



South Coast Air Quality Management District

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1651 Sixteenth Street
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Review of the Draft Environmental Impact Report (Draft EIR) For the Santa Monica-Malibu Unified School District

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are intended to provide guidance to the lead agency and should be incorporated into the revised Draft or Final Environmental Impact Report (Draft or Final EIR) as appropriate.

AQMD staff is concerned that the project's calculated air quality and health risk impacts may be underestimated in the Draft EIR. Specifically, AQMD staff is concerned that the emissions rate for criteria pollutants from the I-10 Freeway may be incorrect resulting in underestimated air quality impacts. Also, given that the proposed project will reduce the buffer which separates the classrooms and freeway the AQMD staff strongly recommends that the lead agency incorporate additional mitigation to reduce potential exposure to freeway pollution. Lastly, AQMD staff recommends that the lead agency provide additional mitigation to reduce the project's significant localized PM10 and PM2.5 impacts during construction.

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment
[IM:DG](#)
LAC100430-01
Control Number

HEALTH RISK ASSESSMENT AND CRITERIA POLLUTANT ANALYSIS

AQMD staff appreciates that the lead agency conducted an analysis to determine potential risks to students and staff by relocating the proposed project closer to the I-10 freeway. This analysis included both a health risk assessment of toxic air contaminants, and an analysis of criteria pollutants such as particulate matter (PM10 and PM2.5) and nitrogen oxides (NOx). The lead agency determined that incremental impacts are less than significant for both health risks and criteria pollutants. However, AQMD staff is concerned that this analysis may have underestimated potential impacts based on the following factors.

Freeway Pollution

1. Recent research has revealed that pollutants found in close proximity to freeways are associated with a variety of adverse health effects, independent of regional air quality impacts¹. These can include reduced lung capacity and growth²; cardiopulmonary disease³; increased incidence of low birth weight, premature birth, and birth defects⁴; and exacerbation of asthma⁵. At this time no methodology has been established to quantitatively assess the impacts from some of the pollutants thought to be responsible for these health effects (e.g. ultrafine particles). Nonetheless, it is clear that the concentration of these pollutants increases substantially in close proximity to freeways (<500 feet). The proposed project will reduce the buffer separating the classrooms and freeway from approximately 220 feet to roughly 80 feet. The recommended buffer distance between schools and freeways specified by the California Air Resources Board is 500 feet. AQMD staff therefore recommends that the lead agency present a brief discussion of potential health effects related to freeway-related contaminants (e.g. ultrafine particles) in the FEIR. In addition, AQMD staff recommends that the lead agency consider the mitigation measures specified below to reduce the severity of these impacts to the maximum extent feasible.

Criteria Pollutant Emission Rates

2. It is unclear if the criteria pollutant emission rates used in the dispersion modeling analysis are correct. As an example, in the On-Road Mobile Sources Emission Rate Computation spreadsheet (Appendix B of the HRA), the diesel particulate matter (DPM) emission rate for the main link of the I-10 freeway is 0.425 grams/mile, while the PM10 emission rate is only 0.273 grams/mile. As DPM is a subset of PM10, it is unclear how the PM10 emission rate could be lower than the DPM emission rate. Based on the review of supplemental electronic spreadsheets transmitted to AQMD

¹ "Special Report 17. Traffic-related air pollution: A critical review of the literature on emissions, exposure, and health effects". Health Effects Institute, May 2009; 394 p.

² "Effect of exposure to traffic on lung development from 10 to 18 years of age: a cohort study". Gauderman WJ et al., Lancet, February 2007; 369 (9561): 571-7.

³ "Exposure to traffic and the onset of myocardial infarction". Peters A et al., The New England Journal of Medicine, 351(17):1721-1730

⁴ Ritz B, et al. 2002 Ambient air pollution and risk of birth defects in Southern California. Am J Epidemiology, 155:17-25

⁵ McConnell R, et al. 2006. Traffic, susceptibility, and childhood asthma. Environ Health Perspectives 114(5):766-72

staff, the DPM emission rate appears to be the appropriate emission rate; however it is unclear how the criteria pollutant emission rates were derived. Specifically, the emission rates in the 'emfac speed adj CRITERIA' worksheet do not appear to correlate with emission rates calculated elsewhere. Additional discussion of the criteria pollutant emission rates should be included in the FEIR. If the rates used in the DEIR are underestimated, then the criteria pollutants should be remodeled to determine potential impacts.

3. The emission factor for break wear and tire wear used in the reentrained road dust calculation does not appear to correlate with the EMFAC model run included in the HRA. This emission factor should be re-examined in the FEIR and remodeled if necessary.

PM10 Modeled Concentration

4. The PM10 concentration for the proposed development reported in Table 3.2-8 of the DEIR is 5.32 ($\mu\text{g}/\text{m}^3$). The highest value reported in the model output file provided electronically to AQMD staff is 6.16 ($\mu\text{g}/\text{m}^3$). This value should be reviewed and updated in the FEIR as necessary.

AIR QUALITY MITIGATION MEASURES

Mitigation Measures to Reduce Exposure to Freeway Pollution

5. AQMD staff recommends that the lead agency consider the following mitigation measures to reduce the potential exposure of students and staff to pollutants coming from the I-10 freeway.
 - ❖ Reconfigure the classroom building so that the bulk of the building is located farther from the freeway. Currently the parking lot serves as a buffer zone between educational activities and the freeway. This buffer should be preserved in the future project.
 - ❖ Place HVAC system intakes as far south on the building as feasible.
 - ❖ Include high efficiency filters in the HVAC system (rated at least MERV 13) as a mitigation measure. This mitigation should include a commitment to regular maintenance and replacement of filters as needed.
 - ❖ Provide positive pressure with the HVAC system in all occupied spaces to prevent the incursion of outside air that bypasses the HVAC filters.
 - ❖ In order to reduce the amount of outside unfiltered air in classrooms, do not place operable windows in close proximity to the freeway. In addition, place signs encouraging faculty to keep doors closed when not in use.

Localized PM10 and PM2.5 Mitigation Measures During Construction

6. On pages 3.2-27 through 3.2-29 in Section 3.2 (Air Quality) the lead agency evaluated localized air quality impacts from construction activities that will occur in close proximity (25 to 33 feet) to sensitive receptors (i.e. residential properties) surrounding the project site. As a result, the lead agency's localized construction air

quality analysis demonstrates that criteria pollutants including Particulate Matter (PM10) and Fine Particulate Matter (PM2.5) emissions exceed the AQMD's daily significance thresholds. Therefore, AQMD staff recommends that the lead agency consider adding the following mitigation measures to further reduce localized PM10 and PM2.5 air quality impacts from the construction phase of the project, if not otherwise implemented by the requirements of Rule 403:

- ❖ Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more);
- ❖ Install wheel washers where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip;
- ❖ Configure construction parking to minimize traffic interference;
- ❖ All trucks hauling dirt, sand, soil, or other loose materials are to be covered;
- ❖ Suspend all excavating and grading operations when wind gusts (as instantaneous gusts) exceed 25 mph;
- ❖ Use electricity from power poles rather than temporary diesel or gasoline power generators;
- ❖ Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow;
- ❖ Schedule construction activities that affect traffic flow on the arterial system to off-peak hour to the extent practicable;
- ❖ Reroute construction trucks away from congested streets or sensitive receptor areas;
- ❖ Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site;
- ❖ Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation;
- ❖ All streets shall be swept at least once a day using SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water);
- ❖ Replace ground cover in disturbed areas as quickly as possible;
- ❖ Water active sites at least twice daily;

- ❖ Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces;
- ❖ Traffic speeds on all unpaved roads to be reduced to 15 mph or less;
- ❖ Require all on-site construction equipment to meet EPA Tier 2 or higher emissions standards according to the following:
 - ✓ April 1, 2010, to December 31, 2011: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 2 offroad emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - ✓ January 1, 2012, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - ✓ Post-January 1, 2015: All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
 - ✓ A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.
- ❖ For additional measures to reduce off-road construction equipment, refer to the mitigation measure tables located at the following website:
www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html.