

STRUMWASSER & WOOCHER LLP

ATTORNEYS AT LAW

10940 WILSHIRE BOULEVARD, SUITE 2000
LOS ANGELES, CALIFORNIA 90024

TELEPHONE: (310) 576-1233

FACSIMILE: (310) 319-0156

WWW.STRUMWOCH.COM

FREDRIC D. WOOCHER
MICHAEL J. STRUMWASSER
GREGORY G. LUKE †
BRYCE A. GEE
BEVERLY GROSSMAN PALMER
DALE K. LARSON
JENNA L. MIARA †‡

† Also admitted to practice in New York and Massachusetts

‡ Also admitted to practice in Illinois

October 23, 2017

By Email

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
Los Angeles, CA 90012
publichearing@bos.lacounty.gov

Re: October 24, 2017 Agenda Item 6, 5101 Overhill Drive, "The View" Project No.
R2015-01232-(2), Inadequate Environmental Analysis

Dear Supervisors,

This firm represents United Homeowners' Association II (UHA II), and the 17 local residents who have filed an appeal of the determination of the Regional Planning Commission (RPC) to approve "The View" project at 5101 Overhill Drive. UHA II is a nonprofit mutual benefit corporation that represents the interests of residents in the unincorporated communities of Windsor Hills, View Park and View Heights. UHA II and the individual appellants urge the Board of Supervisors to think carefully before approving The View on the record before the Board.

The View is a nearly 140,000 square foot, five-story 88-unit condominium project located on a sensitive Hillside Management Area parcel across the street from active oil drilling operations, nearby several abandoned oil wells, and in an area demarcated as requiring precautions due to the potential for underground methane. Rather than relying on a full Environmental Impact Report to disclose the potential environmental impacts of constructing and operating the project, as well as potential alternatives to the project that might be less impactful, the RPC relied upon a Mitigated Negative Declaration (MND) which included scant analysis of a number of potential environmental effects of this project.

The EIR has been called "the heart" of CEQA. For that reason, there is a strong presumption that an EIR should be prepared before a local government approves a project. (*Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928.) If there is a "fair argument," based on substantial evidence, that a project *may* have unmitigated impacts to the environment, an EIR should be prepared. "May" means a reasonable possibility of a significant effect on the environment. (Pub. Res. Code, §§ 21082.2, subd. (a); 21100; 21151, subd. (a).) Substantial evidence includes facts, reasonable assumptions predicated on fact, or expert opinion supported by fact. (Pub. Res. Code, § 21080, subd. (e)(1).) Expert opinion, if supported by facts and even if not based on specific observations as to the site under review, may qualify as substantial evidence for a fair argument. (*Friends of the Old Trees v. Department of Forestry & Fire*

Protection (1997) 52 Cal.App.4th 1383, 1398–1399.) “Where such expert opinions clash, an EIR should be done.” (*Pocket Protectors, supra*, 124 Cal.App.4th at p. 928.)

Enclosed with this letter are analyses of the environmental impacts of the proposed project, which appellants were forced to obtain because the County’s analysis of the project’s environmental impacts was legally inadequate and materially deficient. These analyses, prepared by SWAPE and Tom Brohard, P.E., evaluate the impacts of the project on hazards and hazardous waste, air quality, greenhouse gas, and traffic and circulation. Both expert reviews present substantial evidence that the project *will* have unmitigated environmental impacts, readily satisfying the deferential “fair argument” standard.

SWAPE’s comments demonstrate how lacking the evidentiary record is regarding the conclusions in the MND, noting that the MND lacks a Phase I study of potential hazardous conditions on the site, and contains *no* analysis whatsoever of the potential air quality impacts from construction of the project, which is also located directly across the street from an elementary school. The South Coast Air Quality Management District (SCQAMD) also commented that the MND lacked documentation of the project’s likely impacts to air quality. Because the MND lacked any analysis of air quality impacts, SWAPE utilized the CalEEMod software recommended by SCAQMD to develop emission scenarios, and found that the project would likely exceed the SCAQMD significance thresholds for both volatile organic compounds (VOCs) and nitrogen oxides (NOx). In addition, SWAPE observed that the MND lacks a quantified health risk assessment as required by the Office of Environmental Health Hazards Assessment (OEHHA). SWAPE prepared a “screening level” health risk assessment which demonstrated that, as a result of exposure to the emissions from construction and operation, the cancer risk to an individual residing at the residence nearest the project site significantly exceed the SCAQMD threshold of 10 in one million.

Mr. Brohard’s analysis demonstrates that the traffic study is inadequate, based on outdated and faulty data that is inconsistent with traffic studies of other nearby projects, and fails to identify a likely significant impact at the intersection of Slauson and La Brea. Mr. Brohard notes that the MND’s cumulative impact analysis of traffic is markedly deficient when compared to the cumulative project list for the nearby Baldwin Hills Crenshaw Plaza development. The project list here includes only 8 projects, while the mall project includes 32 projects. Because the cumulative analysis of traffic included *only* the traffic generated by 8 projects, rather than the full list of 32 nearby projects, and because the analysis assumed only a 0.14% increase in traffic each year rather than the standard 1% used by projects in Los Angeles, the traffic study *significantly understated* the impact of the project and other projects nearby on traffic, and failed to identify intersections that will be significantly impacted by the project and the cumulative effect of other nearby development.

Mr. Brohard’s analysis of the manifest deficiencies of the traffic analysis demonstrates that the project developer has not met its burden under Los Angeles County Code section 22.56.040 that “the proposed site is adequately served [b]y highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate” or “by other public or private service facilities as are required.” Mr. Brohard shows that the project will

likely cause cumulative traffic impacts at the nearby intersection of Slauson and La Brea, contributing to future operating conditions below an acceptable level of service. Mr. Brohard also notes that the project will include stairs to access nearby bus stops, but that such stairs are not ADA accessible to persons with disabilities. Mr. Brohard also questions whether the driveway access configurations will provide adequate stacking space for vehicles and sufficient opportunity for left turn access onto a high-speed street like Overhill, which raises obvious safety concerns.

For these reasons, the View should not be approved and the appeal should be granted. Further environmental study is required before a project like this can be approved in this location.

Very Truly Yours,

A handwritten signature in black ink, appearing to read "Beverly Grossman Palmer". The signature is written in a cursive, flowing style.

Beverly Grossman Palmer



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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

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

October 9, 2017

Beverly Grossman Palmer
Strumwasser & Woocher, LLP
10940 Wilshire Boulevard, Suite 2000
Los Angeles, CA 90024

Subject: Comments on “The View” Project (SCH No. 2017041016)

Dear Ms. Palmer:

We have reviewed the February 2015 Initial Study/ Mitigated Negative Declaration (IS/MND) for ‘The View’ Project (“Project”) located in the City of Los Angeles. The proposed Project would construct one multi-family residence lot and 88 attached residential condominium dwelling units on 1.84 acres of land. Additionally, the Project proposes to construct a five-story vehicle parking structure that includes approximately 206 parking spaces.

Our review concludes that the IS/MND fails to adequately evaluate the Project’s Hazards and Hazardous Waste, Air Quality, and Greenhouse Gas (GHG) impacts. As a result, emissions and health impacts associated with the construction and operation of the proposed Project are inadequately addressed. A Project-specific Draft Environmental Impact Report (DEIR) should be prepared to adequately assess and mitigate the potential hazards, air quality, health risk, and GHG impacts the Project may have on the surrounding environment.

Hazards and Hazardous Waste

Because of Improper Due Diligence, a Finding of “No Impact” is Unsubstantial

The IS/MND did not include a Phase I Environmental Site Assessment (ESA), a standard tool for used in CEQA matters to identify potentially hazardous conditions. Instead the IS/MSD simply references an Envirostor¹ search as the sole source of information to conclude “no impact” that the Project site would be located on a hazardous materials site (p. 29). A Phase I ESA is necessary to ensure that hazardous soil or vapor conditions do not exist that would pose a risk to construction workers or neighboring residents

¹ <https://www.envirostor.dtsc.ca.gov/public/Default.asp>

when the parcels are developed. Until a DEIR is prepared to properly assess the hazardous waste impacts, the conclusions reached in the IS/MND are unsubstantiated and unreliable for ensuring the protection of the health of on-site workers and nearby residents during Project construction and operation.

A Phase I ESA should be prepared for the Project site by a certified professional and included in a DEIR. Phase I ESAs are commonly included in CEQA documentation to identify hazardous waste issues that may pose a risk to the public, workers, or the environment and which may require further investigation, including environmental sampling and cleanup. Any conditions identified as hazardous in the Phase I should be addressed through mitigation in the DEIR.

We conducted a review of the California Department of Conservation, Division of Oil and Gas (DOGGR) "Well Finder" website and found that abandoned oil wells are located on parcels directly north and south of the Project site. These wells, Stocker 8 and Stocker 10, were abandoned in 1932² and 1961³, respectively. Hazards to construction personnel may be posed by any well cuttings that may have been disposed on the Project site. Hazards may also be posed to future residents by emissions of vapors that may emanate from the wells, which were abandoned when practices were not as protective as well abandonment practices currently regulated by the DOGGR. Modern well abandonment practices require conformity with California Code of Regulations, Section 1723, as follow⁴:

- A Notice of Intention to Abandon must be filed with the appropriate district office, and a permit to conduct operations must be received from the Division prior to commencing operations.
- The hole will be filled with drilling mud.
- Cement plugs will be placed across all oil or gas zones, the fresh water/salt water interface, the casing shoe (if open hole is below the shoe), casing stub (if casing was removed from the hole), and at the surface. The length required for each plug will vary.
- If there is junk in the hole, a cement plug is required to be placed on top of the junk.
- If there is uncemented casing at the base of fresh water interface, cement must be squeezed through perforations in the casing. The same applies if there is uncemented casing at the surface; all annuli need to be plugged.
- Plugging and abandonment operations require witnessing by a DOGGR engineer.

Additionally, the Project is located directly adjacent to Methane Zone as demarcated by the City of Los Angeles.⁵ Because of the proximity to the Methane Zone, a study of the subsurface gas conditions at the Project site may be warranted to ensure that methane has not accumulated beneath the Project site at potentially explosive levels. The potential for accumulations of methane, and the need for a subsurface gas investigation, should be evaluated in the Phase I ESA, as recommended, for inclusion in a DEIR.

² https://secure.conservation.ca.gov/WellRecord/037/03708316/03708316_2017-05-24_DATA.pdf

³ https://secure.conservation.ca.gov/WellRecord/037/03708318/03708318_2017-05-24_DATA.pdf

⁴ http://www.conservation.ca.gov/dog/faqs/Pages/Index.aspx#how_are_wells_plugged

⁵ <https://www.partneresi.com/sites/default/files/methane-zone-map-los-angeles.pdf>

The Phase I ESA should be conducted to conform to standards for performing a Phase I ESA, established by the US EPA and the American Society for Testing and Materials Standards (ASTM)⁶ to include:

- a review of all known sites in the vicinity of the subject property that are on regulatory agency databases undergoing assessment or cleanup activities;
- an inspection;
- interviews with people knowledgeable about the property; and
- recommendations for further actions to address potential hazards.

Phase I ESAs conclude with the identification of any “recognized environmental conditions” (RECs) and recommendations to address such conditions. A REC is the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. If RECs are identified, then a Phase II ESA generally follows, which includes the collection of soil, soil vapor and groundwater samples, as necessary, to identify the extent of contamination and the need for cleanup to reduce exposure potential to the public.

Consistent with standard due diligence procedures, a Phase I ESA, completed by a licensed environmental professional, is necessary for inclusion in a DEIR to identify recognized environmental conditions at the proposed Project site. In particular, the potential for soil conditions associated with the abandoned wells to the north and south of the Project site and potentially hazardous methane accumulations, should be evaluated. A Phase II ESA should be conducted and included in the DEIR if the Phase I indicates recognized environmental conditions associated with the wells or with methane.

Air Quality

Failure to Quantify Emissions from Project Construction and Operation

The IS/MND fails to evaluate, whatsoever, the proposed Project’s air quality impact. Despite this lack of an actual assessment, the IS/MND still concludes that the criteria air pollutant emissions released during Project construction and operation “will not exceed the SCAQMD Air Quality Significance Thresholds” (p. 11). Furthermore, the IS/MND states,

“Projects such as the proposed “The View” residential project do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The change to regional air quality from the proposed action is immeasurably small due to the size of the project relative to the air quality basin and because the project does not exceed air quality standards” (p. 10).

⁶ <http://www.astm.org/Standards/E1527.htm>

We find issue with this assertion, however, as no actual evaluation of the Project's criteria air pollutant emissions was conducted. Simply because the IS/MND asserts that the Project's impact on regional air quality would be "immeasurably small due to the size of the project" does not mean that the Project would automatically have a less than significant air quality impact, and does not justify the omission of a proper analysis. Without modeling emissions, the amount of criteria air pollutant emissions produced by the Project is unknown. As a result, the Project's emissions cannot be compared to any numerical significance thresholds, including the applicable California Environmental Quality Act (CEQA) significance thresholds set forth by the South Coast Air Quality Management District (SCAQMD), which would support the IS/MND's conclusion that the Project will have a less than significant air quality impact. An actual analysis needs to be conducted prior to making such a significance determination. Until an adequate analysis is conducted that quantifies these impacts, a significance determination cannot be made, as there is no evidentiary basis on which to conclude that air quality impacts are less than significant.

In an effort to determine the proposed Project's air quality impacts, we prepared an air model using the California Emissions Estimator Model Version CalEEMod.2016.3.1 ("CalEEMod"), in which we estimated the Project's construction and operational emissions. The results of this analysis, as described in further detail below, demonstrate that the Project would have significant air quality impacts, contrary to what is stated in the IS/MND. As a result, a DEIR should be prepared to adequately assess the Project's air quality impacts, and additional mitigation should be identified and implemented in order to effectively reduce the Project's emissions to the maximum extent feasible.

Preliminary Emissions Model Indicates Significant Impact

As previously stated, in an effort to more accurately estimate the Project's emissions, we conducted our own emissions modeling using the most recent CalEEMod Model Version CalEEMod.2016.3.1.⁷ 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.⁸ 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, which we have included as an attachment to this letter for reference, disclose to the reader what parameters were utilized in calculating the Project's construction and operational emissions, and make known which default values were changed, as well as provide a justification for the values selected.⁹ In an effort to provide accurate, Project-specific emissions estimates, we relied upon information provided in the IS/MND and associated documents whenever possible. However, some information, such as the specific pieces of off-road construction equipment that the Project proposes to use and the Project's specific construction

⁷ CalEEMod website, available at: <http://www.caleemod.com/>

⁸ CalEEMod User Guide, pp. 7, 14, available at: <http://www.caleemod.com/>

⁹ CalEEMod User Guide, pp. 7, 12, available at: <http://www.caleemod.com/> (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)

schedule, was not disclosed in the IS/MND or associated documents. In instances like this, where Project-specific information is not provided, we relied upon CalEEMod default values. Finally, for input parameters in which a limited amount of site-specific information was provided, we relied upon both the CalEEMod default values as well as site-specific data to come up with a reasonable emission estimate that is as specific to the Project as possible.

According to the IS/MND, the Project proposes to develop one multi-family residence lot with 88 attached single-family residence condominium units within one building, totaling 139,281 square feet, on a 1.84-acre site. Additionally, the Project proposes to construct a subterranean parking structure with 206 parking spaces (RPC Staff Recommendations, pp. 5). The IS/MND does not provide any information on the specific construction schedule for each phase of the Project. Therefore, we relied upon the CalEEMod default construction schedule to estimate the Project's emissions. A summary of the construction schedule utilized in our model is shown in the table below.

Construction Schedule			
Phase	Start Date	End Date	Working Days
Demolition	9/28/2017	10/25/2017	20
Site Preparation	10/26/2017	10/28/2017	2
Grading	10/29/2017	11/2/2017	4
Building Construction	11/3/2017	8/9/2018	200
Paving	8/10/2018	8/23/2018	10
Architectural Coating	8/24/2018	9/6/2018	10

The IS/MND also fails to provide a complete list of the type and amount of equipment to be used throughout Project construction. Therefore, we relied upon the default equipment list provided by CalEEMod for each phase of construction. The use of the CalEEMod default construction schedule and equipment list is adequate, as they are based on surveys of construction sites and are most appropriate for the size and type of Project.¹⁰ Additionally, the IS/MND fails to include any information regarding the Project's construction-related worker, vendor, and hauling trips for any of the three construction phases. Therefore, we also relied upon CalEEMod default values for daily worker, vendor, and hauling trip rates and associated trip lengths to estimate the Project's mobile-source construction emissions.

The results of our CalEEMod models, which are included as an attachment to this letter for reference, demonstrate that when quantified, the Project's construction emissions would exceed the significance thresholds established by the SCAQMD. Specifically, we found that the Project's maximum daily construction VOC emissions exceed the 75 pounds per day (lbs/day) threshold and the Project's maximum daily construction NO_x emissions greatly exceed the 100 lbs/day threshold (see table below).

Maximum Daily Construction Emissions (lbs/day)						
	VOC	NO_x	CO	SO_x	PM10	PM2.5
2017	16.1	496.3	101.2	1.1	33.2	12.6

¹⁰ CalEEMod User Guide, p. 24, available at: <http://www.caleemod.com/>

2018	89.9	20.6	19.1	0.03	2.3	1.4
SCAQMD Thresholds (lbs/day)	75	100	550	150	150	55
Exceed?	Yes	Yes	No	No	No	No

Our analysis demonstrates that when the Project’s emissions are properly quantified and compared to thresholds, Project construction will have a potentially significant air quality impact that was not previously identified in the IS/MND. A DEIR must be prepared to adequately analyze the air quality impacts the proposed Project may have on regional and local air quality and should identify and implement additional mitigation measures to reduce these emissions to the fullest extent feasible.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The IS/MND concludes that the Project would not result in a significant health risk impact, yet fails to conduct a quantified construction or operational health risk assessment (HRA) to support its claim (p. 12). The IS/MND simply states,

“Sensitive receptors are adjacent to and within a 1/4 mile to approximately 3/4 mile of the property identified as playgrounds, schools, day care facilities and other residential neighborhoods. There would be a less than significant impact with code compliance and mitigation. Construction of the project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, exhaust emissions associated with construction of a project this size are typically below SCAQMD CEQA thresholds during construction and construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD standard construction practices” (p. 11-12).

Therefore, since the IS/MND asserts that the proposed Project would generate emissions below SCAQMD thresholds and states that contractors would be required to reduce emissions through compliance with SCAQMD standard construction practices, the IS/MND concludes that the Project would have a less than significant health risk impact. This justification for failing to conduct a quantified construction and operational HRA, however, is incorrect.

The omission of a quantified health risk assessment is inconsistent with the most recent guidance published by Office of Environmental Health Hazards Assessment (OEHHA), the organization responsible for providing recommendations and guidance on how to conduct health risk assessments in California. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.¹¹ This guidance document describes the types of projects that warrant the preparation of a health risk assessment. Construction activities for the proposed Project will produce emissions of diesel particulate matter

¹¹ “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

(DPM) though the exhaust stacks of the construction equipment that will be used throughout the Project's construction period.¹² The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.¹³ Once construction is complete, Project operation will generate truck trips, which will generate additional exhaust emissions, thus continuing to expose nearby sensitive receptors to DPM emissions. The OEHHA document recommends that exposure from projects lasting more than 6 months should be evaluated for the duration of the project, and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident (MEIR).¹⁴ Even though we were not provided with the expected lifetime of the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, per SCAQMD and OEHHA guidelines, health risk impacts from Project construction and operation should be included in a revised CEQA evaluation for the Project.

For the reasons mentioned above, we find the IS/MND evaluation, or lack thereof, of the Project's health risk impact to be inadequate and unreliable. The IS/MND should have conducted some sort of quantitative analysis of the Project's potential health-related impact and should have compared the results of this analysis to applicable thresholds. The SCAQMD provides a specific numerical threshold of 10 in one million for determining a project's health risk impact.¹⁵ Therefore, the IS/MND should have conducted an assessment that compares the Project's combined construction and operational health risks to this threshold in order to determine the Project's health risk impact. By failing to prepare an HRA, the IS/MND fails to provide a comprehensive analysis of the sensitive receptor impacts that may occur as a result of exposure to the Project's potentially substantial air pollutant emissions. In an effort to demonstrate the potential risk posed by Project construction and operation to nearby sensitive receptors, we prepared a simple screening-level health risk assessment. The results of our assessment, as described below, provide substantial evidence that the Project's construction and operational DPM emissions may result in a potentially significant health risk impact that was not previously identified.

Updated Health Risk Assessment Indicates Significant Health Impact

In an effort to demonstrate the potential risk posed by construction and operation of the proposed Project to nearby sensitive receptors, we prepared a simple screening-level health risk assessment. The results of our assessment, as described in the sections below, provide substantial evidence demonstrating that potential health risk impacts associated with construction and operation of the proposed Project may result in a potentially significant health risk impact. As such, a Project-specific DEIR should be prepared to adequately evaluate the proposed Project's health risk impacts, and additional mitigation measures should be identified and incorporated into the Project design, where necessary.

¹² The estimated construction period based on the default construction period from the SWAPE Construction CalEEMod output files.

¹³ "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-18

¹⁴ "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

¹⁵ http://www.valleyair.org/transportation/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

As of 2011, the Environmental Protection Agency (EPA) recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters.¹⁶ The model replaced SCREEN3, and AERSCREEN is included in the OEHHA¹⁷ and the California Air Pollution Control Officers Associated (CAPCOA)¹⁸ guidance as the appropriate air dispersion model for Level 2 health risk screening assessments (“HRSAs”). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary health risk screening assessment of the Project's construction-related impact to sensitive receptors using the annual PM₁₀ exhaust estimates from our SWAPE CalEEMod model. According to the IS/MND, there are sensitive receptors adjacent to the Project site. Using Google Earth, we determined that the nearest sensitive receptor is a residence located approximately 1 meter from the Project site. Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the infantile stage of life. We also assumed that construction and operation of the Project would occur in quick succession, with no gaps between each Project phase. The SWAPE CalEEMod model's annual emissions indicate that construction activities will generate approximately 181 pounds of DPM over the 344-day construction period. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation.

$$\text{Emission Rate} \left(\frac{\text{grams}}{\text{second}} \right) = \frac{181 \text{ lbs}}{344 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.002756 \text{ g/s}}$$

Using this equation, we estimated a construction emission rate of 0.002756 grams per second (g/s). The SWAPE annual CalEEMod output files indicate that operational activities will generate approximately 208 pounds of DPM per year over the 29.1-years of operation. Applying the same equation used to estimate the construction DPM emission rate, we estimated the following emission rate for Project operation.

$$\text{Emission Rate} \left(\frac{\text{grams}}{\text{second}} \right) = \frac{208 \text{ lbs}}{365 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.002986 \text{ g/s}}$$

¹⁶ “AERSCREEN Released as the EPA Recommended Screening Model,” USEPA, April 11, 2011, *available at*: http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

¹⁷ “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

¹⁸ “Health Risk Assessments for Proposed Land Use Projects,” CAPCOA, July 2009, *available at*: http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

Using this equation, we estimated an operational emission rate of 0.002986 g/s. Construction and operational activity was simulated as a 1.84-acre rectangular area source in AERSCREEN, with dimensions of 107 meters by 69.5 meters. A release height of three meters was selected to represent the height of exhaust stacks on operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10%.¹⁹ For example, for the MEIR the single-hour concentration estimated by AERSCREEN for Project construction is approximately 7.287 $\mu\text{g}/\text{m}^3$ DPM at approximately 1 meter downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.7287 $\mu\text{g}/\text{m}^3$ for Project construction at the MEIR. For Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 7.895 $\mu\text{g}/\text{m}^3$ DPM at approximately 1 meter downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.7895 $\mu\text{g}/\text{m}^3$ for Project operation at the MEIR.

We calculated the excess cancer risk to the residential receptors located closest to the Project site using applicable health risk assessment methodologies prescribed by OEHHA and the SCAQMD. Consistent with the construction schedule proposed by the IS/MND, the annualized average concentration for construction was used for the first 0.94 years of the infantile stage of life (0-2 years). The annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the remainder of the infantile stage of life (0-2 years), the child stages of life (2 to 16 years), and adult states of life (16 to 30 years). Consistent with OEHHA guidance, we used Age Sensitivity Factors (ASFs) to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.²⁰ According to the updated guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant) and should be multiplied by a factor of three during the child stage of life (2 to 16 years). Furthermore, in accordance with guidance set forth by OEHHA, we used 95th percentile breathing rates for infants.²¹ We used a cancer potency factor of 1.1 (mg/kg-day)⁻¹ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

¹⁹ http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf

²⁰ "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnrn/2015guidancemanual.pdf>

²¹ "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," June 5, 2015, available at: <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6>, p. 19

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

Activity	Duration (years)	Concentration ($\mu\text{g}/\text{m}^3$)	Breathing Rate (L/kg-day)	ASF	Cancer Risk
Construction	0.94	0.729	1090	10	1.1E-04
Operation	1.06	0.790	1090	10	1.4E-04
Infant Exposure Duration	2.00			Infant Exposure	2.5E-04
Operation	14.00	0.790	572	3	2.9E-04
Child Exposure Duration	14.00			Child Exposure	2.9E-04
Operation	14.00	0.790	261	1	4.3E-05
Adult Exposure Duration	14.00			Adult Exposure	4.3E-05
Lifetime Exposure Duration	30.00			Lifetime Exposure	5.80 E-04

The excess cancer risk to adults, children, and infant at the MEIR located approximately 1 meter away, over the course of Project construction and operation are 43, 290, and 250 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) at the MEIR is approximately 580 in one million. Consistent with OEHHA guidance, exposure was assumed to begin in the infantile stage of life to provide the most conservative estimates of air quality hazards. The infant, child, adult, and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million.

It should be noted that our analysis represents a screening-level health risk assessment, which is known to be more conservative, and tends to err on the side of health protection.²² The purpose of a screening-level health risk assessment, however, is to determine if a more refined health risk assessment needs to be conducted. If the results of a screening-level health risk are above applicable thresholds, then the Project needs to conduct a more refined health risk assessment that is more representative of site specific concentrations. Our screening-level health risk assessment demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. As a result, a refined health risk assessment must be prepared to examine air quality impacts generated by Project construction and operation using site-specific meteorology and specific equipment usage schedules. A Project-specific DEIR must be prepared to adequately evaluate the Project's health risk impact, and should include additional mitigation measures to reduce these impacts to a less-than-significant level.

Additional Mitigation Measures Available to Reduce Construction Emissions

Our analysis demonstrated that the Project's construction-related VOC, NO_x, and DPM emissions would exceed SCAQMD significance thresholds, thus presenting a potentially significant air quality impact. Therefore, additional mitigation measures must be identified and incorporated in an updated DEIR to reduce these emissions to a less than significant level.

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.²³ Longer-term exposure can cause damage to the liver, kidneys, and central

²² http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf p. 1-5

²³ https://toxtown.nlm.nih.gov/text_version/chemicals.php?id=31

nervous system.²⁴ These health problems can affect both on-site construction workers and the surrounding community. Therefore, mitigation measures must be identified and incorporated in a DEIR to reduce these emissions to a less than significant level. Numerous feasible mitigation measures are available to reduce VOC emissions, including the following, which are routinely identified in other CEQA matters as feasible mitigation measures:

Use of Zero-VOC Emissions Paint

The Project Applicant should consider the use of zero-VOC emission paints, which has been required for numerous projects that have undergone CEQA review. Zero-VOC emission VOC paints are commercially available. Other low-VOC standards should be incorporated into mitigation including use of “super-compliant” paints, which have a VOC standard of less than 10 g/L.

Use of Material that do Not Require Paint

Using materials that do not require painting is a common mitigation measure where VOC emissions are a concern. Interior and exterior surfaces, such as concrete, can be left unpainted.

Use of Spray Equipment with Greater Transfer Efficiencies

Various coatings and adhesives are required to be applied by specified methods such as electrostatic spray, high-volume, low-pressure (HVLP) spray, roll coater, flow coater, dip coater, etc. in order to maximize the transfer efficiency. Transfer efficiency is typically defined as the ratio of the weight of coating solids adhering to an object to the total weight of coating solids used in the application process, expressed as a percentage. When it comes to spray applications, the rules typically require the use of either electrostatic spray equipment or HVLP spray equipment. The South Coast Air Quality Management District (SCAQMD) is now able to certify high-volume low-pressure (HVLP) spray applicators and other application technologies at efficiency rates of 65 percent or greater.²⁵

Our analysis also demonstrated that the Project’s construction-related NO_x emissions would exceed SCAQMD thresholds, presenting a potentially significant air quality impact. Additionally, we found that Project construction-related DPM emissions would result in a significant health risk impact. Therefore, additional mitigation measures must be identified and incorporated into a DEIR to reduce these emissions to a less than significant level.

Additional mitigation measures can be found in CAPCOA’s *Quantifying Greenhouse Gas Mitigation Measures*, which attempt to reduce Greenhouse Gas (GHG) levels, as well as reduce criteria air pollutants, such as particulate matter.²⁶ DPM and NO_x are byproducts of diesel fuel combustion, and are emitted by on-road vehicles and by off-road construction equipment. Mitigation for criteria pollutant emissions should include consideration of the following measures to reduce construction emissions.

Require Implementation of Diesel Control Measures

²⁴ https://toxtown.nlm.nih.gov/text_version/chemicals.php?id=31

²⁵ <http://www.aqmd.gov/home/permits/spray-equipment-transfer-efficiency>

²⁶ <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

The Northeast Diesel Collaborative (“NEDC”) is a regionally coordinated initiative to reduce diesel emissions, improve public health, and promote clean diesel technology. The NEDC recommends that contracts for all construction projects require the following diesel control measures: ²⁷

- All diesel onroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA 2007 onroad emissions standards or (2) emission control technology verified by EPA²⁸ or the California Air Resources Board (CARB)²⁹ to reduce PM emissions by a minimum of 85 percent.
- All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85 percent.
- All diesel nonroad construction equipment on site for more than 10 total days must have either (1) engines meeting EPA Tier 4 nonroad emission standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85 percent for engines 50 horse power (hp) and greater and by a minimum of 20 percent for engines less than 50 hp.
- All diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend³⁰ approved by the original engine manufacturer with sulfur content of 15 parts per million (ppm) or less.

Repower or Replace Older Construction Equipment Engines

The NEDC recognizes that availability of equipment that meets the EPA’s newer standards is limited.³¹ Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the *Best Practices for Clean Diesel Construction* report.³² These actions include but are not limited to:

- Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).

Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and large construction machines.³³ Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section “Use Alternative Fuels for Construction Equipment” for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending

²⁷ Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

²⁸ For EPA’s list of verified technology: <http://www3.epa.gov/otaq/diesel/verification/verif-list.htm>

²⁹ For CARB’s list of verified technology: <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>

³⁰ Biodiesel blends are only to be used in conjunction with the technologies which have been verified for use with biodiesel blends and are subject to the following requirements:

<http://www.arb.ca.gov/diesel/verdev/reg/biodieselcompliance.pdf>

³¹ <http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf>

³² <http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf>

³³ <http://www3.epa.gov/otaq/diesel/technologies/engines.htm>

on the newer engine and the vehicle or machine's ability to accept a more modern engine and emission control system. It should be noted, however, that newer engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual emission standard level of the current (existing) and new engines to ensure the repower product is reducing emissions for PM10.³⁴

- Replacement of older equipment with equipment meeting the latest emission standards.

Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders. Replacements using natural gas may require changes to fueling infrastructure.³⁵ Replacements often require some re-engineering work due to differences in size and configuration. Typically, there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.³⁶

Install Retrofit Devices on Existing Construction Equipment

PM emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust system to reduce emissions and should not impact engine or vehicle operation.³⁷ It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

Use Electric and Hybrid Construction Equipment

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*³⁸ report also proposes the use of electric and/or hybrid construction equipment as a way to mitigate criteria pollutant emissions, such as particulate matter. When construction equipment is powered by grid electricity rather than fossil fuel, direct emissions from fuel combustion are replaced with indirect emissions associated with the electricity used to power the equipment. Furthermore, when construction equipment is powered by hybrid-electric drives, emissions from fuel combustion are also greatly reduced and criteria air pollutants would be 100% reduced for equipment running on electricity. Electric construction equipment is available commercially from companies such as Peterson Pacific Corporation³⁹ and Komptech USA⁴⁰,

³⁴ Diesel Emissions Reduction Program (DERA): Technologies, Fleets and Projects Information, *available at:* <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100CVIS.PDF?Dockkey=P100CVIS.PDF>

³⁵ National Clean Diesel Campaign, p. 19 *available at:* <https://www.epa.gov/sites/production/files/2017-02/documents/fy17-state-program-guide-2017-02.pdf>

³⁶ Cleaner Diesels: Low Cost Ways to Reduce Emissions from Construction Equipment, p. 29 *available at:* <https://www.epa.gov/sites/production/files/2015-09/documents/cleaner-diesels-low-cost-ways-to-reduce-emissions-from-construction-equipment.pdf>

³⁷ <https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel>

³⁸ <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

³⁹ Peterson Electric Grinders Brochure, *available at:* http://www.petersoncorp.com/wp-content/uploads/peterson_electric_grinders1.pdf

which specialize in the mechanical processing equipment like grinders and shredders. Construction equipment powered by hybrid-electric drives is also commercially available from companies such as Caterpillar⁴¹. For example, Caterpillar reports that during an 8-hour shift, its D7E hybrid dozer burns 19.5 percent fewer gallons of fuel than a conventional dozer while achieving a 10.3 percent increase in productivity. The D7E model burns 6.2 gallons per hour compared to a conventional dozer which burns 7.7 gallons per hour.⁴² Fuel usage and savings are dependent on the make and model of the construction equipment used. The Project Applicant should calculate project-specific savings and provide manufacturer specifications indicating fuel burned per hour.

Institute a Heavy-Duty Off-Road Vehicle Plan

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*⁴³ report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring hour meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the equipment. Specifically, prior to the construction of a Project the contractor should submit a certified list of all diesel vehicles, construction equipment, and generators to be used on site.⁴⁴ The list should include the following:⁴⁵

- Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment.
- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.
- For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.

Implement a Construction Vehicle Inventory Tracking System

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*⁴⁶ report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring engine run time meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the

⁴⁰ Komptech Green Efficiency Brochure, *available at:*

https://www.komptech.com/index.php?eID=tx_nawsecuredl&u=0&g=0&t=1499460496&hash=629664449e3954477f6857f98ad1d73f8f2ec20d&file=fileadmin/komptech/brochures/Green_Efficiency_eng_2015.pdf

⁴¹ http://www.cat.com/en_US/products/new/power-systems/electric-power-generation.html

⁴² <http://s7d2.scene7.com/is/content/Caterpillar/C811572>

⁴³ <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

⁴⁴ Diesel Emission Controls in Construction Projects, *available at:*

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

⁴⁵ USEPA's Construction Fleet Inventory Guide is a useful tool in identifying the information required.

<http://www2.epa.gov/sites/production/files/2015-09/documents/construction-fleet-inventory-guide.pdf>

⁴⁶ <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

equipment. Specifically, for each onroad construction vehicle, nonroad construction equipment, or generator, the contractor should submit to the developer's representative a report prior to bringing said equipment on site that includes:⁴⁷

- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.
- The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.
- The Certification Statement⁴⁸ signed and printed on the contractor's letterhead.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes:⁴⁹

- Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
- Any problems with the equipment or emission controls.
- Certified copies of fuel deliveries for the time period that identify:
 - Source of supply
 - Quantity of fuel
 - Quality of fuel, including sulfur content (percent by weight).

In addition to those measures, we also recommend that the City require the Applicant to implement the following mitigation measures, called "Enhanced Exhaust Control Practices,"⁵⁰ that are recommended by the Sacramento Metropolitan Air Quality Management District ("SMAQMD"):

1. The project representative shall submit to the lead agency and District a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.
 - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.
 - The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
 - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.
 - The District's Equipment List Form can be used to submit this information.

⁴⁷ Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

⁴⁸ Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf> The

NEDC Model Certification Statement can be found in Appendix A, p. 10.

⁴⁹ Diesel Emission Controls in Construction Projects, *available at*:

<http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf>

⁵⁰ <http://www.airquality.org/LandUseTransportation/Documents/Ch3EnhancedExhaustControlFINAL10-2013.pdf>

- The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
2. The project representative shall provide a plan for approval by the lead agency and District demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_x reduction and 45% particulate reduction compared to the most recent CARB fleet average.
 - This plan shall be submitted in conjunction with the equipment inventory.
 - Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
 - The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.
 3. The project representative shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.
 - Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency and District monthly.
 - A visual survey of all in-operation equipment shall be made at least weekly.
 - A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.
 4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

When combined together, these measures offer a cost-effective way to incorporate lower-emitting equipment into the Project's construction fleet, which subsequently, reduces emissions released during Project construction. A DEIR must be prepared to include additional mitigation measures, as well as include an updated air quality assessment to ensure that the necessary mitigation measures are implemented to reduce construction emissions. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval to ensure that the Project's construction-related emissions are reduced to the maximum extent possible.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impact

The IS/MND determines the Project's greenhouse gas (GHG) impact would be less than significant, yet fails to provide proper justification to support this claim (p. 25). As a result, the Project's GHG impacts are inadequately addressed.

According to the IS/MND,

“Construction GHG emissions are generated by vehicle engine exhaust from construction equipment on-road hauling trucks, vendor trips, and worker commuting trips. Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, SCAQMD staff recommends that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008)” (p. 26).

Furthermore, the IS/MND states,

“Proposed project activities will result in continuous greenhouse gas emissions from mobile, area, and operational sources... A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not officially been adopted by the SCAQMD. As an interim threshold based on guidance provided in the *CAPCOA CEQA and Climate Change* white paper, a non-zero threshold based on Approach 2 of the handbook will be used. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this method is 3,000 metric tons carbon dioxide equivalent (MTCO₂E) per year for residential and commercial projects. This threshold is based on the review of 711 CEQA projects. Greenhouse gas emissions associated with the proposed project is not expected to exceed the 3,000 MTCO₂E threshold based on assumptions for projects similar in size; therefore, impacts will be less than significant and no mitigation is required” (p. 26).

The IS/MND identifies several sources that will contribute to the Project’s GHG emissions, however, the IS/MND determines that these emissions will not result in a significant impact based on “assumptions for projects similar in size.” Furthermore, the IS/MND determines that the Project’s emissions will not exceed the SCAQMD’s established threshold of 3,000 metric tons of carbon dioxide equivalents per year (MT CO₂e/ yr). However, without first quantifying the proposed Project’s GHG emissions, there is no way of knowing if the Project’s GHG emissions will be above or below thresholds. According to CEQA Guidelines (Section 15064.4),

“The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.”⁵¹

⁵¹ “CEQA Guidelines.” *The Governor’s Office of Planning & Research*, 2011, available at: http://resources.ca.gov/ceqa/docs/FINAL_Text_of_Proposed_Amendments.pdf

Therefore, by simply stating that the Project's GHG impact would not be significant and by making no attempt to quantify or evaluate the Project's GHG emissions, the IS/MND violates requirements set forth by CEQA. The Project Applicant should have quantified the proposed Project's emissions and compared the emissions to applicable thresholds to determine if implementation of the Project would result in a significant GHG impact. We find the IS/MND's GHG analysis to be inadequate and should not be relied upon to determine Project significance. Until an updated analysis is conducted that correctly and thoroughly assesses the Project's GHG impacts, the conclusions made within the IS/MND should not be relied upon to determine the impact the Project will have on the surrounding environment.

Sincerely,



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



Hadley Nolan

Tom Brohard and Associates

October 19, 2017

Beverly Grossman Palmer
Strumwasser & Woocher LLP
10940 Wilshire Boulevard, Suite 2000
Los Angeles, CA 90024

SUBJECT: Review of Traffic Impact Study for The View Project at 5101 Overhill Drive in the County of Los Angeles – Traffic Issues

Dear Ms. Palmer:

As you requested and authorized, I, Tom Brohard, P.E., have reviewed the November 12, 2015 Traffic Impact Study (Traffic Study) and the traffic portions of various other documents regarding The View Project at 5101 Overhill Drive in the County of Los Angeles. The Proposed Project includes construction of an 88-unit condominium complex south of Stocker Street between La Brea Avenue and Overhill Drive. The documents I have reviewed included:

- November 12, 2015 Traffic Study prepared by Linscott, Law & Greenspan Engineers for the Proposed Project
- August 14, 2017 Appeal to the Los Angeles County Board of Supervisors of the decision of the Los Angeles County Regional Planning Commission regarding The View Project
- November 2014 Transportation Study for the Baldwin Hills Crenshaw Plaza Redevelopment Project prepared by Gibson Transportation Consulting

Until the various issues and concerns raised in this letter are addressed, there is substantial evidence that The View Project at 5101 Overhill Drive will have adverse traffic and transportation impacts that have not been properly disclosed, analyzed, and mitigated. The November 12, 2015 Traffic Study is obsolete and does not properly calculate, evaluate, or analyze the increase in vehicle trips that will be created by The View Project. Further studies and revisions are required to address the inadequate cumulative traffic analysis. The resulting significant traffic impact in the PM peak hour under cumulative conditions at the La Brea Avenue intersection with Slauson Avenue must be appropriately addressed with implementation of feasible mitigation measures for The View Project.

Education and Experience

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 45 years of professional engineering experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and now serve as the City Traffic Engineer for the City of Indio and as Consulting Transportation Engineer for the

*81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885 Fax (760) 398-8897
Email tbrohard@earthlink.net*

Ms. Beverly Palmer

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Cities of Big Bear Lake and San Fernando. I have extensive experience in traffic engineering and transportation planning. During my career in both the public and private sectors, I have reviewed numerous environmental documents and traffic studies for various projects as indicated on the enclosed resume.

Traffic and Transportation Issues

Based on my review of various documents, there is at least a “fair argument” that The View Project at 5101 Overhill Drive will have significant traffic and transportation impacts as follows:

- 1) Outdated Traffic Counts and Improper Timelines – The November 12, 2015 Traffic Study for The View Project prepared by Linscott, Law, & Greenspan is based on traffic counts at the seven study intersections made in September 2014, over three years ago. These counts do not represent current conditions. Page 4 of the Traffic Study assumes that the project will be completed by 2016 and that has passed. New traffic counts, together with reasonable timelines for construction and occupancy of The View Project, must be made as part of an updated and revised Traffic Study.
- 2) Pedestrian Access Would Not Meet ADA Requirements – Page 9 of the Traffic Study indicates that “new stairs” will be constructed at the southwest corner of the site to connect to La Brea Avenue. Typically, “stairs” would not be ADA accessible. Nearby public bus transit stops are deemed “accessible” but there is no evidence presented as to where these bus stops are located or if the paths of travel are in fact accessible to those with disabilities.
- 3) Traffic Volume Issues – In addition to the traffic counts being more than three years old, traffic volumes on certain street segments do not flow from intersection to intersection. In other words, traffic volumes leaving one intersection should match traffic volumes arriving at the next intersection downstream, particularly at adjacent intersections where there are no significant traffic generators in between them. As shown in Figure 5-1 for the weekday AM peak hour, 1204 vehicles travel eastbound on Stocker Street from Fairfax Avenue but only 1055 vehicles arrive on Stocker Street at La Brea Avenue/Overhill Drive. As shown in Figure 5-2 for the weekday PM peak hour, 1442 vehicles travel southbound on La Brea Avenue from Stocker Street/Overhill Drive but only 1245 vehicles arrive at Slauson Avenue. Traffic volumes must be adjusted for conservation of flow.
- 4) Incomplete Cumulative Project List – Table 6-1 on Page 21 of the Traffic Study identifies two proposed projects in the County and six proposed projects in the City of Los Angeles. The Stocker Street/Don Felipe Drive multi-

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family project as well as the Baldwin Hills Crenshaw Plaza Redevelopment Project are not included in the list of eight development projects. Furthermore, the Cumulus Project, the 1,200-unit residential mixed-use project located at Jefferson Street and La Cienega Boulevard, is not on the cumulative list. In addition, other projects could have also been under construction but not completed or occupied between the date of the traffic counts in September 2014 and the preparation of the list of projects. Over the last three years, other new projects may have also been approved but they were not considered in the cumulative project list in the outdated traffic study. By omitting traffic volumes from some cumulative projects, the future baseline traffic volumes are low and do not properly represent future conditions for Opening Day of The View Project.

- 5) Low Annual Ambient Growth Rate - Page 25 of the Traffic Study states that the annual ambient growth rate was assumed to be 0.14%. In my experience in the review of many traffic studies in the City of Los Angeles, an annual ambient growth rate of 1.00% per year has been typically used in nearly all traffic studies in the City. It is unlikely that construction of the 5101 Overhill Project would begin before 2018 and it would likely not be complete until 2020 at the earliest. At least 3 years of 1.00% per year annual ambient growth must be added to new baseline traffic counts gathered before the holiday season at the end of 2017 as part of a revised and updated Traffic Study.
- 6) Project Driveway Analysis – The View Project proposes two new access driveways on Overhill Drive but there is no analysis of the operation of either driveway. The Traffic Study generally concludes that stacking outside of the security gates will be 85' (about 4 cars in length) but there is no analysis as to whether this will be adequate or not. Typical minimum desirable stacking for driveways on high speed streets such as Overhill Drive should be a minimum of 100'. There also should be adequate width and distance for left turning vehicles headed north on Overhill Drive to make a two-step left turn before merging into northbound through traffic. From the interim striping plan in Appendix A, a painted non-traversable median within Overhill Drive beginning at the north side of the north driveway will prevent northbound left turning vehicles from legally accelerating and safely merging into Overhill Drive at the 65 miles per hour design speed required by the County.
- 7) No Consideration for Trucks – Truck-axle breakdown vehicle counts were not conducted or analyzed in the Traffic Study. Loaded 5-axle trucks typically equate to at least 2.5 passenger cars in the analysis of intersection capacity. The impact of trucks on the operating conditions of the intersections evaluated in the Traffic Study must be evaluated and considered, particularly since the roadways in the area are located in rolling terrain.

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8) Significant Traffic Impact at La Brea Avenue and Slauson Avenue – As part of my review of The View Project, I have also examined the traffic study for the Baldwin Hills Crenshaw Plaza Redevelopment Project. There are major inconsistencies in the PM peak hour analysis between the two studies at the intersection of La Brea Avenue and Slauson Avenue that must be reconciled. As set forth in the following paragraphs, there is substantial evidence that there will be a significant cumulative traffic impact in the PM peak hour at the intersection of La Brea Avenue at Slauson Avenue:

- a) Existing Baseline Traffic Volumes and Level of Service – The traffic study for The View Project collected traffic count data in September 2014. At the common intersection of La Brea Avenue and Slauson Avenue in the PM peak hour, that traffic study calculated a volume to capacity ratio of 0.887, Level of Service “D”.

Traffic counts for the Baldwin Hills Crenshaw Plaza Redevelopment Project were made three years earlier in 2011. At the common intersection of La Brea Avenue and Slauson Avenue in the PM peak hour, this traffic study calculated a volume to capacity ratio of 0.930, Level of Service “E”.

No physical improvements were made at the intersection of La Brea Avenue and Slauson Avenue between 2011 and 2014. The only possible explanation of the drop in the volume to capacity ratio would involve lower traffic volumes counted in 2014 than those recorded in 2011. The difference in the volume to capacity ratio of 0.043 is significant and represents the equivalent of just less than ½ a Level of Service.

In total, five intersections were counted in both traffic studies. While traffic volumes at La Brea Avenue and Rodeo Road remained the same in both peak hours in 2011 and in 2014, the other four intersections showed significant decreases between 2011 and 2014. These four intersections included La Cienega Boulevard and Stocker Street, La Brea Avenue and Overhill Drive-Stocker Street, La Brea Avenue and Stocker Street, and Overhill Drive and Slauson Avenue. In the AM peak hour, traffic volumes at the four intersections dropped by an average of 10.6%. In the PM peak hour, traffic volumes at the four intersections dropped by an average of 13.6%.

It is not possible for the traffic volumes to drop as much as the comparison above indicates, particularly when baseline traffic volumes are typically assumed to grow by 1% per year in the City of Los Angeles immediately adjacent to The View Project. The 2014 baseline traffic volumes used in the traffic study are flawed as they are significantly lower than those

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recorded in 2011 and cannot be used in a proper analysis of The View Project.

- b) Cumulative Baseline Project Conditions – Both traffic studies forecast an annual ambient traffic volume growth from the time when the baseline traffic counts were made until the projected opening date of the proposed projects (assumed to be 2020 for the Baldwin Hills Crenshaw Plaza Redevelopment Project and 2016 for The View Project). In addition, trips to and from approved projects that have not yet been built or fully occupied were added to forecast opening day traffic volumes. However, a significant difference was identified in the number of projects in the cumulative analysis between these two traffic studies.

For The View Project, only eight cumulative projects were identified and their trips were then added to derive the cumulative traffic volumes prior to adding project traffic at the study intersections. At the common intersection of La Brea Avenue and Slauson Avenue, The View Project traffic study calculated a volume to capacity ratio of 0.896 in the PM peak hour, Level of Service “D”, for the volumes that included annual ambient growth plus trips to and from the eight cumulative projects.

For the Baldwin Hills Crenshaw Plaza Redevelopment Project traffic study, 39 cumulative projects were identified and their trips were then added to derive the cumulative baseline traffic volumes. The cumulative baseline traffic volumes include annual ambient growth plus trips to and from the 39 cumulative projects including The View Project. At the common intersection of La Brea Avenue and Slauson Avenue, the Baldwin Hills Crenshaw Redevelopment Project traffic study calculated a volume to capacity ratio of 1.011 in the PM peak hour, Level of Service “F”. When trips for the Baldwin Hills Crenshaw Plaza Redevelopment Project are added to the cumulative baseline, the volume to capacity ratio increased up to 1.022 in the PM peak hour, Level of Service “F”. Traffic volumes from the extensive cumulative project list plus traffic volumes from the Baldwin Hills Crenshaw Plaza Redevelopment Project are required for proper cumulative analysis of The View Project.

- c) Significant Cumulative Traffic Impact at La Brea/Slauson – The View Project traffic study used outdated traffic counts, an unrealistically low annual ambient growth rate, and an incomplete listing of cumulative projects which omitted the Baldwin Hills Crenshaw Plaza Redevelopment Project and others including the Cumulus Project. Even with these errors, The View Project traffic study still increased the volume to capacity ratio at La Brea Avenue and Slauson Avenue to 0.896, Level of Service “D”, in the PM peak hour under Cumulative plus Project conditions. Correcting errors

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pointed out earlier in this letter would likely raise the volume to capacity ratio above 0.91, Level of Service "E". If the increase in the volume to capacity ratio is equal to or greater than 0.01, then there will be a significant traffic impact at La Brea Avenue and Slauson Avenue caused by The View Project.

As discussed throughout this letter, there is substantial evidence that The View Project will have adverse environmental impacts that have not been properly disclosed, analyzed, and mitigated. The outdated Traffic Study must be brought current and the various flaws and deficiencies outlined above must be addressed through further analysis. Feasible and effective mitigation measures for the significant traffic impacts that will occur under "Cumulative plus Project" conditions in the PM peak hour at the intersection of La Brea Avenue and Slauson Avenue must be developed and implemented. If you have questions regarding these comments, please call me at your convenience.

Respectfully submitted,

Tom Brohard and Associates



Tom Brohard, PE
Principal

Enclosure



Tom Brohard, PE

Licenses: 1975 / Professional Engineer / California – Civil, No. 24577
1977 / Professional Engineer / California – Traffic, No. 724
2006 / Professional Engineer / Hawaii – Civil, No. 12321

Education: 1969 / BSE / Civil Engineering / Duke University

Experience: 45+ Years

Memberships: 1977 / Institute of Transportation Engineers – Fellow, Life
1978 / Orange County Traffic Engineers Council - Chair 1982-1983
1981 / American Public Works Association – Life Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. Since May 2005, he has served as Consulting City Traffic Engineer for the City of Indio. He also currently provides “on call” Traffic and Transportation Engineer services to the Cities of Big Bear Lake and San Fernando. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

- Bellflower 1997 - 1998
- Bell Gardens 1982 - 1995
- Huntington Beach 1998 - 2004
- Lawndale..... 1973 - 1978
- Los Alamitos 1981 - 1982
- Oceanside..... 1981 - 1982
- Paramount 1982 - 1988
- Rancho Palos Verdes 1973 - 1978
- Rolling Hills 1973 - 1978, 1985 - 1993
- Rolling Hills Estates 1973 - 1978, 1984 - 1991
- San Marcos..... 1981
- Santa Ana 1978 - 1981
- Westlake Village 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over \$10 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

Tom Brohard and Associates

In his service to the City of Indio since May 2005, Tom has accomplished the following:

- ❖ Oversaw preparation and adoption of the 2008 Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain conditions.
- ❖ Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street and on Monroe Street over I-10 as well as justifications for protected-permissive left turn phasing at I-10 on-ramps, the first such installations in Caltrans District 8 in Riverside County; reviewed plans and provided assistance during construction of both \$2 million projects to install traffic signals and widen three of four ramps at these two interchanges under Caltrans encroachment permits.
- ❖ Reviewed traffic signal, signing, striping, and work area traffic control plans for the County's \$45 million I-10 Interchange Improvement Project at Jefferson Street.
- ❖ Reviewed traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvements of the I-10 Interchanges at Jefferson Street, Monroe Street, Jackson Street and Golf Center Parkway.
- ❖ Oversaw preparation of plans, specifications, and contract documents and provided construction assistance for over 50 traffic signal installations and modifications.
- ❖ Reviewed and approved over 1,200 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects.
- ❖ Oversaw preparation of a City wide traffic safety study of conditions at all schools.
- ❖ Obtained \$47,000 grant from the California Office of Traffic Safety and implemented the City's Traffic Collision Database System. Annually reviews "Top 25" collision locations and provides traffic engineering recommendations to reduce collisions.
- ❖ Prepared over 900 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping.
- ❖ Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 400 street segments.
- ❖ Reviewed and approved traffic impact studies for more than 35 major projects and special events including the annual Coachella and Stagecoach Music Festivals.
- ❖ Developed and implemented the City's Golf Cart Transportation Program.

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.