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Case # ENV 2011-0585-EIR
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Department of City Planning
200 N. Spring Street, Room 750
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**Review of the Draft Environmental Impact Report (Draft EIR) for the
Convention and Event Center Project**

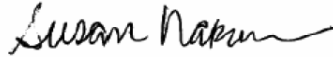
The South Coast Air Quality Management District (AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are intended to provide guidance to the lead agency and should be incorporated into the Final Environmental Impact Report (EIR) as appropriate.

Based on a review of the Draft EIR the proposed project will generate significant regional and localized air quality impacts, both during construction and operations. The AQMD staff is concerned about the significant localized NO₂ and PM impacts to a substantial number of residences and school children. Exposure to NO₂ can result in a range of adverse respiratory health effects. The project's significant air quality impacts are predominantly from the high traffic volumes generated by events occurring at the project site. Therefore, it is imperative that the lead agency include all feasible mitigation measures to ensure air quality and health impacts are minimized.

Further, it appears that the lead agency may have underestimated air quality impacts from the proposed project. As a result AQMD staff has suggested revisions to this analysis (included in the attachment). Of primary concern is the substantial number of vehicles that will travel to this site for major events. The provisions of Senate Bill 292 and assumptions in the Draft EIR indicate that the project proponent will make a good faith effort to ensure that a portion of the project's trips will be diverted from passenger cars (between 18% and 27%) to transit and pedestrian travel. Notwithstanding this good faith effort, additional action beyond SB 292 must be taken to reduce the project's significant air quality impacts, including making the existing assumptions enforceable in the first year of operation, and providing additional mitigation to reduce emissions from activities associated with the proposed project.

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. If you have any questions regarding the enclosed comments please contact me at (909) 396-3105.

Sincerely,



Susan Nakamura
Planning and Rules Manager
Planning, Rule Development & Area Sources

Attachment

IM:DG
LAC120405-01
Control Number

Operational Emissions Mitigation

1. Given that the lead agency's operational air quality analysis demonstrates significant regional air quality impacts from NO_x, VOC, CO, PM₁₀ and PM_{2.5} and localized air quality impacts from NO₂, PM₁₀, and PM_{2.5} emissions the AQMD staff recommends that the lead agency provide additional mitigation measures pursuant to CEQA Guidelines Section 15126.4. Specifically, the AQMD staff recommends that the lead agency minimize or eliminate significant adverse air quality impacts by adding the mitigation measures provided below.

Energy Efficiency Mitigation Measures

- a) Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the Project site to generate solar energy for the facility.
- b) Require all lighting fixtures, including signage, to be state-of-the art and 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.
- c) Use insulated glass in viewing boxes that are enclosed.
- d) Maximizing the planting of trees in landscaping and parking lots.
- e) Use light colored paving and roofing materials.
- f) Use passive heating, natural cooling, solar hot water systems, and reduced pavement.
- g) Utilizing only Energy Star heating, cooling, and lighting devices, and appliances.
- h) Install light colored "cool" roofs and cool pavements.
- i) Limit the hours of operation of outdoor lighting.
- j) Install energy efficient heating and cooling systems, appliances and equipment, and control systems.

Transportation Mitigation Measures

- k) Coordinate events at the Event Center such that they do not overlap with other major operational events occurring within the specific plan area (e.g., coordinate events such that the L.A. Auto Show does not occur on the same time as a football game).
- l) Develop and implement transportation related measures necessary to achieve SB 292 trip ratio requirements at project build-out.
- m) Ensure that all mass transit capacity that is assumed to be utilized for this project is facilitated with a direct transit link to the project. For example, while Table IV.B.1-9 shows that there will be 14,400 transit trips for a weekday NFL game Table 5.3.2.1a-b shows that the only trains with direct access to the site (Blue Line and Expo Line) have capacity for about 3,500 people. Therefore, the lead agency should provide direct access to the project site (e.g, dedicated electric shuttle buses to events that could further minimize walking distances to the event center and improve accessibility).

- n) Provide direct shuttle service between the site and locations such as Union Station should be made using electrically powered shuttles (or other alternative fueled shuttles if electric is not available).
- o) Provide a dedicated bike lane along the Pico Boulevard tunnel to encourage the use of alternative transportation from residences west of the 110 Freeway accessing the downtown core.
- p) Provide dedicated electric shuttles for employees that directly access the project site. In the event that the lead agency determines that electric shuttles cannot be obtained the applicant shall provide transit subsidies or passes to the stadium and surrounding business employees. Also, ensure that if employees use transit that the transit will be available after their work shift is completed.
- q) Implement a home dispatching system where employees receive routing schedules by phone rather than driving to work, especially on game days.
- r) Provide incentives to encourage public transportation and carpooling possibly through local retail, restaurant, and the stadium discounts.
- s) Provide incentives for employees and the public to use public transportation such as discounted transit passes, reduced ticket prices, and/or other incentives.
- t) Implement a rideshare program for employees.
- u) Construct off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes or on-site improvements such as bicycle paths, bicycle parking facilities, etc.
- v) Require the use of 2010 diesel trucks, or alternatively fueled, delivery trucks (e.g., food, retail and vendor supply delivery trucks) upon project build-out.
- w) Provide an alternative fueling station for delivery trucks (e.g., natural gas or electric).
- x) Create local “light vehicle” networks, such as neighborhood electric vehicle (NEV) systems.
- y) Require the use of electric or alternative fueled maintenance vehicles, field vehicles, and forklifts.

Parking Mitigation Measures

- z) 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.
- aa) Provide pre-paid parking opportunities that reduce idling and provide dedicated express entrances and exits for pre-paid parking tickets.
- bb) Provide preferential parking spaces for alternative fuel vehicles, and vanpools and provide sufficient vertical clearance in parking facilities for van pool access.
- cc) Set up parking systems that minimize the time required to collect parking fees and reduce vehicles queuing for example walkup kiosks and electronic payments.
- dd) Provide real time information on parking availability in the parking structures to minimize the time it takes to find available parking.

Other Mitigation Measures

- ee) Require the use of low firework launching systems and lower emissions fireworks.
- ff) Provide outlets for electric and propane barbecues.
- gg) Provide a designated shaded recreation area with propane and electrical outlets to reduce vehicle idling emissions associated with tailgating.
- hh) Require diesel particulate filters on all diesel-fueled emergency generators.
- ii) Require use of electric lawn mowers and leaf blowers.
- jj) Require use of electric or alternatively fueled sweepers with HEPA filters.
- kk) Use of water-based or low VOC cleaning products.

Further, if the lead agency determines that mitigation measure (n) identified above that is related to transit capacity is not feasible the lead agency should revise the air quality analysis in the Final EIR to ensure that the air quality impacts account for all potential automobile related trips. Specifically, AQMD staff is concerned that if the project's patrons choose not to utilize existing mass transit as a result of poor accessibility to the project site (i.e., extended walking distance to local serving mass transportation stops and inconvenient local serving bus activity) the air quality impacts may be under stated.

Auto Occupancy Rate Related to Operational Emissions

2. Upon review of the air quality calculation files provided in the Draft EIR it appears that the lead agency quantified the project's air quality impacts based on an average auto occupancy rate of 2.94 persons per vehicle. However, based on the Transportation Study in Appendix I of the Draft EIR the lead agency estimated that the average vehicle occupancy rate for those arriving by car would be 2.7 persons per vehicle during weekday events and 3.0 persons per vehicle during weekend events. Therefore, the AQMD staff recommends that the lead agency explain the vehicle occupancy rate of 2.94 persons per vehicle was derived for the air quality analysis and accounts for maximum potential daily air quality impacts.

SB 292 Requirements

3. The Draft EIR demonstrates significant air quality impacts with the inclusion of an improved trip ratio as required by SB 292. These air quality impacts are primarily a result of high traffic volumes associated with events at the project site. Therefore, the AQMD staff recommends that the lead agency include additional mitigation measures in the Final EIR that go beyond SB 292 and achieve a lower trip ratio than required by SB 292. The mitigation measures provided in the comments above should be included to support an improved trip ratio.

Further, the AQMD staff recognizes that SB 292 requires an improved trip ratio; however, the project has until the 10th football season (i.e., 10 years) to achieve this improvement. Therefore, it is critical that the lead agency provide enforceable conditions to ensure that the proposed project will achieve the trip ratio requirements of SB 292. Also, the AQMD staff recommends that the lead agency provide

contingency measures that eliminate air quality impacts in the event that the project does not meet the trip ratio required by SB 292.

Peak Day Operational Emissions Forecast

4. In Chapter II (project description) of the Draft EIR the lead agency describes the project's baseline conditions and discusses the project's emissions forecast as they relate to events at the Convention Center. Based on the information provided in Appendix F of the Draft EIR it is not clear that lead agency captured the highest attended events such as the L.A. Auto Show and E-3 Convention in the peak day attendance forecast. If these events were excluded from the attendance forecast the lead agency may have underestimated the project's air quality impacts. Therefore, the AQMD staff recommends that the lead agency include a revised attendance forecast in the Final EIR that clarifies the methodology used to determine the project's peak day attendance levels and accounts for peak day air quality impacts (i.e., air quality impacts on a day with highest attendance levels at the convention and event center).

Tailgating Event Emissions

5. The Draft EIR does not discuss or include emissions from barbecues to calculate the project's overall operational air quality impacts. If these activities are not allowed as part of the project, then the proposed project should specify how this will be prohibited and how the prohibition would be enforced at surrounding parking areas serving patrons of the proposed project. If the proposed project will allow barbecues and tailgating, air quality impacts must be included in the Final EIR.

Localized Analysis

6. The Draft EIR contains a modeling analysis of all sources of NO₂ emissions, including emissions from local freeways. The analysis demonstrates that the project has the potential to exceed federal and state Ambient Air Quality Standards (AAQS), due primarily to vehicle emissions. The Draft EIR also contains an analysis of carbon monoxide (CO) emissions, however the only sources that are included are the new onsite parking garages, and emissions from the Pico Avenue tunnel that exit through three vents. Other onsite emissions have not been included, such as for delivery trucks, for vehicles along LA Live Way, or for stationary permitted equipment like boilers, etc. Because of the substantial emissions from vehicles associated with this project, as demonstrated by the results of the NO₂ dispersion modeling, AQMD staff recommends that the emissions from CO be modeled from the same offsite NO₂ emission sources and all onsite sources to determine if CO AAQS will be exceeded.

Localized PM₁₀ Emissions Impacts

7. The lead agency performs a two step evaluation to determine whether the project is consistent with Regional Plans developed by the AQMD and the Southern California Association of Governments (SCAG). In the first step, the Draft EIR concluded that the proposed project would have significant localized PM₁₀ impacts due to exceedance of PM₁₀ Ambient Air Quality Standards (AAQS). In the second step, the

lead agency concluded that the proposed project is consistent with Regional Plans because of the low probability of a localized PM10 exceedance. A low probability does not dismiss the significance of localized PM10 impacts or substantiate that the proposed project is consistent with Regional Plans. This inconsistency should be addressed in the Final EIR.

Off-site Parking Emissions

8. The air quality analysis includes an estimate of emissions from the Cherry and Bond parking structures. These structures will only accommodate 3,450 cars of the total 23,387 trips (a difference of 19,937) anticipated to travel to the site on a peak day. The Final EIR should therefore add the emissions associated with the 19,937 vehicles that park off-site. These emissions should be included in air quality analysis.

Air Quality Analysis Calculations for Permitted Equipment

9. The Draft EIR appendices contain many calculations that estimate potential emissions from equipment that will operate onsite. Some of the assumptions used in these calculations do not have corresponding enforceable provisions that would ensure that operation of the project would match predicted impacts. Unless the project includes an enforceable mitigation measure or project condition, the expected permitted limits should be used to determine emission impacts (e.g., 50 hrs/yr for emergency diesel generators). As a responsible agency for the portions of this project that require AQMD permits, in order for our agency to rely on the lead agency's EIR, all emissions up to the permitted limits must be included in the analysis. Examples of calculation assumptions that should be reviewed include:
 - Backup emergency diesel generators are assumed to operate only 12 hours per year.
 - Backup emergency diesel generators are assumed to not be tested for maintenance purposes on event days.
 - Only one out of a total of twelve onsite backup emergency diesel generators is assumed to be tested for maintenance purposes each day.
 - Boilers are assumed to operate no more than eight hours per day, including only four hours at peak capacity and four hours at 40% capacity.
 - Onsite forklifts are projected to use only 10 gallons/day total, including on event days with up to approximately 335 truck deliveries in one day. The 10 gallon figure is derived in the calculation spreadsheets by multiplying the 335 truck deliveries by 3%, without any justification. Additional information should be provided describing the estimate of fuel usage in the Final EIR.
 - Annual toxic emissions estimates from backup emergency diesel generators appear to only include one new generator. Although total emissions from two new generators are calculated on a lb/yr basis, this value is multiplied by 0.5 when deriving the gram/second value used for dispersion modeling.

Natural Gas Combustion Emissions

10. The lead agency quantified the project’s air quality impacts from onsite natural gas combustion sources using a set of emission factors that do not correspond to factors used by the AQMD. The primary sources of natural gas combustion are boilers, water heaters, and charboilers for cooking. The emissions factors in Table 1 should be used in the Final EIR to calculate the emissions for boilers rated above 2,000,000 Btu/hr or the lead agency should provide the appropriate documentation to substantiate the emissions factors used in the Draft EIR.

Table 1: Emissions Factors in lbs per MMBtu for
Boilers rated above 2 MMBtu/hr

	NOX	ROG	CO	PM10	SOX
Draft EIR	120	5.3	20	0.2	0
AQMD	11 ^a	7.0 ^c	38.6 ^b	7.5 ^c	0.6 ^c

^a Current NOX limits under AQMD Rules 1146 & 1146.1

^b Current CO limit under Best Available Control Technology (BACT)

^c AQMD default emission factors

In addition, the project applicant will be required to apply for operating permits for any boilers and water heater rated above 2,000,000 Btu/hr. If the proposed boilers and water heaters are rated between 1,000,000 Btu/hr and 2,000,000 Btu/hr, then the owner/operator shall apply for registration permits as required by AQMD Rule 222 and will have to meet NOX emission limits of 25 lb/MM cu.ft. per AQMD Rule 1146.2. Also, charbroilers will require registration under AQMD Rule 222.

Emergency Engine Emissions

11. To mitigate PM10 emissions, emergency generators should be equipped with diesel particulate filters. Installing diesel particulate filters on emergency standby engines is feasible and would ensure compliance with BACT, and AQMD Rules 1470 and 1472.

Emissions Related to Pressure Washers and Steam Cleaners

12. The proposed liquid-fueled washers are used for cleaning the event center (stadium). The Draft EIR uses emissions factors for internal combustion engines fueled with gasoline to calculate emissions, however, it does not appear that the Draft EIR accounted for the emissions from the boilers that generate the steam/hot water. Commercial/industrial pressure washers/steam cleaners typically consist of a boiler (hot water/steam) and an internal combustion engine (prime mover for the pump). Typically the boilers are fired with diesel fuel. AQMD requires permits for the diesel-fueled pressure washers/steam cleaners. In addition, the boilers will be subject to a 40 ppmv NOx limit as required by Rule 1147.

Re-entrained Road Dust

13. The air quality analysis estimates fugitive PM10 from re-entrained road dust using an old equation from US EPA’s AP-42 guidance mixed in with parameters from the

EPA's January 2011 update to this equation. The Final EIR should include a revision to the road dust emissions estimate that includes the 2011 updated equation along with appropriate parameters.

Applicable AQMD Rules and Regulations

14. As a reminder, in addition to the rules mentioned in Chapter IVF.1 of the Draft EIR and the above comments the AQMD staff recommends that compliance with AQMD Rules 1166-Volatile Organic Compound Emissions from Decontamination of Soil, 1403- Asbestos Emissions from Demolition/Renovation Activities, and 1113-Architectural Coatings be addressed in the Final EIR.

Greenhouse Gas Emissions Analysis

15. Based on a review of Chapter IVF.2 of the Draft EIR the lead agency has determined that the proposed project will achieve a GHG reduction of 48% below business-as-usual (BAU). However, it is unclear how the project's baseline emissions are consistent with the Climate Change Scoping Plan prepared by CARB. The Climate Change Scoping Plan proposed a 15% reduction below 2005 emissions to achieve 1990 levels by 2020. Therefore, the AQMD staff requests that the lead agency provide additional information that demonstrates how the GHG emissions associated with the proposed project are consistent with the baseline GHG emissions and forecasting inventory presented in Appendix F of the Climate Change Scoping Plan. Appendix F of the Climate Change Scoping Plan is available at:
http://www.arb.ca.gov/cc/scopingplan/document/appendices_volume1.pdf

Construction Mitigation Measures

16. Given that construction air quality analysis in the Draft EIR demonstrates significant air quality impacts from NOx and VOC and locally elevated concentrations of NO₂ emissions the AQMD staff recommends that the lead agency provide additional mitigation pursuant to CEQA Guidelines Section 15126.4. Specifically, AQMD staff recommends that the lead agency minimize or eliminate significant adverse air quality impacts by adding the mitigation measures provided below. Also, the lead agency should note that the following measures have been determined to be feasible and applicable to past projects within the lead agency's jurisdiction including the Jordan Downs Specific Plan.
 - Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow,
 - Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site,
 - Reroute construction trucks away from congested streets or sensitive receptor areas,
 - Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation,

- Improve traffic flow by signal synchronization, and ensure that all vehicles and equipment will be properly tuned and maintained according to manufacturers' specifications,
- Require the use of electricity from power poles rather than temporary diesel or gasoline power generators, and
- 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 NOx and PM emissions requirements.

Further, AQMD staff recommends that the lead agency replace Mitigation Measure F.1-1 with the following:

- ✓ Project Start to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3 off-road 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 off-road 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>

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.

Also, the AQMD staff recommends that the lead agency revise mitigation measures F.1-6 as follows:

~~Low- and n~~Non-VOC containing paints, sealants, adhesives, solvents, asphalt primer, and architectural coatings (where used), or pre-fabricated architectural panels shall be used in the construction of the Project to reduce VOC emissions to the maximum extent practicable.