



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

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

June 26, 2023

Gary Ho
Blum Collins LLP
707 Wilshire Blvd, Ste. 4880
Los Angeles, CA 90017

**Subject: Comments on the 550 Piercy Road Industrial Development Project (SCH No.
 2023060249)**

Dear Mr. Ho,

We have reviewed the June 2023 Initial Study and Mitigated Negative Declaration (“IS/MND”) for the 550 Piercy Road Industrial Development (“Project”) located in the City of San Jose (“City”). The Project proposes to construct 430,000-square-feet (“SF”) of industrial space and 427 parking spaces on the 28.9-acre site.

Our review concludes that the IS/MND fails to adequately evaluate the Project’s air quality and greenhouse gas impacts. As a result, emissions associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. An Environmental Impact Report (“EIR”) should be prepared to adequately assess and mitigate the potential air quality and greenhouse gas impacts that the project may have on the environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The Air Quality Assessment (“AQA”), included as Appendix A to the IS/MND, relies on emissions calculated with California Emissions Estimator Model (“CalEEMod”) Version 2020.4.0 (p. 44).¹ CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-

¹ “CalEEMod Version 2020.4.0.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <http://www.aqmd.gov/caleemod/download-model>.

specific values, but the California Environmental Quality Act (“CEQA”) requires that such changes be justified by substantial evidence. Once all of the values are inputted into the model, the Project’s construction and operational emissions are calculated, and “output files” are generated. These output files disclose to the reader what parameters are utilized in calculating the Project’s air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project’s CalEEMod output files, provided in the AQA as Appendix A to the IS/MND, we found that several model inputs are not consistent with information disclosed in the IS/MND. As a result, the Project’s construction and operational emissions may be underestimated. An EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that operation of the Project will have on local and regional air quality.

Underestimated Parking Land Use Size

According to the IS/MND:

“The proposed project includes 84 loading docks (46 for Building 1 and 38 for Building 2), 34 automotive parking stalls (including 12 accessible parking spaces, 140 electric vehicle capable parking spaces, 36 spaces with Electric Vehicle Supply Equipment (EVSE), and 8 clean air spaces), 28 motorcycle stalls, 36 bicycle spaces (10 long-term spaces and 26-short-term spaces), and 80 trailer parking stalls” (emphasis added) (p. 3).

As such, the model should have included 427 parking spaces.² However, review of the CalEEMod output files demonstrates that the “550 Piercy Rd” model includes only 334 parking spaces (see excerpt below) (Appendix A, pp. 33).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Unrefrigerated Warehouse-No Rail	430.00	1000sqft	29.00	430,000.00
Parking Lot	334.00	Space	0.00	133,600.00

As demonstrated above, the amount of parking spaces included in the models is underestimated by 93 spaces.³ This underestimation presents an issue, as the square footage of parking land uses is used for certain calculations such as determining the area to be painted and stripped (i.e., VOC emissions from architectural coatings) and area to include lighting (i.e., energy impacts).⁴ By underestimating the proposed parking land use size, the models may underestimate the Project’s construction-related and operational emissions and should not be relied upon to determine Project significance.

² Calculated: 347 automotive parking spaces + 80 trailer parking stalls = 427 total parking spaces.

³ Calculated: (427 proposed parking spaces) – (334 parking spaces) = 93 underestimated stalls.

⁴ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/calceemod/user’s-guide>, p. 29.

Unsubstantiated Reductions to Worker, Vendor, and Hauling Trip Numbers

Review of the CalEEMod output files demonstrates that the “550 Piercy Rd” model includes several changes to the default worker, vendor, and hauling trip numbers (see excerpt below) (Appendix A, pp. 36, 37).

Table Name	Column Name	Default Value	Value
tblTripsAndVMT	HaulingTripNumber	42,023.00	0.00
tblTripsAndVMT	VendorTripNumber	92.00	0.00
tblTripsAndVMT	WorkerTripNumber	47.00	0.00
tblTripsAndVMT	WorkerTripNumber	237.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00

As demonstrated above, the models reduce the worker, vendor, and hauling trip numbers to zero. As previously mentioned, the CalEEMod User’s Guide requires any changes to model defaults be justified.⁵ According to the “User Entered Comments & Non-Default Data” table, the justification provided for these changes is:

“EMFAC2021 adjustment 0 trips, building const = 1,644 concrete truck round trips, paving = 861 round trips. Estimated from Google earth overlay of site plan” (Appendix A, pp. 34).

However, these changes remain unsupported, as the justification fails to discuss the reason for the worker, vendor, and hauling trip numbers being set to zero. Furthermore, the IS/MND and associated documents fail to mention or justify the revised worker, vendor, and hauling trip numbers whatsoever. This is incorrect, as previously mentioned according to the CalEEMod User’s Guide:

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

Here, as the IS/MND and associated documents fail to provide substantial evidence to support the revised worker, vendor and hauling trip numbers, we cannot verify the changes.

These unsubstantiated reductions present an issue, as CalEEMod uses the worker, vendor, and hauling trip numbers to estimate the construction-related emissions associated with on-road vehicles.⁷ By including unsubstantiated changes to the default worker, vendor, and hauling trip numbers, the model

⁵ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/caleemod/user's-guide>, p. 1, 14.

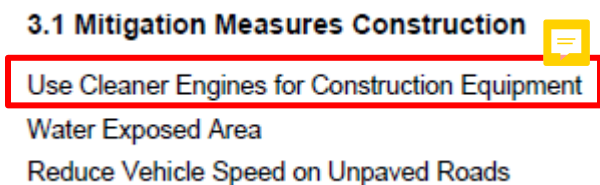
⁶ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/caleemod/user's-guide>, p. 13, 14.

⁷ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/caleemod/user's-guide>, p. 34.

may underestimate the Project’s mobile-source construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Application of Tier 4 Interim Mitigation

Review of the CalEEMod output files demonstrates that the “550 Piercy Rd” model includes the following construction-related mitigation measures (see excerpt below) (Appendix A, pp. 59).



As a result, the model assumes that the Project’s off-road construction equipment fleet would meet Tier 4 interim emissions standards (see excerpt below) (Appendix A, pp. 34).

Table Name	Column Name	Default Value	New Value
tbiConstEquipMitigation	Tier	No Change	Tier 4 Interim
tbiConstEquipMitigation	Tier	No Change	Tier 4 Interim
tbiConstEquipMitigation	Tier	No Change	Tier 4 Interim
tbiConstEquipMitigation	Tier	No Change	Tier 4 Interim
tbiConstEquipMitigation	Tier	No Change	Tier 4 Interim

Note: Screenshot does not include all the applicable changes.

As previously mentioned, the CalEEMod User’s Guide requires any changes to model defaults be justified.⁸ According to the “User Entered Comments & Non-Default Data” table, the justification provided for these changes is:

“BMPs, tier 4 interim mitigation” (Appendix A, pp. 24).

However, the assumption that the Project’s off-road construction equipment fleet would meet Tier 4 interim emissions standards remains unsupported for two reasons.

First, the IS/MND and associated documents fail to mention or justify the inclusion of Tier 4 interim emissions standards whatsoever. This is incorrect, as according to the CalEEMod User’s Guide:

“CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.”⁹

⁸ “CalEEMod User’s Guide Version 2020.4.0.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/caleemod/user-s-guide>, p. 1, 14.

⁹ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at: <https://www.aqmd.gov/caleemod/user-s-guide>, p. 13, 14.

As such, until additional information becomes available that substantiates the above-mentioned construction-related mitigation measures, we are unable to verify that the inclusion of Tier 4 interim emissions standards in the model are an accurate reflection of the proposed construction equipment.

Second, the IS/MND fails to explicitly require these standards through formal mitigation measures. This is incorrect, as according to the Association of Environmental Professionals (“AEP”) *CEQA Portal Topic Paper* on mitigation measures:

“While not ‘mitigation’, a good practice is to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP). Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact” (emphasis added).¹⁰

As demonstrated in the excerpt above, measures that are not formally included in the mitigation monitoring and reporting program (“MMRP”) may be eliminated from the Project’s design altogether. As the use of construction equipment with Tier 4 interim emissions standards are not formally included as mitigation measures, we cannot guarantee that these standards would be implemented, monitored, and enforced on the Project site. Consequently, the model’s assumption that the off-road construction equipment fleet would adhere to Tier 4 interim emissions standards is incorrect.

Unsubstantiated Changes to Wastewater System Treatment Percentages

Review of the CalEEMod output files demonstrates that the “550 Piercy Rd” model includes several changes to the default wastewater treatment system percentage (see excerpt below) (Appendix A pp. 54).

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

As demonstrated in the excerpt above, the model assumes that the Project’s wastewater would be treated 100% aerobically. As previously mentioned, the CalEEMod User’s Guide requires any changes to model defaults be justified.¹¹ According to the “User Entered Comments & Non-Default Data” table, the justification provided for these changes is:

¹⁰ “CEQA Portal Topic Paper Mitigation Measures.” AEP, February 2020, available at:

<https://cegaportal.org/tp/CEQA%20Mitigation%202020.pdf>, p. 6.

¹¹ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, available at:

<https://www.aqmd.gov/caleemod/user's-guide>, p. 1, 14.

“Wastewater treatment 100% aerobic - no septic tanks or lagoons” (Appendix A, pp. 34).

However, review of the San Jose-Santa Clara Regional Wastewater Facilities treatment process reveals the use of anaerobic bacteria in the digesters phase of wastewater treatment.¹² As such, the assumption that the Project’s wastewater would be treated 100% aerobically is incorrect.

These unsubstantiated changes present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project’s total GHG emissions.¹³ By including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project’s GHG emissions and should not be relied upon to determine Project significance.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

According to the GHG Reduction Strategy Compliance Checklist, provided as Appendix E to the IS/MND, the Project would be consistent with the City’s Greenhouse Gas Reduction Strategy (“GHGRS”). However, the IS/MND fails to quantify the Project’s total greenhouse gas (“GHG”) emissions whatsoever. As such, we are unable to verify that the Project would not have a significant GHG impact. An EIR should be prepared to include a GHG analysis which adequately evaluates the Project’s emissions. Until such an analysis is prepared, the Project should not be approved.

Furthermore, it is policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045. While the IS/MND states that the Project would include a “solar ready rooftop,” we emphasize that the IS/MND should consider incorporating a full solar power system into the Project design (p. 16). Until the feasibility of generating on-site renewable energy production is considered beyond the construction of a roof with solar readiness, the Project should not be approved.

Disclaimer

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

¹² “Treatment Process.” San Jose-Santa Clara Regional Wastewater Facility, *available at*: <https://www.sanjoseca.gov/your-government/environment/water-utilities/regional-wastewater-facility/treatment-process>.

¹³ “CalEEMod User’s Guide.” California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at*: <https://www.aqmd.gov/calceemod/user's-guide>, p. 45.

otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink that reads "Matt Hagemann". The signature is fluid and cursive, with a long horizontal stroke at the end.

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

A handwritten signature in blue ink that reads "Paul Rosenfeld". The signature is cursive and clearly legible.

Paul E. Rosenfeld, Ph.D.

Attachment A: Matt Hagemann CV
Attachment B: Paul Rosenfeld CV