THE CITY OF SAN DIEGO

September 2, 2015

Heather (Phillips) King, AICP
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Re: San Diego Stadium Reconstruction Project-Clarifications on AB 900 Application

Dear Ms. King,

We very much appreciate your quick response to our AB 900 application. Below is the additional information/clarification as requested by ARB staff,

1) Project Lifetime: Page 10 of the City's AB 900 application submitted 8/25/15 implies that GHG emissions would not accumulate beyond year 2035. We understand that the anticipated project lifetime is estimated at 30 years, which would make the project's lifetime 2019-2049. Therefore, the cumulative net increase in GHG emissions would include emissions that occur beyond year 2035. We understand that GHG emission factors stabilize in year 2035 according to acceptable data sources. We do not require GHG emissions be quantified for individual years beyond 2035, as it would be somewhat speculative to do so. However, please confirm that the applicant assumes that operational GHG emissions from the project would continue through year 2049 at a level similar to, or less than, the GHG emissions estimated for year 2035.

Consistent with similar AB 900 applications (e.g., Golden State Warriors), emission estimates for the project were provided through 2035. We agree that it would be speculative to include emissions beyond those years, particularly if the project must offset those future emissions. The Draft EIR states that "the total construction GHG emissions associated with a project are amortized over 30 years for Project construction, and added to the operational GHG emissions." This approach was done to meet the City's requirements for the CEQA analysis and is based upon guidance from the Association of Environmental Professionals (AEP). The Conditional Use Permit will include a condition for the purchase of carbon credits, as discussed in our response to question 3, below. Based on the conservative assumptions for events in the draft EIR and AB 900 application, we assume that the operational GHG emissions would continue through 2049 at a level similar to, or less than, the GHG emissions estimated for 2035, although they are likely to decrease.

2) Consideration of Feasible On-site GHG Reduction Measures: Because the proposed project would result in a net increase in GHG emissions even after accounting for on-site mitigation

Engineering Branch • Public Works Department
525 B Street, Suite 750, MS 908A • San Diego, CA 92101
Tel (619) 533-5200 Fax (619) 533-4666

(e.g., LEED Gold certification, on-site solar PV generation, and Transportation Demand Management Plan), the project applicant will need to secure additional voluntary GHG reductions to qualify for AB 900 certification. The cumulative net increase in GHG emissions over the project's lifetime could exceed 200,000 MT CO2e. Has the applicant determined that additional on-site voluntary mitigation is infeasible when compared to the cost to purchase this quantity of voluntary GHG offsets through a qualified emissions broker? If so, what on-site GHG-reduction measures were considered, and why were they rejected?

As mentioned in the comment, the project would include LEED Gold certification, on-site solar PV generation, and a TDM plan. The details of the measures for LEED GOLD certification are not available at this time, but the project would likely include additional energy and water conservation measures that are not estimated in the AB 900 application. These measures include installing a comprehensive lighting control system utilizing motion sensors, use of an LED scoreboard and field signs, and energy- efficient heating and cooling systems. In addition, restrooms would be equipped with waterless urinals, low-flow toilets, and sensor faucets to reduce overall water use. The project would be designed to have "no net increase" in total annual energy consumption related to electricity and natural gas use compared to existing conditions.

The new stadium would include PV renewable energy that would provide a minimum of 100 kilowatts of renewable energy on-site. The solar shade canopies would be installed, at a minimum, over 220 parking spaces on an acre or be installed on as much as 5 acres (i.e., 500 kilowatts) depending on final design. However, additional solar PV panels greater than the 5 acres would be limited due to potential biological impacts related to avian collisions with the PV panels, the project's restrictions on construction and improvements within the San Diego River Influence Area of the parking lot, pyrotechnic zones, and space required for large events held in the parking lot which sometimes require temporary structures such as tents.

The TDM plan includes all measures that are considered feasible for on- and off-site vehicle emissions. Since the TDM Plan includes an ongoing annual assessment as a part of its implementation, additional best practices and implementation strategies could be incorporated into the plan. No additional on-site mitigation measures were considered feasible for the project.

3) Timing of GHG Offsets: Please specify the timing of GHG offsets relative to the GHG emissions from construction and operational activities. The City's commitment to include the following as a project condition would be acceptable.

"GHG offset contracts for construction emissions that would occur between 2016 and project occupancy (anticipated in 2019) will be secured prior to occupancy. The remaining GHG offset contracts for construction emissions associated with demolition and removal of the existing Qualcomm stadium that would occur in or after 2019 would be secured during the year in which the emissions occur. GHG offset contracts for the net increase in annual operational GHG emissions will be secured during the year in which emissions occur over the life of the project. The project lifetime is defined as 30 years. Therefore, offsets would be required through year 2049; or if the actual useful life extends beyond year 2049, through the actual useful life of the project; or until the point in time when there is no longer a net increase in operational GHG emissions according to the methodology submitted as the basis for the project's AB 900 application."

The following language will be incorporated into the permit as a condition of approval.

The City's commitment to obtain GHG offsets for net additional greenhouse gases resulting from construction and operation of the Project will be included as permit conditions requiring the following:

1. No later than six (6) months after the issuance of a Temporary Certificate of Occupancy for the Project, the City shall provide to the California Air Resources Board (ARB), a calculation of the net additional emissions resulting from construction of the Project (the "Construction Emissions"), calculated using the same methodology used in the City's AB 900 application (the "Agreed Methodology"). The City shall enter into one or more contracts to purchase voluntary carbon credits from a qualified greenhouse gas emissions broker in an amount sufficient to offset the Construction Emissions. The City shall provide courtesy copies of any such contracts to ARB promptly following the execution of such contracts.

2. No later than six (6) months after Project Stabilization (the date following Project completion when ninety percent (90%) of the available booking dates for the Stadium are secured), the City shall submit to ARB a projection of net additional emissions resulting from operation of the Project, based on data accumulated to that date and reasonable projections of operational emissions for the useful life of the Project (currently estimated to be 30 years), to be calculated in accordance with the Agreed Methodology (the "Net Operational Emissions"). The City shall enter into one or more contracts to purchase voluntary carbon credits from a qualified greenhouse gas emissions broker in an amount sufficient to offset the Net Operational Emissions, on a net present value basis in light of the fact that the City is proposing to acquire such credits in advance of any creation of the emissions subject to the offset. The City shall provide courtesy copies of any such contracts to ARB promptly following the execution of such contracts.

3. If the Project is forecasted to reach no net emissions over the baseline established in the AB900 application during its useful life, then purchase of the carbon credits for the Net Operational Emissions will satisfy this condition. If not, then no later than six (6) months after the end of the Project's useful life, the City will provide ARB with a report including an estimate of the remaining actual life of the Project, a description of any proposed rehabilitation including additional measures to reduce emissions, a calculation of the net additional emissions resulting from continued operation of the Project to the end of its actual life taking into account measures intended to reduce emissions, and a proposed purchase of additional carbon credits or other mitigation to fulfill this condition.

4. These commitments will be referenced as enforceable conditions of the Conditional Use Permit and the Site Development Permit for the Project, and the City, by approving and issuing the permits, will agree to comply with these conditions.

4) Copies of GHG Offset Contracts: Please clarify the underlined portion of the following statement: "Copies of the contract(s) shall be provided <u>in the AB 900 application</u> to ARB and the Governor's office to verify that construction and lifetime operational emissions have been offset." This seems impossible because contracts have not yet been procured. Please clarify, or indicate whether this part of the statement was made in error. ARB staff concurs with the remainder of the statement, and would still like to receive courtesy copies of the GHG offset contracts once those contracts have been executed.

Yes, we made a typographical error with that statement. Based on discussions with ARB regarding the application and methodology, the application only contains a commitment to purchase those credits. The actual contract to purchase GHG offsets will occur as stated in the response to question 3, above. Copies of the contract will be provided to ARB at the time of purchase.

5) Please confirm that projected area-source emissions from the new stadium during 2031-2035 should be 0.14 MTCO2e/year. We detect a possible excel formula series fill error that has a very nominal effect on the total GHG emissions results in those years.

The comment is correct. The formula increased area source emissions from 0.14 MT CO2e per year in 2030 to 5.14 MT CO2e per year in 2035. Area-source emissions do not increase and are assumed to be constant for all operational years. The spreadsheet has been corrected, and the total annual emissions have been updated 6,534 MT CO2e to 26,529 MT CO2e in 2035.

Should you have further questions or concerns, please do not hesitate to contact me.

Sincerely,

Kris Shackelford, PE
Senior Civil Engineer

Electronic cc: Mike Hansen, Director of Land Use and Environmental Policy, Mayor's Office
Tom Tomlinson, Acting Director, Planning Department
Kerry Santoro, Deputy Director, Development Services Department
Martha Blake, Senior Planner, Development Services Department
James Nagelvoort, Director, Public Works Department
Carrie Gleeson, Deputy City Attorney, City Attorney's Office
Terry Robert, California Air Resources Board
Nicholas Rabinowitsh, California Air Resources Board
Nicole Dolney, California Air Resources Board
Jonathan Taylor, California Air Resources Board
Scott Morgan, Governor's Office of Planning and Research
Ray Hrenko, AECOM
Jeff Rice, AECOM