



South Coast Air Quality Management District

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SENT VIA E-MAIL AND USPS:

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Draft Environmental Impact Report (Draft EIR) for the Proposed Wedgeworth K-8 School and Residential Development Project (SCH No.: 2019071040)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final EIR.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to demolish 187,310 square feet of existing school facilities and four baseball fields, and construct 160 residential units and 82,998 square feet of new school facilities to accommodate an increase in enrollment capacity from 600 to 1,200 students on 20 acres (Proposed Project). The Proposed Project is located at 16494 Wedgeworth Drive on the northwest corner of Wedgeworth Drive and Ridge Park Drive in the community of Hacienda Heights within Los Angeles County. Construction of the Proposed Project will occur in two phases (Phases 1 and 2) over a seven-year period from 2020 through 2026¹. It is anticipated that Phase 1, which includes operations of the new school facilities, will become operational while Phase 2 is still under construction². Upon reviews of Figure 3-4: *Conceptual Wedgeworth K-8 School and Residential Development Site Plan* in the Draft EIR and aerial photographs, South Coast AQMD staff found that the Proposed Project will be located within 500 feet of State Route 60 (SR-60)³.

South Coast AQMD Staff's Summary of the Air Quality Analysis

In the Air Quality Analysis Section, the Lead Agency quantified the Proposed Project's construction emissions from Phases 1 and 2, including overlapping construction phases, and compared those emissions to South Coast AQMD's recommended regional and localized air quality CEQA significance thresholds. Based on the analyses, the Lead Agency found that during Phase 1, the Proposed Project's maximum unmitigated construction air quality impacts would be significant for regional nitrogen oxide (NOx) emissions at 111 pounds per day (lbs/day)⁴, which is above South Coast AQMD's air quality CEQA significance threshold for NOx at 100 lbs/day, and for localized PM10 and PM2.5 emissions during overlapping site preparation, grading, and utility trenching phases⁵. During Phase 2, the Proposed Project's maximum unmitigated construction air quality impacts would be significant for regional volatile organic compounds (VOC) at 100 lbs/day, which is above South Coast AQMD's air quality CEQA significance threshold for VOC at 75 lbs/day. The Lead Agency is committed to implementing construction Mitigation Measures (MMs) AQ-1 through AQ-3, which require that all construction equipment used for building demolition activities meet EPA's Tier 3 off-road emissions standards, that all interior architectural coatings meet a low VOC concentration of 30 grams per liter, and that all exposed

¹ Draft EIR. Chapter 3. Project Description. "3.3.1.2 Project Phasing" Page 3-3.

² *Ibid.*

³ *Ibid.* Page 3-11.

⁴ Draft EIR. Chapter 5.1. Air Quality. Pages 5.1-25 through 5.1-26.

⁵ *Ibid.* Pages 5.1-28 through 5.1-27.

ground surfaces and disturbed areas be watered three times per day during Phase 1 site preparation⁶. With implementation of MMs AQ-1 through -3, maximum regional NO_x and VOC emissions from construction would be reduced to less than significant at 78 lbs/day and 60 lbs/day, respectively. Localized PM₁₀ and PM_{2.5} emissions would also be reduced to less than significant⁷.

The Lead Agency also quantified the Proposed Project's operational emissions from Phase 1 and Phases 1 and 2 combined. Based on the analyses, the Lead Agency found that the Proposed Project's operational air quality impacts would be less than significant⁸. As such, no mitigation measures for operational air quality impacts were included⁹.

The Lead Agency prepared a Health Risk Assessment (HRA) analysis to disclose potential health risks for receptors within a quarter-mile radius to the school, which includes SR-60. The Lead Agency found that the unmitigated cancer risk from the surrounding high-volume freeway and existing emission sources would be 2.4 in one million for students¹⁰ and 1.5 in one million for staff¹¹, both of which would not exceed South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk¹².

The Lead Agency included in the Draft EIR discussions on applicable South Coast AQMD rules¹³, including Rule 401 – Visible Emissions¹⁴, Rule 402 – Nuisance¹⁵, Rule 403 – Fugitive Dust¹⁶, Rule 445 – Wood-Burning Devices¹⁷, Rule 1113 – Architectural Coatings¹⁸, and Rule 1403 – Asbestos Emissions from Demolition¹⁹.

South Coast AQMD Staff's General Comments

South Coast AQMD staff has comments on the Air Quality and HRA Analyses. First, the Lead Agency did not discuss or analyze an overlapping construction and operation impact scenario. Second, the Proposed Project's operational emissions from operation of school buses may be underestimated. Third, the Lead Agency did not use the appropriate age bins, starting from the third trimester, to calculate cancer risk for future students at the Proposed Project. Moreover, although the Lead Agency performed a HRA analysis for future students at the Proposed Project, it did not discuss the potential long-term health risk to future residents who will live at the Proposed Project in close proximity to SR-60, which is capable of attracting diesel fueled, heavy-duty trucks that emit diesel particulate matter (DPM). To further reduce the Proposed Project's regional and localized air quality impacts during construction and operation, South

⁶ *Ibid.* Page 5.1-33.

⁷ *Ibid.* Pages 5.1-34 through 5.1-35.

⁸ *Ibid.* Pages 5.1-26 through 5.1-27.

⁹ *Ibid.*

¹⁰ Draft EIR. Appendix D: Health Risk Assessment. Page 21.

¹¹ *Ibid.*

¹² South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

¹³ *Ibid.* Pages 5.1-10 through 5.1-11.

¹⁴ South Coast AQMD Rule 401 – Visible Emissions. Accessed at: <http://www.aqmd.gov/docs/default-source/compliance/visible-emissions.pdf>

¹⁵ South Coast AQMD Rule 402 – Nuisance. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf>

¹⁶ South Coast AQMD Rule 403 – Fugitive Dust. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>

¹⁷ South Coast AQMD Rule 455 – Wood-Burning Devices. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-445.pdf>

¹⁸ South Coast AQMD. Rule 1113 – Architectural Coatings. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf>

¹⁹ South Coast AQMD. Rule 1403 – Asbestos Emissions from Demolition. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf>

Coast AQMD staff recommends revisions to existing air quality mitigation measures and additional mitigation measures that the Lead Agency should incorporate in the Final EIR. South Coast AQMD staff also recommends that the Lead Agency incorporate strategies to reduce exposures to DPM. Please see the attachment for more information.

Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), South Coast AQMD staff requests that the Lead Agency provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR. In addition, issues raised in the comments should be addressed in detail giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and to the public who are interested in the Proposed Project. Further, if the Lead Agency makes the finding that the recommended revisions to MM AQ-1 and AQ-3 and the additional mitigation measures are not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting them in the Final EIR (CEQA Guidelines Section 15091).

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Assistant Air Quality Specialist, at amullins@aqmd.gov or (909) 396-2402, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment
LS:AM
LAC191206-02
Control Number

ATTACHMENT

Air Quality Analysis – Overlapping Construction and Operational Activities

1. Based on a review of the Air Quality Analysis, South Coast AQMD staff found that the Lead Agency did not discuss or analyze a scenario where construction activities overlap with net new operational activities (e.g., some components of Phase 1 may be operational while some components of Phase 2 are under construction). Since implementation of the Proposed Project is expected to occur in two phases over a seven-year timeframe from 2020 to beyond 2026²⁰, it is reasonably foreseeable that construction and operation of the two phases may overlap. If an overlapping construction and operation scenario is reasonably foreseeable, to conservatively analyze a worst-case impact scenario, South Coast AQMD staff recommends that the Lead Agency use its best efforts to identify the overlapping construction and operational years and development components, combine construction emissions (including emissions from demolition) with operational emissions, and compare the combined emissions to South Coast AQMD's air quality CEQA *operational* thresholds of significance to determine the level of significance in the Final EIR, unless the Lead Agency includes requirement(s) to prohibit overlapping construction and operational activities in the Final EIR.

Air Quality Analysis – CalEEMod Mobile Sources

2. In the main body of the Draft EIR²¹ and Appendix J: *Traffic*²², the Lead Agency explained that the Proposed Project, which includes a capacity increase of 600 more students, will include the operation of school buses. Upon review of the CalEEMod output files in Appendix C: *Air Quality/GHG Data*, South Coast AQMD staff found that the fleet mix used in CalEEMod to quantify the Proposed Project's net new operational emissions from mobile sources assumed that school buses will only make up 0.000429%, or less than 0.5 percent, of the Proposed Project's elementary school fleet mix²³. Since operation of the Proposed Project includes an increase in student capacity by 50 percent from 600 to 1,200 students, it is reasonably foreseeable that additional school buses may be needed to accommodate the enrollment increase, which may generate additional operational emissions. If it is reasonably foreseeable that operation of the Proposed Project will require an increase in the amount of school buses, in addition to what is already in operation, the Lead Agency should quantify operational emissions from new school bus trips, and include those emissions in the Proposed Project's operational emissions profile to be compared to South Coast AQMD's air quality CEQA significance thresholds for operation to determine the level of significance in the Final EIR. If emissions from new school bus trips are not included in the Final EIR, the Lead Agency should provide reasons for not including them supported by substantial evidence in the record.

Health Risk Assessment (HRA) Analysis for Sensitive Receptors Sited Near a Freeway and Other Sources of Air Pollution

3. Notwithstanding the court rulings, South Coast AQMD staff recognizes that Lead Agencies that approve CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. Because of South Coast AQMD's concern about the potential public health impacts of siting sensitive populations within close proximity to major sources of air pollution, such as high-volume freeways, South Coast AQMD staff recommends that the Lead Agency review and consider the following comments when making local planning and land use decisions.

HRA Analysis for Future New School Children and Staff Sited Near SR-60

²⁰ Draft EIR. Chapter 3. Project Description. "3.3.1.2 Project Phasing" Page 3-3.

²¹ *Ibid.* Page 3-2.

²² Draft EIR. Appendix J: *Traffic*. Page 61.

²³ Draft EIR. Appendix C: *Air Quality/GHG Data*. CalEEMod Output File "Wedgeworth ES Operations Run". PDF page 525.

4. In the Draft EIR, the Lead Agency prepared a mobile source HRA analysis to disclose potential health risks to future new students attending and staff working at the Proposed Project. Upon review of the HRA analysis, South Coast AQMD staff found that the parameters used to calculate cancer risk were improper, which may have led to an under-estimation of the health risk impacts in the Draft EIR. Detailed comments are as follows:
 - a) The Lead Agency used nine years of exposure to calculate cancer risk to students at Wedgeworth Elementary School, consisting of risk exposures for the 2 to 16 years age bin²⁴. The 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) guidelines acknowledge that children are more susceptible to exposures to air toxics and have revised the way cancer risks are estimated to take this into account. When calculating cancer risk to students, South Coast AQMD staff recommends that the Lead Agency start from the third trimester, calculate cancer risk for each individual age group (i.e., the third trimester to 0 year age bin, the 0 to 2 years age bin, the 2 to 9 years age bin, and the 9 to 16 years age bin), assign proper exposure parameters for each individual age group, sum cancer risks for individual age groups to estimate cancer risk for a 30-year exposure duration, and compare the summed cancer risk to South Coast AQMD CEQA significance threshold of 10 in a million for cancer risk to determine the level of significance in the Final EIR.
 - b) The Lead Agency modeled SR-60's operational emissions during the hours of school operation (Mondays through Fridays 8:00AM-4:00PM), which would equal to 40 hours of operation per week, rather than assuming continuous operations of vehicles and trucks on SR-60. The Lead Agency also used improper emission scalars when modeling the variable emissions. South Coast AQMD staff recommends emission sources from SR-60 be modeled as continuous operations (24 hours/day, seven days/week, and 52 weeks/year) by using the default emission rate of 1g/s, 24 hours a day, for 365 days a year in AERMOD to estimate the cancer risks. Alternatively, if the Lead Agency has substantial evidence to support the restriction of operating hours for SR-60, the Lead Agency should revise the variable emission scalar in AERMOD. Since continuous operations occur over seven days a week result in 168 hours (24 hours multiplied by seven days), a variable emissions scenario should account for 168 hours of operation, rather than only 40 hours. Therefore, the Lead Agency should use 4.2 instead of 0.9²⁵ for each hour of operation (168 hours divided by 40 hours) and 0 for each hour of nonoperation in AERMOD.

HRA Analysis for Future Residents Sited Near SR-60

5. Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include schools, daycare centers, nursing homes, elderly care facilities, hospitals, and residential dwelling units. As stated above, the Proposed Project will include construction of 160 residential units. Based on a review of Figure 3-4: *Conceptual Wedgeworth K-8 School and Residential Development Site Plan* in the Draft EIR, South Coast AQMD staff found that SR-60 is within 27 feet of the residential portion of the Proposed Project. Sensitive receptors living at the Proposed Project could be exposed to DPM emissions from diesel fueled, heavy-duty trucks passing by on SR-60. The California Air Resources Board (CARB) has identified DPM as a toxic air contaminant based on its carcinogenic effects²⁶. Therefore, South Coast AQMD staff recommends

²⁴ *Ibid.* Appendix D: *Health Risk Assessment*. Page D-6.

²⁵ Technical Excel File "SEI for SR-60". The "Hour of Day Scalars" the Lead Agency used for Passenger Vehicles from 8:00 AM – 4:00 PM include: .933, .911, .922, .939, .956, .977, .946, .931; and scalars for Trucks for the same operational hours include: .922, .865, .867, .883, .917, .950, .932, .923.

²⁶ California Air Resources Board. August 27, 1998. Resolution 98-35. Accessed at: <http://www.arb.ca.gov/regact/diesltac/diesltac.htm>.

that the Lead Agency consider health impacts on future residents living at the Proposed Project by performing a mobile source HRA²⁷ analysis to disclose the potential health risks in the Final EIR²⁸. This will facilitate the purpose and goal of CEQA on public disclosure and enable decision-makers with meaningful information to make an informed decision on project approval. This will also foster informed public participation by providing the public with useful information that is needed to understand the potential health risks from living in close proximity to freeways.

Guidance on Siting Sensitive Receptors Near a Freeway or Other Sources of Air Pollution

6. South Coast AQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and South Coast AQMD to reduce community exposure to source-specific and cumulative air pollution impacts, South Coast AQMD adopted the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* in 2005²⁹. This Guidance document provides recommended policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. Additional guidance on siting incompatible land uses can be found in the CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. In the Handbook, CARB recommends avoiding new sensitive land uses such as the Proposed Project (e.g., students and residents) within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day³⁰. Therefore, South Coast AQMD staff recommends that the Lead Agency review these guidance documents when making local planning and land use decisions.

Recommended Revisions to Existing Air Quality Mitigation Measures (MMs) AQ-1 and AQ-3

7. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse air quality impacts. With the implementation of MMs AQ-1 and AQ-3, which require the use of Tier 3 construction equipment and watering of disturbed soil three times per day, maximum localized PM10 construction emissions would be reduced from 16.22 lbs/day to 13.14 lbs/day, which would be slightly below South Coast AQMD's CEQA localized air quality significance threshold at 14 lbs/day³¹ for construction in Source Receptor Area 11 – South San Gabriel Valley (SRA 11). Additionally, maximum localized PM2.5 construction emissions would be reduced from 10.18 lbs/day to 8.11 lbs/day, slightly below South Coast AQMD's CEQA localized air quality significance threshold at 9 lbs/day³² for construction in SRA 11. To further reduce the Proposed Project's localized air quality impacts from PM10 and PM2.5 emissions during construction on nearby sensitive receptors such as existing students and staff attending and working at the Proposed Project, South Coast AQMD staff recommends that the Lead Agency make the following revisions to MMs AQ-1 and AQ-3 in the Final EIR.

²⁷ South Coast AQMD. Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/airquality-analysis-handbook/mobile-source-toxics-analysis>.

²⁸ South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

²⁹ South Coast AQMD. May 2005. "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning" Accessed at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

³⁰ *Ibid.* Table 1-1. Page 4.

³¹ *Ibid.* Page 46.

³² *Ibid.* Page 46.

AQ-1

The Hacienda La Puente Unified School District (District) shall specify in the construction bid that the construction contractor(s) shall, at minimum, use equipment that meets the EPA's Tier ~~3~~ 4 Final emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower for all ~~building demolition~~ construction phases, unless it can be demonstrated to the District that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by Tier ~~3~~ 4 Final emissions standards for a similarly sized engine, as defined by the California Air Resources Board's regulations. Such equipment will be outfitted with Best Available Control Technology (BACT) devices including a CARB-certified Level 3 Diesel Particulate Filter (DPFs). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions³³. A list of CARB verified DPFs are available on the CARB website³⁴.

To ensure that Tier 4 Final construction equipment or better would be used during the Proposed Project's construction, South Coast AQMD staff recommends that the Lead Agency include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractor(s) must demonstrate the ability to supply the compliant construction equipment for use prior to any ground disturbing and construction activities. Prior to construction, the project engineer shall ensure that all building ~~demolition~~-construction plans clearly show the requirement for EPA Tier ~~3~~ 4 Final emissions standards for construction equipment over 50 horsepower for ~~demolition~~ all construction activities.

During construction, the construction contractor shall maintain a list of all operating equipment associated with ~~building demolition~~ each construction phase in use on the site for verification by the District. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site, including CARB or South Coast AQMD operating permit (if applicable). Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Additionally, the Lead Agency should require periodic reporting and provision of written construction documents by construction contractor(s) to ensure compliance and conduct regular inspections to the maximum extent feasible to ensure compliance.

In the event that construction equipment cannot meet the Tier 4 Final engine certification, the Project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim emission standards, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the Proposed Project, and/or limiting construction phases occurring simultaneously.

AQ-3

The Hacienda La Puente Unified School District (District) shall specify in the construction bid that the construction contractor(s) shall water exposed ground surfaces and disturbed areas three times per day during ~~Phase 1 site preparation~~ all soil disturbing construction activities (e.g., site preparation and grading) to minimize fugitive dust. Prior to construction, the construction

³³ CARB. November 16-17, 2004. *Diesel Off-Road Equipment Measure – Workshop*. Page 17. Accessed at: https://www.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf.

³⁴ *Ibid*. Page 18.

contractor(s) shall ensure that all construction plans submitted to the District's Director of Facilities and Maintenance, or designee, clearly show the watering requirement to control fugitive dust.

Additional Recommended Mitigation Measures for Operational Air Quality Impacts

8. South Coast AQMD staff has compiled a list of additional mitigation measures as suggested resources and guidance to the Lead Agency and recommends that the Lead Agency incorporate them in the Final EIR to further reduce the Proposed Project's air quality impacts. For more information on potential mitigation measures as guidance to the Lead Agency, please visit South Coast AQMD's CEQA Air Quality Handbook website³⁵.

Mitigation Measures for Construction Air Quality Impacts

- a) Require the use of zero-emission (ZE) or near-zero emission (NZE) on-road haul trucks (e.g., material delivery trucks and soil import/export) such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emission standard at 0.02 grams per brake horsepower-hour (g/bhp-hr). When requiring ZE or NZE on-road haul trucks, the Lead Agency should include analyses to evaluate and identify sufficient power and supportive infrastructure available for ZE/NZE trucks in the Energy and Utilities and Service Systems Sections of the Final EIR, where appropriate.

CARB also adopted the statewide Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent³⁶. Since the construction schedule of the Proposed Project extends beyond 2023 till 2027, 2010 model year trucks will be required for the Proposed Project and should become more widely available commercially. Therefore, South Coast AQMD staff recommends that the Lead Agency implement the Truck and Bus Regulation early and require, at a minimum, that construction vendors, contractors, and/or haul truck operators commit to using 2010 model year or newer engines. Early implementation of the Truck and Bus Regulation at the Proposed Project will assist construction management planning with a preference for construction contractor(s) who can supply 2010 model year trucks, facilitate the transition to 2010 model year trucks in 2023, provide time and opportunities to resolve implementation challenges ahead of 2023, ease the costs and burden of regulatory compliance with the Truck and Bus Regulation, and yield emission reductions from fleets earlier than 2023.

To monitor and ensure ZE, NZE, or 2010 model year trucks are used at the Proposed Project, the Lead Agency should require that operators maintain records of all trucks associated with the Proposed Project's construction and make these records available to the Lead Agency upon request. The records will serve as evidence to prove that each truck called to the Proposed Project during construction meets the minimum 2010 model year engine emission standards. Alternatively, the Lead Agency should require periodic reporting and provision of written records by contractors and conduct regular inspections of the records to the maximum extent feasible and practicable.

³⁵ South Coast Air Quality Management District. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

³⁶ California Air Resources Board. December 20, 2018. <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

- b) Encourage construction contractors to apply for South Coast AQMD “SOON” funds. The “SOON” program provides funds to applicable fleets for the purchase of commercially-available low-emission heavy-duty engines to achieve near-term reduction of NOx emissions from in-use off-road diesel vehicles. More information on this program can be found at South Coast AQMD’s website: <http://www.aqmd.gov/home/programs/business/business-detail?title=off-road-diesel-engines>.

Mitigation Measures for Operational Air Quality Impacts

- c) Since the Proposed Project includes operation of an elementary school with an additional 600 students expected at the Proposed Project, the Lead Agency should take this opportunity to encourage operators of new school bus fleets that would regularly visit the Proposed Project to seek funding opportunities to replace older diesel buses with cleaner school buses. (See also Comment No. 2). South Coast AQMD’s Lower-Emission School Bus Program provides funding to applicable fleets for the purchase of alternatively fueled buses or retrofits for older diesel buses. More information on this program can be found at South Coast AQMD’s website: <https://www.aqmd.gov/home/programs/business/lower-emission-school-bus-program>
- d) Funding opportunities are also available through the CARB’s administration of the Volkswagen Environmental Mitigation Trust for California for Zero-Emission Transit, School, and Shuttle Buses. More information about the application process for this funding opportunity can be found at: <http://vwbusmoney.valleyair.org/>. More information on additional funding opportunities through CARB’s program can be found at: <https://ww2.arb.ca.gov/our-work/programs/volkswagen-environmental-mitigation-trust-california/about>.
- e) Require the use of electric landscaping equipment, such as lawn mowers and leaf blowers.
- f) Require the use of electric or alternatively fueled sweepers with HEPA filters.
- g) Maximize the planting of trees in landscaping and parking lots.
- h) Use light colored paving and roofing materials.
- i) Utilize only Energy Star heating, cooling, and lighting devices, and appliances.

Health Risk Reduction Strategies

9. The Proposed Project will site sensitive receptors within 500 feet of SR-60, which, in 2016, had 51,894 annual average daily truck trips, 54% of which was comprised of 4- and 5-axle trucks at Nogales Street (Post Mile (PM) 20.428)³⁷. Since future students, staff, and residents at the Proposed Project would be exposed to DPM emissions from the mobile sources traveling on SR-60 (e.g., diesel fueled, heavy-duty trucks), South Coast AQMD staff recommends that the Lead Agency consider to incorporate the following health risk reduction strategies at the new school facilities and residential development, at a minimum, when making local planning and land use decisions.

Many strategies are available to reduce exposure, including, but not limited to, building filtration systems with Minimum Efficiency Reporting Value (MERV) 13 or better, or in some cases, MERV 15 or better is recommended; building design, orientation, location; vegetation barriers or landscaping screening, etc. Enhanced filtration units are capable of reducing exposures. Installation of enhanced

³⁷ California Department of Transportation. 2016. *Truck Traffic: Annual Average Daily Truck Traffic*. Accessed at: <https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/f0017681-2016-aadt-truck-a11y.pdf>

filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.

Enhanced filtration systems have limitations. In a study that South Coast AQMD conducted to investigate filters³⁸, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter. The initial start-up cost could substantially increase if an HVAC system needs to be installed. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the building tenants. It is typically assumed that the filters operate 100 percent of the time while sensitive receptors are indoors, and the environmental analysis does not generally account for the times when sensitive receptors have windows or doors open or are in common space areas of a project. Moreover, these filters have no ability to filter out any toxic gases from vehicle exhaust. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail and disclosed to prospective residences prior to assuming that they will sufficiently alleviate exposures to DPM emissions.

Because of limitations, to ensure that enhanced filters are enforceable throughout the lifetime of the Proposed Project and effective in reducing exposures to DPM emissions, South Coast AQMD staff recommends that the Lead Agency provide additional details regarding the ongoing, regular maintenance, and monitoring of filters in the Final EIR. To facilitate a good-faith effort at full disclosure and provide useful information to students, parents, staff, and residents who will attend school, work, and/or live at the Proposed Project, which is in close proximity to SR-60, at a minimum, the Final EIR should include the following information:

- Disclose the potential health impacts to prospective students and parents, staff, and residents from attending school, working and/or living in a close proximity to sources of air pollution (e.g., high-volume freeway, etc.) and the reduced effectiveness of the air filtration system when windows are open and/or when students, staff, and/or residents are outdoors (e.g., in the common usable open space areas);
- Identify the responsible implementing and enforcement agency such as the Lead Agency, School District, or Homeowners Association (HOA), to ensure that enhanced filtration units are installed on-site at the Proposed Project before a permit of occupancy is issued;
- Identify the responsible implementing and enforcement agency, such as the Lead Agency, School District, or HOA to ensure that enhanced filtration units are inspected and maintained regularly;
- Disclose the potential increase in energy costs for running the HVAC system to the School District, HOA representatives and/or prospective residents;
- Provide information to the School District and/or HOA representatives and/or prospective residents on where the MERV filters can be purchased;
- Provide recommended schedules (e.g., every year or every six months) for replacing the enhanced filtration units;

³⁸ This study evaluated filters rated MERV 13 or better. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Also see 2012 Peer Review Journal article by South Coast AQMD: <http://d7.iqair.com/sites/default/files/pdf/Polidori-et-al-2012.pdf>.

- Identify the responsible entity, such as the School District, HOA, residents themselves, or property management, for ensuring enhanced filtration units are replaced on time, if appropriate and feasible (if the School District and/ or residents should be responsible for the periodic and regular purchase and replacement of the enhanced filtration units, the Lead Agency should include this information in the disclosure form);
- Identify, provide, and disclose ongoing cost sharing strategies, if any, for replacing the enhanced filtration units;
- Set City-wide, School District-wide, or Proposed Project-specific criteria for assessing progress in installing and replacing the enhanced filtration units; and
- Develop a City-wide, School District-wide, or Proposed Project-specific process for evaluating the effectiveness of the enhanced filtration units.