding risk-based screening levels. Soil gas samples collected off-site exceeded commercial or residential risk-based screening levels for volatile organic compounds including benzene, tetrachloroethene, ethylbenzene, naphthalene and chloroform; soil gas samples collected on-Site exceeded commercial or residential risk-based screening levels for volatile organic compounds including benzene, tetrachloroethene, ethylbenzene, naphthalene, chloroform and vinyl chloride. The primary chemicals of potential concern identified during investigations conducted to date include volatile organic compounds (VOCs), lead, pesticides, and petroleum.
>
> Alameda County Department of Environmental Health is currently working with the developer to identify areas for additional data collection and identifying remedial actions prior to site redevelopment activities.

The status of the Project site as a listed Geotracker site is not disclosed in the Checklist. The contamination, as described by the Geotracker website, is not disclosed in the Checklist and the Geotracker description of the contamination is inconsistent with the Checklist conclusion that "the

[1] https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000016541

project site does not contain outstanding surface or subsurface recognized environmental conditions that require further investigation" (p. 4-63).

The Geotracker website includes a March 2021 PowerPoint presentation[2] that describes active and ongoing investigations and includes these bullet points:

- 14th & Callan Street Developer, LLC entered into an agreement with Alameda County Department of Environmental Health to oversee investigation and cleanup activities to support site redevelopment.
- Additional investigation will be conducted in March to further define the extent of chemicals in soil and soil vapor
- Proposed Remedial Action
    - Excavating shallow soils across the site
    - Targeted deeper excavation as needed
    - Transporting excavated soil to a licensed disposal facility, if needed, or re-use as fill on site
    - Backfilling excavations with clean, imported fill, as needed
- Proposed Mitigation
    - Installation of engineered systems beneath occupied building and along utility trenches.

None of this is disclosed in the Checklist, and the agreement with the Alameda County Department of Environmental Health is not attached. Instead, the Checklist states there are no Geotracker sites within a 1,000 feet, when, in fact, the Project site itself is a Geotracker site undergoing active investigation and cleanup under Alameda County Department of Environmental Health oversight.

This is problematic for two reasons:

1. CEQA requires the disclosure of all sites listed on the Cortese list (i.e. Geotracker cleanup sites), and prohibits CEQA exemptions for sites on the Cortese list. The Checklist fails to disclose the Cortese-list status of the Project site and fails to provide adequate disclosure of the status of the site as undergoing further environmental investigation and, ultimately, cleanup.
2. The impacts of the investigation and the cleanup are not disclosed. The Checklist fails to disclose, among other cleanup impacts:
    - How contaminated soils will be handled and stored to protect neighboring residents and businesses from exposure to contaminated vapors emanating from the soil.
    - How contaminated soils will be trucked through the surrounding neighborhoods in a safe manner, including dust protection, and the routes to be taken by the disposal trucks.
    - The construction emissions of remediation equipment that will be required (excavators, loaders, trucks for hauling contaminated soil, trucks for workers involved in the assessment and cleanup) and health risks that will be incrementally added to the construction emissions that were disclosed.

Absent mitigation, disturbance of contaminated soil during Project construction may release contaminants which could pose significant health and safety risks to workers and sensitive receptors

[2] RO3472_FCT_SHT_2021-03-02.pdf (ca.gov)

near the Project site. An EIR is necessary to disclose the Cortese-list status of the Project site. An EIR is also necessary to disclose all impacts from cleanup, including health related impacts from assessment and cleanup and to substantially mitigate such impacts. The Applicant should enter into an agreement with the Regional Board for approval of the proposed residential land use.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The Checklist's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 4-12).[3] 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 the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[4] Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollutant emissions and make known which default values were changed as well as provide justification for the values selected.[5]

When reviewing the Project's CalEEMod output files, provided in the Air Quality and Greenhouse Gas Emissions Technical Reports ("AQ & GHG Report") as Appendix A to the Checklist, we found that several model inputs were not consistent with information disclosed in the Checklist. As a result, the Project's construction and operational emissions are underestimated. A full CEQA analysis should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Unsubstantiated Changes to CO_2, CH_4, and N_2O Intensity Factors

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Operations" model includes reductions to the default CO_2, CH_4, and N_2O intensity factors (see excerpt below) (Appendix A, pp. 131).

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.014
tblProjectCharacteristics	CO2IntensityFactor	641.35	154.28
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002

[3] CalEEMod User Guide, *available at:* http://www.caleemod.com/.
[4] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.
[5] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 11, 12 – 13. A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.

As you can see in the excerpt above, the CH_4, CO_2, and N_2O intensity factors were reduced by approximately 52%, 76%, and 67%, respectively. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[6] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Based on the 2019 EBCE Power Content Label" (Appendix A, pp. 129). Furthermore, regarding the Project's anticipated utility company, the Checklist states:

> "Electrical needs to the project site would be provided by East Bay Clean Energy (EBCE). EBCE obtains electricity from conventional and renewable sources throughout California. In 2019, 59.9 percent of the electricity from EBCE's Bright Choice Power Mix was generated from renewable energy sources; 25.3 percent from large hydroelectric generators; 1.5 percent from nuclear sources; and 13.3 percent from other and unspecified sources" (p. 4-42).

However, these changes remain unsupported, as the 2019 EBCE Power Content Label fails to provide the revised intensity factors. Furthermore, review of the 2019 EBCE Power Content Label demonstrates that East Bay Clean Energy provides four categories of power mixes (Renewable 100, Brilliant 100, Bright Choice, and 2019 CA Power Mix). Without additional information regarding which power mix the Project would use, we cannot verify the revised intensity factors. As a result, the changes remain unsupported.

These unsubstantiated reductions present an issue, as CalEEMod uses the CH_4, CO_2, and N_2O intensity factors to calculate the Project's greenhouse gas ("GHG") emissions associated with electricity use.[7] Thus, by including unsubstantiated reductions to the default CH_4, CO_2, and N_2O intensity factors, the models may underestimate the Project's GHG emissions. Therefore, the Project may have significant GHG impacts that would not be substantially mitigated by the mitigation measures listed in the checklist and General Plan EIR.

Unsubstantiated Reductions to Off-Road Construction Equipment Usage Hours

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Construction" and "Callan and E 14th Street Infill Checklist Project Mitigated Construction" models include reductions to the default off-road construction equipment usage hours (see excerpt below) (Appendix A, pp. 84, 107).

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	UsageHours	6.00	1.00
tblOffRoadEquipment	UsageHours	8.00	1.00

As you can see in the excerpt below, the usage hours for two pieces of off-road construction equipment were reduced from the default value to 1-hour. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[8] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "crane and welders would only

[6] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[7] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 17.
[8] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

be used on site for a portion of the total building construction duration" and "MM: limit crane use" (Appendix A, pp. 83, 105). Furthermore, the AQ & GHG Report provides the following off-road construction equipment assumptions (see excerpt below) (Appendix A, pp. 63):

Construction Equipment Details						
Equipment	model	# of Equipment	hr/day	hp	load factor*	total trips
Building Construction						
Cranes*		1	1	231	0.29	
Forklifts		1	6	89	0.2	
Generator Sets		1	8	84	0.74	
Tractors/Loaders/Backhoes		1	6	97	0.37	
Welders**		3	1	46	0.45	
Worker Trips						189
Vendor Trips						41
Hauling Trips						0

* The crane would be used on site only for a portion of the total building construction duration. The crane is anticipated to be used fewer than 354 hours (1 hour for each day of building construction) per piece of equipment.

** Use of welders would be predominately used during the initial framing; and therefore, the hours of operation of the duration were reduced to one hour per day per welder to reflect the average duration for the entire 20 month construction building phase

However, these changes remain unsupported for two reasons. First, the Checklist fails to mention or justify the revised off-road construction equipment usage hours whatsoever. Second, the AQ & GHG Analysis cannot simply *assume* that cranes would be used for fewer than 354 hours or that welders would be predominately used during the initial framing phase. According to the CalEEMod User's Guide:

> "CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, *provided that the information is supported by substantial evidence as required by CEQA*" (emphasis added).[9]

Here, as the Checklist fails to mention the changes and the AQ & GHG Report fails to provide substantial evidence to support the revised off-road construction equipment usage hours, we cannot verify the changes. By including unsubstantiated changes to the default off-road construction equipment usage hours, the models may underestimate the Project's construction-related emissions and may constitute an impact that more severe than was analyzed in the General Plan EIR or the Checklist.

Unsubstantiated Changes to Fleet Mix Percentages

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Operations" model includes several changes to the default operational vehicle fleet mix percentages (see excerpt below) (Appendix A, pp. 130-131).

[9] CalEEMod Model 2013.2.2 User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/usersguideSept2016.pdf?sfvrsn=6, p. 12.

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.05	5.0610e-003
tblFleetMix	LDA	0.56	0.68
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	1.6840e-003
tblFleetMix	LHD2	5.1800e-003	5.6700e-004
tblFleetMix	MCY	5.4910e-003	7.1080e-003
tblFleetMix	MDV	0.11	0.02
tblFleetMix	MH	7.0400e-004	0.00
tblFleetMix	MHD	0.02	2.6880e-003
tblFleetMix	OBUS	2.2090e-003	0.00
tblFleetMix	SBUS	3.3400e-004	0.00
tblFleetMix	UBUS	2.4560e-003	0.00

As you can see in the excerpt above, the percentage of passenger cars ("LDA"), light-duty trucks ("LDT1" & "LDT2"), and motorcycles ("MCY") were reduced, while the percentage of heavy-heavy duty trucks ("HHD"), light-heavy duty trucks ("LHD1" & "LHD2"), medium-duty trucks ("MDV"), motorhomes ("MH"), medium-heavy duty trucks ("MHD"), other buses ("OBUS"), school buses ("SBUS"), and urban buses ("UBUS") were reduced. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[10] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see adjusted fleet mix for residential in assump file" (Appendix A, pp. 130). Furthermore, the AQ & GHG Report provides the following operational vehicle fleet mix assumptions (see excerpt below) (Appendix A, pp. 71):

Changes to the CalEEMod Defaults - Residential Fleet Mix 2023

Trips 628

Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.561348	0.038614	0.190285	0.107199	0.015389	0.00518	0.024554	0.046236	0.002209	0.002456	0.005491	0.000334	0.000704	100%
Trips	353	24	120	67	10	3	15	29	1	2	3	0	0	628
Percent	80%			11%	10%									100%
without buses/MH	0.561348	0.038614	0.190285	0.107199	0.015389	0.005180	0.024554	0.046236	0	0	0.005491	0	0	99%
Percent	80%			11%	9%									99%
Adjusted without buses/MH	0.561348	0.038614	0.190285	0.107199	0.016350	0.005503	0.026087	0.049122	0.000000	0.000000	0.005834	0.000000	0.000000	
Percent adjusted	80%			11%	10%									100%
Assumed Mix	97.0%			2.00%	1.00%									100%
adjusted with Assumed	0.683985	0.047050	0.231856	0.020000	0.001684	0.000567	0.002688	0.005061	0.000000	0.000000	0.007108	0.000000	0.000000	100%
Percent Check:	97%			2%	1%									
Trips	430	30	146	13	1	0	2	3	0	0	4	0	0	628

However, these changes remain unsupported for two reasons. First, the Checklist fails to mention or justify the revised off-road operational vehicle fleet mix percentages whatsoever. Second, the assumptions fail to provide a source or explain how the revised operational vehicle fleet mix percentages were derived. This is incorrect, as simply providing the operational vehicle fleet mix

[10] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

assumed to estimate the Project's emissions does not justify the values inputted into the model. Rather, according to the CalEEMod User's Guide:

> "CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, *provided that the information is supported by substantial evidence as required by CEQA*." [11]

Here, as the Checklist fails to mention the changes and the AQ & GHG Report fails to provide substantial evidence to support the revised operational vehicle fleet mix percentages, we cannot verify the changes.

These unsubstantiated changes present an issue, as operational vehicle fleet mix percentages are used by CalEEMod to calculate the Project's operational emissions associated with on-road vehicles.[12] Thus, by including unsubstantiated changes to the default operational vehicle fleet mix percentages, the model may underestimate the Project's mobile-source operational emissions. The Project's mobile-source emissions may be a potentially significant, and unmitigated impact, for which the City must prepare an EIR.

Unsubstantiated Changes to Gas Fireplaces

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Operations" model includes several changes to the default gas fireplace values (see excerpt below) (Appendix A, pp. 130).

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	NumberGas	29.40	0.00

As you can see in the excerpt above, the model assumes that the Project would not include any gas fireplaces. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[13] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "no fireplaces" (Appendix A, pp. 130).

However, these changes remain unsupported for two reasons. First, the Checklist fails to indicate that the Project would not include any gas fireplaces. Second, the Project's air model cannot simply *assume* the Project would not include gas fireplaces. According to the CalEEMod User's Guide:

[11] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 12.
[12] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[13] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

> "CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, *provided that the information is supported by substantial evidence as required by CEQA*" (emphasis added).[14]

Here, as the Checklist fails to mention the changes or provide substantial evidence to support the revised gas fireplace values, we cannot verify the changes.

These unsubstantiated changes present an issue, as CalEEMod uses the number of gas fireplaces to calculate the Project's area-source operational emissions.[15] Thus, by including unsubstantiated changes to the default number of gas fireplaces, the model may underestimate the Project's area-source operational emissions. .The Project's impacts from gas fireplaces may be a new specific effect or a more significant effect than was analyzed in the prior EIR. The mitigation measures offered in the General Plan EIR would be insufficient to mitigate such effects. The City should prepare an EIR to analyze and mitigate the potentially significant impacts from gas fireplaces.

Unsubstantiated Reductions to Energy Use Values

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Operations" model includes several changes to the default energy use values (see excerpt below) (Appendix A, pp. 130).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	426.45	417.92
tblEnergyUse	T24E	1.21	1.08
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	2.67	2.38
tblEnergyUse	T24E	2.24	2.00
tblEnergyUse	T24E	2.72	2.43
tblEnergyUse	T24NG	6,115.43	5,809.66
tblEnergyUse	T24NG	17.85	17.67
tblEnergyUse	T24NG	39.90	39.50
tblEnergyUse	T24NG	3.90	3.86
tblEnergyUse	T24NG	24.53	24.28

As you can see in the excerpt above, the Title 24 electricity energy intensity ("T24E") and the Title 24 natural gas intensity ("T24NG") values were each manually reduced. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[16] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "based on NORESCO reductions, see assumptions file" (Appendix A, pp. 130). Furthermore, the AQ & GHG

[14] CalEEMod Model 2013.2.2 User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/usersguideSept2016.pdf?sfvrsn=6, p. 12.
[15] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 40.
[16] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

Report provides NORESCO's 2019 Title 24 electricity and natural gas rate reductions (see excerpt below) (Appendix A, pp. 69):

Electricity (Buildings)

Multifamily Residential Additional Electricity Reductions[2]	2.0%	more efficient than 2019 Title 24 electricity rates
Multifamily Residential Additional Natural Gas Reductions[2]	5%	more efficient than 2019 Title 24 natural gas rates
Non-residential Additional Electricity Reductions[2]	10.7%	more efficient than 2019 Title 24 electricity rates
Non-residential Additional Natural Gas Reductions[2]	1%	more efficient than 2019 Title 24 natural gas rates

Sources:

[1] California Energy Commission (CEC). 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. Accessed on April 3, 2019. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf

[2] NORESCO. 2018. 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings

Default CalEEMod Energy Use

Land Use Subtype	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Lighting Energy Intensity (KWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)*	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Apartments Mid Rise	426.45	3,054.10	741.44	6,115.43	2,615.00
Bank (with Drive-Through)	1.21	3.36	2.99	17.85	6.90
Enclosed Parking with Elevator	3.92	0.19	1.75	0.00	0.00
Fast Food Restaurant w/o Drive Thru	2.67	20.97	5.34	39.90	128.02
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00
Regional Shopping Center	2.24	3.36	4.88	3.90	0.70
Supermarket	2.72	27.24	7.42	24.53	12.69

Adjusted CalEEMod Energy Use

Land Use Subtype	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Lighting Energy Intensity (KWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)*	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Apartments Mid Rise	417.92	3,054.10	741.44	5,809.66	2,615.00
Bank (with Drive-Through)	1.08	3.36	2.99	17.67	6.90
Enclosed Parking with Elevator	3.50	0.19	1.75	0.00	0.00
Fast Food Restaurant w/o Drive Thru	2.38	20.97	5.34	39.50	128.02
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00
Regional Shopping Center	2.00	3.36	4.88	3.86	0.70
Supermarket	2.43	27.24	7.42	24.28	12.69

However, these changes remain unsupported for two reasons.

First, the source provided for the NORESCO's 2019 Title 24 electricity and natural gas rate reduction fails to provide a link. Thus, we cannot verify the that reductions accurately reflect NORESCO's actual rate reductions.

Second, regardless of the accuracy of the source, simply because NORESCO ***expects*** reductions in Title 24 electricity and natural gas building energy consumption does not ***guarantee*** that these reductions would be implemented locally on the Project site. Absent additional information demonstrating that these reductions would be achieved through the implementation, monitoring, and enforcement of energy-related mitigation measures, we are unable to verify the revised energy use values inputted into the model.

These unsubstantiated reductions present an issue, as CalEEMod uses energy use values to calculate the Project's emissions associated with building electricity and non-hearth natural gas usage.[17] By including unsubstantiated reductions to the default Title 24 electricity energy intensity and Title 24 natural gas

[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 43

intensity values, the model may underestimate the Project's energy-source operational emissions and should not be relied upon to determine Project significance.

Underestimated Indoor and Outdoor Water Use Rates

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Operations" model includes several reductions to the default indoor and outdoor water use rates (see excerpt below) (Appendix A, pp. 172-173).

Table Name	Column Name	Default Value	New Value
tblWater	IndoorWaterUseRate	12,770,189.02	12,191,000.00
tblWater	IndoorWaterUseRate	99,849.76	0.00
tblWater	IndoorWaterUseRate	470,477.25	0.00
tblWater	IndoorWaterUseRate	118,516.03	0.00
tblWater	IndoorWaterUseRate	2,861,055.27	0.00
tblWater	OutdoorWaterUseRate	8,050,771.34	0.00
tblWater	OutdoorWaterUseRate	61,198.24	0.00
tblWater	OutdoorWaterUseRate	30,030.46	0.00
tblWater	OutdoorWaterUseRate	72,638.86	0.00
tblWater	OutdoorWaterUseRate	88,486.25	0.00

As you can see in the excerpt above, the indoor use rates were manually reallocated to the residential land use and reduced from the cumulative default value of 16,320,087.33- to 12,191,000.00-gallons per year ("gpy"). Furthermore, the outdoor water use rates were each manually reduced to 0 gpy. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[18] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "assigning all water use to apartments land use, assumes all indoor water and 100% aerobic treatment" (Appendix A, pp. 130). However, these changes remain unsupported for two reasons.

First, regarding the Project's anticipated indoor water use, the Checklist states:

> "The UWMP establishes an initial 2020 average daily per capita water use of 80 gallons per capita/day (gpcd) for residential indoor demand and58 gpcd for commercial demand.56 Applying this per capita demand to the projected 560 new residents and 51 new employees of the proposed project, the project would create the demand for 47,758 gallons per day (gpd), or 0.047 mgd" (p. 4-134).

As the excerpt above demonstrates, the Checklist estimates that the Project would use 47,758 gallons per day ("gpd"), or 17,431,670 gpy.[19] Thus, the model underestimates the Project's anticipated indoor water use rate by 5,240,670 gpy.[20]

[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[19] Calculated: 47,758 gpd * 365 days = 17,431,670 gpy.
[20] Calculated: 17,431,670 gpy – 12,191,000 gpy = 5,240,670 underestimated gpy.

Second, the Checklist fails to mention or justify the Project's anticipated outdoor water use rate whatsoever. As such, we cannot verify the revised outdoor water use rates.

These underestimations present an issue, as CalEEMod uses indoor and outdoor water use rates to estimate the amount of wastewater, which has direct emissions of GHGs.[21] By including an underestimated indoor and outdoor water use rates, the model underestimates the Project's water-related operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Wastewater Treatment System Percentages

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Operations" model includes several changes to the default wastewater system percentages (see excerpt below) (Appendix A, pp. 172-173).

Table Name	Column Name	Default Value	New Value
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

As you can see in the excerpt above, the model assumes that 100% of the Project's wastewater would be treated aerobically. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[22] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "assumes all indoor water and 100% aerobic treatment" (Appendix A, pp. 130). Furthermore, the Checklist states that "[p]roject-generated sewage would be

[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 44, 45.
[22] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

handled by the City's existing sewer system and treated at the San Leandro Water Pollution Control Plant (SLWPCP)" (p. 4-131).

However, review of the SLWPCP treatment process demonstrates that the facility utilizes anaerobic digesters.[23] As a result, the model is incorrect in assuming that the Project's wastewater would be treated entirely aerobically, and we cannot verify the revised wastewater treatment system percentages.

These unsubstantiated changes present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project's total GHG emissions.[24] Thus, by including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project's GHG emissions. . GHG emissions may constitute a significant impact requiring adequate mitigation. At this time, the Standard Conditions of Approval and General Plan mitigation measures presented do not substantially mitigate such impacts. An EIRshould be prepared to adequately address and mitigate these impacts.

Incorrect Application of Tier 4 Interim Mitigation

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Mitigated Construction" model assumes that the Project's off-road construction equipment fleet would meet Tier 4 Interim emissions standards (see excerpt below) (Appendix A, pp. 105-106).

[23] "Anaerobic Digesters." San Leandro Wastewater Treatment, City of San Leandro*, available at:* https://www.sanleandro.org/depts/pw/wpcp/virtual/tour9.asp.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 45.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

As you can see in the excerpt above, the model assumes that 23 pieces of off-road construction equipment would meet Tier 4 Interim emission standards. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[25] According to the "User Entered Comments and Non-Default Data" table, the justification provided for inclusion of Tier 4 Interim emissions standards is: "MM: Tier 4 Equipment" (Appendix A, pp. 105). Furthermore, regarding the use of Tier 4 Interim construction equipment, the Checklist states:

> "The EPA would require equipment that meets the EPA Tier 4 (Interim) emissions standards on all equipment with more than 25 horsepower that would be operating for more than 20 hours over the entire duration of the construction activities. Similarly, any emissions control device used by the contractor would need to achieve emissions reductions that are no less than what could be achieved by a Tier 4 interim emissions standard for a similarly sized engine, as defined by the California Air Resources Board's regulations. Per the EPA regulations, the proposed project would:

[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

- Have engines that meet either US EPA or California Air Resources Board (CARB) Tier 4 Interim emission standards and ensure that all construction plans clearly show the selected emission reduction strategy for construction equipment over 25 horsepower" (p. 4-18).

However, the inclusion of Tier 4 Interim mitigation remains unsupported for two reasons.

First, the EPA does not explicitly require local land use projects to use off-road construction equipment meeting Tier 4 Interim emissions standards. In order to ensure that the Project uses Tier 4 Interim equipment, the City would therefore need to include a specific mitigation measure to this effect. Furthermore, the inclusion of Tier 4 interim mitigation, based on the Project's vague compliance with EPA policies, is unsupported. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[26]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on EPA policies, does not constitute adequate mitigation.

Second, according to the above-mentioned AEP report:

> "While not "mitigation", a good practice is *to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP)*. Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, *it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact*" (emphasis added).[27]

As you can see in the excerpts above, measures that are not formally included in the mitigation monitoring and reporting program ("MMRP") may be eliminated from the Project's design altogether. Thus, as the use of Tier 4 Interim construction equipment is not formally included as a mitigation measure, we cannot guarantee that Tier 4 Interim emission standards would be implemented, monitored, and enforced on the Project site. Thus, the model's assumption that the entire off-road construction equipment fleet would meet Tier 4 Interim emissions standards is incorrect. The impacts

[26] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[27] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

would potentially remain significant and thus are subject to further environmental review in a full CEQA review.

Incorrect Application of Water-Related Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Callan and E 14th Street Infill Checklist Project Operations" model includes the following water-related operational mitigation measures (see excerpt below) (Appendix A, pp. 179-180):

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[28] However, the "User Entered Comments and Non-Default Data" table fails to provide a justification for inclusion of water-related operational mitigation measures. Furthermore, the use of low-flow appliances and a water efficient irrigation system are not included as formal mitigation measures in the Checklist. As such, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As a result, the inclusion of the above-mentioned water-related operational mitigation measures in the model is incorrect. By including several unsubstantiated water-related operational mitigation measures, the model may underestimate the Project's water-source operational emissions and may constitute a significant impact that remains substantially unmitigated.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The Checklist concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction health risk analysis ("HRA"). Specifically, the Checklist estimates that Project construction would result in a mitigated excess cancer risk of 4.9 in one million, which would not exceed the BAAQMD threshold of 10 in one million (see excerpt below) (p. 4-19, Table 4-4).

[28] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

TABLE 4-4 CONSTRUCTION HEALTH RISK ASSESSMENT RESULTS – EPA TIER 4 INTERIM STANDARDS

	Project Level Risk[a]		
Receptor	Cancer Risk (per million)	Chronic Hazards	Construction Exhaust $PM_{2.5}$ ($\mu g/m^3$)[a]
Maximum Exposed Receptor – Offsite Residences	4.9	0.013	0.026
BAAQMD Threshold	10	1.0	0.3 $\mu g/m^3$
Exceeds Threshold?	No	No	No

Regarding the potential health risk impacts associated with Project operation, the Checklist states:

> "The proposed project would not include stationary sources that emit TACs. The approximately 23,000-sf grocery store would generate 8 to 10 truck trips of various size per day. This amount of heavy-duty truck trips would not be a significant source of diesel particulate matter (DPM). Therefore, the proposed project would not expose sensitive receptors to substantial concentrations of air pollutant emissions during operation. Impacts would be less than significant and would not be more significant than described in the prior EIR" (p. 4-19).

As demonstrated above, the Checklist concludes that the Project would result in a less-than-significant operational health risk impact because the heavy-duty truck trips associated with the proposed grocery store land use would not be a significant source of diesel particulate matter ("DPM"). However, the Checklist's evaluation of the Project's potential health risk impacts, as well as the less-than-significant impact conclusion, is incorrect for three reasons.

First, the Checklist's construction HRA is incorrect, as it relies upon exhaust PM_{10} emissions estimates from a flawed air model (Appendix B, p. 2). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQ & GHG Report as Appendix A to the Checklist, we found that several of the values inputted into the model are not consistent with information disclosed in the Checklist and associated documents. As a result, the HRA utilizes an underestimated DPM concentration to calculate the health risk associated with Project construction. As such, the Checklist's construction HRA underestimates the Project's construction-related cancer risk which may remain significant and unmitigated.

Second, the Checklist fails to quantitatively evaluate the Project's operational toxic air contaminants ("TAC") emissions or make a reasonable effort to connect these emissions to potential health risk impacts posed to nearby existing sensitive receptors. Despite the Checklist's qualitative claim that heavy-duty truck trips associated with the proposed grocery store land use would not be a significant source of DPM, the Checklist indicates that Project is expected to generate approximately 5,465 average daily vehicle trips, which would generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. 4-14). However, the Checklist's vague discussion of potential TACs associated with Project operation fails to indicate the concentrations at which such pollutants would trigger adverse health effects. Thus, without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the Project is

inconsistent with CEQA's requirement to correlate the increase in TAC emissions with potential adverse impacts on human health.

Third, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by the Checklist (p. 4-17).[29] The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[30] Even though we were not provided with the expected lifetime of the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. This recommendation reflects the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in a full CEQA analysis for the Project.

Fourth, while the Checklist includes an HRA evaluating the health risk impacts to nearby, existing receptors as a result of Project construction, the HRA fails to evaluate the *cumulative* lifetime cancer risk to nearby, existing receptors as a result of Project *construction and operation together*. According to OEHHA guidance, as referenced by the Checklist, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (p. 4-17).[31] However, the Checklist's HRA fails to sum each age bin to evaluate the total cancer risk over the course of the Project's total construction and operation. This is incorrect and thus, an updated analysis should quantify the entirety of the Project's construction and operational health risks and then sum them to compare to the BAAQMD threshold of 10 in one million, as referenced by the Checklist (p. 4-17, Table 4-3; p. 4-19, Table 4-4).

Failure to Identify Significant Health Risk Impact

As previously stated, the Checklist estimates that Project construction would result in a mitigated excess cancer risk of 4.9 in one million, which would not exceed the BAAQMD threshold of 10 in one million (p. 4-19, Table 4-4). However, as previously discussed, the "Callan and E 14th Street Infill Checklist Project Mitigated Construction" model incorrectly assumes that the Project's off-road construction equipment fleet would meet Tier 4 Interim emissions standards without properly committing to the mitigation measure. As a result, the Checklist should have relied upon the unmitigated construction HRA in order to determine the significance of the Project's health risk impact. The Project's unmitigated construction

[29] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

[30] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

[31] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4

HRA indicates that the Project would pose an excess cancer risk of 54.7 in one million to people living nearby (p. 4-17, Table 4-3).

TABLE 4-3 CONSTRUCTION RISK SUMMARY – UNMITIGATED

	Project Level Risk		
Receptor	Cancer Risk (per million)	Chronic Hazards	Construction Exhaust $PM_{2.5}$ ($\mu g/m^3$)[a]
Maximum Exposed Receptor – Offsite Residences [a]	54.7	0.166	0.41
BAAQMD Threshold	10	1.0	0.30
Exceeds Threshold?	Yes	No	Yes

As demonstrated in the table above, the unmitigated construction-related cancer risk, as estimated by the Checklist, is 54.7 in one million, which exceeds the BAAQMD threshold of 10 in one million, thus indicating a potentially significant health risk impact not identified or addressed by the Checklist or the General Plan EIR. As such, the Checklist fails to identify and adequately mitigate the Project's health risk impact, and the less-than-significant impact conclusion should not be relied upon.

Screening-Level Analysis Demonstrates Significant Impacts

In order to conduct our screening-level risk assessment, we relied upon AERSCREEN, a screening level air quality dispersion model.[32] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[33] and the California Air Pollution Control Officers Associated ("CAPCOA")[34] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to residential sensitive receptors using the annual PM_{10} exhaust estimates from the Checklist's incorrect and unsubstantiated "Callan and E 14th Street Infill Checklist Project Operations" CalEEMod model. Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life. Subtracting the 608-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 28.33 years, approximately. The output files for the "Callan and E 14th Street Infill Checklist Project Operations" CalEEMod model indicate that operational activities will generate approximately 129 pounds of DPM per year throughout operation. The AERSCREEN model

[32] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[33] OEHHA (February 2015) Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments, https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[34] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{129.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00186\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00186 g/s. Construction and operational activity was simulated as a 1.6-acre rectangular area source in AERSCREEN with dimensions of 100 by 65 meters. A release height of three meters was selected to represent the height of exhaust stacks on operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10%.[35] According to the Checklist, the closest sensitive receptors are located 100 meters from the Project site (p. 4-17). Thus, the single-hour concentration estimated by AERSCREEN for Project operation is approximately 3.138 µg/m^3 DPM at approximately 100 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.3138 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA, as referenced by the Checklist (p. 4-17). Consistent with the construction schedule utilized in the Checklist's CalEEMod model, the annualized averaged concentration for operation was used for the latter 0.58 years of the infantile stage of life (0 – 2 years), as well as the entire child stage of life (2 – 16 years) and adult stage of life (16 – 30 years).

Consistent with the methodology utilized by the Community Health Risk Assessment ("HRA Report"), provided as Appendix B to the Checklist, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (Appendix B, p. 4-5). When applying ASFs, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years) (Appendix B, p. 5). Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[36] Finally,

[35] "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised." EPA, 1992, *available at*: http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf; *see also* "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 4-36.

[36] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," June 5, 2015, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6, p. 19.

according to BAAQMD guidance, we used a Fraction of Time At Home ("FAH") value of 0.85 for the 3rd trimester and infant receptors, 0.72 for child receptors, and 0.73 for the adult receptors.[37] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Closest Exposed Individual at an Existing Residential Receptor

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Construction	0.25	*	361	10	*
3rd Trimester Duration	***0.25***			***3rd Trimester Exposure***	
Construction	1.42	*	1090	10	*
Operation	0.58	0.3138	1090	10	2.6E-05
Infant Exposure Duration	***2.00***			***Infant Exposure***	***2.6E-05***
Operation	14.00	0.3138	572	3	8.2E-05
Child Exposure Duration	***14.00***			***Child Exposure***	***8.2E-05***
Operation	14.00	0.3138	261	1	1.3E-05
Adult Exposure Duration	***14.00***			***Adult Exposure***	***1.3E-05***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**1.2E-04**

* Construction-related cancer risk calculated separately in the Checklist.

As demonstrated in the table above, the excess cancer risks to adults, children, and infants at the closest exposed individual resident located approximately 100 meters away, over the course of Project operation, are approximately 13, 82, and 26 in one million, respectively. The excess cancer risk associated with the Project operation alone over the course of a residential lifetime is approximately 120 in one million. When summing Project's operational cancer risk, as estimated by SWAPE, with the Checklist's mitigated construction-related cancer risk estimate of 4.9 in one million, we estimate an excess cancer risk of approximately 124.9 in one million over the course of a residential lifetime (30 years) (p. 4-19, Table 4-4).[38] The infant, child, adult, and lifetime cancer risks exceed the BAAQMD

"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

[37] "Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines." BAAQMD, January 2016, *available at:* http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en

[38] Calculated: 120 in one million + 4.9 in one million = 124.9 in one million.

threshold of 10 in one million, thus resulting in a potentially significant impact not addressed in the General Plan EIR nor identified by the Checklist.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. [39] The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level HRA indicates a potentially significant impact, the City should prepare a full CEQA analysis with an HRA which makes a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, the City should prepare an updated, quantified air pollution model as well as an updated, quantified refined HRA which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Emissions

The Checklist estimates that the Project would generate net annual construction-related and operational greenhouse gas ("GHG") emissions of 472 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year") (see excerpt below) (p. 4-55, Table 4-8).

TABLE 4-8 PROJECT GHG EMISSIONS INVENTORY

	GHG Emissions[a]	
	$MTCO_2e$ Per Year	Percent Proportion
Construction		
Total Construction Emissions	840	NA
30-Year Amortized Construction	28	NA
Operations		
Area Sources[a]	2	<1%
Energy Use[b]	310	66%
Waste Generation	122	26%
Water/Wastewater[c]	10	2%
Amortized Construction Emissions	28	6%
Total	472	100%

[39] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 1-5

Furthermore, based on a service population of 621 people, the Checklist estimates a service population efficiency value of 0.76 metric tons of carbon dioxide equivalents per service population per year ("MT CO_2e/SP/year"), which would be less severe than the 2035 General Plan (p. 4-55). Finally, the Checklist relies upon the Project's consistency with CARB's *Scoping Plan*, the *Plan Bay Area*, and the City of San Leandro Climate Action Plan ("CAP") (p. 4-56 - 4-59). However, the Checklist's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

(1) The Checklist's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) Updated analysis indicates a potentially significant GHG impact; and
(3) The Checklist fails to consider the performance-based standards under CARB's *Scoping Plan*.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, Checklist estimates that the Project would generate net annual GHG emissions of 472 MT CO_2e/year (p. 4-55, Table 4-8). However, the Project's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQ & GHG Report as Appendix A to the Checklist, we found that several of the values inputted into the model are not consistent with information disclosed in the Checklist. As a result, the model underestimates the Project's emissions, and the Project's quantitative GHG impacts remain significant and substantially unmitigated. An EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

2) Updated Analysis Indicates a Potentially Significant GHG Impact

In an effort to more accurately estimate Project emissions, we prepared updated CalEEMod models, using the Project-specific information provided by the Checklist. In our updated models, we omitted the unsubstantiated changes to the CO_2, CH_4, and N_2O intensity factors, off-road construction equipment usage hours, operational vehicle fleet mix percentages, gas fireplace values, energy use values, outdoor water use rates, and wastewater system treatment percentages; corrected the indoor water use rate; and excluded the unsubstantiated construction-related and operational mitigation measures.

When applying the AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, SWAPE's updated modeling demonstrates a potentially significant GHG impact not previously identified or mitigated by the Checklist. The updated CalEEMod output files, modeled by SWAPE with Project-specific information, disclose the Project's mitigated emissions, which include approximately 806 CO_2e of total construction emissions (sum of 2021, 2022, and 2023) and approximately 6,268 MT CO_2e/year of net annual operational emissions (sum of area-, energy-, mobile-, waste, and water-related emissions). When amortizing the Project's construction-related GHG emissions over a period of 30 years and summing them with the Project's operational GHG emissions, we estimate net annual GHG emissions of 6,295 MT CO_2e/year. When dividing the Project's GHG emissions (amortized construction + operational)

by a service population value of 621 people, we find that the Project would emit approximately 10.1 MT CO_2e/SP/year (see table below).[40]

SWAPE Greenhouse Gas Emissions	
Project Phase	**Proposed Project (MT CO_2e/year)**
Construction (amortized over 30 years)	27
Area	10
Energy	824
Mobile	5,252
Waste	122
Water	60
Net Annual GHG Emissions	**6,295**
Service Population	621
Service Population Efficiency	**10.1**
Threshold	2.6
Exceed?	***Yes***

As demonstrated above, the Project's per capita GHG emissions, as estimated by SWAPE, exceed the AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, thus resulting in a potentially significant impact not previously mitigated in the Checklist or General Plan EIR. As such, an updated GHG analysis should be prepared in a full CEQA analysis and additional mitigation should be incorporated accordingly, per CEQA Guidelines.

3) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the Checklist relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance (p. 4-56 – 4-57). However, this is incorrect, as the Checklist fails to consider performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[41] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning

[40] Calculated: (6,295.0 MT CO_2e/year) / (621 service population) = (10.1 MT CO_2e/SP/year).
[41] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.

Organizations (MPOs) pursuant to SB 375 as of 2015."[42] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2023 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

2017 Scoping Plan Daily VMT Per Capita						
	Alameda County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	1,515,354	33,170,333.97	21.89	37,335,085	836,463,980.46	22.40
2023	1,756,373	36,882,427.91	21.00	41,659,526	924,184,228.61	22.18
2030	1,873,622	38,380,824.56	20.48	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on the Checklist's modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	**Project Checklist Modeling**
Annual VMT from Auto & Light-Duty Vehicles	13,371,709
Daily VMT from Auto & Light-Duty Vehicles	36,635
Service Population	621
Daily VMT Per Capita	58.99
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	**Yes**
22.18 VMT (2023 Projected) Exceed?	**Yes**
21.78 VMT (2030 Projected) Exceed?	**Yes**
2017 Scoping Plan Benchmarks, Alameda County Specific	
21.89 VMT (2010 Baseline) Exceed?	**Yes**
21.00 VMT (2023 Projected) Exceed?	**Yes**
20.48 VMT (2030 Projected) Exceed?	**Yes**

As shown above, the Checklist's modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2023, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the Checklist's claim that the proposed Project would not conflict with the CARB 2017

[42] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

Scoping Plan is unsupported. A full CEQA analysis should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

Design Features Should Be Included as Mitigation Measures

Our analysis demonstrates that the Project would result in potentially significant air quality, health risk, and GHG impacts that should be mitigated further. We recommend that the Checklist implement all Project Design Features ("PDFs") and regulatory compliance measures, such as the inclusion of Tier 4 Interim emissions standards, low-flow appliances, and water efficient irrigation systems, as formal mitigation measures. As a result, we could guarantee that these measures would be implemented, monitored, and enforced on the Project site. Including formal mitigation measures by properly committing to their implementation would result in verifiable emissions reductions that may help reduce emissions to less-than-significant levels.

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,

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

Paul E. Rosenfeld, Ph.D.

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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 25 years of experience in environmental policy, assessment and remediation. 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) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- 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 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, 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 industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- 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.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

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. 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 taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

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 DNAPL-contaminated 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 examination, 2009-2011.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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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 VOC 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 is the Co-Founder and Principal Environmental Chemist at Soil Water Air Protection Enterprise (SWAPE). His focus is the fate and transport of environmental contaminants, risk assessment, and ecological restoration. His project experience ranges from monitoring and modeling of pollution sources as they relate to human and ecological health. Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing, petroleum, MtBE and fuel oxygenates, chlorinated solvents, pesticides, radioactive waste, PCBs, PAHs, dioxins, furans, volatile organics, semi-volatile organics, perchlorate, heavy metals, asbestos, PFOA, unusual polymers, and odor. Significant projects performed by Dr. Rosenfeld include the following:

Litigation Support

Client: Missouri Department of Natural Resources (Jefferson City, Missouri)
Serving as an expert in evaluating air pollution and odor emissions from a Republic Landfill in St. Louis, Missouri. Conducted. Project manager overseeing daily, weekly and comprehensive sampling of odor and chemicals.

Client: Louisiana Department of Transportation and Development (Baton Rouge, Louisiana)
Serving as an expert witness, conducting groundwater modeling of an ethylene dichloride DNAPL and soluble plume resulting from spill caused by Conoco Phillips.

Client: Missouri Department of Natural Resources (St. Louis, Missouri)
Serving as a consulting expert and potential testifying expert regarding a landfill fire directly adjacent to another landfill containing radioactive waste. Implemented an air monitoring program testing for over 100 different compounds using approximately 12 different analytical methods.

Client: Baron & Budd, P.C. (Dallas, Texas) and Weitz & Luxeinberg (New York, New York)
Served as a consulting expert in MTBE Federal Multi District Litigation (MDL) in New York. Consolidated ground water data, created maps for test cases, constructed damage model, evaluated taste and odor threshold levels. Resulted in a settlement of over $440 million.

Client: The Buzbee Law Firm (Houston, Texas)
Served as a as an expert in ongoing litigation involving over 50,000+ plaintiffs who are seeking compensation for chemical exposure and reduction in property value resulting from chemicals released from the BP facility.

Client: Environmental Litigation Group (Birmingham, Alabama)
Serving as an expert on property damage, medical monitoring and toxic tort claims that have been filed on behalf of over 13,000 plaintiffs who were exposed to PCBs and dioxins/furans resulting from emissions from Monsanto and Cerro Copper's operations in Sauget, Illinois. Developed AERMOD models to demonstrate plaintiff's exposure.

Client: Baron & Budd P.C. (Dallas Texas) and Korein Tillery (St. Louis, Missouri)
Served as a consulting expert for a Class Action defective product claim filed in Madison County, Illinois against Syngenta and five other manufacturers for atrazine. Evaluated health issues associated with atrazine and deterimied treatment cost for filtration of public drinking water supplies. Resulted in $105 million dollar settlement.

Client: The Buzbee Law Firm (Houston, Texas)
Served as a consulting expert in catalyst release and refinery emissions cases against the BP Refinery in Texas City. A jury verdict for 10 employees exposed to catalyst via BP's irresponsible behavior.

Client: Baron & Budd, P.C. (Dallas, Texas)
Served as a consulting expert to calculate the Maximum Allowable Dose Level (MADL) and No Significant Risk Level (NSRL), based on Cal EPA and OEHHA guidelines, for Polychlorinated Biphenyls (PCBs) in fish oil dietary supplements.

Client: Girardi Keese (Los Angeles, California)
Served as an expert testifying on hydrocarbon exposure of a woman who worked on a fuel barge operated by Chevron. Demonstrated that the plaintiff was exposed to excessive amounts of benzene.

Client: Mason & Cawood (Annapolis, Maryland) and Girardi & Keese (Los Angeles, California)
Serving as an expert consultant on the Battlefield Golf Club fly ash disposal site in Chesapeake, VA, where arsenic, other metals and radionuclides are leaching into groundwater, and ash is blowing off-site onto the surrounding communities.

Client: California Earth Mineral Corporation (Culver City, California)
Evaluating the montmorillonite clay deposit located near El Centro, California. Working as a Defense Expert representing an individual who owns a 2,500 acre parcel that will potentially be seized by the United States Navy via eminent domain.

Client: Matthews & Associates (Houston, Texas)
Serving as an expert witness, preparing air model demonstrating residential exposure via emissions from fracking in natural gas wells in Duncan, Texas.

Client: Baron & Budd P.C. (Dallas, Texas) and Korein Tillery (St. Louis, Missouri)
Served as a consulting expert for analysis of private wells relating to litigation regarding compensation of private well owners for MTBE testing. Coordinated data acquisition and GIS analysis evaluating private well proximity to leaking underground storage tanks.

Client: Lurie & Park LLP (Los Angeles, California)
Served as an expert witness evaluating a vapor intrusion toxic tort case that resulted in a settlement. The Superfund site is a 4 ½ mile groundwater plume of chlorinated solvents in Whittier, California.

Client: Mason & Cawood (Annapolis, Maryland)
Evaluated data from the Hess Gasoline Station in northern Baltimore, Maryland that had a release resulting in flooding of plaintiff's homes with gasoline-contaminated water, foul odor, and biofilm growth.

Client: The Buzbee Law Firm (Houston, Texas)
Evaluated air quality resulting from grain processing emissions in Muscatine, Iowa.

Client: Anderson Kill & Olick, P.C. (Ventura, California)
Evaluated historical exposure and lateral and vertical extent of contamination resulting from a ~150 million gallon Exxon Mobil tank farm located near Watts, California.

Client: Packard Law Firm (Petaluma, California)
Served as an expert witness, evaluated lead in Proposition 65 Case where various products were found to have elevated lead levels.

Client: The Buzbee Law Firm (Houston, Texas)
Evaluated data resulting from an oil spill in Port Arthur, Texas.

Client: Nexsen Pruet, LLC (Charleston, South Carolina)
Serving as expert in chlorine exposure in a railroad tank car accident where approximately 120,000 pounds of chlorine were released.

Client: Girardi & Keese (Los Angeles, California)
Serving as an expert investigating hydrocarbon exposure and property damage for ~600 individuals and ~280 properties in Carson, California where homes were constructed above a large tank farm formerly owned by Shell.

Client: Brent Coon Law Firm (Cleveland, Ohio)
Served as an expert, calculating an environmental exposure to benzene, PAHs, and VOCs from a Chevron Refinery in Hooven, Ohio. Conducted AERMOD modeling to determine cumulative dose.

Client: Lundy Davis (Lake Charles, Louisiana)
Served as consulting expert on an oil field case representing the lease holder of a contaminated oil field. Conducted field work evaluating oil field contamination in Sulphur, Louisiana. Property is owned by Conoco Phillips, but leased by Yellow Rock, a small oil firm.

Client: Cox Cox Filo (Lake Charles, Louisiana)
Served as testifying expert on a multimillion gallon oil spill in Lake Charles which occurred on June 19, 2006, resulting in hydrocarbon vapor exposure to hundreds of workers and residents. Prepared air model and calculated exposure concentration. Demonstrated that petroleum odor alone can result in significant health harms.

Client: Cotchett Pitre & McCarthy (San Francisco, California)
Served as testifying expert representing homeowners who unknowingly purchased homes built on an old oil field in Santa Maria, California. Properties have high concentrations of petroleum hydrocarbons in subsurface soils resulting in diminished property value.

Client: Law Offices Of Anthony Liberatore P.C. (Los Angeles, California)
Served as testifying expert representing individuals who rented homes on the Inglewood Oil Field in California. Plaintiffs were exposed to hydrocarbon contaminated water and air, and experienced health harms associated with the petroleum exposure.

Client: Orange County District Attorney (Orange County, California)
Coordinated a review of 143 ARCO gas stations in Orange County to assist the District Attorney's prosecution of CCR Title 23 and California Health and Safety Code violators.

Client: Environmental Litigation Group (Birmingham, Alabama)
Served as a testifying expert in a health effects case against ABC Coke/Drummond Company for polluting a community with PAHs, benzene, particulate matter, heavy metals, and coke oven emissions. Created air dispersion models and conducted attic dust sampling, exposure modeling, and risk assessment for plaintiffs.

Client: Masry & Vitatoe (Westlake Village, California), Engstrom Lipscomb Lack (Los Angeles, Califronia) and Baron & Budd P.C. (Dallas, Texas)
Served as a consulting expert in Proposition 65 lawsuit filed against major oil companies for benzene and toluene releases from gas stations and refineries resulting in contaminated groundwater. Settlement included over $110 million dollars in injunctive relief.

Client: Tommy Franks Law Firm (Austin, Texas)
Served as expert evaluating groundwater contamination which resulted from the hazardous waste injection program and negligent actions of Morton Thiokol and Rohm Hass. Evaluated drinking water contamination and community exposure.

Client: Baron & Budd P.C. (Dallas, Texas) and Sher Leff (San Francisco, California)
Served as consulting expert for several California cities that filed defective product cases against Dow Chemical and Shell for 1,2,3-trichloropropane groundwater contamination. Generated maps showing capture zones of impacted wells for various municipalities.

Client: Weitz & Luxenberg (New York, New York)
Served as expert on Property Damage and Nuisance claims resulting from emissions from the Countywide Landfill in Ohio. The landfill had an exothermic reaction or fire resulting from aluminum dross dumping, and the EPA fined the landfill $10,000,000 dollars.

Client: Baron & Budd P.C. (Dallas, Texas)
Served as a consulting expert for a groundwater contamination case in Pensacola, Florida where fluorinated compounds contaminated wells operated by Escambia County.

Client: Environmental Litigation Group (Birmingham, Alabama)
Served as an expert on groundwater case where Exxon Mobil and Helena Chemical released ethylene dichloride into groundwater resulting in a large plume. Prepared report on the appropriate treatment technology and cost, and flaws with the proposed on-site remediation.

Client: Environmental Litigation Group (Birmingham, Alabama)
Served as an expert on air emissions released when a Bartlo Packaging Incorporated facility in West Helena, Arkansas exploded resulting in community exposure to pesticides and smoke from combustion of pesticides.

Client: Omara & Padilla (San Diego, California)
Served as a testifying expert on nuisance case against Nutro Dogfood Company that constructed a large dog food processing facility in the middle of a residential community in Victorville, California with no odor control devices. The facility has undergone significant modifications, including installation of a regenerative thermal oxidizer.

Client: Environmental Litigation Group (Birmingham, Alabama)
Serving as an expert on property damage and medical monitoring claims that have been filed against International Paper resulting from chemical emissions from facilities located in Bastrop, Louisiana; Prattville, Alabama; and Georgetown, South Carolina.

Client: Estep and Shafer L.C. (Kingwood, West Virginia)
Served as expert calculating acid emissions doses to residents resulting from coal-fired power plant emissions in West V
irginia using various air models.

Client: Watts Law Firm (Austin, Texas), Woodfill & Pressler (Houston, Texas) and Woska & Associates (Oklahoma City, Oklahoma)
Served as testifying expert on community and worker exposure to CCA, creosote, PAHs, and dioxins/furans from a BNSF and Koppers Facility in Somerville, Texas. Conducted field sampling, risk assessment, dose assessment and air modeling to quantify exposure to workers and community members.

Client: Environmental Litigation Group (Birmingham, Alabama)
Served as expert regarding community exposure to CCA, creosote, PAHs, and dioxins/furans from a Louisiana Pacific wood treatment facility in Florala, Alabama. Conducted blood sampling and environmental sampling to determine environmental exposure to dioxins/furans and PAHs.

Client: Sanders Law Firm (Colorado Springs, Colorado) and Vamvoras & Schwartzberg (Lake Charles, Louisiana)
Served as an expert calculating chemical exposure to over 500 workers from large ethylene dichloride spill in Lake Charles, Louisiana at the Conoco Phillips Refinery.

Client: Baron & Budd P.C. (Dallas, Texas)
Served as consulting expert in a defective product lawsuit against Dow Agroscience focusing on Clopyralid, a recalcitrant herbicide that damaged numerous compost facilities across the United States.

Client: Sullivan Papain Block McGrath & Cannavo (New York, New York) and The Cochran Firm (Dothan, Mississippi)

Served as an expert regarding community exposure to metals, PAHs PCBs, and dioxins/furans from the burning of Ford paint sludge and municipal solid waste in Ringwood, New Jersey.

Client: Rose, Klein & Marias LLP (Los Angeles, California)
Served as an expert in 55 Proposition 65 cases against individual facilities in the Port of Los Angeles and Port of Long Beach. Prepared air dispersion and risk models to demonstrate that each facility emits diesel particulate matter that results in risks exceeding 1/100,000, hence violating the Proposition 65 Statute.

Client: Rose, Klein & Marias LLP (Los Angeles, California) and Environmental Law Foundation (San Francisco, California)
Served as an expert in a Proposition 65 case against potato chip manufacturers. Conducted an analysis of several brands of potato chips for acrylamide concentrations and found that all samples exceeded Proposition 65 No Significant Risk Levels.

Client: Gonzales & Robinson (Westlake Village, California)
Served as a testifying expert in a toxic tort case against Chevron (Ortho) for allowing a community to be contaminated with lead arsenate pesticide. Created air dispersion and soil vadose zone transport models, and evaluated bioaccumulation of lead arsenate in food.

Client: Environment Now (Santa Monica, California)
Served as expert for Environment Now to convince the State of California to file a nuisance claim against automobile manufactures to recover MediCal damages from expenditures on asthma-related health care costs.

Client: Trutanich Michell (Long Beach, California)
Served as expert representing San Pedro Boat Works in the Port of Los Angeles. Prepared air dispersion, particulate air dispersion, and storm water discharge models to demonstrate that Kaiser Bulk Loading is responsible for copper concentrate accumulating in the bay sediment.

Client: Azurix of North America (Fort Myers, Florida)
Provided expert opinions, reports and research pertaining to a proposed County Ordinance requiring biosolids applicators to measure VOC and odor concentrations at application sites' boundaries.

Client: MCP Polyurethane (Pittsburg, Kansas)
Provided expert opinions and reports regarding metal-laden landfill runoff that damaged a running track by causing the reversion of the polyurethane due to its catalytic properties.

Risk Assessment And Air Modeling

Client: Hager, Dewick & Zuengler, S.C. (Green Bay, Wisconsin)
Conducted odor audit of rendering facility in Green Bay, Wisconsin.

Client: ABT-Haskell (San Bernardino, California)
Prepared air dispersion model for a proposed state-of-the-art enclosed compost facility. Prepared a traffic analysis and developed odor detection limits to predict 1, 8, and 24-hour off-site concentrations of sulfur, ammonia, and amine.

Client: Jefferson PRP Group (Los Angeles, California)
Evaluated exposure pathways for chlorinated solvents and hexavalent chromium for human health risk assessment of Los Angeles Academy (formerly Jefferson New Middle School) operated by Los Angeles Unified School District.

Client: Covanta (Susanville, California)
Prepared human health risk assessment for Covanta Energy focusing on agricultural worker exposure to caustic fertilizer.

Client: CIWMB (Sacramento, California)
Used dispersion models to estimate traveling distance and VOC concentrations downwind from a composting facility for the California Integrated Waste Management Board.

Client: Carboquimeca (Bogotá, Columbia)
Evaluated exposure pathways for human health risk assessment for a confidential client focusing on significant concentrations of arsenic and chlorinated solvents present in groundwater used for drinking water.

Client: Navy Base Realignment and Closure Team (Treasure Island, California)
Used Johnson-Ettinger model to estimate indoor air PCB concentrations and compared estimated values with empirical data collected in homes.

Client: San Diego State University (San Diego, California)
Measured CO_2 flux from soils amended with different quantities of biosolids compost at Camp Pendleton to determine CO_2 credit values for coastal sage under fertilized and non-fertilized conditions.

Client: Navy Base Realignment and Closure Team (MCAS Tustin, California)
Evaluated cumulative risk of a multiple pathway scenario for a child resident and a construction worker. Evaluated exposure to air and soil via particulate and vapor inhalation, incidental soil ingestion, and dermal contact with soil.

Client: MCAS Miramar (San Diego, California)
Evaluated exposure pathways of metals in soil by comparing site data to background data. Risk assessment incorporated multiple pathway scenarios assuming child resident and construction worker particulate and vapor inhalation, soil ingestion, and dermal soil contact.

Client: Naval Weapons Station (Seal Beach, California)
Used a multiple pathway model to generate dust emission factors from automobiles driving on dirt roads. Calculated bioaccumulation of metals, PCBs, dioxin congeners and pesticides to estimate human and ecological risk.

Client: King County, Douglas County (Washington State)
Measured PM_{10} and $PM_{2.5}$ emissions from windblown soil treated with biosolids and a polyacrylamide polymer in Douglas County, Washington. Used Pilat Mark V impactor for measurement and compared data to EPA particulate regulations.

Client: King County (Seattle, Washington)
Created emission inventory for several compost and wastewater facilities comparing VOC, particulate, and fungi concentrations to NIOSH values estimating risk to workers and individuals at neighboring facilities.

Air Pollution Investigation and Remediation

Client: Republic Landfill (Santa Clarita, California)
Managed a field investigation of odor around a landfill during 30+ events. Used hedonic tone, butanol scale, dilution-to-threshold values, and odor character to evaluate odor sources and character and intensity.

Client: California Biomass (Victorville, California)
Managed a field investigation of odor around landfill during 9+ events. Used hedonic tone, butanol scale, dilution-to-threshold values, and odor character to evaluate odor sources, character and intensity.

Client: ABT-Haskell (Redlands, California)
Assisted in permitting a compost facility that will be completely enclosed with a complex scrubbing system using acid scrubbers, base scrubbers, biofilters, heat exchangers and chlorine to reduce VOC emissions by 99 percent.

Client: Synagro (Corona, California)
Designed and monitored 30-foot by 20-foot by 6-foot biofilter for VOC control at an industrial composting facility in Corona, California to reduce VOC emissions by 99 percent.

Client: Jeff Gage (Tacoma, Washington)
Conducted emission inventory at industrial compost facility using GC/MS analyses for VOCs. Evaluated effectiveness of VOC and odor control systems and estimated human health risk.

Client: Daishowa America (Port Angeles Mill, Washington)
Analyzed industrial paper sludge and ash for VOCs, heavy metals and nutrients to develop a land application program. Metals were compared to federal guidelines to determine maximum allowable land application rates.

Client: Jeff Gage (Puyallup, Washington)
Measured effectiveness of biofilters at composting facility and conducted EPA dispersion models to estimate traveling distance of odor and human health risk from exposure to volatile organics.

Surface Water, Groundwater, and Wastewater Investigation/Remediation

Client: Confidential (Downey, California)
Managed groundwater investigation to determine horizontal extent of 1,000 foot TCE plume associated with a metal finishing shop.

Client: Confidential (West Hollywood, California)
Designing soil vapor extraction system that is currently being installed for confidential client. Managing groundwater investigation to determine horizontal extent of TCE plume associated with dry cleaning.

Client: Synagro Technologies (Sacramento, California)
Managed groundwater investigation to determine if biosolids application impacted salinity and nutrient concentrations in groundwater.

Client: Navy Base Realignment and Closure Team (Treasure Island, California)
Assisted in the design and remediation of PCB, chlorinated solvent, hydrocarbon and lead contaminated groundwater and soil on Treasure Island. Negotiated screening levels with DTSC and Water Board. Assisted in the preparation of FSP/QAPP, RI/FS, and RAP documents and assisted in CEQA document preparation.

Client: Navy Base Realignment and Closure Team (MCAS Tustin, California)
Assisted in the design of groundwater monitoring systems for chlorinated solvents at Tustin MCAS. Contributed to the preparation of FS for groundwater treatment.

Client: Mission Cleaning Facility (Salinas, California)
Prepared a RAP and cost estimate for using an oxygen releasing compound (ORC) and molasses to oxidize diesel fuel in soil and groundwater at Mission Cleaning in Salinas.

Client: King County (Washington)
Established and monitored experimental plots at a US EPA Superfund Site in wetland and upland mine tailings contaminated with zinc and lead in Smelterville, Idaho. Used organic matter and pH adjustment for wetland remediation and erosion control.

Client: City of Redmond (Richmond, Washington)
Collected storm water from compost-amended and fertilized turf to measure nutrients in urban runoff. Evaluated effectiveness of organic matter-lined detention ponds on reduction of peak flow during storm events. Drafted compost amended landscape installation guidelines to promote storm water detention and nutrient runoff reduction.

Client: City of Seattle (Seattle, Washington)
Measured VOC emissions from Renton wastewater treatment plant in Washington. Ran GC/MS, dispersion models, and sensory panels to characterize, quantify, control and estimate risk from VOCs.

Client: Plumas County (Quincy, California)

Installed wetland to treat contaminated water containing 1% copper in an EPA Superfund site. Revegetated 10 acres of acidic and metal laden sand dunes resulting from hydraulic mining. Installed and monitored piezometers in wetland estimating metal loading.

Client: Adams Egg Farm (St. Kitts, West Indies)
Designed, constructed, and maintained 3 anaerobic digesters at Springfield Egg Farm, St. Kitts. Digesters treated chicken excrement before effluent discharged into sea. Chicken waste was converted into methane cooking gas.

Client: BLM (Kremmling, Colorado)
Collected water samples for monitoring program along upper stretch of the Colorado River. Rafted along river and protected water quality by digging and repairing latrines.

Soil Science and Restoration Projects

Client: Hefner, Stark & Marois, LLP (Sacramento, California)
Facilitated in assisting Hefner, Stark & Marois, LLP in working with the Regional Water Quality board to determine how to utilize Calcium Participate as a by-product of processing sugar beets.

Client: Kinder Morgan (San Diego County, California)
Designed and monitored the restoration of a 110-acre project on Camp Pendleton along a 26-mile pipeline. Managed crew of 20, planting coastal sage, riparian, wetland, native grassland, and marsh ecosystems. Negotiated with the CDFW concerning species planting list and success standards.

Client: NAVY BRAC (Orote Landfill, Guam)
Designed and monitored pilot landfill cap mimicking limestone forest. Measured different species' root-penetration into landfill cap. Plants were used to evapotranspirate water, reducing water leaching through soil profile.

Client: LA Sanitation District Puente Hills Landfill (Whittier, California)
Monitored success of upland and wetland mitigation at Puente Hills Landfill operated by Sanitation Districts of Los Angeles. Negotiated with the Army Corps of Engineers and CDFG to obtain an early sign-off.

Client: City of Escondido (Escondido, California)
Designed, managed, installed, and monitored a 20-acre coastal sage scrub restoration project at Kit Carson Park, Escondido, California.

Client: Home Depot (Encinitas, California)
Designed, managed, installed and monitored a 15-acre coastal sage scrub and wetland restoration project at Home Depot in Encinitas, California.

Client: Alvarado Water Filtration Plant (San Diego, California)
Planned, installed and monitored 2-acre riparian and coastal sage scrub mitigation in San Diego California.

Client: Monsanto and James River Corporation (Clatskanie, Oregon)
Served as a soil scientist on a 50,000-acre hybrid poplar farm. Worked on genetically engineering study of Poplar trees to see if glyphosate resistant poplar clones were economically viable.

Client: World Wildlife Fund (St. Kitts, West Indies)
Managed 2-year biodiversity study, quantifying and qualifying the various flora and fauna in St. Kitts' expanding volcanic rainforest. Collaborated with skilled botanists, ornithologists and herpetologists.

Publications

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, 2012, 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.

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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', in Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modelling, Monitoring and Management of Air Pollution*, Tallinn, Estonia. 20-22 July, 2009, Southampton, Boston. WIT Press.

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

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Hensley, A.R. A. Scott, J. J. J. Clark, **P. E. Rosenfeld** (2007) "Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility" Environmental Research. 105, pp 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," Elsevier Publishing, Boston Massachusetts.

Rosenfeld P.E., and Suffet, I.H. (Mel) (2007) "Anatomy Of An Odor Wheel" Water Science and Technology, In Press.

Rosenfeld, P.E., Clark, J.J.J., Hensley A.R., Suffet, I.H. (Mel) (2007) "The use of an odor wheel classification for evaluation of human health risk criteria for compost facilities." Water Science And Technology, In Press.

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

Rosenfeld, P.E., and Suffet I.H. (2004) "Control of Compost Odor Using High Carbon Wood Ash", Water Science and Technology, Vol. 49, No. 9. pp. 171-178.

Rosenfeld, P.E., Clark J. J. and Suffet, I.H. (2004) "Value of and Urban Odor Wheel." (2004). WEFTEC 2004. New Orleans, October 2 - 6, 2004.

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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 JUL-AUG 2004.

Rosenfeld, P. E., Grey, M., (2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium. Batelle Conference Orlando Florida. June 2 and June 6, 2003.

Rosenfeld, P.E., Grey, M and Suffet, M. 2002. "Controlling Odors Using High Carbon Wood Ash." Biocycle, March 2002, Page 42.

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. April 2002.

Rosenfeld, P.E., and C.L. Henry. 2001. Characterization of odor emissions from three different biosolids. Water Soil and Air pollution. Vol. 127 Nos. 1-4, pp. 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: 363-367.

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Rosenfeld, P.E., and Henry C. L., 2001. High carbon wood ash effect on biosolids microbial activity and odor. Water Environment Research. Volume 131 No. 1-4, pp. 247-262.

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. Bellevue Washington.

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

P. Rosenfeld. 1992. The Mount Liamuiga Crater Trail. Heritage Magazine of St. Kitts, Vol. 3 No. 2.

P. Rosenfeld. 1993. High School Biogas Project to Prevent Deforestation On St. Kitts. Biomass Users Network, Vol. 7, No. 1, 1993.

P. Rosenfeld. 1992. British West Indies, St. Kitts. Surf Report, April issue.

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

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

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

England Environmental Agency, 2002. Landfill Gas Control Technologies. Publishing Organization Environment Agency, Rio House, Waterside Drive, Aztec West, Almondsbury BRISTOL, BS32 4UD.

Presentations

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.** "Atrazine: A Persistent Pesticide in Urban Drinking Water." Urban Environmental Pollution, Boston, MA, June 20-23, 2010.

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.** "Bringing Environmental Justice to East St. Louis, Illinois." Urban Environmental Pollution, Boston, MA, June 20-23, 2010.

Rosenfeld, P.E. (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" Presentation at the 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, April 19-23, 2009. Tuscon, AZ.

Rosenfeld, P.E. (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" Presentation at the 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, April 19-23, 2009. Tuscon, AZ.

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

Rosenfeld, P. E. (2007) "The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant" Platform Presentation at the 23rd Annual International Conferences on Soils Sediment and Water, October 15-18, 2007. University of Massachusetts, Amherst MA.

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

Rosenfeld P. E. "Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP)" – Platform Presentation at the Association for Environmental Health and Sciences (AEHS) Annual Meeting, San Diego, CA, 3/2007.

Rosenfeld P. E. "Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama" – Platform Presentation at the AEHS Annual Meeting, San Diego, CA, 3/2007.

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

Paul Rosenfeld Ph.D. "Fate, Transport and Persistence of PFOA and Related Chemicals." Mealey's C8/PFOA Science, Risk & Litigation Conference" October 24, 25. The Rittenhouse Hotel, Philadelphia.

Paul Rosenfeld Ph.D. "Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation PEMA Emerging Contaminant Conference. September 19. Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. "Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP." PEMA Emerging Contaminant Conference. September 19. Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. "Fate, Transport and Persistence of PDBEs." Mealey's Groundwater Conference. September 26, 27. Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. "Fate, Transport and Persistence of PFOA and Related Chemicals." International Society of Environmental Forensics: Focus On Emerging Contaminants. June 7,8. Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

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

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

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

Paul Rosenfeld, Ph.D., 2004. Perchlorate Toxicology. Presentation to a meeting of the American Groundwater Trust. March 7th, 2004. Pheonix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse, 2004. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

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

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

Paul Rosenfeld, Ph.D. Underground Storage Tank Litigation and Remediation. California CUPA Forum. Marriott Hotel. Anaheim California. February 6-7, 2003.

Paul Rosenfeld, Ph.D. Underground Storage Tank Litigation and Remediation. EPA Underground Storage Tank Roundtable. Sacramento California. October 23, 2002.

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

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

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

Rosenfeld, P.E. and Grey, M. A. 2002. Soil Science Society Annual Conference. Indianapolis, Maryland. November 11-14.

Rosenfeld. P.E. 2000. Two stage biofilter for biosolids composting odor control. Water Environment Federation. Anaheim California. September 16, 2000.

Rosenfeld. P. E. 2000. Wood ash and biofilter control of compost odor. Biofest. October 16, 2000.Ocean Shores, California.

Rosenfeld, P. E. 2000. Bioremediation Using Organic Soil Amendments. California Resource Recovery Association. 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. 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. 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, Seattle Washington.

Rosenfeld, P.E., C.L. Henry. 1998. Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. Biofest Lake Chelan, 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, Anaheim California.

Professional History

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Founding And Managing Partner
UCLA School of Public Health; 2007 to 2010; Lecturer (Asst Res)
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 H_2O 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
Bureau of Land Management, Kremmling Colorado 1990; Scientist

Teaching Experience

UCLA Department of Environmental Health (Summer 2003 through 2010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focuses 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.

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.

Cases that Dr. Rosenfeld Provided Deposition or Trial Testimony

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)

In the Court of Common Pleas for the Second Judicial Circuit, State of South Carolina, County of Aiken
David Anderson, et al., *Plaintiffs,* vs. Norfolk Southern Corporation, et al., *Defendants.*
Case Number: 2007-CP-02-1584

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

In the Ninth Judicial District Court, Parish of Rapides, State of Louisiana
Roger Price, et al., *Plaintiffs*, vs. Roy O. Martin, L.P., et al., *Defendants*.
Civil Suit Number 224,041 Division G

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

In the United States District Court for the Southern District of Ohio
Carolyn Baker, et al., *Plaintiffs*, vs. Chevron Oil Company, et al., *Defendants*.
Case Number 1:05 CV 227

In the Fourth Judicial District Court, Parish of Calcasieu, State of Louisiana
Craig Steven Arabie, et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 07-2738 G

In the Fourteenth Judicial District Court, Parish of Calcasieu, State of Louisiana
Leon B. Brydels, *Plaintiffs*, vs. Conoco, Inc., et al., *Defendants.*
Case Number 2004-6941 Division A

In the District Court of Tarrant County, Texas, 153rd Judicial District
Linda Faust, *Plaintiff*, vs. Burlington Northern Santa Fe Rail Way Company, Witco Chemical Corporation A/K/A Witco Corporation, Solvents and Chemicals, Inc. and Koppers Industries, Inc., *Defendants*.
Case Number 153-212928-05

In the Superior Court of the State of California in and for the County of San Bernardino
Leroy Allen, et al., *Plaintiffs*, vs. Nutro Products, Inc., a California Corporation and DOES 1 to 100, inclusive, *Defendants*.
John Loney, Plaintiff, vs. James H. Didion, Sr.; Nutro Products, Inc.; DOES 1 through 20, inclusive, *Defendants*.
Case Number VCVVS044671

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

In the Superior Court of the State of California in and for the County of Los Angeles
Leslie Hensley and Rick Hensley, *Plaintiffs*, vs. Peter T. Hoss, as trustee on behalf of the Cone Fee Trust; Plains Exploration & Production Company, a Delaware corporation; Rayne Water Conditioning, Inc., a California corporation; and DOES 1 through 100, *Defendants.*
Case Number SC094173

In the Superior Court of the State of California in and for the County of Santa Barbara, Santa Maria Branch
Clifford and Shirley Adelhelm, et al., all individually, *Plaintiffs*, vs. Unocal Corporation, a Delaware Corporation; Union Oil Company of California, a California corporation; Chevron Corporation, a California corporation; ConocoPhillips, a Texas corporation; Kerr-McGee Corporation, an Oklahoma corporation; and DOES 1 though 100, *Defendants.*
Case Number 1229251 (Consolidated with case number 1231299)

In the United States District Court for Eastern District of Arkansas, Eastern District of Arkansas
Harry Stephens Farms, Inc, and Harry Stephens, individual and as managing partner of Stephens Partnership, *Plaintiffs*, vs. Helena Chemical Company, and Exxon Mobil Corp., successor to Mobil Chemical Co., *Defendants.*
Case Number 2:06-CV-00166 JMM (Consolidated with case number 4:07CV00278 JMM)

In the United States District Court for the Western District of Arkansas, Texarkana Division
Rhonda Brasel, et al., *Plaintiffs*, vs. Weyerhaeuser Company and DOES 1 through 100, *Defendants.*
Civil Action Number 07-4037

In The Superior Court of the State of California County of Santa Cruz
Constance Acevedo, et al. *Plaintiffs* Vs. California Spray Company, et al. *Defendants*
Case No CV 146344

In the District Court of Texas 21st Judicial District of Burleson County
Dennis Davis, *Plaintiff*, vs. Burlington Northern Santa Fe Rail Way Company, *Defendant.*
Case Number 25,151

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622

EXHIBIT B

SMITH ENGINEERING & MANAGEMENT

May 5, 2021

Ms. Kelilah Federman
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080-7037

Subject: Callan and E. 14th Street Project

P21012

Dear Ms. Federman:

Per your request, I reviewed the Infill Environmental Checklist (the "IEC") for the Callan and E.14th Project (the "Project") in the City of San Leandro (the "City"). My review is with respect to transportation and circulation considerations.

My qualifications to perform this review include registration as a Civil and Traffic Engineer in California, over 50 years professional consulting practice in these fields and both preparation and review of the traffic and transportation components of numerous environmental documents prepared under the California Environmental Quality Act ("CEQA"). My professional resume is attached hereto.

The IEC Exaggerates the Project's Proximity to the BART Rail Transit Station and the Stops of the Bus Lines that Service It

The principal criterion under which the Project qualifies for environmental review as an infill project under the expedited IEC process is its location within ½ mile of transit station or high-quality bus lines. The IEC states at page 2-4 that the Project is located within 0.4 miles of the BART rail transit station, which also includes stop points for the several bus lines that service it. But this is an 'as the crow flies' distance, not as measured along the actual paths pedestrians would have to walk. At page 3-2 the IEC further exaggerates the proximity of the

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Project site to BART, stating BART is about .25 miles west of the project site. Actually, the linear distance from the nearest corner of the Project site to the nearest corner of the BART station site is nearly .30 miles. Furthermore, the actual station entrance is set about .17 miles further south, a fact not mentioned in this section of the IEC. Compounding the exaggeration, the resident access to the proposed project is not at the corner of E. 14th and Callan; it is set about 175 feet farther east on Callan. When distance to the BART Station turnstile entry is measured along the actual paths Project residents would have to follow from the resident entry lobby, the distance is 0.492 miles. So, the Project qualifies as being within ½ mile of quality transit, but only by the thinnest of margins. This fact must be remembered when the IEC and its Appendix F are dismissive of exceedance of vehicle miles traveled ("VMT") impact significance thresholds on the claim of proximity to BART.

The IEC Is Inappropriately Dismissive of the Project's Exceedance of Thresholds of Significant VMT Impact

The IEC discloses that, based on transportation data and forecasting by the Metropolitan Transportation Commission, although VMT per capita resident in this particular area (a traffic analysis zone or "TAZ") would be well below significance thresholds set 15 percent below existing regional average, VMT per employee would exceed the thresholds. Hence, the Project's non-residential component would create a significant transportation impact.

The IEC Appendix F cites Office of Planning and Research ("OPR") CEQA guidance that "land use projects within one-half mile of an existing high-quality transit corridor should be presumed to cause less than significant transportation impacts. The proposed project would be located within one-half mile of the San Leandro BART station and adjacent to a high-quality transit corridor (AC Transit Route 1T operates on East 14th Street and Davis Street at 10-minute headways), and thus is expected to generate significantly lower VMT per employee and resident compared to existing uses in TAZ 871."

However, this citation from CEQA guidelines and advisories omits the immediately following sentence therein: "This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT". Location-specific information does indicate that the Project would still generate significant levels of VMT – the data for TAZ 871 where it is located. And the rationalization that the Project would have "significantly lower VMT per employee and resident compared to existing uses in TAZ 871" is undemonstrated, false and misleading.

The MTC TAZ zone 871 comprises approximately a 66-acre area of central San Leandro – approximately one square mile. While TAZ 871 is neither perfectly

square nor is the BART station perfectly in the center of it, residential and employment uses in most of TAZ 871 have equal or better accessibility to BART than the Project's 0.49 mile walking distance to it and also have qualifying accessibility to (as disclosed in Appendix F Section 2.6.1 and Table 4 and Figure 5) AC lines 1T or 10, which fulfill CEQA's definition of 'quality transit'. The existing uses in TAZ 871 therefore have equal or better transit access than the Project, yet have significant VMT impacts. Hence, there is absolutely no supporting evidence, or reason to presume, that the Project would generate less VMT than the average for TAZ 871.

Elsewhere, Appendix F cites the fact that the Project provides less than code parking as another reason why the Project might have less than TAZ 871 average VMT generation. But this is just a double-counting of the effects of accessibility to high-quality transit. That accessibility enables the Project developer to cheapen Project costs, while still having it attractive and marketable to enough households that would prefer to not drive as much, prefer not to own a car, or prefer not to own multiple cars to remain economically viable. Having less available parking does not force people to use transit. The reverse is the true. Having readily accessible quality transit makes buildings that offer less than normal parking viably marketable. The IEC's conclusion that reduced parking along will reduce VMT, without corresponding transit improvements, is not supported by evidence.

The IEC Underestimates the Project's Trip Generation

For reasons of assessing the Project's consistency with transportation components of the *City of San Leandro 2035 General Plan Update Draft Environmental Impact Report* (*DEIR*), and the *Downtown San Leandro Transit-Oriented Development Strategy Environmental Impact Report*, the IEC and its Appendix F carry out peak period traffic delay/level of service and traffic queuing analyses at several selected intersections. To do so, the documents must estimate the number of AM and PM peak hour trips each component of the Project causes ("trip generation"), estimate how that traffic distributes itself across the area roadway system, and then compute what effect that traffic has on delay/level of service and queuing conditions when added to other traffic counted or predicted to be at the selected intersections under various development scenarios. Hence, estimating Project trip generation is the foundational step in this process. The problem is that the IEC overestimates discounts of Project trip generation due to internalization. It also overestimates the credit for elimination of existing uses due to failure to apply the same discounting for proximity to transit and passer-by attraction to the existing uses as it assumes for future uses.

The issue with the trip generation of the Project's residential trip generation estimate is as follows. The IEC analysis estimates trip generation for the Project's various components relying on information contained in the Institute of Transportation Engineers publication *Trip Generation, 10th Edition*, a document recognized as authoritative. For the Project's residential component, it relies on data for the Mid-Rise Residential with First Floor Commercial land use category (ITE code 231) for General Urban/Suburban settings; a category we concur is appropriate. However, Appendix F goes on to state at page 29: "The rates presented in the *ITE Trip Generation Manual,* 10th Edition were collected at single-use, freestanding sites. Therefore, the *ITE Trip Generation Handbook*, 3rd Edition recommends using the National Cooperative Highway Research Program (NCHRP) *Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* procedure to estimate the level of internal trip capture from complementary land uses within mixed-use developments."

While the problem of only representing data collected at "single use, freestanding sites" was nearly universally correct in the case of *Trip Generation*, 3rd Edition, that is not the case with *Trip Generation, 10th Edition*. In fact, the very title for land use category 231 makes that obvious: Mid-Rise Residential with First Floor Commercial. The trip rates for this category already reflect the internal trip capture that comes from having mixed use commercial on the ground floor. So, the City's analysis should not have applied the above referenced adjustment procedure to account for internalization to the initial estimate residential trip generation, but it inappropriately made this double discounting. As demonstrated in Appendix F, Tables 10 and 11 at pages 29 and 30, this inappropriate extra discounting on the residential trips in the PM peak eliminates 45 of the 71 (over 63 percent) of those residential trips. Looking at the end result on Appendix F, Table 14 at page 33, the inappropriate discount of residential trips amounts to almost 29 percent of the 156 net new PM peak hour trips that are ultimately assigned to the street system. This one error alone is sufficient to result in a substantial understatement of the Project's impacts on PM peak hour delay/level of service and traffic queues.

Also, in compiling the estimate of net new trips caused by the Project, the analysis correctly discounts trips to the uses that were in operation at the time baseline traffic counts were taken. However, in compiling those trip credits, it fails to apply the same 36 percent reduction for attracted passers-by to the then-existing retail component as it does to the trip generation of the Project's retail component. Had it done so, it would have awarded 12 fewer PM peak hour trip credits for uses removed.

When both of the above are considered, the number of trips inappropriately eliminated from the Project's net new PM peak hour trip total comprises almost 37 percent of the net new trips that were carried forward in the analysis. The IES

therefore substantially underestimates the Project's trip generation. This is a new traffic impact that is specific to the Project which was not analyzed, and is more severe than, the traffic issues considered in the General Plan EIR. Since the impacts were not accurately evaluated, there is insufficient evidence in the IES that the General Plan's standard mitigation measures would substantially reduce traffic impacts (and resulting General Plan inconsistencies).

Lack of Cumulative Scenario Without Project and Flawed Interpretation of Delay/Level-of-Service and Queue Conditions and

The IEC and its Appendix F analyze traffic delay/level-of-service and queues at selected intersections Project traffic for two scenarios. The Baseline scenario traffic counts taken in 2018 as adjusted to reflect one project that was fully approved, but not yet occupied. The Baseline scenario is analyzed both with and without the Project. The Cumulative scenario reflects projected traffic in the year 2040 based on existing traffic counts, build-out of development indicated in the San Leandro 2035 General Plan Update, and growth factors estimated using the Alameda County Transportation Commission 2040 travel demand model. The Cumulative scenario is only analyzed with the Project included, so it provides no basis for understanding what incremental impact the Project has on the Cumulative scenario, a critical flaw in the IEC.

The Baseline analysis indicates that the study intersections would operate at acceptable delay/level-of-service conditions. However, the queue length analysis shows that 95th percentile queues[1] exceed queue storage capacity on one or more major turning movements at 4 of the 5 intersections studied. The problem with this part of the IEC is the narrative and/or lack of narrative clearly explaining to the public what the implications of overflows of queue storage capacity by various lengths are.

Consider the narrative at page of IEC Appendix F. It states: "Although 95th percentile queue lengths increase slightly at the study intersections compared to Baseline Conditions, most study intersections are expected to maintain a 95th percentile queue length that is within the existing turn pocket storage capacity. For turn pockets that already exceed capacity under Baseline Conditions, the proposed project would contribute less than a car length to the 95th percentile queue length, except for one exception below." First, the statement that 'most study intersections are expected to maintain a 95th percentile queue length that is within the existing turn pocket storage capacity' is clearly false. IEC Appendix F Table 17 clearly shows only one of the study intersections does not have at least

[1] Sometimes analysts attempt to claim 95th percentile queues rarely occur, thus making the information seem of diminished consequence. However, in some engineering literature, because overflowed queue storage is so consequential, the 95th percentile queue is referred to as the "Design Queue" because it is the length of queue storage that engineers attempt to provide in design.

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one movement where the 95th percentile queue does not exceed the storage capacity in either the AM or PM peak hour. Also, the notion that adding just a few feet to queue length is inconsequential is not always true. Addition of a few feet that changes a queue from fitting in the available storage area to not fitting in the available storage length is very consequential. And this happens in the referenced Table 17 with the addition of Project traffic on the westbound left at the intersection of E. 14th – Davis and Callan.

The narrative fails to explain to the public what queues of a particular length mean on the ground. It simply presents the information as an abstract length of queued vehicles. An example of what interpretation of queues should be provided in at least narrative form, if not also on drawings on aerial photos is, for instance, what a queue length of 250 feet in the northbound left turn lane at Callan and Bancroft means. What it means is that the queue of northbound vehicles wanting to make left turns onto westbound Callan would block the northbound through lane on Bancroft to within about one car length of the limits of the intersection of Bancroft with Estudillo and that the vehicles that wanted to use that through lane to go further north would certainly extend the queue through the Bancroft-Estudillo intersection and beyond. It is worth also knowing, but undisclosed, that all this would be happening on the frontage of Bancroft Middle School, itself a traffic hot spot in the morning peak. This is the type of interpretation that the public and policy-makers should be getting but the IEC and its Appendix F lack.

The IEC also fails to explain that, if there is queuing substantially exceeding storage, the actual delay/level-of-service will be much worse than the projections reported, because the blocking of other lanes results in those lanes being inefficiently used.

With regard to the Cumulative Conditions scenario, the delay/level-of-service projections have the superficial appearance of being satisfactory but queues exceed storage capacity by nightmarish lengths[2], assuring that delay/level-of-service will be much worse than shown. The IEC and its Appendix F make no attempt to define feasible mitigation for the situation and just blame it on traffic from other growth. The Project's actual contribution to the cumulative chaos cannot be determined since the IEC does not include a Cumulative – No Project scenario. Compounding all this is the fact that the analysis should have included 37 percent more Project traffic than it did in the PM peak hour. The IEC therefore fails to disclose potentially significant cumulative effects that are specific to the Project, were not analyzed, and are more severe than, the traffic issues considered in the General Plan EIR.

Undisclosed Safety Issue

[2] See Appendix F, Table 19

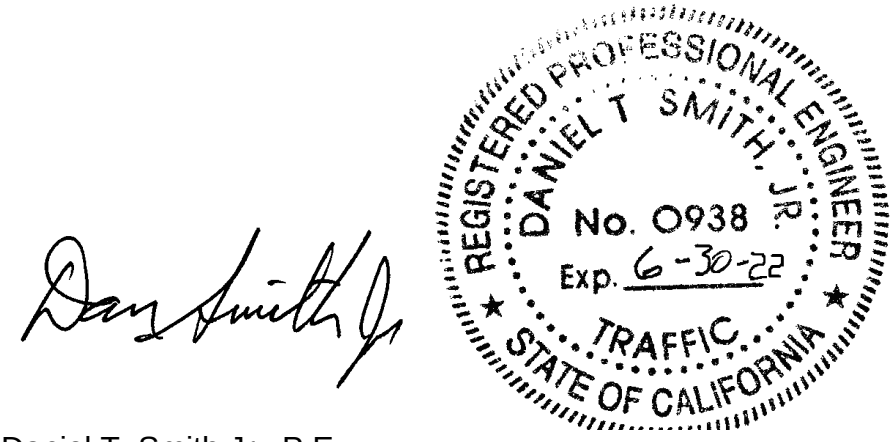
IEC Figure 3-12 shows an articulated tractor-trailer truck unit that would be common in deliveries of grocery supplies backing into and exiting the grocery loading area. To make the entry maneuver, the truck would have to proceed eastbound on Chumalia, swing out into the westbound Chumalia, so momentarily blocking both directions of Chumalia, then make a backing S turn (that starts backing right, then switches to turning left) across the sidewalk, through the entry to the garage, then into the grocery loading dock that is at right angles to the garage entry lane. For drivers of articulated units, a backing right turn is a blind turn and this is a complex maneuver, so executing it may require multiple attempts so the blockage to the sidewalk on the Project side and both directions of Chumalia may be more than momentary. To exit, the truck must again swing across both directions of Chumalia and make an extremely tight turn into Hyde Street. This awkward situation is a compromise to safety that is not addressed in the IEC's assessment of Project access, and is a more severe impact that analyzed in the General Plan EIR.

Conclusion

Given all of the above, the Project cannot be approved under the IEC and a full EIR should be prepared.

Sincerely,

Smith Engineering & Management
A California Corporation



Daniel T. Smith Jr., P.E.
President

SMITH ENGINEERING & MANAGEMENT

DANIEL T. SMITH, Jr.
President

EDUCATION

Bachelor of Science, Engineering and Applied Science, Yale University, 1967
Master of Science, Transportation Planning, University of California, Berkeley, 1968

PROFESSIONAL REGISTRATION

California No. 21913 (Civil) Nevada No. 7969 (Civil) Washington No. 29337 (Civil)
California No. 938 (Traffic) Arizona No. 22131 (Civil)

PROFESSIONAL EXPERIENCE

Smith Engineering & Management, 1993 to present. President.
DKS Associates, 1979 to 1993. Founder, Vice President, Principal Transportation Engineer.
De Leuw, Cather & Company, 1968 to 1979. Senior Transportation Planner.
Personal specialties and project experience include:

Litigation Consulting. Provides consultation, investigations and expert witness testimony in highway design, transit design and traffic engineering matters including condemnations involving transportation access issues; traffic accidents involving highway design or traffic engineering factors; land use and development matters involving access and transportation impacts; parking and other traffic and transportation matters.

Urban Corridor Studies/Alternatives Analysis. Principal-in-charge for State Route (SR) 102 Feasibility Study, a 35-mile freeway alignment study north of Sacramento. Consultant on I-280 Interstate Transfer Concept Program, San Francisco, an AA/EIS for completion of I-280, demolition of Embarcadero freeway, substitute light rail and commuter rail projects. Principal-in-charge, SR 238 corridor freeway/expressway design/environmental study, Hayward (Calif.) Project manager, Sacramento Northeast Area multi-modal transportation corridor study. Transportation planner for I-80N West Terminal Study, and Harbor Drive Traffic Study, Portland, Oregon. Project manager for design of surface segment of Woodward Corridor LRT, Detroit, Michigan. Directed staff on I-80 National Strategic Corridor Study (Sacramento-San Francisco), US 101-Sonoma freeway operations study, SR 92 freeway operations study, I-880 freeway operations study, SR 152 alignment studies, Sacramento RTD light rail systems study, Tasman Corridor LRT AA/EIS, Fremont-Warm Springs BART extension plan/EIR, SRs 70/99 freeway alternatives study, and Richmond Parkway (SR 93) design study.

Area Transportation Plans. Principal-in charge for transportation element of City of Los Angeles General Plan Framework, shaping nations largest city two decades into 21'st century. Project manager for the transportation element of 300-acre Mission Bay development in downtown San Francisco. Mission Bay involves 7 million gsf office/commercial space, 8,500 dwelling units, and community facilities. Transportation features include relocation of commuter rail station; extension of MUNI-Metro LRT; a multi-modal terminal for LRT, commuter rail and local bus; removal of a quarter mile elevated freeway; replacement by new ramps and a boulevard; an internal roadway network overcoming constraints imposed by an internal tidal basin; freeway structures and rail facilities; and concept plans for 20,000 structured parking spaces. Principal-in-charge for circulation plan to accommodate 9 million gsf of office/commercial growth in downtown Bellevue (Wash.). Principal-in-charge for 64 acre, 2 million gsf multi-use complex for FMC adjacent to San Jose International Airport. Project manager for transportation element of Sacramento Capitol Area Plan for the state governmental complex, and for Downtown Sacramento Redevelopment Plan. Project manager for Napa (Calif.) General Plan Circulation Element and Downtown Riverfront Redevelopment Plan, on parking program for downtown Walnut Creek, on downtown transportation plan for San Mateo and redevelopment plan for downtown Mountain View (Calif.), for traffic circulation and safety plans for California cities of Davis, Pleasant Hill and Hayward, and for Salem, Oregon.

Transportation Centers. Project manager for Daly City Intermodal Study which developed a $7 million surface bus terminal, traffic access, parking and pedestrian circulation improvements at the Daly City BART station plus development of functional plans for a new BART station at Colma. Project manager for design of multi-modal terminal (commuter rail, light rail, bus) at Mission Bay, San Francisco. In Santa Clarita Long Range Transit Development Program, responsible for plan to relocate system's existing timed-transfer hub and development of three satellite transfer hubs. Performed airport ground transportation system evaluations for San Francisco International, Oakland International, Sea-Tac International, Oakland International, Los Angeles International, and San Diego Lindberg.

Campus Transportation. Campus transportation planning assignments for UC Davis, UC Berkeley, UC Santa Cruz and UC San Francisco Medical Center campuses; San Francisco State University; University of San Francisco; and the University of Alaska and others. Also developed master plans for institutional campuses including medical centers, headquarters complexes and research & development facilities.

Special Event Facilities. Evaluations and design studies for football/baseball stadiums, indoor sports arenas, horse and motor racing facilities, theme parks, fairgrounds and convention centers, ski complexes and destination resorts throughout western United States.

Parking. Parking programs and facilities for large area plans and individual sites including downtowns, special event facilities, university and institutional campuses and other large site developments; numerous parking feasibility and operations studies for parking structures and surface facilities; also, resident preferential parking .

Transportation System Management & Traffic Restraint. Project manager on FHWA program to develop techniques and guidelines for neighborhood street traffic limitation. Project manager for Berkeley, (Calif.), Neighborhood Traffic Study, pioneered application of traffic restraint techniques in the U.S. Developed residential traffic plans for Menlo Park, Santa Monica, Santa Cruz, Mill Valley, Oakland, Palo Alto, Piedmont, San Mateo County, Pasadena, Santa Ana and others. Participated in development of photo/radar speed enforcement device and experimented with speed humps. Co-author of Institute of Transportation Engineers reference publication on neighborhood traffic control.

Bicycle Facilities. Project manager to develop an FHWA manual for bicycle facility design and planning, on bikeway plans for Del Mar, (Calif.), the UC Davis and the City of Davis. Consultant to bikeway plans for Eugene, Oregon, Washington, D.C., Buffalo, New York, and Skokie, Illinois. Consultant to U.S. Bureau of Reclamation for development of hydraulically efficient, bicycle safe drainage inlets. Consultant on FHWA research on effective retrofits of undercrossing and overcrossing structures for bicyclists, pedestrians, and handicapped.

MEMBERSHIPS

Institute of Transportation Engineers Transportation Research Board

PUBLICATIONS AND AWARDS

Residential Street Design and Traffic Control, with W. Homburger *et al*. Prentice Hall, 1989.

Co-recipient, Progressive Architecture Citation, *Mission Bay Master Plan*, with I.M. Pei WRT Associated, 1984.

Residential Traffic Management, State of the Art Report, U.S. Department of Transportation, 1979.

Improving The Residential Street Environment, with Donald Appleyard et al., U.S. Department of Transportation, 1979.

Strategic Concepts in Residential Neighborhood Traffic Control, International Symposium on Traffic Control Systems, Berkeley, California, 1979.

Planning and Design of Bicycle Facilities: Pitfalls and New Directions, Transportation Research Board, Research Record 570, 1976.

Co-recipient, Progressive Architecture Award, *Livable Urban Streets, San Francisco Bay Area and London*, with Donald Appleyard, 1979.

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EXHIBIT C

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #21-xxx

May 5, 2021

Ms. Kelilah D. Federman
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: Davis@1188 Mixed-Use CEQA Infill, Comments on the Noise Analysis

Dear Ms. Federman,

Per your request, I have reviewed the subject matter document CEQA Infill Checklist (Checklist) for the Callan & East 14th Street project (Davis@1188). The project would demolish an existing building and develop a five-floor mixed-use residential and retail building, which would include 196 dwelling units; a ground-floor grocery store and additional retail space with an above ground parking garage. The subject document is a project-level document that references the San Leandro 2035 General Plan and the EIR for the 2035 General Plan.

Effectiveness of Construction Noise Mitigation Measures and Construction Noise Thresholds are not Clearly Established

The EIR for the 2035 General Plan (GPEIR) identifies construction noise as a less than significant impact with mitigation, and this is cited as the reason that the proposed project would likewise not be more significant than the impacts evaluated in the GPEIR. However, neither the GPEIR nor the project Checklist contain any significance thresholds or quantitative analysis of construction noise, and thus the effectiveness of mitigation (GPEIR Mitigation Measure NOI-4) to reduce and mitigate the construction noise impact is not substantiated. Moreover, the suggested mitigation measures contained in GPEIR MM NOI-4 are, in many instances, likely to be ineffective at reducing actual construction noise.

To demonstrate, consider the following hypothetical construction noise analysis.

The Checklist cites the Federal Transit Administration (FTA) for the analysis of construction vibration guidance. The FTA[1] also provides guidance and noise analysis methodology to evaluate noise from construction activities. Table 1 provides an excerpted list of construction equipment from the FTA that could be used to construct the project, along with usage factors corresponding to the expected amount of time that the equipment could generate its highest noise levels. A sound level from a hydra break ram (hoe ram) was obtained from the Federal Highway Administration's Roadway Construction Noise Model.[2] As seen from Table 1, any single piece of construction equipment would exceed 65 dBA (Lmax or Leq). Any two pieces operated at the closest edge of the property over the course of an hour would generate 78 to 85 dBA Leq.

The GPEIR identified construction noise as significant without mitigation without defining what level would be significant. One way to reach this conclusion would be to compare the hourly energy equivalent noise level (Leq) caused by a single piece of equipment to the long-term construction noise criteria used in the nearby City of Oakland[3], where long-term construction activities (more than 10 days) are limited to 65 dBA at the receiving property. The project site is approximately 45 to 55 ft from the nearest noise sensitive properties, and thus it is clear that construction activities would exceed a 65 dBA noise limit evaluated on an Lmax or Leq basis. Effective noise mitigation would provide nominally 10 dBA or more noise reduction.

Alternatively, consider the existing environment documented for the Checklist, where hourly noise levels during daytime hours exceed 65 dBA at LT-1 (Appendix E, page 40 of 49). The daytime noise at LT-2 was above 70 dBA Leq (Appendix E, page 41 of 49). These data were measured near the building setback from the nearby roads and appear to be representative of the noise exposure at nearby noise sensitive receptors. Applying a noise threshold 5 dBA higher than these ambient data would yield thresholds of 70 and 75 dBA Leq, respectively. It is clear that most construction activities would exceed these thresholds, resulting in significant noise impacts to sensitive receptors. Effective noise mitigation would provide at least 5 dBA noise reduction.

Table 1 Equipment Noise Levels

Equipment	SPL @ 50 ft	Usage factor	Leq @ 50 ft
Air Compressor	80	40%	76
Backhoe	80	40%	76
Compactor	82	20%	75
Concrete Mixer	85	20%	78
Concrete Pump	82	20%	75
Concrete Vibrator	76	15%	68

[1] FTA, "Transit Noise and Vibration Impact Assessment Manual," 2018. Accessed via the web on 5/3/21. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

[2] FHWA, "Roadway Construction Noise Model," v 1.1, accessed via the web on 5/3/21 https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/

[3] City of Oakland, Planning Code, Performance Standards for noise, Chapter 17.120.050. Accessed via the web on 5/4/21. https://library.municode.com/ca/oakland/codes/planning_code?nodeId=TIT17PL_CH17.120PEST_17.120.050NO

Crane, Derrick	88	16%	80
Crane, Mobile	83	16%	75
Dozer	85	40%	81
Generator	82	50%	79
Grader	85	40%	81
Hydra break ram (FHWA)	90	10%	80
Impact Wrench	85	50%	82
Jack Hammer	88	20%	81
Loader	80	40%	76
Paver	85	50%	82
Pneumatic Tool	85	50%	82
Pump	77	50%	74
Rock Drill	85	20%	78
Roller	85	20%	78
Saw	76	20%	69
Scraper	85	40%	81
Truck	84	40%	80

Consider then the mitigation measures in GPEIR MM NOI-4, copied below:

Prior to the start of construction activities, the construction contractor shall:

- *Maintain and tune all proposed equipment in accordance with the manufacturer's recommendations to minimize noise emission.*
- *Inspect all proposed equipment and fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds that are no less effective than as originally equipped by the manufacturer.*
- *Post a sign, clearly visible at the site, with a contact name and telephone number of the City of San Leandro's authorized representative to respond in the event of a noise complaint.*
- *Place stationary construction equipment and material delivery in loading and unloading areas as far as practicable from the residences.*
- *Limit unnecessary engine idling to the extent feasible.*
- *Use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with human spotters.*
- *Use low-noise emission equipment.*
- *Limit use of public address systems.*
- *Minimize grade surface irregularities on construction sites*

While this list of controls includes good practices to conduct construction activities in a noise-sensitive community, only one of the listed measures could reduce noise ("place stationary construction equipment … as far as practicable from the residences"). None of the items assures the community that construction would be reduced by any quantitative amount, leaving construction noise impacts significant and unmitigated. The Checklist's conclusion that construction noise impacts would be substantially mitigated is therefore not supported by GPEIR MM NOI-4.

Depending on the threshold selected, a target goal for any meaningful site-specific noise control technique should be 5 dBA at a minimum. This could be achieved through perimeter sound barriers, equipment shields, and buffer distances. Adequate materials for such sound barriers or shields would include ¾" thick plywood or STC 20-25 blankets on a tubular steel frame or scaffolding or 3 PSF wood frame barriers (e.g., using ¾" thick plywood). In any case, the material should overlap or otherwise be constructed to avoid gaps of any size, and should be high enough to block line of sight between the construction noise sources and the affected windows at the neighboring noise sensitive uses. The sound barrier has to interrupt the line of sight between the source(s) and the receiver(s), and the best placement to maximize the sound barrier benefit is close the source or close to the receiver. Doubling the distance from 50 to 100 ft would also reduce the construction noise by 6 dBA; such buffer distances might be suitable to site stationary construction equipment at the far side of the project from noise sensitive land use. These feasible measures would achieve quantitative reductions in noise levels that GPEIR MM NOI-4 fails to accomplish.

Operational Noise Mitigation Measures are not Clearly Established

The Checklist addresses HVAC and building mechanical equipment and uses a reference sound level of 75 dBA Leq measured at 3 ft as a conservative assumption. The analysis concludes that, at 85 ft distance, with a 5 dBA reduction from the roof parapet, the noise from these units would be 41 dBA. Accounting for distance from 3 to 85 ft reduces sound by 29 dBA to 56 dBA. Applying a 5 dBA loss from the parapet achieves a noise level of 51 dBA for a single unit. With 196 units and common areas, there could be as many as 200 units on the roof, and possibly as many as 50 of these units sited about 85 ft from any nearby noise sensitive receptor which could raise the sound by another 17 dBA to 68 dBA, exceeding the City's "normally acceptable" land use standard of 60 dBA.

Furthermore, a grocery store requires substantial refrigeration and ventilation equipment, and a bakery or café would require exhaust fans. Any of these could generate sound levels of 80 to 95 dBA at 3 ft. Refrigeration cooling equipment typically runs 24/7. A building with an elevator is usually required to have an emergency generator which must be tested for an hour each month. Without proper equipment selection and mitigation design, these additional noise sources may exceed the "normally acceptable" land use standard at nearby noise sensitive receptors, resulting in significant, ongoing operational noise impacts.

The Checklist lacks discussion of these impacts and does not identify any Standard Conditions of Approval to address these impacts, and no other necessary mitigation measures are included in the Checklist to assure the community that all rooftop and mechanical equipment will be designed to meet these land use standards.

Conclusions

The Checklist relies on the San Leandro 2035 General Plan EIR in the determination of construction noise significance and mitigation. However, the prior EIR provides no quantitative thresholds to determine significant impacts and no quantitative analysis to demonstrate that the proposed mitigation measures actually reduce the impact. A hypothetical construction noise analysis is provided for consideration and to provide an example of what specific measures would be required to mitigate construction noise impacts.

The Checklist addresses noise impact from rooftop mechanical equipment, but appears to have an several errors in the analysis that concludes no impact would occur. Furthermore, the noise impact

from refrigeration noise and other noise sources for the project are missing from the analysis; these impacts would also require mitigation.

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

Very truly yours,

WILSON IHRIG

Deborah A. Jue, INCE-USA
Principal

davis@1188 ceqa noise review_wilson ihrig.docx

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

DEBORAH JUE

Principal

Since joining Wilson Ihrig in 1990, Ms. Jue has been involved in with many projects from environmental assessments and entitlements, through design development, construction documents and construction administration support. As an acoustical consultant, she has provided noise measurement, analysis and recommendations to control noise and vibration both at the interior of the project and at the neighboring properties. She has authored many reports concerning compliance with the requirements of California Noise Insulation Standards, Title 24, local Noise Elements, environmental assessments and Federal noise criteria, and is well aware of the additional design and construction technique requirements to achieve industry standards. Ms. Jue has authored or provided input for many environmental documents and technical studies in accordance with NEPA and California's CEQA regulations, most of them related to surface transportation, and she gives presentations to public officials when necessary to explain construction noise problems, noise mitigation goals, and noise control methods. She can develop construction noise and vibration criteria to address vibration damage potential to nearby buildings and sensitive structures, and vibration annoyance or disruption potential for occupants of nearby buildings.

Education

- M.S. in Mechanical Engineering, University of California, Berkeley, 1998
- B.S. in General Engineering: Acoustics, Stanford University, 1988

Professional Associations (Member)

- American Society of Mechanical Engineers
- Acoustical Society of America
- National Council of Acoustical Consultants
- Institute of Noise Control Engineering
- WTS
- Transportation Research Board, AEP80 Standing Committee Member (2021-2024)

Research and Published Papers

- ACRP Report 175, ACRP 07-14, *Improving Intelligibility of Airport Terminal Public Address Systems*
- NCHRP 25-25, *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects*
- *Transportation Research Record*, V. 2502, "Considerations to Establish Ground-Borne Noise Criteria to Define Mitigation for Noise-Sensitive Spaces"

Relevant Experience

- California High Speed Rail Caltrain Corridor EIR/EIS, San Francisco to San Jose
- UC Berkeley Northgate Hall A/V Renovations, Berkeley
- MacArthur Station, *long-term construction noise and vibration monitoring*, Oakland
- Safeway @ Claremont & College, *HVAC noise and construction noise monitoring*, Oakland
- ACTC I-80/Ashby, *interchange traffic noise analysis*, Berkeley and Emeryville
- ACTC I-680 Express Lanes, *traffic noise analysis*, Contra Costa County, CA
- Chase Arena, *construction noise and vibration monitoring*, San Francisco