CALIFORNIANS FOR HOMEOWNERSHIP

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December 13, 2022

VIA EMAIL

Mayor Sam Liccardo & Members of the City Council
City of San José
200 E Santa Clara St
San Jose, CA 95113
Email: city.clerk@sanjoseca.gov

RE: Eterna Tower Mixed-Use Development Residences (Appl. No. H20-026)

Mayor Sam Liccardo and Members of the City Council:

Californians for Homeownership is a 501(c)(3) organization devoted to using legal tools to address California's housing crisis. We are writing to support the City's efforts to address the housing crisis by facilitating housing development within its borders—an effort that its approval of the Eterna Tower mixed-use development, a 192-unit residential project, will advance.

California has experienced a significant housing access and affordability crisis for several decades. In recent years, this crisis has reached historic proportions. As a result of the crisis, younger Californians do not have access to homeownership and housing security opportunities afforded to previous generations. Many middle- and lower-income families devote more than half of their take-home pay to rent, leaving little money to pay for transportation, food, healthcare, and other necessities. Unable to set aside money for savings, these families are denied the opportunity to become homeowners and are at grave risk of losing their housing in case of a medical issue, car trouble, or other personal emergencies. Indeed, housing insecurity in California has led to a mounting homelessness crisis. Furthermore, the crisis has disproportionately affected historically disadvantaged communities, including individuals with physical and developmental disabilities and communities of color. The COVID-19 crisis has only reinforced the need for high-quality, stable housing available to California families at all income levels.

At the core of California's housing crisis is its failure to build enough new housing to meet the needs of its growing population. The Legislative Analyst's Office estimates that from 1980 to 2010, the state should have been building approximately 210,000 units yearly in major metropolitan areas to meet housing demand. Instead, it built approximately 120,000 units per year. Today, California ranks 49th out of the 50 states in existing housing units per capita. The legislature has recognized that the housing crisis is an emergency that requires proactive solutions: "The consequences of failing to effectively and aggressively confront this crisis are hurting millions of Californians, robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the state's environmental and climate objectives." Gov. Code § 65589.5(a)(2)(A).

525 S. Virgil Avenue
Los Angeles, CA 90020

Our organization's sole purpose is to participate in litigation to support the critical public interest in developing new housing. This project would provide 192 vitally needed housing units in the City, including 28 units set aside for low-income families. Approval of the project is well-supported by the record, and the project's environmental review has met California Environmental Quality Act's (CEQA) requirements. If the City faces a lawsuit challenging the project's approval, we may seek to intervene in the litigation to support the City's critical efforts to address the region's housing crisis. Further, we may seek reimbursement for our attorneys' fees from the plaintiff in such a lawsuit.

Indeed, we have reviewed the environmental appeal of the Project and find that the appeal lacks legal merit. No one can claim to be surprised by the development of the project site as a multi-use development. Over the last five decades, California's legislature has increasingly sought to address the reluctance of local governments to approve needed housing through the Regional Housing Needs Allocation ("RHNA") and Housing Element law. The RHNA and Housing Element laws require cities to assess and modify land use policies to ensure cities can accommodate necessary additional housing. State housing law mandates that cities plan for new residential developments to fulfill RHNA obligations. This project is part of the City's efforts to fulfill its state housing obligations to plan and build new, needed housing. Our organization submits this letter to support that effort.

The 2040 Final Environmental Impact Report ("FEIR") and the Project's Addendum have adequately addressed concerns over air quality and hazardous material impacts. Moreover, the concerns about air quality and hazardous material impacts are quintessential "NIMBY" complaints by occupants of developed properties, who would rather see adjacent property remain undeveloped; it is precisely this sort of "NIMBYism" that has precipitated the state's affordable housing crisis. Similarly, any attempts to misuse CEQA to accomplish non-environmental aims should be dismissed. In any event, the FEIR and Project Addendum thoroughly analyze potential environmental impacts and mitigation measures that sufficiently address the appellant's environmental concerns. Moreover, the concerns over air quality and hazardous material impacts do not present significant changes or new information to render the use of an addendum inappropriate under CEQA. The City Council's approval of the project is permissible.

Fundamentally, the concerns reflect a desire for the area to remain dedicated to commercial uses. Unfortunately, that is precisely the problem. California's cities have separated centers of commerce from homes for too long. The result has been economic and environmental harm. The City is leading the way toward a solution to the region's housing crisis by supporting the development of this project. The City Council has our support.

Sincerely,

[redacted]

Matthew Gelfand

525 S. Virgil Avenue
Los Angeles, CA 90020

FW: Agenda Item 10.3 Appeal of the Eterna Mixed Use Project Addendum and Site Development Permit No. H20-026

City Clerk <city.clerk@sanjoseca.gov>
Tue 12/13/2022 7:38 AM
To: Agendadesk <Agendadesk@sanjoseca.gov>

1 attachments (2 MB)
5622-013acp - Comments on Eterna Project 12-13-22 City Council Hearing and Attachment A.pdf;

From: The Office of Mayor Sam Liccardo <TheOfficeofMayorSamLiccardo@sanjoseca.gov>
Sent: Monday, December 12, 2022 9:48 PM
To: Sahid, Robyn <Robyn.Sahid@sanjoseca.gov>; Lomio, Michael <Michael.Lomio@sanjoseca.gov>
Cc: City Clerk <city.clerk@sanjoseca.gov>
Subject: Fw: Agenda Item 10.3 Appeal of the Eterna Mixed Use Project Addendum and Site Development Permit No. H20-026

FYI

From: Alisha C. Pember <[redacted]
Sent: Monday, December 12, 2022 6:27 PM
To: The Office of Mayor Sam Liccardo <TheOfficeofMayorSamLiccardo@sanjoseca.gov>; District1 <district1@sanjoseca.gov>; District2 <District2@sanjoseca.gov>; District3 <district3@sanjoseca.gov>; District4 <District4@sanjoseca.gov>; District5 <District5@sanjoseca.gov>; District 6 <district6@sanjoseca.gov>; District7 <District7@sanjoseca.gov>; District8 <district8@sanjoseca.gov>; District9 <district9@sanjoseca.gov>; District 10 <District10@sanjoseca.gov>; Blanco, Maira <Maira.Blanco@sanjoseca.gov>; Meiners, Laura <Laura.Meiners@sanjoseca.gov>; Manford, Robert <Robert.Manford@sanjoseca.gov>; Burton, Chris <Christopher.Burton@sanjoseca.gov>
Cc: Richard M. Franco <[redacted]>; Kelilah D. Federman [redacted]
Subject: Agenda Item 10.3 Appeal of the Eterna Mixed Use Project Addendum and Site Development Permit No. H20-026

[External Email]

Good evening,

Please find attached **Comments re Agenda Item 10.3 Appeal of the Eterna Mixed Use Project Addendum and Site Development Permit No. H20 026** and **Attachment A**

A hard copy of our Comments and Attachment A will go out tomorrow via overnight delivery

If you have any questions, please contact Kelilah Federman

Thank you

Alisha Pember

Ali ha C Pember
[redacted]

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December 12, 2022

Via Email and Overnight Mail
Honorable Mayor Sam Liccardo
Honorable Vice Mayor Charles Jones, Honorable Councilmembers: Sergio Jimenez; Raul Peralez; David Cohen; Magdalena Carrasco, Devora Davis, Maya Esparza, Sylvia Arenas, Pam Foley, Matt Mahan
Emails: mayoremail@sanjoseca.gov; District1@sanjoseca.gov; District2@sanjoseca.gov; District3@sanjoseca.gov; District4@sanjoseca.gov; District5@sanjoseca.gov; district6@sanjoseca.gov; District7@sanjoseca.gov; district8@sanjoseca.gov; District9@sanjoseca.gov; District10@sanjoseca.gov

Via Email Only
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Christopher Burton, Director, Christopher.Burton@sanjoseca.gov

Re: Agenda Item 10.3 Appeal of the Eterna Mixed Use Project Addendum and Site Development Permit No. H20-026

Dear Honorable Mayor Liccardo, Vice Mayor Jones, and Councilmembers Jimenez, Peralez, Cohen, Carrasco, Davis, Esparza, Arenas, Foley and Mahan, Ms. Blanco, Ms. Meiners, Mr. Manford, and Mr. Burton:

On behalf of Silicon Valley Residents for Responsible Development ("Silicon Valley Residents" or "Commenters"), we submit these comments on Appeal of the Planning Director's reliance on the Eterna Tower Mixed-Use Development Project Addendum ("Addendum") to the Downtown Strategy 2040 Final Environmental Impact Report ("Downtown Strategy 2040 FEIR") and approval of the Site Development Permit No. H20-026 for the Eterna Tower Mixed-Use Development Project ("Project") proposed by ROYGBIV Real Estate Development LLC ("Applicant"). The Site Development Permit (File No. H20-026) would allow the demolition of two on-site two-story buildings and allow the construction of a 26-story, approximately 184,667-gross square foot mixed-use building consisting of 192 residential units and 6,644 square feet of commercial space, on an approximately 0.18-acre site at 17 and 29 East Santa Clara Street in downtown San José. The

Project would include 192 residential units and approximately 5,217 square feet of office space on the second floor.

The Project is within the DC Downtown Primary Commercial Zoning District, and the Downtown General Plan Designation.[1] The Project is also located within the Downtown Employment Priority Area, which requires a minimum 4.0 FAR of commercial use within residential / commercial mixed-use projects.[2] Construction of the Project would occur over a period of 29 months.[3]

We have reviewed the Addendum, the Memorandum prepared in response to this appeal ("Staff Report"),[4] technical appendices related to the Addendum, and reference documents with assistance of Commenters' expert consultant James J.J. Clark of Clark & Associates.[5] Dr. Clark's comments are attached to this letter along with his curriculum vitae. Based on our review of the Addendum, it is clear that the Addendum fails as an informational document under CEQA and is inappropriate under CEQA because it identifies significant effects not discussed in the previous EIR, fails to comply with the requirements for program-level environmental review, fails to evaluate the project-level impacts in the areas of public health, air quality, contaminant hazards and historical resources, and lacks substantial, if any, evidence to support the City's environmental conclusions.

I. STATEMENT OF INTEREST

Silicon Valley 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 the environmental and public service impacts of the Project. Residents includes International Brotherhood of Electrical Workers Local 332, Plumbers & Steamfitters Local 393, Sheet Metal Workers Local

[1] San Jose Zoning Code § 20.70.100.
[2] City of San Jose, Site Development Permit (H20-026) p. 10 of 28.
[3] Addendum p. 6.
[4] City of San Jose, Memorandum from Christopher Burton Director of Planning, Building & Code Enforcement to Honorable Mayor and City Council (December 1, 2022), https://sanjose.legistar.com/View.ashx?M=F&ID=11495662&GUID=391132CE-B5BD-465A-9567-E1AA9D1F3D41 ("Staff Report").
[5] See Letter from James J.J. Clark, Clark & Associates, to Kelilah Federman re: Comments On Addendum to the San Jose Downtown Strategy 2040 Final Environmental Impact Report (SCH # 2003042127), H20-026 – 17 and 29 East Santa Clara Street, Eterna Tower Mixed-Use Development Project, August 23, 2022 (hereinafter, "Clark Comments"), **Attachment A**.

104, Sprinkler Fitters Local 483, along with their members, their families, and other individuals who live and work in the City of San José.

Individual members of Silicon Valley Residents live, work, recreate, and raise their families in the City and in the surrounding communities. Accordingly, they would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist on site.

In addition, Silicon Valley 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 businesses and industries to expand in the region, and by making the area less desirable for new businesses and new residents. Indeed, continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

II. LEGAL BACKGROUND

When an EIR has previously been prepared that could apply to the Project, CEQA requires the lead agency to conduct subsequent or supplemental environmental review when one or more of the following events occur:

> (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.[6]

The CEQA Guidelines explain that 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 occur:

[6] PRC, § 21166.

(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 one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.[7]

Only where ***none*** of the conditions described above calling for preparation of

[7] 14 CCR, § 15162(a)(1)-(3) (emphasis added).

a subsequent or supplemental EIR have occurred may the lead agency consider preparing a subsequent negative declaration, an addendum or no further documentation.[8] For addenda specifically, CEQA allows an addendum to a previously certified EIR if minor changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.[9] The City's decision not to prepare a Subsequent EIR must be supported by substantial evidence.[10]

Here, the City lacks substantial evidence for its decision not to prepare a Subsequent EIR because at least one of the triggering conditions in Section 15162 has occurred. As explained below, substantial evidence shows that the Project may have one or more significant effects not discussed in the Downtown Strategy 2040 EIR. Specifically, the Project may have significant impacts associated with, air quality and public health, as described by Dr. Clark. Moreover, the Addendum specifically recognizes potentially significant impacts with respect to air quality, soil and groundwater hazards, and noise and vibration that were not addressed in the 2040 Downtown Strategy EIR. This fact alone makes an addendum inappropriate under CEQA.

Accordingly, Dr. Clark's substantial evidence, and the City's own recognition of potentially significant impacts not previously addressed, require that the City prepare and circulate for public comment a Subsequent EIR that adequately addresses all of the Project's potentially significant impacts and proposes appropriate mitigation measures.[11]

III. THE CITY RELIED ON AN ADDENDUM IN VIOLATION OF CEQA

An addendum to an EIR is only appropriate if some changes or additions to the prior EIR are necessary, and none of the conditions described in Guidelines section 15162 have occurred. Where, as here, the project will have one or more significant impacts not discussed in the previous EIR, an addendum is inappropriate. The Addendum specifically identifies several potentially significant

[8] 14 CCR, § 15162(b).
[9] 14 CCR, § 15164.
[10] *Id*. §§ 15162 (a), 15164(e), and 15168(c)(4).
[11] 14 CCR, § 15162 ("no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one of more of the following [triggering actions has occurred]"); § 15164 ("The [agency's] explanation [to not prepare a subsequent EIR pursuant to Section 15162] must be supported by substantial evidence.").

impacts not discussed in the Downtown Strategy 2040 EIR, including Impact AQ-1 (infant cancer risk from exposure to diesel particulate matter during project construction), Impact HAZ-1 (exposure of construction workers and the public to soil and groundwater contaminants), Impact NSE-1 (construction noise in excess of the City's General Plan thresholds) and Impact NSE-2 (vibrations from construction exceeding the City's General Plan thresholds).

The Staff Report states that "the comments submitted by Silicon Valley Residents represent an opinion and do not demonstrate with facts and analysis for a fair argument that a new environmental document is required pursuant to CEQA Guidelines Sections 15162."[12] The comments submitted by Silicon Valley Residents include expert opinions supported by facts. Dr. Clark is a highly skilled and qualified technical expert with extensive experience in the field of air quality and public health impacts. His conclusions are supported by well-documented, credible evidence. Dr. Clark's opinions therefore constitute substantial evidence within the meaning of the law.[13] The Staff Report's assertion that Silicon Valley Residents presented opinions unsupported by facts and analysis, is patently false. Moreover, the Addendum's inclusion of several potentially significant impacts not addressed in the Downtown Strategy 2040 EIR is a fact, not an opinion. Silicon Valley Residents provided the City with substantial evidence supporting a fair argument that the Project results in potentially new significant impacts not previously addressed, such that the City must prepare and circulate for public comment a Subsequent EIR that adequately analyzes all of the Project's potentially significant impacts and proposes appropriate mitigation measures.[14]

[12] Staff Report, p. 14.
[13] 14 C.C.R. § 15384(b) ("Substantial evidence" includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts); *Architectural Heritage v. County of Monterey* (2004) 122 Cal.App.4th 1095, 1117-18 (expert's opinion is "credible" if it constitutes "fact-based observations by people apparently qualified to speak to the question [at issue.] That testimony constitutes substantial evidence, because it consists of "facts, reasonable assumptions, and expert opinion supported by facts.").
[14] 14 CCR, § 15162 ("no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one of more of the following [triggering actions has occurred]"); § 15164 ("The [agency's] explanation [to not prepare a subsequent EIR pursuant to Section 15162] must be supported by substantial evidence.").

A. The Project Results in New Significant Air Quality and Health Risk Impacts

An Addendum is inappropriate because the Project results in new potentially significant impacts from air quality and health risk. The Project's emissions from the backup generator onsite may exceed BAAQMD thresholds. But the Addendum fails to accurately model the backup generators' air emissions and thus fails to analyze the full extent of the Project's operational air emissions. The Addendum fails to analyze any emissions associated with the backup generator during Project operation.

Dr. Clark concludes that the Addendum's assumption that the backup generator will only be used 50 hours per year for testing is not supported by substantial evidence. In fact, Dr. Clark presented substantial evidence in his prior comments and updated comments including a graphic which shows the current outages in and around San Jose. This evidence shows that power outages are a daily occurrence in San Jose, and would constitute an emergency use for the backup generator, if an outage occurred onsite. The Staff Report's assertion that "the commenter did not provide verifiable and substantial evidence that generators would operate on average more than 50 hours per years over the life span of the project" is not supported by substantial evidence and is patently false. Given that the Project is allowed to use the generator for 50 hours and any number of hours for emergency use, the impacts from the backup generators may be significant and remain unmitigated. Dr. Clark provided substantial evidence in the form of "expert opinions supported by facts"[15] that the backup generator may need to be used more than 150 hours per year, due to increasing Public Safety Power Shutoff ("PSPS") events and extreme heat events.[16]

During a PSPS event, the use of stationary generators is permitted as an emergency use.[17] For every PSPS or extreme heat event, significant GHG emissions i.e., carbon dioxide equivalents and diesel particulate matter ("DPM") will be

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[15] 14 C.C.R. § 15384(b) ("Substantial evidence" includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts); *Architectural Heritage v. County of Monterey* (2004) 122 Cal.App.4th 1095, 1117-18 (expert's opinion is "credible" if it constitutes "fact-based observations by people apparently qualified to speak to the question [at issue.] That testimony constitutes substantial evidence, because it consists of "facts, reasonable assumptions, and expert opinion supported by facts.").

[16] Clark Comments, p. 9.

[17] 17 CCR 93115.4(a)(30)(A)(2).

released.[18] DPM has been identified as a toxic air contaminant, composed of carbon particles and numerous organic compounds, including forty known cancer-causing organic substances.[19] Dr. Clark notes that the California Air Resources Board found that the 1,810 additional stationary generators during a PSPS in October 2019 generated 126 tons of NOx, 8.3 tons of particulate matter, and 8.3 tons of DPM.[20] Therefore, the GHG, air quality, and DPM emission impacts associated with the use of the Backup Generator are significant, but the Addendum fails to adequately analyze or mitigate such impacts.[21]

The failure to analyze is a failure to proceed in a manner required by law.[22] Challenges to an agency's failure to proceed in the manner required by CEQA, such as the failure to address a subject required to disclose information about a project's environmental effects or alternatives, are subject to a less deferential standard than challenges to an agency's factual conclusions.[23] In reviewing challenges to an agency's approval of an EIR based on a lack of substantial evidence, the court will "determine de novo whether the agency has employed the correct procedures, scrupulously enforcing all legislatively mandated CEQA requirements."[24] Even when the substantial evidence standard is applicable to agency decisions to certify an EIR and approve a project, reviewing courts will not 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference.'"[25]

The Addendum must be withdrawn, and the City must circulate a subsequent EIR for public review to adequately analyze impacts associated with emissions from the Backup Generators.

Further, Dr. Clark concludes that the Addendum relies on inaccurate air quality modeling because it fails to incorporate analysis of building downwash in

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[18] Clark Comments, p. 9.
[19] *Id.*
[20] California Air Resources Board, Potential Emissions Impact of Public Safety Power Shutoff (PSPS), Emission Impact: Additional Generator Usage Associated with Power Outage (January 30, 2020). Available at: https://ww2.arb.ca.gov/sites/default/files/2020-01/Emissions_Inventory_Generator_Demand%20Usage_During_Power_Outage_01_30_20.pdf.
[21] Clark Comments, p. 9.
[22] *Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236.
[23] *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.
[24] *Id., Madera Oversight Coal., Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102.
[25] *Berkeley Jets*, 91 Cal.App.4th at 1355.

the AERMOD model for receptors at, near, and surrounding the Project.[26] Dr. Clark concludes that the omission of the downwash impacts from the air quality and health risk analysis "underestimates the exposure point concentrations for receptors near the building(s)."[27] Dr. Clark found that this impact is potentially significant and must be analyzed in a Supplemental EIR.

IV. THE PROJECT RESULTS IN SIGNIFICANT HAZARDS AND HAZARDOUS MATERIALS IMPACTS NOT ANALYZED IN THE DOWNTOWN STRATEGY 2040 EIR

A. The Addendum Fails to Adequately Analyze the Impacts of Hazardous Contamination

The Staff Report does not resolve Silicon Valley Residents' comments regarding hazards and hazardous materials. CEQA requires EIRs to analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected.[28] Both CEQA and the CEQA Guidelines require an analysis of a project's effects on the environment and human health. CEQA also provides that the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in areas susceptible to hazardous conditions, including both short-term and long-term conditions.[29]

The Project poses a potentially significant risk of exacerbating hazardous contamination in soil and groundwater. According to the Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency (CalEPA), the Project site is within the 91st percentile in terms of groundwater threats.[30] The Project is also within the 41st percentile for toxic releases from facilities.[31] The Project site is adjoined on its northeastern corner by a site listed as an open Spills, Leaks, Investigations, and Cleanup (SLIC) release case in the regulatory database.[32] The site is contaminated with halogenated

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[26] Clark Comments, p. 3.
[27] *Id.*
[28] 14 CCR 15126.2(a); *Cal. Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 388.
[29] 14 CCR 15126.2(a).
[30] CalEnviroScreen 3.0 Results (June 2018 Update) Available at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30.
[31] *Id.*
[32] Addendum p. 124.

volatile organic compounds (HVOCs), including PCE, in soil, soil-gas, indoor air, and shallow groundwater at concentrations above their respective regulatory screening criteria at this site.[33] In addition, elevated HVOC levels have been detected in soil, soil-gas, groundwater, and indoor air samples collected from the properties located north/northeast of the Project site.[34]

The Addendum fails to analyze the Project's risk of exacerbating existing environmental conditions and bringing people to the area affected, in violation of CEQA. The Addendum must be withdrawn, and a Subsequent EIR pursuant to CEQA Guidelines Section 15162 must be prepared and circulated for public review.

B. The Addendum Fails to Mitigate the Impacts of Hazardous Contamination

The Staff Report does not remedy the impermissible deferral of mitigation for hazardous contamination in the Addendum. Mitigation Measure HAZ-1 is inadequate because it constitutes impermissibly deferred analysis. CEQA Guidelines § 15126.4(a)(1)(B) provide that formulation of mitigation measures shall not be deferred until some future time.[35] "Impermissible deferral of mitigation measures occur when an EIR puts off analysis or orders a report without either setting standards or demonstrating how the impact can be mitigated in the manner described in the EIR."[36] Here, the Addendum states that a Phase II Environmental Site Assessment will be conducted after Project approval, at which time additional groundwater sampling and mitigation may be proposed.[37]

"An EIR is inadequate if '[t]he success or failure of mitigation efforts ... may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.' "[38] Here, MM HAZ-1 would require additional analysis and formulation of mitigation measures that should have been included in an EIR, rather than an Addendum which is not required to be circulated for public review. The Addendum fails as an informational document for impermissibly deferred analysis and mitigation.

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[33] Addendum p. 124.
[34] *Id.*
[35] 14 CCR 15126.4(a)(1)(B).
[36] *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 915-916.
[37] Addendum p. 126-127.
[38] *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, quoting *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92, quoting *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645 670.

The CEQA Guidelines provide that "[t]he specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review…"[39] The Addendum does not state why specifying the Phase II site assessment and additional mitigation measures were impractical or infeasible at the time the Addendum was drafted. In *Preserve Wild Santee v. City of Santee,* the city impermissibly deferred mitigation where the EIR did not state why specifying performance standards for mitigation measures "was impractical or infeasible at the time the EIR was certified."[40] The court determined that although the City must ultimately approve the mitigation standards, this does not cure these informational defects in the EIR.[41] Further, the court in *Endangered Habitats League, Inc. v. County of Orange*, held that mitigation that does no more than require a report to be prepared and followed, or allow approval by a county department without setting any standards is inadequate.[42] Here, the fact that the Site and Groundwater Management Plan will be approved later by the Director of Planning, Building and Code Enforcement or the Director's designee does not cure the informational defects in this Addendum.[43]

V. THE CITY CANNOT MAKE THE NECESSARY FINDINGS TO APPROVE THE SITE DEVELOPMENT PERMIT

As described in Silicon Valley Residents prior comments, the City does not have the legal basis to make the necessary findings for a Site Development Permit. In order to approve a Site Development Permit, the City must make all the following findings[44]:

1. The site development permit, as approved, is consistent with and will further the policies of the general plan and applicable specific plans and area development policies.
2. The site development permit, as approved, conforms with the zoning code and all other provisions of the San José Municipal Code applicable to the project.

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[39] 14 CCR § 15126.4(a)(1)(B).
[40] *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281.
[41] *Id.*
[42] *Endangered Habitats League, Inc. v. County of Orange,* (2005) 131 Cal.App.4th 777, 794.
[43] *See Cal. Clean Energy Comm. v. City of Woodland* (2014) 225 Cal.App.4th 173, 194.
[44] San Jose Zoning Code § 20.100.630.

3. The site development permit, as approved, is consistent with applicable city council policies, or counterbalancing considerations justify the inconsistency.
4. The interrelationship between the orientation, location, and elevations of proposed buildings and structures and other uses on-site are mutually compatible and aesthetically harmonious.
5. The orientation, location and elevation of the proposed buildings and structures and other uses on the site are compatible with and are aesthetically harmonious with adjacent development or the character of the neighborhood.
6. The environmental impacts of the project, including but not limited to noise, vibration, dust, drainage, erosion, storm water runoff, and odor which, even if insignificant for purposes of the California Environmental Quality Act (CEQA), will not have an unacceptable negative affect on adjacent property or properties.
7. Landscaping, irrigation systems, walls and fences, features to conceal outdoor activities, exterior heating, ventilating, plumbing, utility and trash facilities are sufficient to maintain or upgrade the appearance of the neighborhood.
8. Traffic access, pedestrian access and parking are adequate.

The director, the planning commission, or the city council shall deny the application where the information submitted by the applicant or presented at the public hearing fails to satisfactorily substantiate such findings.

The Addendum fails to analyze the Project's nonconformance with the Site Development Permit requirements with respect to the air quality impacts associated with construction and operation of the Project. As Dr. Clark noted in his comments, the impacts from construction emissions and the backup generator may result in significant unacceptable negative effects on the adjacent property and properties. These impacts will adversely impact sensitive receptors at adjacent properties. These include the future 19 North Second Street Affordable Senior Housing project to the northeast of the project site.[45] The maximum excess residential cancer risks at these locations would be 17.19 per million for infant risk, which is greater than the BAAQMD significance threshold of 10 in one million for cancer risk.[46] The dust from construction may negatively affect the sensitive receptors within adjacent properties, but the Addendum fails to adequately analyze

[45] Addendum p. 54.
[46] *Id.*

and mitigate such impacts. As such, the City cannot make the necessary findings to approve the Site Development Permit, absent the circulation of a Subsequent EIR which adequately analyzes and mitigates the Project's significant air, dust, and health risk impacts.

VI. CONCLUSION

For the reasons discussed above and in Silicon Valley Residents' prior comments and expert consultant reports, the Addendum remains wholly inadequate under CEQA. The City should grant this Appeal, and prepare a Subsequent EIR pursuant to CEQA Guidelines Section 15162 to provide legally adequate analysis of, and mitigation for, all of the Project's potentially significant impacts. Until a subsequent EIR is circulated for public review, the City may not lawfully approve the Project, nor the Site Development Permit.

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

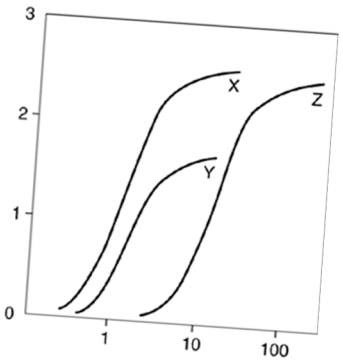
Sincerely,

[redacted]

Kelilah D. Federman

Attachment
KDF:acp

ATTACHMENT A



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December 12,2022

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Attn: Ms. Kelilah D. Federman

Subject: Comments On Staff Report On H20-026 Administrative Hearing Of The Eterna Tower Mixed-Use Development Project Addendum To The Downtown Strategy 2040 Final Environmental Impact Report (SCH # 2003042127), H20-026 – 17 and 29 East Santa Clara Street, Eterna Tower Mixed-Use Development Project.

Dear Ms. Federman:

At the request of Adams Broadwell Joseph & Cardozo (ABJC), Clark and Associates (Clark) has reviewed materials related to the November 21, 2022 City of San Jose's (the City's) Staff Report of the above referenced project.

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

Staff Report Conclusions:

The Staff Report's conclusions that the Air Quality Analysis represents a reasonable worst-case assessment of emissions is factually incorrect. A worst-case scenario of emissions would include an analysis of the failure of control technologies utilized at the source (e.g., diesel particulate filters added to Tier 3 engines) along with additional hours of operation based on the frequency and severity of power outages in the San Jose area.

The health risk analysis provided in the DEIR assumes that the emissions can be reduced by approximately 90% using Tier 4 technology and diesel particulate filters (DPFs). DPFs are only as effective as the maintenance program that is meant to ensure the DPF is kept clean. As the DPM is captured in the DPF the effective capture rate of DPM decreases (system becomes plugged). A case can be made that the use of 90% effective reduction rate is overly optimistic. As is evidenced by the attached Technical Bulletin from USEPA regarding the need for frequent engine maintenance and DPF cleaning to ensure the effectiveness of the DPF.

In regards to the air dispersion model for the project, it must be noted that neither the input nor the output files for the dispersion model were included in the documents for the Project. A summary of the model was provided in Appendix A, but none of the values contained in the report can be independently verified. Given the complex nature of the Downtown environment, it must be pointed out that nowhere in the City's analysis is there a discussion of the impact that the surrounding buildings will have on the air flow to and from the site.

Figure 1: Project Site

The building surrounding the Project Site are much larger than the existing building (75 feet to 500 feet in the immediate vicinity of the Project Site). The impact of these large wind-breaks are not included in the Air Quality Analysis for the Project.

Figure 2: Close up of Project Site

Building downwash occurs as the wind flows over and around buildings and impacts the dispersion of pollution from nearby stacks. A plume caught in the path of this flow is drawn into the wake, temporarily trapping it in a recirculating cavity. This downwash effect leads to higher ground-level concentration of chemicals emitted from sources. The downwash effect increases as the relative difference between the release height and top of the building increases.[1]

For the closest receptors, the residences of the Project, this difference will create an additional potentially significant air quality impact that is not accounted for in the City's analysis, in the Addendum or the Downtown Strategy 2040 EIR. In addition to incorporating the building downwash impacts of the Project buildings, the AERMOD model should also incorporate the building downwash

[1] The so-called good engineering practice height (GEP) of the source. The GEP is defined in Section 123 of the Clean Air Act as "the height necessary to ensure that emissions from a stack do not result in excessive concentrations of any air pollutant in the immediate vicinity of the source as a result of atmospheric downwash, eddies or wakes which may be created by the source itself, nearby structures or nearby terrain obstacles."

for receptors near the Project. Receptors farther away will still be subject to the downwash effect given the assumed emission height release incorporated into the model. Omission of the building downwash effect underestimates the exposure point concentrations for receptors near the building(s). The City should address this potentially significant issue in a Subsequent EIR.

As for the frequency of the use of the back-up generator that will be installed on site, it is evident from a review of the Pacific Gas and Electric (PG&E) website that power outages in the area of the Project are not uncommon. Outages occur daily affecting a variety of locations in and around the Project Site.

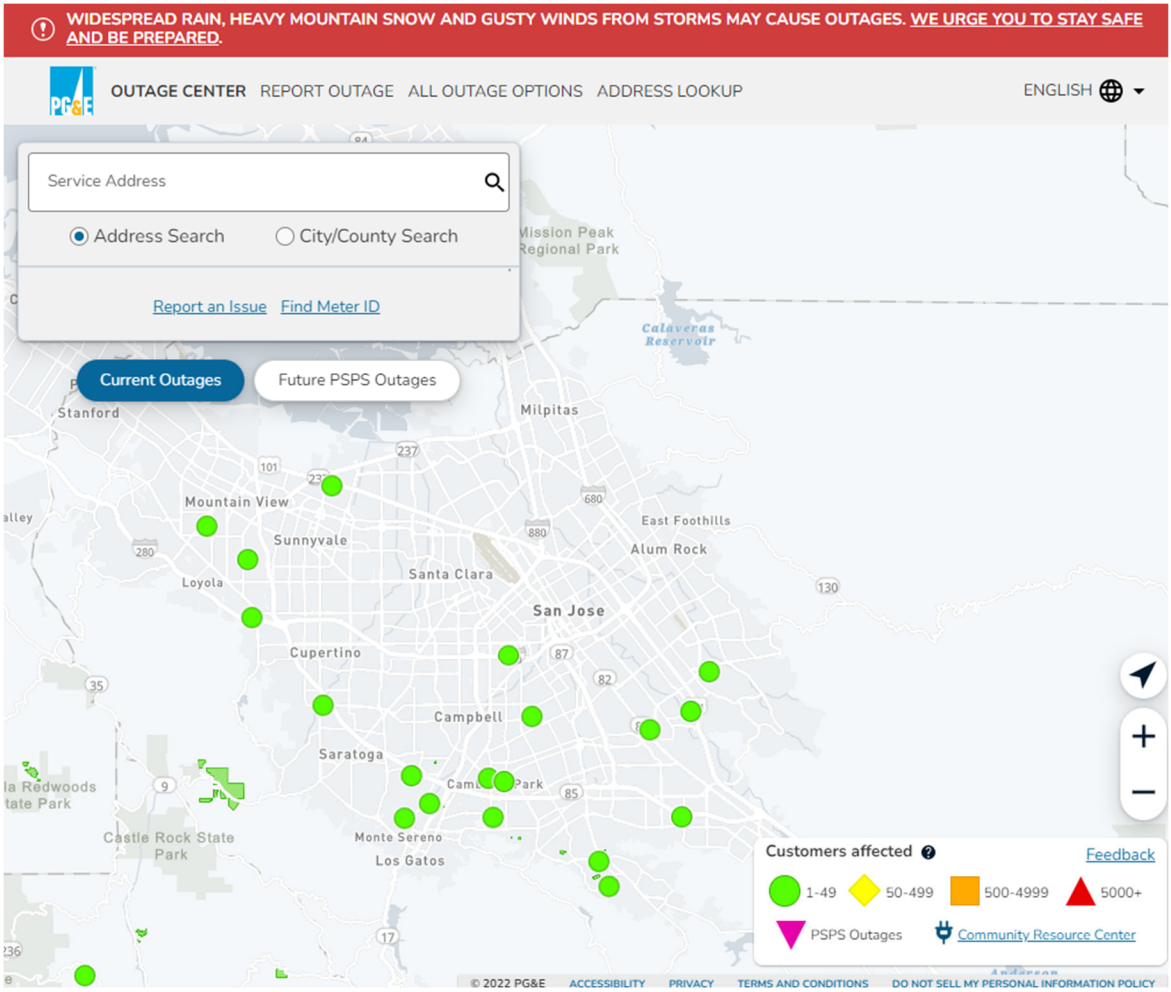


Figure 3: Power Outages Reported By PG&E In And Around San Jose, CA

The assumption that the back-up generator will never be used more than 50 hours per year (for testing) is clearly an overly optimistic analysis.

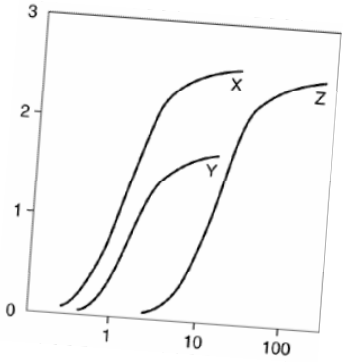
Conclusion

The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant unmitigated impacts if the Addendum is approved. The City must re-evaluate the significant impacts identified in this letter by requiring the preparation of a subsequent environmental impact report.

Sincerely,

EXHIBIT A

CV



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James J. J. Clark, Ph.D.

Principal Toxicologist

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

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

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

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

Professional Experience:

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

Significant projects performed by Dr. Clark include the following:

LITIGATION SUPPORT

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

Client: Environmental Litgation Group, Birmingham, Alabama

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

Case Result: Settlement in favor of plaintiff.

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

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

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

Case Result: Settlement in favor of plaintiff.

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

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

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

Case Result: Summary judgment for defendants.

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

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

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

Case Result: Settlement in favor of plaintiff.

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

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

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

Case Result: Settlement in favor of plaintiff.

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

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

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

Case Result: Settlement in favor of plaintiff.

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

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

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

Case Result: Settlement in favor of plaintiff.

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

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

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

Case Result: Settlement in favor of plaintiff.

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

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

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

Case Result: Settlement in favor of plaintiff.

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

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

Case Result: Settlement in favor of defendant.

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

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

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

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

Case Result: Judgement in favor of defendant.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client – Confidential

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

Client – Confidential

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

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

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

Client – City of Santa Monica, Santa Monica, California

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

Client: Omnitrans, San Bernardino, California

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

Client: Confidential, San Francisco, California

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

Client: Confidential, Minneapolis, Minnesota

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

Client – United Kingdom Environmental Agency

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

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

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: Ameren Services, St. Louis, Missouri

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

Client: City of Santa Clarita, Santa Clarita, California

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

Client: Confidential, Los Angeles, California

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

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

Client – Confidential, Los Angeles, California

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

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

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

Client: Confidential, San Francisco, California

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

Client: Confidential, San Francisco, California

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

Client: Confidential, San Francisco, California

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

Client: Covanta Energy, Westwood, California

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

Client – United Kingdom Environmental Agency

Oversaw a comprehensive toxicological evaluation of methyl-*tertiary* butyl ether (M*t*BE) for the United Kingdom's Environment Agency. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of M*t*BE. The results of the evaluation have been used as a briefing tool for public health professionals.

Client – Confidential, Los Angeles, California

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

Client – Confidential, Los Angeles, California

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

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

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

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

Client: Confidential, Los Angeles, California

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

Client: Kaiser Venture Incorporated, Fontana, California

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

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Client: Confidential, Atlanta, Georgia

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

Client: Confidential, Escondido, California

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

Client: Confidential, San Francisco, California

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

Client: Confidential, Bogotá, Columbia

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

Client: Confidential, Los Angeles, California

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

Client: Confidential, Los Angeles, California

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

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

Client: Confidential, Los Angeles, California

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

Client: Confidential, Los Angeles, California

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

Client –Dominguez Energy, Carson, California

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

Kaiser Ventures Incorporated, Fontana, California

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

ANR Freight - Los Angeles, California

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

Kaiser Ventures Incorporated, Fontana, California

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

Unocal Corporation - Los Angeles, California

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

Client: Confidential, Los Angeles, California

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

Client: Confidential, San Francisco, California

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

Client: Confidential, San Francisco, California

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

IT Corporation, North Carolina

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

Professional Associations

American Public Health Association (APHA)
Association for Environmental Health and Sciences (AEHS)
American Chemical Society (ACS)
California Redevelopment Association (CRA)
International Society of Environmental Forensics (ISEF)
Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:

Books and Book Chapters

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

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