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**Review of the Draft Environmental Impact Report (Draft EIR) for the
Los Angeles International Airport (LAX) Specific Plan Amendment Study Project**

The South Coast Air Quality Management District (AQMD) staff appreciates the opportunity to comment on the above-mentioned document and the lead agency's consideration of the enclosed comments beyond the comment period. The following comments are intended to provide guidance to the lead agency and should be incorporated into the Final Environmental Impact Report (EIR) as appropriate.

Based on a review of the Draft EIR the proposed project will generate significant regional and local air quality impacts during operations. The project's significant air quality impacts are predominantly from aircraft emissions generated by a significant increase of air passenger capacity at the project site. For example, the project could result in an additional 11,000 lbs/day of NOx emissions from future aircraft activity, resulting in significant localized impacts. Therefore, it is imperative that the lead agency provide additional mitigation measures that address these significant project emissions pursuant to CEQA Guidelines Section 15126.4. Because of the high baseline and future emissions from the project site, the lead agency should also ensure that any approved build alternatives minimize exposures wherever feasible, including through providing the largest possible buffer between emission sources (such as runways) and sensitive receptors.

Further, the Draft EIR lacks necessary specificity in several areas, including how mitigation will be implemented, what other air quality work has been recently completed for LAX and the surrounding community, and in many of the air quality analysis methodologies. Without presenting the details of the analysis, AQMD staff is unable to confirm whether the air quality analysis is consistent with our guidance. Further, by omitting this information, the decision makers and the public are not afforded the opportunity to review all of the pertinent information prior to determining the environmental impacts of this project. As a result, AQMD staff has suggested revisions to this analysis (included in the attachment).

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. Staff is available to work with the lead agency to address these issues and recommends that the lead agency coordinate with our staff prior to releasing the Final EIR. If you have any questions regarding the enclosed comments please contact Dan Garcia at (909) 396-3304.

Sincerely,



Ian MacMillan

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

Attachment

IM:DG

LAC120731-06

Control Number

Operational Emissions Mitigation

1. Given that the lead agency's operational air quality analysis demonstrates significant regional air quality impacts from PM10 and PM2.5 and localized air quality impacts from NO2, SO2, PM10, and PM2.5 emissions the AQMD staff recommends that the lead agency provide additional mitigation measures pursuant to CEQA Guidelines Section 15126.4. Because of these significant current and future air quality impacts, the lead agency should ensure that any approved build alternative looks to minimize exposures wherever possible. This can include providing the maximum buffer between emission sources (such as runways, major travel routes, parking lot entrances, etc.) and sensitive receptors.
2. In addition, the AQMD staff recommends that the lead agency minimize or eliminate significant adverse air quality impacts by adding the mitigation measures provided below.

Aircraft Emissions

- a) Encourage or incentivize airlines to route the cleanest aircraft engines to serve the South Coast Air Basin.

Energy Efficiency Mitigation Measures

- b) Maximize use of solar energy including solar panels; specifically, the lead agency should review, estimate and commit to a minimum installation based on the total available space at the project site. The lead agency should provide a brief justification for any areas found to be infeasible for solar panel installation.
- c) Require all lighting fixtures, including signage, to be energy efficient, and require that new traffic signals have light-emitting diode (LED) bulbs and require that light fixtures be energy efficient compact fluorescent and/or LED light bulbs. Where feasible use solar powered lighting.
- d) Use light colored paving and roofing materials.
- e) Use passive heating, natural cooling, and solar hot water systems for buildings, and reduced pavement for non-roadway areas where possible.
- f) Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
- g) Limit the hours of operation of outdoor lighting where possible.
- h) Install energy efficient heating and cooling systems, appliances and equipment, and control systems.

Transportation Mitigation Measures

- i) Set specific goals for service levels applicable to LAX Flyaway Service that will provide direct shuttle service between the site and off-site locations.
- j) Set goals for the introduction of zero/near zero emission shuttles serving LAX.
- k) Ensure that LAX Flyaway Services provide adequate seating capacity for employees.

- l) Implement a home dispatching system where employees receive routing schedules by phone.
- m) Provide incentives to encourage public transportation and carpooling (e.g., through internal retail and restaurant discounts).
- n) Provide incentives for employees and the public to use public transportation such as discounted transit passes, reduced ticket prices, and/or other incentives.
- o) Implement and/or enhance a rideshare program for employees.
- p) Require the use of 2010 diesel, or alternatively fueled, delivery trucks (e.g., food, retail and vendor supply delivery trucks) as soon as feasible and prior to the 2023 CARB compliance deadline.
- q) Provide electric infrastructure (wiring, panel upgrades, etc.) for truck loading areas to allow future charging station installation.
- r) Provide a direct connection between the MTA Green Line/Crenshaw Line and any constructed Automated People Mover (APM).
- s) Require the APM to operate with zero emissions technology.
- t) Provide zero/near-zero emissions and alternative fueled technologies to transport passengers from nearby locations such as rental car centers.

Parking Mitigation Measures

- u) Provide parking system for quick entry and exit that will reduce vehicle idling time. A system should also be installed that provides sufficient signage or communication for available parking, parking locations, and parking fee.
- v) Provide real time information on parking availability in the parking structures to minimize the time it takes to find available parking.
- w) Install electrical hookups at docks for any TRU's.

Other Mitigation Measures

- x) Require diesel particulate filters on all diesel-fueled emergency generators.
- y) Require use of electric lawn mowers and leaf blowers.
- z) Require use of electric or alternatively fueled sweepers with HEPA filters.

Further, given that the lead agency incorporates MMAQ-4 from the Final EIR for the LAX Master Plan in the proposed project the AQMD staff recommends that the lead agency provide an updated inventory in the Final EIR that demonstrates the lead agency's progress toward achieving a zero/near zero (low emission) fleet of ground support equipment. The aforementioned inventory should provide an overview of the existing ground support equipment fleet and near future milestones toward achieving a low emission fleet.

Construction Emissions Mitigation

3. The lead agency determined that the proposed project will exceed the CEQA regional construction significance thresholds for NO_x, VOC, CO, PM₁₀, and PM_{2.5}; therefore, beyond MMAQ-1 and MMAQ-2 and the requirements of the applicable settlement agreement the AQMD staff recommends that the lead agency provide the following additional mitigation measures pursuant to CEQA Guidelines Section 15126.4.

- Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NO_x emissions requirements,
- Consistent with measures that other lead agencies in the region (including Port of Los Angeles, Port of Long Beach, Metro and City of Los Angeles)¹ have enacted, require all on-site construction equipment to meet EPA Tier 3 or higher emissions standards according to the following:
 - ✓ Project start, 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.
 - ✓ Encourage construction contractors to apply for AQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for AQMD "SOON" funds. The "SOON" program provides funds to accelerate clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: <http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>

¹ For example see the Metro Green Construction Policy at:
http://www.metro.net/projects_studies/sustainability/images/Green_Construction_Policy.pdf

Additional measures to reduce off-road construction equipment can be found at the following website: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html.

Specificity of Mitigation Measures

4. Many of the mitigation measures from the LAX Master Plan that are carried forward into the LAX SPAS Draft EIR are vague and need further clarification in the Final EIR. Without this added specificity, it is unclear how effectively the proposed measures from Table 4.2-9 of the Draft EIR may mitigate air quality impacts. The Final EIR should include additional discussion of the following items:
 - It is unclear how many charging stations will be provided by implementing this project. The currently installed electric vehicle charging stations are commonly overcrowded, thus not allowing electric vehicles the ability to charge while onsite. At a minimum, enough Level 1 charging capacity should be added to accommodate demand.
 - It is unclear how promoting “best engine” technologies at rental car fleets will be implemented. The types of technologies that will be promoted and the incentives provided should be detailed in the Final EIR.
 - It is unclear how the lead agency will promote SULEV/ZEV technology for commercial vehicles using terminal areas. The Final EIR should specify the types of incentives that will be offered, as well as the applicability of these incentives (e.g., how will it apply to heavy duty delivery trucks, shuttle buses, etc?)

Electrification of Passenger Gates

5. Page 4-107 of the Draft EIR states that newly constructed passenger gates will be electrified (Measure X.A). Because of the significant air quality impacts of this project, the lead agency should investigate the feasibility of electrifying all gates at LAX. The Final EIR should include a discussion of the feasibility of this additional mitigation, as well as the time frame that would be needed to implement it.

CEQA Baseline

6. Establishing a proper baseline is fundamental to accurately assessing a project’s impacts. The function of the baseline is to set conditions against which project impacts are compared to determine whether an environmental impact is significant. As such, the baseline should not be established in a way that understates project impacts. The baseline emissions in this Draft EIR are from 2010. While conditions at the time the NOP is released normally constitutes the baseline for analysis of project impacts, a future conditions baseline is the more appropriate baseline to evaluate the impacts from this proposed project. This is because use of a current conditions baseline underestimates project impacts by taking credit for projected improvements to air quality that are unrelated to the proposed project. These improvements include the future air quality benefits from currently adopted and enforceable vehicle emission standards. Crediting the project with such benefits does not disclose the impacts *of the project*. Therefore, in order to ensure that the impacts of this project

are accurately described, the AQMD staff believes the impacts of the proposed Project should be measured against future conditions without the proposed Project. In other words, a baseline should be presented that includes current activity levels along with project build-out emission standards.

Air Quality Analysis Interim Milestone Years Needed in Air Quality Analysis

7. The analysis years for the Draft EIR includes only two analysis years: baseline year 2009/2010 and build out year 2025. It is not clear that 2025 captures the peak daily emissions. By 2025, the project will be at full build and vehicle and truck fleets will meet the most stringent emission standards currently required. Although the proposed project may not be at peak capacity in earlier years, it is possible that due to higher emission rates of vehicles and trucks in earlier years that peak daily emissions may occur before 2025. The overall emission rates of vehicles and trucks are higher in earlier years as more stringent emission standards have not been fully implemented and fleets have not fully turned over. The Final EIR must provide additional information to demonstrate that 2025 is the peak year, and if it is found that an earlier year is the peak year, that year should be presented in the air quality analysis.

Diesel Idling

8. Page 4-108 of the Draft EIR describes a ten minute idling limitation for vehicles onsite (Measure X.M). This measure should be revisited and made consistent with the most recent CARB rule on diesel idling, including no more than five minutes of idling for trucks.

Monitoring Studies Evaluating Black Carbon and Ultrafine Particles

9. LAX is currently undertaking a monitoring study to evaluate the community impacts of air pollution from the existing facility.² According to the LAWA website, the study will be complete by Spring of 2013. This study will evaluate a diverse suite of pollutants, including two pollutants commonly associated with health impacts, ultrafine particles and black carbon. Another recent study that investigated pollutant concentrations near LAX found that black carbon and ultrafine particles are substantially elevated during aircraft takeoffs and landings.³ However AQMD staff was unable to identify any discussion of either study in the Draft EIR. As both of these studies were conducted to help the public and decision makers for this project evaluate potential air quality impacts from this facility, a robust description should be included in the Final EIR.

Receptors Used in Dispersion Modeling

10. The dispersion modeling used to determine criteria and toxic air pollutant concentrations uses a set of receptors along the boundary of the project site. As shown in Table 4.2-15 of the Draft EIR, most of the pollutants exceed significance thresholds, some by a large margin. However, because receptors were not included

² http://www.lawa.org/welcome_LAX.aspx?id=1066

³ <http://arb.ca.gov/research/apr/past/04-325.pdf>

farther out in the community, it is impossible to determine the extent of these impacts. While knowing whether predicted concentrations exceed the Ambient Air Quality Standards (AAQS) is important, the public and decision makers also need to know if this impact is strictly at the fence line or if it impacts a substantial number of people in the surrounding community. The Final EIR should include results of the dispersion model, including contour maps, showing the extent of criteria pollutant impacts offsite. Guidance regarding receptor placement for dispersion modeling can be found at the website below:

http://www.aqmd.gov/smog/metdata/AERMOD_ModelingGuidance.html.

Dispersion Modeling Source Treatment

11. The Draft EIR does not contain any description of how emission sources were treated in the dispersion model. Without this key description of the modeling exercise, neither AQMD staff, nor the public, is able to confirm the validity of the dispersion modeling analysis. Key parameters that require additional clarification include source type, placement, strength, dispersion parameters, etc. The Final EIR should include a copy of the dispersion modeling input and output files as a separate appendix. AQMD staff also requests that the input and output files be provided to us in their native format (consistent with our request from our comment letter on the project's NOP) when available.

Meteorological Data Used in Dispersion Model

12. Page 4-88 of the Draft EIR states that one year of meteorological data was used to complete the dispersion modeling analysis. While one year of meteorological data is appropriate if collected onsite for most modeling purposes, it is not clear how the NO₂ and SO₂ modeling analysis comparing against the federal standards were completed. The federal NO₂ and SO₂ standards are based on the three year average of the 98th and 99th percentile (respectively) of the daily maximum hourly concentration. Three years of meteorological data is available from the LAX met station⁴ and should be used to determine these potential impacts.

Emissions Inventory Calculations for Vehicles

13. It is unclear how the emission inventories were calculated for vehicles accessing the project site. For example, Table 56 of Attachment 2 of Appendix of the Draft EIR presents estimates of Vehicle Miles Travelled (VMT) for different speed bins and different vehicle types for the baseline scenario. This VMT estimate is then presumably multiplied by the emission factors from Table 61 of the same appendix to determine the total emission inventory from this source. However, there are several parameters that are not clear from Table 56 including 1) how the VMT was apportioned to each speed bin (it does not correlate with EMFAC 2011 for example); 2) how the different vehicle classes (at least 6 classes of vehicles likely travel to LAX) were weighted down to the two classes presented in Table 56; 3) how the VMT per trip value was determined; and 4) how the number of trips presented in Table 56 correlates with Tables 4.12.1-2 and 4.12.1-5 from the transportation analysis in the Draft EIR. The Final EIR should include a more thorough explanation of how the

⁴ <http://www.aqmd.gov/smog/metdata/AERMOD.html>

emission calculations were performed, including providing additional calculation sheets if necessary.

Emissions Inventory Calculations for Aircraft

14. The Draft EIR and its appendices only contain summary results for the emission inventory for aircraft emissions. AQMD staff could not find any backup calculations, including spreadsheets or EDMS input or output files in any of the project files. Without these emission calculations, neither AQMD staff, nor the public, is able to confirm the validity of the aircraft emission calculations. The Final EIR should include all of the calculation sheets and model files used to determine air quality impacts from aircraft emissions.

Consistency with the AQMP

15. The Draft EIR does not address how the project is consistent with the AQMP. Although the capped number of passengers (78.9 million annually) appears to be consistent with assumptions in the Regional Transportation Plan / Sustainable Community Strategy (RTP/SCS), it is not clear if the assumptions about on-road vehicular travel are consistent with the RTP. The AQMP relies on the assumptions contained within the RTP/SCS. Given the volume of vehicles travelling to LAX, it is important to understand if the analysis contained within this EIR is consistent with regional planning assumptions. The Final EIR should include a discussion of the consistency between this project's traffic analysis and the RTP/SCS and the AQMP in general.

Greenhouse Gas Calculations for Aircraft

16. Page 4-389 of the Draft EIR describes how the GHG emissions were calculated from aircraft. Consistent with the criteria pollutant analysis, emissions were only included below the average mixing height of 1,806 feet above sea level. While using the mixing height is an appropriate method for a criteria pollutant analysis, it is not clear why this is appropriate for a GHG analysis. Aircraft travel the vast majority of their trip above the mixing height, and hence emit the bulk of their GHG's above this level. The Final EIR should include further clarification about why this is an appropriate method. The lead agency should also describe why other methods are not more appropriate (e.g., calculating aircraft GHG's based on the amount of fuel dispensed from LAX).

Greenhouse Gas Emissions Mitigation

17. Based on a review of the Draft EIR the lead agency has determined that the proposed project will not achieve a greenhouse gas (GHG) reduction target of 16% per passenger below 2009 levels by 2025. However, the lead agency indicates that, at a minimum, the project will achieve a 13.05% reduction in GHG emissions per capita. Therefore, the AQMD staff recommends that the lead agency provide the following additional mitigation measures pursuant to CEQA Guidelines Section 15126.4.

- Incorporate mitigation measures (b) through (x) in comment #2 and all mitigation measures in comment #3 identified above.
- Develop a monitoring and reporting plan that ensures the implementation of the applicable mitigation measures and requires future updates of the project's GHG emissions inventory. At a minimum, the inventory should demonstrate that the project achieves 13.05% reduction per capita consistent with the lead agency's GHG emissions analysis in the Draft EIR.