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May 31, 2016

VIA EMAIL and
HAND DELIVERY on June 1, 2016

Chair Jim Moore and
Planning Commission
Oakland City Hall
One Frank H. Ogawa Plaza, Hearing Room No. 1
Oakland, CA 94612

Peterson Vollman
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City of Oakland
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Re: Comments on the CEQA Analysis for the 226 13th Street Project (PLN15320)

Dear Chair Moore, Honorable Members of the Oakland Planning Commission and Mr. Vollman:

We write on behalf of Oakland Residents for Responsible Development to comment on the City of Oakland's analysis of the 226 13th Street Project ("Project) pursuant to the California Environmental Quality Act ("CEQA Analysis").[1] The Project includes a five-story building over a two-story podium with approximately 262 multi-family units, parking for approximately 198 vehicles, and approximately 12,090 square feet of retail space on 14th Street.

The CEQA Analysis evaluates the Project's potential environmental impacts and consistency with the Lake Merritt Station Area Plan, as well as Oakland's 1998

[1] Pub. Resources Code §§ 21000 et seq.

General Plan Land Use and Transportation Element Environmental Impact Report ("EIR"), the 2010 General Plan Housing Element Update EIR and 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR.

We reviewed the CEQA Analysis and applicable plans, and we identified several flaws in the analysis, as well as new information regarding new or more severe impacts than previously analyzed in the LMSAP EIR. Furthermore, we identified several mitigation measures not previously analyzed that would reduce significant impacts. Specifically, the CEQA Analysis fails to analyze and mitigate the Project's construction health risks to the surrounding community, which are new or more severe than previously analyzed, and fails to adequately analyze and mitigate the Project's significant VOC emissions during construction. Therefore, the City lacks substantial evidence to support the conclusions in its CEQA Analysis and an EIR is required.

We reviewed the CEQA Analysis, LMSAP EIR, and other plans and EIRs with the help of experts Matt Hagemann and Jessie Jaeger. Their attached technical comments are submitted in addition to the comments in this letter.[2] Accordingly, they must be addressed and responded to separately. The curricula vitae of these experts are also attached as exhibits to this letter.

I. STATEMENT OF INTEREST

Oakland Residents for Responsible Development ("Oakland Residents") is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential impacts associated with Project development. The association includes Alan Guan, Risi Agbabiaka, Peter Lew, Bridgette Hall, Tanya Pitts, the International Brotherhood of Electrical Workers Local 595, Plumbers and Steamfitters Local 342, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, and their members and their families who live and/or work in the City of Oakland and Alameda County.

The individual members of Oakland Residents live, work, and raise their families in the City of Oakland. They would be directly affected by the Project's impacts. Individual members may also work on the Project itself. They will

[2] *See* Letter from Matt Hagemann and Jessie Jaeger, SWAPE, to Laura Horton re: Comments on the 14th & Alice Project (hereinafter, "SWAPE Comments"), May 31, 2016, **Attachment A.**

therefore be first in line to be exposed to any health and safety hazards that may exist on the Project site.

The organizational members of Oakland Residents also have an interest in enforcing the City's planning and zoning laws and the State's environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there. Indeed, continued degradation can, and has, caused restrictions on growth that reduce future employment opportunities. Finally, Oakland Residents' members are concerned about projects that present environmental and land use impacts without providing countervailing economic and community benefits.

II. THE CITY MAY NOT RELY ON PREVIOUS ENVIRONMENTAL ANALYSIS FOR PROJECT APPROVAL

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.[3] The EIR is the "heart" of this requirement.[4] 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."[5]

To fulfill this function, the discussion of impacts in an EIR must be detailed, complete, and "reflect a good faith effort at full disclosure."[6] An adequate EIR must contain facts and analysis, not just an agency's conclusions.[7] CEQA requires an EIR to disclose all potential direct and indirect, significant environmental impacts of a project.[8]

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[3] 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.

[4] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.

[5] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

[6] CEQA Guidelines § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.

[7] *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568.

[8] Pub. Resources Code § 21100(b)(1); CEQA Guidelines § 15126.2(a).

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.[9] If an EIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts.[10] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures.[11] 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.[12] 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.[13] This approach helps "insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug."[14]

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 a program EIR, tiering, or other appropriate process can be used for analysis of the project's environmental effects, or determine whether a previously prepared EIR could be used with the project, among other purposes.[15] CEQA requires an agency to analyze the potential environmental impacts of its proposed actions in an EIR except in certain limited circumstances.[16] A negative declaration may be prepared

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[9] 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.
[10] Pub. Resources Code §§ 21002.1(a), 21100(b)(3).
[11] *Id.*, §§ 21002-21002.1.
[12] CEQA Guidelines § 15126.4(a)(2).
[13] *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).
[14] *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.
[15] CEQA Guidelines §§ 15060, 15063(c).
[16] *See, e.g.*, Pub. Resources Code § 21100.

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."[17]

When an EIR has been prepared for a 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.[18]

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:

(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

[17] *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597; Pub. Resources Code § 21080(c).
[18] Pub. Resources Code § 21166.

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.[19]

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.[20] For Addendums specifically, which is one of several CEQA exemption/streamlining avenues that the City claims is applicable to the Project, CEQA allows Addendums to a previously certified EIR "if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."[21]

Here, the City has failed to demonstrate that the Project can be lawfully approved based on the CEQA Analysis provided. Indeed, as explained in this letter, the City must disclose, analyze, and mitigate the Project's significant impacts in an EIR. Otherwise, the City's approval of the Project would violate CEQA.

[19] CEQA Guidelines § 15162(a)(1)-(3).
[20] CEQA Guidelines § 15162(b).
[21] CEQA Guidelines § 15164.

A. The Project is Not Consistent with CEQA Addendum and Exemption Requirements

The City claims the Project is consistent with CEQA Guidelines Sections 15162 (Subsequent EIR and Negative Declaration), 15164 (Addendums), and 15168 (Program EIRs).[22] However, the City's reliance on these provisions is misplaced for two reasons.

First, the CEQA Analysis does not simply provide "some changes or additions" to the EIR as is allowed under the Addendum provision; rather, it includes over 2,000 pages of analysis for a large development project which is different from the project analyzed in the LMSAP EIR.[23] Indeed, the City's unlawful use of the Addendum provision has occurred frequently in other projects in Oakland.[24] The City must discontinue this practice, which clearly violates CEQA. Second, as explained further below, the Project will result in new or more severe significant impacts than analyzed in previous EIRs, and there are new mitigation measures that were not considered in the previous EIRs, but that could reduce those impacts to a less than significant level. In any case, the City's decision must be supported by substantial evidence.[25] Here, the City's decision not to prepare a subsequent or supplemental EIR for the Project is not supported by substantial evidence.

The City also relies on additional CEQA provisions that allow approval of projects without an EIR in narrow circumstances. Specifically, the City relies on CEQA Guidelines Sections 15183 (Community Plan)[26] and 15183.3 (Qualified Infill)[27] for Project approval. However, the City's determination that exemptions also apply is not supported by substantial evidence.

The exemptions apply only when a Project does not have impacts peculiar to the proposed project that are new or more significant than previously analyzed or can be substantially mitigated by uniformly applicable development policies or standards. The Project fails to meet these requirements because the Project's

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[22] CEQA Analysis, Attachment B, p. B-1.
[23] *Id.*, at p. 2.
[24] *See* 2400 Valdez Street Project, (PLN15-336), http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak057878.pdf.
[25] *Id.* §§ 15162 (a), 15164(e), and 15168(c)(4).
[26] CEQA Guidelines Section 15183.
[27] CEQA Guidelines Section 15183.3.

health risks from diesel particulate matter ("DPM") emissions during construction are highly significant. In particular, because the LMSAP did not actually quantify project-level health risks, the absence of any previous project-specific analysis undermines the City's determination that Standard Conditions of Approval ("SCAs") would mitigate the impact. Furthermore, the Project's VOC emissions during construction exceed the City's thresholds of significance. Unfortunately, the LMSAP EIR did not fully address these peculiar and more significant impacts, and there are mitigation measures not previously identified that would reduce these significant impacts.

Thus, the Project will have new or more severe significant impacts than previously analyzed in the LMSAP EIR. In addition, as described below, the site-specific analysis conducted for the Project is flawed in several ways and the CEQA Analysis fails to incorporate all feasible mitigation. Therefore, the City may not rely on the CEQA Analysis for Project approval, and must provide detailed analysis of the Project's impacts in an EIR.

B. The CEQA Analysis Fails To Adequately Analyze and Mitigate Project-Specific Health Risk From Diesel Particulate Matter

1. The City is Required to Quantify the Project's Health Risk from DPM Emissions During Construction

The California Air Resources Board ("CARB") identifies diesel particulate matter ("DPM") as a toxic air contaminant ("TAC") based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects.[28] In 2012, the International Agency for Research on Cancer listed diesel engine exhaust as "carcinogenic to humans."[29] As with other air pollutants, SWAPE explains that DPM emissions during development construction can impact both on-site construction workers and the surrounding community such as schools and residential sensitive receptors.[30]

The LMSAP EIR concludes that "[d]evelopment facilitated by the proposed Plan would potentially expose sensitive receptors to substantial health risks from

[28] http://www.arb.ca.gov/research/diesel/diesel-health.htm.
[29] *Id.*
[30] SWAPE Comments, p. 14.

[TACs] from sources including both DPM and gaseous emissions."[31] Furthermore, the LMSAP EIR found that while compliance with the City's SCAs "would entail the preparation of site-specific health risk assessments which would reduce DPM exposure to a less than significant level", the SCAs would not necessarily reduce gaseous TACs to a less-than-significant level.[32] Therefore, the LMSAP EIR found the impacts related to DPM exposure would be less than significant, while the remaining TAC impacts (related to gaseous sources) would be significant and unavoidable.[33]

The LMSAP EIR did not address construction related exposures because "[t]he specificity of detail necessary to conduct a health risk assessment is not available at the Plan stage..."[34] The LMSAP EIR thus deferred the assessment of health risks from construction activities to the project level stage where project-specific impacts and mitigation measures could be determined to ensure that DPM exposure would not exceed applicable thresholds.

As explained by SWAPE, however, the CEQA Analysis completely fails to evaluate the health risk posed to nearby sensitive receptors from exposure to DPM emissions released during Project construction, despite the indication in the LMSAP EIR that a health risk assessment ("HRA") would be required.[35] The City's omission of an HRA is particularly egregious because there are several schools in the area, including the American Indian Public Charter School, which is a charter middle school with predominantly low-income, minority students within two blocks of the Project. Oakland Charter High School is also just a few blocks away from the Project site.

The CEQA Analysis justifies the omission by stating "[d]ue to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary. . . Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities."[36]

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[31] LMSAP DEIR, p. ES-34.
[32] *Id.*
[33] *Id.*, at 3.3-25.
[34] *Id.*, at 3.3-39.
[35] SWAPE Comments, p. 14.
[36] CEQA Analysis, p. 39.

In addition, the CEQA Analysis states that although "[t]he LMSAP EIR determined that sensitive receptors in proximity to construction-related DPM emissions (generally within 200 meters) could be subject to increased cancer risk, chronic health problems, and acute health risk," all future development projects pursuant to the LMSAP would be subject to basic construction control measures and best management practices through implementation of SCA 19/ SCA-AIR-1.[37] SWAPE's analysis demonstrates that these justifications are misplaced.

Although the CEQA Analysis incorporates SCAs from the LMSAP, the City is not absolved of CEQA's requirement that agencies disclose significant environmental impacts to the public and mitigate those impacts.[38] The CEQA Analysis openly states that the LMSAP EIR determined that sensitive receptors may be subject to an increased cancer risk due to construction activities. Therefore, CEQA mandates that the City quantify that risk in order to determine ***if*** the basic construction control measures and best management practices in SCA 19/ SCA-AIR-1will reduce DPM emissions to less than significant levels.

Furthermore, the CEQA Analysis assumes that because construction would occur over a short period of time, the health risk posed from construction activities would be negligible. SWAPE explains that this determination conflicts with most recent guidance published by the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing recommendations for health risk assessments in California. OEHHA's *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted by OEHHA in March of 2015, describes the types of projects that warrant the preparation of a health risk assessment.[39] OEHHA guidance recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[40] Here, Project construction is expected to last 24 months. In addition, Project construction will produce emissions of DPM, as described in the CEQA Analysis. SWAPE explains that OEHHA's recommendation that such short-term projects be evaluated for cancer risks to nearby sensitive receptors "reflects the most recent health risk assessment policy, and as such, an assessment of health risks to nearby sensitive

[37] *Id.*
[38] CEQA Guidelines §§ 15126.2, 15126.4.
[39] "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.
[40] *Id.*, at 8-18.

receptors from construction should be included in a revised CEQA evaluation for the Project."[41]

2. The Project Will Result in Significant Health Risks from DPM Emissions During Construction

In light of the City's failure to quantify the Project's impacts from DPM emissions during construction, SWAPE prepared a simple screening-level health risk assessment using AERSCREEN. SWAPE's analysis demonstrates that construction-related DPM emissions will result in a previously undisclosed significant impact to the surrounding community.[42]

SWAPE's model incorporates updated construction emissions estimates, as explained in more detail below. The updated California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod") annual emissions indicate that construction activities will generate approximately 897.2 pounds of DPM over a 728 day construction period.[43] Construction activity was simulated as a 1.4 acre rectangular area source in AERSCREEN, with dimensions of 95 meters by 60 meters. SWAPE explains that a release height of three meters was selected to represent the height of exhaust stacks on construction equipment, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. Furthermore, an urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.[44]

SWAPE calculated the excess cancer risk for each sensitive receptor location, for adults, children, and/or infant receptors using applicable HRA methodologies prescribed by OEHHA.[45] OEHHA recommends the use of Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.[46] According to the revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). Furthermore, in accordance with guidance set forth by the

[41] SWAPE Comments, p. 15.
[42] *Id.*
[43] *Id.*
[44] *Id.*
[45] *Id.*, at 16.
[46] "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.

BAAQMD, SWAPE used 95th percentile breathing rates for infants and children and 80th percentile breathing rates for adults.[47] Furthermore, SWAPE used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of SWAPE's calculations are shown below.

Parameter	Description	Units	Adult	Child	Infant
C_{air}	Concentration	µg/m^3	0.9825	0.9825	0.9825
DBR	Daily breathing rate	L/kg-day	233	572	1090
EF	Exposure Frequency	days/year	365	365	365
ED	Exposure Duration	years	14	14	2
AT	Averaging Time	days	25550	25550	25550
	Inhaled Dose	(mg/kg-day)	4.6E-05	1.1E-04	3.1E-05
CPF	Cancer Potency Factor	1/(mg/kg-day)	1.1	1.1	1.1
ASF	Age Sensitivity Factor	-	1	3	10
	Cancer Risk		**5.04E-05**	**3.71E-04**	**3.37E-04**

SWAPE concludes that "[t]he excess cancer risk to adults, children, and infants during Project construction for the sensitive receptors located 100 meters away are 50.4, 371, and 337 in one million, respectively."[48] The adult, child, and infantile exposure for the sensitive receptors clearly exceed the BAAQMD threshold of 10 in one million.[49] Thus, the Project will result in significant health risks from DPM emissions during construction. As a result, SWAPE concludes that the City must prepare a refined HRA using site-specific meteorology and specific equipment usage schedules and include the HRA in an EIR to examine air quality and public health impacts generated by Project construction.[50]

[47] "Air Toxics NSR Program Health Risk Screening Analysis (HRSA) Guidelines," BAAQMD, January 2010, *available at:* http://www.baaqmd.gov/~/media/Files/Engineering/Air%20Toxics%20Programs/hrsa_guidelines.ashx, p. 2-3.
[48] SWAPE Comments, p. 16.
[49] BAAQMD CEQA Air Quality Guidelines, p. 2-5, http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_May%202011_5_3_11.ashx.
[50] SWAPE Comments, p. 16.

3. The City Fails to Incorporate all Feasible Mitigation Measures Required to Reduce Significant Impacts from DPM Emissions

SWAPE's screening-level HRA demonstrates that construction of the Project would result in significant health risks.[51] Thus, SWAPE provides a detailed list of mitigation measures that could be incorporated to reduce DPM exposure. Although the CEQA Analysis incorporates SCA AIR-1 (SCA 19) from the LMSAP FEIR, the Project would require even further measures to reduce the significant impacts from DPM emissions to less than significant levels. SWAPE notes that additional mitigation measures can be found in the California Air Pollution Control Officers Association's ("CAPCOA") *Quantifying Greenhouse Gas Mitigation Measures,* which reduces GHG emissions, as well as reduce Criteria Air Pollutants such as particulate matter (PM).[52] Mitigation measures for particulate matter emissions, which are described in further detail in SWAPE's comments, include:[53]

- Limiting construction equipment beyond regulation requirements;
- Requiring implementation of diesel control measures as described by the Northeast Diesel Collaborative ("NEDC");
- Repowering or replacing older construction engines;
- Installing retrofit devices on existing construction equipment;
- Using electric or hybrid construction equipment;
- Instituting a Heavy-Duty Off-Road Vehicle Plan;
- Implementing a Construction Vehicle Inventory Tracking System; and
- "Enhanced Exhaust Control Practices," recommended by the Sacramento Metropolitan Air Quality Management District ("SMAQMD").[54]

The CEQA Analysis is inconsistent with the LMSAP because it fails to quantify the health risk associated with DPM emissions for this Project, as anticipated under the LMSAP EIR. Furthermore, the City failed to identify and incorporate feasible mitigation measures, not previously identified, that would reduce the Project's highly significant health risk impacts during construction. In light of the fact that the LMSAP EIR identified the health risk from DPM during construction as a less than significant impact, this Project does, in fact, present substantial new information showing a new or more severe significant impact than

[51] *Id.*, at 17.
[52] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
[53] SWAPE Comments, p. 17 – 21.
[54] http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf.

previously analyzed. Furthermore, there are mitigation measures not previously identified that could potentially reduce the impact to less than significant levels. Therefore, CEQA requires the City to prepare an EIR for the Project, and the City may not rely on the CEQA Analysis for Project approval.

B. The CEQA Analysis Fails To Adequately Analyze and Mitigate Project-Specific Construction Emissions

1. The CEQA Analysis Uses Unsubstantiated Input Parameters to Estimate Project Emissions

The CEQA Analysis for the Project relies on emissions calculated from CalEEMod.[55] As explained by SWAPE, CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.[56] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollution emissions, and make known which default values were changed, as well as provide a justification for the values selected.[57]

When reviewing the CalEEMod output files for the air quality analysis, SWAPE found that several of the values inputted into the model are "are not consistent with information disclosed in the CEQA Analysis."[58] For example, the City's CEQA Analysis specifically describes that the Project will involve grading, paving, architectural coating, drilling and hauling during demolition and excavation. As a result, the GHG emissions associated with the construction and operation of the Project are "greatly underestimated."[59] When SWAPE corrected

[55] CalEEMod website, *available at*: http://www.caleemod.com/.
[56] CalEEMod User Guide, pp. 2, 9.
[57] *Id.*
[58] SWAPE Comments, p. 2.
[59] *Id.*

those values, the model shows that the Project will have a significant VOC impact.[60] The model values are incorrect for eight reasons.

- The CalEEMod model output files are incomplete.
- The CalEEMod model relies upon an incorrect intensity factors.
- The EMFAC2014 emission factors are insufficiently supported.
- The CalEEMod model fails to include grading equipment for the grading phase.
- The CalEEMod model underestimates paving square footage and equipment.
- The CalEEMod model fails to include appropriate construction equipment for architectural coating.
- The CalEEMod model fails to include a drill rig in the equipment estimates.
- The CalEEMod model underestimates the number of hauling trucks for demolition and excavation.[61]

Because the City's modeling of air emissions fails to account for all aspects of the Project, as described by the City itself, the City's modeling and analysis of air quality impacts are not supported by substantial evidence.

2. Corrected Model Shows Significant VOC Impact and Higher Emissions Levels

In light of the City's failure to adequately analyze emissions, SWAPE prepared an updated air model using CalEEMod. SWAPE's analysis demonstrates that the Project will result in a significant VOC impact.[62]

SWAPE explains that the updated model used a CO_2 intensity factor of 457 lbs/MWh, which is consistent with applicable guidance. In addition, the model relies upon the CalEEMod default values of 0.029 lb/MWhr and 0.006 lb/MWhr for the CH_4 Intensity factor and N_2O Intensity factor, respectively. SWAPE also updated the equipment list to include an additional grader during the grading phase, paving-specific equipment during the phases that require paving, an additional air compressor for the finishes and coating phases, and an additional

[60] *Id.*
[61] *Id.*, at p. 2 – 12.
[62] *Id.*, at 12.

drilling rig for the shoring phases.[63] SWAPE also increased the number of hauling trips for the demolition phase to 156 trips and increased the number of hauling trips for the mass excavation phase to 813 trips in an effort to accurately estimate the number of trips that will be required for material export.[64] The basis for each corrected input is explained in SWAPE's comments.

When these corrected input parameters are used to model emissions, SWAPE finds that the Project's construction emissions increase significantly compared to the CEQA Analysis' model.[65] Specifically, SWAPE finds that the Project's construction-related VOC emissions exceed the City of Oakland significance threshold of 54 pounds per day.[66] SWAPE explains that even just short-term exposure to VOC emissions can cause eye and respiratory tract irritation, headaches, dizziness, visual disorders, fatigue, loss of coordination, allergic skin reactions, nausea, and memory impairment.[67] Longer-term exposure can cause damage to the liver, kidneys, and central nervous system.[68] These health problems can affect both on-site construction workers and the surrounding community.[69]

Construction Emissions (lbs/day)					
	VOC	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
CEQA Analysis Model	0.7	5.8	9.2	0.7	0.4
City of Oakland Thresholds	**54**	**54**	-	**82**	**54**
Exceed?	*No*	*No*	*No*	*No*	*No*
SWAPE Model	55	34	60	9	4
City of Oakland Thresholds	**54**	**54**	-	**82**	**54**
Exceed?	***Yes***	*No*	*No*	*No*	*No*

Therefore, SWAPE concludes that an updated CEQA evaluation should be prepared as part of an EIR that includes an updated model to adequately estimate the Project's emissions during construction. Furthermore, SWAPE concludes that

[63] *Id.*, at 12 – 13.
[64] *Id.*
[65] *Id.*
[66] *Id.*, at 13.
[67] https://toxtown.nlm.nih.gov/text_version/chemicals.php?id=31.
[68] *Id.*
[69] SWAPE, p. 13.

additional mitigation measures must be identified and incorporated in the EIR to reduce VOC emissions to a less than significant level.[70]

3. The City Fails to Incorporate Sufficient Feasible Mitigation Measures To Reduce Significant VOC Emissions

SWAPE notes that "[n]umerous additional and feasible mitigation measures are available to reduce VOC emissions, including the following which are routinely identified in other CEQA matters as feasible mitigation measures":[71]

- Use of zero-VOC emissions paint (the CEQA Analysis only commits to using "low VOC coatings");[72]
- Use of materials that do not require paint; and
- Use of spray equipment with greater transfer efficiencies.

SWAPE concludes that when these mitigation measures are combined, "these measures offer a feasible way to effectively reduce the Project's construction-related VOC emissions to a less than significant level."[73] As such, CEQA mandates that the City prepare an EIR to adequately analyze and mitigate significant impacts from Project construction VOC emissions which exceed the City's significance threshold.

[70] *Id.*
[71] *Id.*
[72] CEQA Analysis p. 97.
[73] SWAPE Comments, p. 13.

III. CONCLUSION

The City failed to comply with CEQA's procedural and evidentiary standards in its CEQA Analysis. As explained above, the CEQA Analysis fails to analyze and mitigate the Project's significant health risks posed to the surrounding community from DPM emissions and the Project's significant VOC emissions. Both of these significant impacts are new or more severe significant than previously analyzed, and mitigation measures, which are considerably different from those analyzed in the LMSAP EIR, would substantially reduce these significant effects, but have not been required in the CEQA Analysis. For these reasons, we urge the City to revise its analysis, identify feasible mitigation measure and disclose its revised analysis in an EIR, as required by CEQA, before the City considers approval of the Project.

Sincerely,

Laura E. Horton

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Attachments