APPENDIX C-26
SURVEY OF LOCAL PERFORMANCE STANDARDS
USED BY AB 900 PROJECTS

JANUARY 2019

The purpose of this document is to provide a survey of Assembly Bill (AB) 900 projects, which are designated "environmental leadership development projects" under the California Environmental Quality Act (CEQA) and subject to judicial streamlining. (Pub. Resources Code, §§21178-21189.3.) This document specifically focuses on the locational performance standards – if any – imposed on such projects' procurement of carbon offset credits needed to support findings that the projects will not result in net additional greenhouse gas (GHG) emissions. (Pub. Resources Code, §21183(c).) As evidenced by the summaries below, to date, the California Air Resources Board (CARB) has determined that AB 900 projects achieve the necessary quantity of GHG emissions reduction without imposing rigid, quantitative limits on the locational attributes of procured carbon offset credits. While more recent AB 900 projects have committed to a preference for local reduction opportunities, no quantitative mandates are associated with that preference and the ultimate portfolio of procured carbon offset credits is subject to general feasibility principles.

Additional information regarding the AB 900 projects discussed below is available at http://opr.ca.gov/ceqa/california-jobs.html. Further, documentation substantiating the summaries of each project's locational performance standards (or lack thereof) is attached hereto.

1. McCoy Solar Energy Project (State Clearinghouse #2012011019)

CARB net-zero determination date: 3/21/2012
Project location: Unincorporated Riverside County
Lead Agency: County of Riverside

The project's GHG emissions will be entirely offset by the purchase of carbon offset credits from NextEra Energy Resources, LLC, the New York Stock Exchange Blue Registry, or "a similar type of voluntary credit generator." CARB's certification of the project was not reliant on any guarantee that the carbon offsets would have locational priority. The project application relies on the NextEra Energy Resources, LLC wind project, located out of state (Texas), and it is expected that most credits will be purchased from that out-of-state project.

2. Apple Campus 2 (State Clearinghouse #2011082055)

CARB net-zero determination date: 6/14/2012
Project location: Cupertino
Lead Agency: City of Cupertino

The project will completely offset its GHG emissions through participation in California's Direct Access program by supplying renewable power to all Apple-owned buildings in Cupertino, California. Because all emissions will be directly offset at the project site or within the project vicinity, CARB did not address carbon offset credits for the project.

3. Soitec Solar Energy Project (State Clearinghouse #2013011007)

CARB net-zero determination date: 4/16/2013
Project location: Unincorporated San Diego County
Lead Agency: County of San Diego

The project's GHG emissions will be offset in their entirety by the purchase of carbon offset credits from "a qualified GHG emission broker such as Evolution Markets, based in San Francisco, California, or a similar type of broker . . . ." Although Evolution Markets is a broker in the California market, with offices in California and New York, there is no indication that the carbon credits negotiated by

Evolution Markets are from any particular locality, region, state, or country. The project application did not expressly guarantee that its carbon credits would come from a particular source; so the project, as certified, is not required to commit to a particular geographical source or locational priority with respect to its carbon offset credits.

4. 8150 Sunset Boulevard (State Clearinghouse #2014011087)

CARB net-zero determination date: 3/27/2014
Project location: Los Angeles
Lead Agency: City of Los Angeles

To ensure that the project's GHG emissions do not exceed baseline emissions, the project committed to "purchase at least 15 percent of its electricity from green power, carbon offsets, and/or RECs [renewable energy credits] for at least two years beyond the minimum five-year requirement." The project is not expressly reliant on any of its purchases coming from any particular geographic source or having any locational priority.

5. Event Center and Mixed-Use Development at Mission Bay Blocks (State Clearinghouse #2014112045)

CARB net-zero determination date: 4/20/2015
Project location: San Francisco
Lead Agency: San Francisco Office of Community Investment and Infrastructure

The project's construction-related GHG emissions will be completely offset through a one-time purchase "through a voluntary carbon credits market from a voluntary credit generator." To offset the project's operational GHG emissions, the applicant will "secure carbon credits on an on-going basis to offset the net increase in emissions generated during project operation through the voluntary carbon credits market from a voluntary credit generator." The project is not expressly reliant on any of its purchases coming from any particular geographic source or having any locational priority.

6. Qualcomm Stadium Reconstruction Project (State Clearinghouse #2015061061)

CARB net-zero determination date: 9/8/2015
Project location: San Diego
Lead Agency: City of San Diego

The project will mitigate its construction GHG emissions by securing "one-time carbon credits . . . through a voluntary carbon credits market from a voluntary carbon credit generator." The project will mitigate its operational GHG emissions by securing "voluntary carbon credits for the net increase in operational emission on a net-present value basis," and such credits will be purchased from "a verified GHG emissions credit broker." The project is not expressly reliant on any of its purchases coming from any particular geographic source or having any locational priority.

7. Crossroads Hollywood (State Clearinghouse #2015101073)

CARB net-zero determination date: 11/14/2016
Project location: Los Angeles
Lead Agency: City of Los Angeles

The project will completely offset its construction GHG emissions through securing carbon credits "through a voluntary carbon credits market from a qualified GHG emissions broker." The offsets must be "real, quantifiable, verifiable, and surplus." The project also commits to purchase "electricity from green power, carbon offsets, and/or RECs for the life of the project" to offset its operational GHG emissions. Pursuant to the South Coast Air Quality Management District's (SCAQMD) recommendation, which is the air district responsible for regulating air quality in the air basin in which the project is located, the offsets are "considered in the following prioritized manner: (1) project design feature/on-site reduction measures; (2) off-site within neighborhood; (3) off-site within district; (4) off-site within state; and (5) off-site out of state." Although the project committed to this geographical priority, the project does not guarantee that it will choose a local offset over a more distant offset and did not commit to any particular geographical source.

8. 6220 West Yucca Project (State Clearinghouse #2015111073)

CARB net-zero determination date: 6/15/2017
Project location: Los Angeles
Lead Agency: City of Los Angeles

The project will completely offset its construction and operational GHG emissions through a combination of one-time carbon offset credits and carbon credits on a net-present value basis. The credits will be secured through "a voluntary carbon credits market from a qualified GHG emissions broker." Pursuant to SCAQMD's recommendation, which is the air district responsible for regulating air quality in the air basin in which the project is located, the project committed to the following geographical prioritization for its credits: "(1) project design feature/on-site reduction measures; (2) off-site within the neighborhood; (3) off-site within the SCAQMD jurisdiction; (4) off-site within the State; (5) off-site out-of-State." Although the project committed to this geographical priority, the project does not guarantee that it will choose a local offset over a more distant offset and did not commit to any particular geographical source.

9. 10 Van Ness Avenue Mixed-Use Project (State Clearinghouse #2017072018)

CARB net-zero determination date: 12/18/2017
Project location: San Francisco
Lead Agency: San Francisco Planning Department

The project will completely offset its GHG emissions by securing carbon offset credits from "a recognized and reputable carbon registry" and "continue to explore [other options] to the extent feasible, with the following order of preference: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions; and (4) offset credits issued by a recognized and reputable carbon registry." Although the project committed to this geographical priority, the project does not guarantee that it will choose a local offset over a more distant offset and did not commit to any particular geographical source.

10. 1045 Olive Street Project (State Clearinghouse #2017121047)

CARB net-zero determination date: 3/19/2018
Project location: Los Angeles
Lead Agency: City of Los Angeles

The project will offset its GHG emissions by securing a blend of one-time carbon offset credits and carbon offset credits on a net-present value basis from a "recognized and reputable carbon

registry." The project will obtain offsets "using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reduction; (4) offset credits issued by a recognized and reputable carbon registry, consistent with policy recommendations in CARB's Proposed 2017 Climate Change Scoping Plan Update." Although the project committed to this geographical priority, the project does not guarantee that it will choose a local offset over a more distant offset and did not commit to any particular geographical source.

11. Hollywood Center Project (State Clearinghouse #2018051002)

CARB net-zero determination date: 6/22/2018
Project location: Los Angeles
Lead Agency: City of Los Angeles

The project will offset its GHG emissions by securing a blend of one-time carbon offset credits and carbon offset credits on a net-present value basis. All credits will be purchased through "an accredited carbon registry" using the following prioritization: "(1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions; and (4) offset credits issued by an accredited carbon registry, consistent with policy recommendations included in CARB's Proposed 2017 Climate Change Scoping Plan Update." Although the project committed to this geographical priority, the project does not guarantee that it will choose a local offset over a more distant offset and did not commit to any particular geographical source.

12. Potrero Power Station Mixed-Use Project (State Clearinghouse #2017112005)

CARB net-zero determination date: 8/31/2018
Project location: San Francisco
Lead Agency: San Francisco Planning Department

The project will not result in a net increase in GHG emissions above the baseline at any point during construction or operation and will remain "GHG neutral" during its lifetime. Therefore, CARB did not address carbon offset credits as they will not be utilized for the project.

13. 3333 California Street Project (State Clearinghouse #2017092053)

CARB net-zero determination date: Pending
Project location: San Francisco
Lead Agency: San Francisco Planning Department

The project application was submitted on 8/24/2018, and the public review period on supplemental information closed on 12/14/2018. CARB has not yet determined whether the project will result in net additional GHG emissions. In preparation for the possibility that the project will exceed baseline emissions, the applicant provided a letter of commitment to reduce GHG emissions and provided clarification in response to CARB's questions in a follow-up letter. The applicant has proposed to "purchase carbon credits issued by a recognized and reputable carbon registry." The applicant proposes the following prioritization:

> Consistent with policy recommendations included in CARB's 2017 Climate Change Scoping Plan, while offsets are a potential way to mitigate GHG emissions, other options will continue to be explored as well to the extent feasible, with the following order of preference: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry. To the extent offsets are

used to mitigate GHG emissions, prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the project that exceeds the existing emissions, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, for the operational emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining (after implementation of any identified, feasible project design feature/on-site reduction measures, off-site local reductions, or off-site regional reductions) operational emissions attributable to that phase over the analysis horizon of 30 years.

14. Inglewood Basketball and Entertainment Center (State Clearinghouse #2018021056)

CARB net-zero determination date: Pending
Project location: Inglewood
Lead Agency: City of Inglewood

The project application was submitted on 1/3/2019, and the AB 900 website (opr.ca.gov/ceqa/California-jobs.html) indicates no further action has been taken in relation to this project. CARB has thus not yet determined whether the project will result in net additional GHG emissions. The project application states that the project will reduce emissions to achieve net-zero emissions through the purchase of carbon credit offsets, which "will be verified by a third party accredited by ARB, such as the American Carbon Registry, Climate Action Reserved, and Verified Carbon Standard." The application states that carbon credits "shall be purchased at a net present value although the contracts could propose acquiring the credits in advance of the emission-generating activities to be offset." As to prioritization, the application states: "If using offset credits, the applicant must, to the extent feasible, place the highest priority on the purchase of offset credits that produce emission reduction within the City of Inglewood or the boundaries of the South Coast Air Quality Management District."

SUPPORTING MATERIALS

McCoy Solar Energy Project
Supporting Documents

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

March 21, 2012

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown Jr.
State Capitol, First Floor
Sacramento, California 95814

Dear Mr. Alex:

Pursuant to Assembly Bill 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition for the Governor's certification is that a project does not result in any net additional emission of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On January 12, 2012, in accordance with the Governor's Guidelines for applications for the CEQA streamlining, McCoy Solar, LLC submitted to ARB an Air Quality and Greenhouse Gas Technical Report (Report) for its proposed McCoy Solar Energy Project (Project). The Report included a proposed methodology for quantifying the net additional GHG emissions from the Project and documentation that the Project does not result in any net additional GHG emissions. After evaluating the Report in consultation with the lead agency, ARB found that it provided an adequate technical basis for estimating the total GHG emissions and required mitigation for the Project. Based on the information submitted, ARB staff has determined that McCoy Solar Energy Project will not result in any net additional GHG emissions.

I have enclosed ARB's Executive Order noting our determination. ARB staff's evaluation of the Air Quality and Greenhouse Gas Technical Report submitted by McCoy Solar, LLC is included in Attachment A and the Report is included in Attachment B.

If you have questions regarding ARB's evaluation or determination, please contact Mr. Richard Corey, Deputy Executive Officer, at (916) 322-2890 or by e-mail at rcorey@arb.ca.gov.

Sincerely,

James N. Goldstene
Executive Officer

Enclosure(s)

cc: Richard Corey
Deputy Executive Officer

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER LP-12-001

Relating to Determination of Any Net Additional Greenhouse Gas Emissions Pursuant to Public Resources Code section 21183(c)

For McCoy Solar Energy Project, McCoy Solar, LLC

WHEREAS, in September 2011, Governor Brown signed Assembly Bill 900, "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, in accordance with AB 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, in accordance with California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHGs), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for applications for the CEQA streamlining require, for purposes of ARB's determination on GHGs, that an applicant submit electronically to ARB a proposed methodology for quantifying a project's net additional GHGs and documentation that the project does not result in any net additional GHGs;

WHEREAS, in accordance with the Governor's Guidelines, McCoy Solar, LLC submitted its GHG methodologies and documentation to ARB on the proposed McCoy Solar Energy Project (Project) on January 12, 2012;

WHEREAS, the Air Quality and Greenhouse Gas Technical Report (Report) submitted for the McCoy Solar Energy Project states that the Project's estimated GHG emissions are as follows:

1. Construction GHG Emissions: 12,672 metric tons of carbon dioxide equivalent ($MTCO_2e$) generated by the equipment used for construction activities and from both on-site and off-site motor vehicles;

2. Direct Operation-Related GHG Emissions: 3,360 $MTCO_2e$ from fossil fuel combustion used to support operation of the facility, including employee transportation;

3. Indirect Operation GHG Emissions: 3,120 $MTCO_2e$ emissions from electricity use and sulfur hexafluoride usage associated with electrical switchgear;

4. Total Project Lifetime GHG Emissions: 19,152 $MTCO_2e$ from construction and operation of the Project during a projected 30-year operational lifetime;

WHEREAS, in the Report submitted, McCoy Solar, LLC proposes to secure 19,152 $MTCO_2e$ carbon credits through a voluntary carbon credits market such as the New York Stock Exchange Blue Registry, or from a similar type of voluntary carbon credit registry, to mitigate the total identified construction and operational GHG emissions prior to the commencement of the Project;

WHEREAS, ARB staff has reviewed and evaluated the submitted Report in consultation with the lead agency; prior to finalizing its determination, staff shared a draft of its evaluation with the lead agency;

WHEREAS, staff's evaluation of the Report found that it provides an adequate technical basis for estimating the total GHG emissions and required mitigation for the Project; and

WHEREAS, ARB's review and evaluation of the Project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900; ARB's determination is not in lieu of any findings or determination required to be made by the lead agency or a responsible agency pursuant to any other requirement under state or federal law, including CEQA; the lead agency remains responsible for full compliance with CEQA for this project.

NOW, THEREFORE, based on ARB staff's evaluation (Attachment A) of the Air Quality and Greenhouse Gas Technical Report submitted by McCoy Solar, LLC (Attachment B), I determine that McCoy Solar Energy Project will not result in any net additional greenhouse gas emissions pursuant to Public Resources Code section 21183(c).

Executed at Sacramento, California this 21 day of March 2012.

James N. Goldstene
Executive Officer

Attachment(s)

Attachment A

Air Resources Board
Staff Evaluation

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Air Resources Board Evaluation
of Greenhouse Gas Emission Methodologies and Documentation
Pursuant to Public Resources Code Section 21183, subdivision (c)

Project Information

Project Name: McCoy Solar Energy Project
Project Applicant: McCoy Solar, LLC
Project Location: Unincorporated portion of Riverside County near the city of Blythe
Project Description: The proposed McCoy Solar Energy Project (MSEP or Project) would be an up to 750 megawatt (MW) net alternating current solar power generating installation. The Project would utilize photovoltaic (PV) technology for the generation of electricity. The entire 750 MW Project would be comprised of two power units–Unit 1 would have a capacity of 250 MW and Unit 2 would have a capacity of up to 500 MW. The Project would be developed over an area of approximately 4,315 acres of federal land managed by the Bureau of Land Management (BLM) and 477 acres of private land, plus an approximately 15.5-mile long transmission line right-of-way. The applicant expects the Project to have a 30-year operational life.

AB 900 Standards and Applicants Proposed Method of Compliance

The Governor may certify a project for streamlining pursuant to Assembly Bill 900 "Jobs and Economic Improvement through Environmental Leadership Act" if certain conditions are met. (Public Resources Code § 21178 et seq.) One such condition is that the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the Air Resources Board pursuant to Division 25.5. (commencing with Section 38500) of the Health and Safety Code." (Public Resources Code § 21183, subdivision (c).)

In accordance with the Guidelines established by the Governor for applying for the streamlining, McCoy Solar, LLC submitted an "Air Quality and Greenhouse Gas Technical Report" (Report) for the proposed Project to the Air Resources Board (ARB) for review and evaluation. The Report states that combining the total construction and operational GHG emissions, the proposed Project would emit an estimated 12,672 metric tons carbon dioxide equivalent ($MTCO_2e$) greenhouse gas (GHG) emissions during construction and 6,480 (216 x 30 years) $MTCO_2e$ GHG emissions during operation, for a total of 19,152 $MTCO_2e$ of GHG emissions.

The Report states that the proposed Project will result in the displacement of more GHG intensive forms of energy production, and therefore, would result in an overall net reduction in GHG emissions. However, the Report states that to ensure the proposed Project meets the requirements of Public Resources Code section 21183, subdivision (c), McCoy Solar, LLC has proposed to secure voluntary carbon credits equivalent to 19,152 $MTCO_2e$ to mitigate the GHG emissions expected to be generated during construction and operation of the proposed Project. By mitigating the total projected

GHG emissions, the Report concludes that the proposed project will not result in any net additional GHG emissions.

The Report states that a joint Environmental Impact Study (EIS)/Environmental Impact Report (EIR) is being prepared for the proposed Project pursuant to the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Prior to approval of the proposed Project, the EIS/EIR must be certified by the lead agency (Riverside County) and a mitigation monitoring and reporting plan must be adopted. The Report states that the applicant expects that all mitigation measures necessary to ensure compliance will be included in the mitigation monitoring and reporting plan, as conditions of project approval, or both. According to the Application for CEQA Streamlining Under the "Jobs and Economic Improvement through Environmental Leadership Act" submitted with the Report, the applicant will be required to implement all mitigation measures contained in the mitigation monitoring and reporting plan and adhere to all conditions of project approval set forth by Riverside County and the BLM.

GHG Emissions Calculation Methodology

The Report evaluated the emissions of six categories of GHGs: carbon dioxide, nitrous oxide, methane, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. Carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) are GHGs emitted by combustion sources and would be directly emitted by the equipment and vehicles used for constructing the Project. Sulfur hexafluoride (SF_6) may be emitted from some types of electrical switchgear associated with the Project. The Report states that the Project is not expected to result in any emissions of hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs).

The Report states that although CO_2 is expected to be the primary GHG of concern for this project, emissions of CH_4, N_2O, and SF_6 were also estimated. ARB staff agrees that in most cases CO_2 drives the projected GHG emissions associated with fuel combustion. ARB staff expects that there may be SF_6 emissions associated with the Project due to gas-insulated switchgear being used in conjunction with the Project. ARB staff would not expect any HFC or PFC emissions associated with the Project because of the specialty nature of these compounds, one of the most common forms of usage is as a refrigerant.

The CO2 emissions from construction equipment use were estimated in the Report using the same methodology used to estimate criteria pollutant emissions. This methodology employs the URBEMIS model to estimate CO_2 emissions. Emissions of N_2O and CH_4 were estimated using the CO_2 emissions calculated by URBEMIS and CO_2, N_2O, and CH_4 emission factors obtained from The Climate Registry Default Emission Factors (2011) for diesel fuel combustion. The URBEMIS default load factors were revised by the applicant to reflect the revised load factors proposed by the Air Resources Board (ARB) in *The Amendments to the Regulations for In-Use Off-Road*

Diesel-Fueled Fleets and Off-Road Large Spark Ignition Engine Fleet Requirements (2010).

The Report explains that URBEMIS is the model recommended by the Mojave Desert Air Quality Management District. ARB staff agrees that URBEMIS with revised load factors is an appropriate model for estimating CO_2 emissions from mobile equipment. Staff agrees that using CO_2 emissions from URBEMIS and back-calculating comparable N_2O and CH_4 emissions from Climate Registry emission factors is a reasonable way to estimate these emissions.

In the Report, GHG emissions from motor vehicles used during construction were estimated using the same methodology used to estimate criteria pollutants from construction vehicles by using ARB's EMFAC2007 model. Since the EMFAC2007 model provides emission factors for CO_2 emissions only, the Report used emission factors for N_2O and CH_4 for different vehicle types from ARB's Regulation for The Mandatory Reporting of Greenhouse Gas Emissions, Appendix A, Table 8 (ARB's mandatory reporting program).

ARB staff agrees with the use of EMFAC2007 for the estimation of emissions factors for motor vehicles. Staff agrees that using the CO_2 emissions from the model and back-calculating to obtain N_2O and CH_4 emissions from ARB's mandatory reporting program is a reasonable method to obtain those emission estimates.

The Report estimated GHG emissions during construction generated by motor vehicles within the Mojave Desert Air Basin (MDAB) (i.e., worker trips to and from site and deliveries of construction materials). The applicant has not decided at the time of submission where the PV panels will be obtained from for the Project. The Report states that, in order to provide a conservative estimate of GHG emissions from the delivery of the panels, GHG emissions were estimated based on an assumed round trip for delivery of panels from the Port of Long Beach. The Report split GHG emissions due to panel delivery trips into those emissions that would occur inside of and outside of the MDAB as provided in the table below.

Report's Construction GHG Emission Estimates ($MTCO_2e$)

Calendar Year	Within MDAB	Outside of MDAB	Total
2013	1,945	362	2,307
2014	2,500	627	3,127
2015	2,567	549	3,116
2016	3,197	925	4,122
Total	**10,209**	**2,463**	**12,672**

The Report states that the Project's operation would emit GHGs from the use of equipment and vehicles. It further states that GHGs could be emitted as fugitive emissions from electrical switchgear that contains SF_6 and indirect GHG emissions due to electricity use from off-site generators.

The Report estimated GHG emissions for on-site equipment based on anticipated fuel use and emission factors from The Climate Registry's Default Emission Factors (2011). The Report estimated vehicle emissions using the same methodology used to estimate vehicle emissions during construction. SF_6 emissions were assumed to be emitted at half the allowable level for calendar year 2020 under ARB's Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (California Code of Regulations, title 17, sections 95350 – 95359).

ARB staff agrees that using projected fuel usage from equipment and vehicles is a valid basis for estimating GHG emissions from these devices. The Climate Registry is a reasonable source for emission factors from these devices. Staff agrees that this is an appropriate methodology for the same reasons as were detailed under the review of the applicant's estimation of GHG emissions from equipment used during construction.

ARB adopted a regulation pertaining to the maximum allowable SF_6 emission rate from gas insulated switchgear. The regulation starts at a ten percent leak rate allowed in 2011 and decrease one percent per year until it reaches a one percent allowable leak rate in 2020. The Report assumed that the switchgear used would emit at the rate of one-half of a percent, based on installed capacity, annually from the time of installation through the life of the project. Currently available new switchgear typically has a maximum leak rate of one-half percent or less. As such, ARB staff agrees that the applicant used a reasonable estimation of SF_6 emissions.

Report's Annual GHG Emission Estimates from Project Operation

	Annual Emissions (MTCO2e/yr)
Fossil Fuel Combustion	112
Indirect Electricity Use	24
Fugitive Sulfur Hexafluoride	80
Total Annual Operations	**216**

The Report derived the Project's total GHG emissions by combining construction and operational GHG emission for a 30-year project life. This yields a total GHG estimate of 19,152 $MTCO_2e$. Based on the staff evaluation of the calculations for estimating emissions as described above, staff agrees that 19,152 $MTCO_2e$ is a reasonable estimate of the Project's total GHG emissions over the lifetime of the Project.

Carbon Credits

McCoy Solar, LLC proposes to secure voluntary carbon credits from NextEra Energy Resources, LLC (the parent company of McCoy Solar, LLC) or from a similar type of voluntary credit generator. The applicant submitted the following information regarding the carbon credits that they are proposing to use to mitigate the GHG emissions from the Project. In 2010, NextEra Energy Resources submitted the Capricorn Ridge 4 wind project to the Voluntary Carbon Standard (VCS, now called the Verified Carbon

Standard) to generate carbon offset credits. The 112.5 MW project is located in Sterling and Coke counties in West Texas. First Environment, a "qualified third party," verified the creation of the Verified Carbon Units (VCUs) for the renewable generation from the project for periods from January 1, 2010 through September 30, 2010, accounting for over 100,000 metric tons of carbon credits. The majority of these VCUs have been sold in the voluntary carbon offset market, with the remaining VCUs still residing in NextEra Energy Resources' NYSE Blue (APX) registry account. The Report states that the applicant would secure 19,152 metric tons CO_2e of these remaining VCUs, or similar carbon credits, to mitigate the construction and operations of the Project. As McCoy Solar is a wholly owned subsidiary of NextEra Energy Resources, ARB staff believes that the potential for the Project to procure these credits is enhanced by this business relationship.

ARB staff reviewed the information available on the VCS website and found that the VCS registry is consistent with the registry required to be used for renewable energy projects to demonstrate compliance with the Renewable Portfolio Standard as amended by Senate Bill 2 of the first extraordinary session of 2011. VCS issues individual certificates with unique serial numbers. The unique serial numbers allows for the tracking of all transactions involving certificates and prevents multiple claims against the same credits. Credits can be tracked through the registry from issuance through retirement. According to VCS, its registry operators must meet strict capitalization, transparency, and other requirements. The VCS system currently has three international registries: NYSE Blue, Markit, and CDC Climat. After reviewing information about VCS, ARB staff believes that the credits the applicant is proposing to use would be acceptable for CEQA mitigation of the GHG emission impacts due to the Project.

Conclusions/Recommendations

The ARB staff reviewed the GHG emission estimates and the methodology provided by the applicant. During its review, ARB staff had numerous conversations with the CEQA lead agency, the County of Riverside, and consultants working on the CEQA evaluation for this Project. Based on these discussions with lead agency representatives, staff concluded that the emissions estimates and methodology submitted to ARB are generally consistent with how the lead agency is planning to evaluate the Project's GHG emissions. The lead agency's approach may evaluate the GHG emissions from a couple of potential sources (e.g. carbon embedded in water used for the project) that are not calculated in the Report submitted to ARB. However, there is a less than one percent difference in estimated GHG emissions between the two estimation approaches. Based on discussions with the lead agency's consultant, ARB staff and the consultant agree that the differences in calculations are negligible.

Based on the staff's evaluation of the documentation provided in the Report and the discussions with the lead agency's consultants, staff concludes that the project applicant has reasonably documented and estimated the Project's anticipated GHG

emissions. If McCoy Solar, LLC secures the proposed GHG emission credits described in the Report, then the Project's estimated GHG emissions would be fully mitigated.

Based on this evaluation, ARB staff recommends that a determination be made that the McCoy Solar Energy Project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, pursuant to Public Resources Code section 21183, subdivision (c).

Apple Campus 2
Supporting Documents

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

June 14, 2012

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown Jr.
State Capitol, First Floor
Sacramento, California, 95814

Dear Mr. Alex:

Pursuant to Assembly Bill 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act if certain conditions are met. One condition for the Governor's certification is that a project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On April 18, 2012, Apple Inc. submitted to ARB information regarding the GHG emission estimates for its proposed Apple Campus 2 project in Cupertino, California. ARB staff conducted an independent analysis of the baseline and project operational emissions and concluded that the project will not result in any net additional GHG emissions relative to the baseline.

I have enclosed an ARB Executive Order noting our determination. ARB staff's evaluation of the Apple Campus 2 project is included in Attachment A and the documentation submitted by Apple Inc. is included in Attachments B, C, and D.

If you have any questions regarding ARB's evaluation or determination, please contact Mr. Kurt Karperos, Assistant Chief, Planning and Technical Support Division at (916) 322-5350 or kkapero@arb.ca.gov.

Sincerely,

Lynn M. Terry
Deputy Executive Officer

Enclosures

cc: Mr. Kurt Karperos
Assistant Chief
Planning and Technical Support Division

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER LP-12-002

Relating to Determination of Any Net Additional Greenhouse Gas Emissions Pursuant to Public Resources Code section 21183, subd. (c)

For Apple Campus 2 Project, Apple Inc.

WHEREAS, in September 2011, Governor Brown signed Assembly Bill 900, "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, in accordance with the AB 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, in accordance with California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHGs), including GHG emissions from construction and operation of the project, as determined by the Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for applications for the CEQA streamlining require, for purposes of ARB's determination on GHGs, that an applicant submit electronically to ARB a proposed methodology for quantifying a project's net additional GHGs and documentation that the project does not result in any net additional GHGs;

WHEREAS, Apple Inc. (Apple) submitted GHG documentation to ARB on the proposed Apple Campus 2 Project (Project) on April 18, 2012;

WHEREAS, the Application for Environmental Leadership Development Project (Application), the Net Zero Energy Strategy for Apple Campus 2 (Energy Strategy), and the Statement of Construction Emissions and Participation in California's Direct Access Program (Construction Statement) submitted by Apple for the Apple Campus 2 Project included the Project's estimated GHG emissions for the 2011 full occupancy baseline and estimated GHG emissions for the Project's operational and construction emissions;

WHEREAS, to substantiate GHG emission estimates submitted by Apple in the Application, ARB staff conducted an independent assessment of GHG emissions for the 2011 full occupancy baseline and the Project's 2016 operational emissions using independently acquired, appropriate data inputs and methods;

WHEREAS, based on ARB staff's independent assessment, the estimated GHG emissions for the full occupancy baseline in 2011 are as follows:

1. Indirect Operation-Related GHG Emissions for the Energy Sector: 23,839 metric tons of carbon dioxide equivalent ($MTCO_2e$) emissions from electricity and natural gas use to support operation of the facility;

2. Direct Operation-Related GHG Emissions for the Mobile Sector: 29,744 $MTCO_2$ from fossil fuel combustion due to employee transportation, including employee commute and transit trips, and visitor and vendor trips;

3. Indirect Operation-Related GHG Emissions for the Waste Sector: 533 $MTCO_2e$ emissions from waste disposal;

4. Indirect Operation-Related GHG Emissions for the Water Sector: 366 $MTCO_2e$ emissions from water usage;

5. Total Project Operational GHG Emissions: 54,482 $MTCO_2e$ from full occupancy operation of the Project in 2011;

WHEREAS, based on ARB staff's assessment, the estimated GHG emissions for Project operations in the full Phase 1 build-out year 2016 are as follows:

1. Indirect Operation-Related GHG Emissions for the Energy Sector: Net zero GHG emissions from energy use as a result of a net zero energy strategy proposed by Apple for the Project in which 100 percent of the Project's energy needs will be met with:
    a. Reduction of energy use by at least 30 percent compared to a typical commercial development through energy efficient, green building design;
    b. Onsite generation of renewable energy using a 12 MW capacity solar array, and a 6 MW Fuel Cell installation on-site powered by 100 percent directed biogas, and;
    c. Meeting the remaining energy needs with clean, grid-purchased renewable energy generated off the Project site;

2. Direct Operation-Related GHG Emissions for the Mobile Sector: 33,661 $MTCO_2$ from fossil fuel combustion due to employee transportation, including employee commute and transit trips, and visitor and vendor trips;

3. Indirect Operation-Related GHG Emissions for the Waste Sector: 729 $MTCO_2e$ emissions from waste disposal;

4. Indirect Operation-Related GHG Emissions for the Water Sector: 373 $MTCO_2e$ emissions from water usage, which incorporates the proposed reduction in water use by at least 30 percent compared to a typical commercial development;

5. Total Project Operational GHG Emissions: 34,763 $MTCO_2e$ from full occupancy operation of the Project in 2016;

WHEREAS, based on information provided by Apple, the Project will generate a total of 47,819 $MTCO_2e$ from the equipment used for construction activities from both on-site and off-site equipment and motor vehicles;

WHEREAS, based on ARB staff's independent assessment, Apple's proposed design and operational elements will result in total GHG emissions from project operations in 2016 lower than the 2011 full occupancy baseline GHG emissions;

WHEREAS, Apple has committed to fully offsetting the construction emissions of the Project from 2013 to 2015 by participation in California's Direct Access program for supplying renewable power to Apple-owned buildings in Cupertino, California;

WHEREAS, mitigation of all Phase 1 Project GHG emissions from construction shall occur contemporaneously with construction of the Project;

WHEREAS, ARB staff has reviewed the Application and ARB staff's assessment with the lead agency prior to finalizing its determination;

WHEREAS, ARB's review, evaluation, and assessment of the Project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900; ARB's determination is not in lieu of any findings or determination required to be made by the lead agency or a responsible agency pursuant to any other requirement under state or federal law, including CEQA; the lead agency remains responsible for full compliance with CEQA for this project;

NOW, THEREFORE, based on ARB staff's assessment of the Project's 2011 full occupancy baseline and 2016 operational emissions (Attachment A), and the Application for Environmental Leadership Development Project, the Net Zero Energy Strategy for Apple Campus 2, and the Statement of Construction Emissions and Participation in California's Direct Access Program submitted by Apple Inc. (Attachments B, C and D), I determine that the Apple Campus 2 Project will not result in any net additional greenhouse gas emissions pursuant to Public Resources Code section 21183(c).

Executed at Sacramento, California this 14th day of June 2012.

Lynn M. Terry
Deputy Executive Officer

Attachment A

Air Resources Board
Staff Assessment

AB 900 -- Apple Campus 2 Project
ARB Staff Evaluation

Apple, Inc. (Apple) is proposing development of Apple Campus 2, a major office and research campus located in Cupertino, California. Apple is seeking certification for the Apple Campus 2 project under Assembly Bill 900, the Jobs and Economic Improvement through Environmental Leadership Act (AB 900). AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the project does not result in any net additional greenhouse gas (GHG) emissions as determined by the Air Resources Board (ARB). As part of the determination, ARB staff has prepared this technical evaluation of the GHG emissions from the Apple Campus 2 project. The evaluation includes a brief description of the Apple Campus 2 project, a summary of the AB 900 net zero GHG emissions requirement, a technical review of GHG emissions information provided by Apple in their AB 900 application, an ARB staff assessment of Apple's proposal for achieving net zero, and staff's recommendation on the AB 900 GHG emissions determination for the project.

Project Description

The Apple Campus 2 project is planned for development on 176 acres situated in the northeast section of the City of Cupertino bordering on the City of Santa Clara. The site is currently home to a corporate business park owned by Apple. The proposed project includes demolition of the existing buildings followed by redevelopment of the site to include construction of a 2.8 million square foot ring-shaped office building, R&D buildings totaling 300,000 square feet, a corporate auditorium, an employee fitness center, and above- and below-ground parking facilities. Approximately 13,000 Apple employees are anticipated to work at the Apple Campus 2 site. Most of the increase in employee population will result from the consolidation of other Apple campuses elsewhere in Cupertino to Apple Campus 2.

AB 900 Net Zero Additional GHG Emissions Requirement

AB 900 provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5. (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code §21183, subd. (c).)

Per the Governor's Guidelines for AB 900 applications, applicants shall submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The

project's net emissions, after mitigation, will be monitored and enforced consistent with section 21183, subdivision (d) of the Public Resources Code.

The role of ARB staff in the GHG emissions determination of a proposed AB 900 project is limited to an evaluation of the quantification methods and documentation submitted by the project applicant for purposes of the Governor's certification. ARB staff will evaluate the technical elements of a project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

Apple's Proposed Baseline and Project GHG Emissions

Baseline Emissions

The Apple Campus 2 project information received by ARB on April 18, 2012, consists of a brief narrative, the GHG emission estimates for two different baseline scenarios, and the final results of emission calculations for the project's construction and operation. Apple's application incorporated estimates of the following two baselines: (1) 2011 Actual Occupancy Baseline—GHG emissions based on the current actual occupancy of the existing buildings; and, (2) 2011 Full Occupancy Baseline—GHG emissions as if the existing buildings were fully occupied. The current actual occupancy of the site is about half of the full capacity given that Apple is relocating employees to other locations in anticipation of the project.

The application states that use of the 2011 Actual Occupancy Baseline provides consistency with the CEQA analysis by the lead agency, but that use of the 2011 Full Occupancy Baseline may provide a more realistic estimate if the project will result in net zero additional GHGs given that the site has historically operated at full occupancy and would likely do so again if the project were not built. ARB staff acknowledges that the 2011 Full Occupancy Baseline is an acceptable baseline for evaluating the project's net GHG emission impacts given: 1) in the absence of the project, the site would likely continue to serve as one of several Apple campuses in Cupertino and would be filled to its capacity of 9,500; and, 2) the footprint of the 9,500 baseline population, whether at the current project site or a location elsewhere in Cupertino provides an estimate of the total emissions from which reductions may be achieved from the project.

2011 Full Occupancy Baseline presented in Apple's application includes emissions from energy use, transportation, waste and water. The application states that baseline emissions from energy use, mobile, and waste were estimated using the California Emissions Estimator Model (CalEEMod), an emissions quantification model designed and developed by a consulting firm in conjunction with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. The project application states that baseline emissions from water were quantified by City of Cupertino consultants based on water demand analysis and incorporated directly into the Apple Campus 2 project application.

Table 1 below summarizes Apple's assessment of GHG emissions from a 2011 Full Occupancy Baseline. Emissions from a 2011 Full Occupancy Baseline total 54,290 metric tons of carbon dioxide equivalent per year (MTCO2e/year). The application indicates that this estimate is based on full occupancy of the existing buildings with 9,500 employees with a total facility (office plus ancillary use) floor space of 2,657 thousand square feet (ksf).

Table 1
Apple's GHG Emissions for
2011 Full Occupancy Baseline

Sector	Emissions (MTCO2e/year)
Energy	25,297
Mobile	25,469
Waste	654
Water	2,870
Total	***54,290***

Project Operational Emissions

Project operational emissions incorporate mitigation measures at the time construction is completed and the site is at full occupancy. The project application states that construction is expected to be completed in the fall of 2015. Project operational emissions are presented in the application beginning in 2016 and extending through 2020. The application indicates that 2016 operational year emissions are highest with emissions in subsequent years declining due to transportation-related reduction measures at the State level (e.g., Pavley standards).

In 2016, the Apple Campus 2 site is expected to have a population of 13,000 employees with 3,340 ksf floor space, including offices, research facilities, an auditorium, and a corporate fitness center. Operational emissions from the project include estimates of emissions from energy use, transportation, waste, and water.

The project application states that Apple commits to net zero energy for the project and states that 100 percent of the energy requirements of the project will be met through a three-tiered strategy combining efficiency and conservation, on-site renewable energy from 650,000 square feet of solar panels with a total capacity of 12 MW, a 100 percent biogas sustained fuel cell with an annual output of 47 GWh, and off-site renewable energy from Apple's participation in California's Direct Access program for commercial customers and from the purchase of renewable energy credits.

Transportation-related emissions included in the application account for employee commute, local non-commute trips by Apple employees, visitor and vendor trips, and Apple Transit trips provided by Apple coaches/shuttles. Activity information for worker commute trips, local non-commute trips, visitor trips, and vendor trips were developed

by Apple using CalEEMod scaling emissions to reflect the expected increase in trip rates in 2016 based on the increase in project size relative to the baseline. Emission factors used for Apple Transit were adjusted to account for the anticipated increase in biodiesel use for Apple coaches.

The project application considers transportation emissions reductions from the installation of charging stations for 300 employee-driven electric vehicles. The project application indicates that all 300 electric vehicles are assumed to be charged using zero emission electricity generated at the project site. The use of net zero energy for charging electric vehicles results in a 564 MTCO2e reduction in light-duty vehicle emissions in 2016.

The project application states that 2016 operational emissions from waste are calculated using CalEEMod defaults applying the same diversion rate (81%) used for the baseline analysis. Project emissions from water use reference the same water demand analysis used for estimating the project's baseline emissions.

The application indicates that the project site will include replacement of existing switchgear and distribution-scale equipment with fewer, high-performance pieces of equipment, resulting in a substantial decrease or elimination of any potential emissions of SF_6.

Table 2 below summarizes Apple's 2016 project operational emissions presented in the application. Total emissions of 27,814 MTCO2e are based on the project's full occupancy of 13,000.

Table 2
Apple's 2016 Project Operational GHG Emissions

Sector	Emissions (MTCO2e/year)
Energy	--
Mobile	27,428
Waste	268
Water	118
Total	***27,814***

Project Construction Emissions

The application states that one-time construction emissions for the project were estimated using CalEEMod default values based on the area of the project and the expected number of trips required for excavation and fill. The estimated emissions provided in the application from construction equal 14,391 MTCO2e.

Subsequent to submitting the application, Apple provided ARB staff with revised information indicating that the total one-time estimated emissions from project

construction are 47,819 MTCO2e. This estimate was developed based on a direct assessment of several factors, including the number, type, and power consumption of equipment used on-site during construction.

The application estimates one-time sequestration benefits associated with the addition of approximately 1,700 trees to the existing site.

ARB Staff Assessment of Apple Campus 2 GHG Emissions

ARB staff conducted an independent assessment of the baseline and operational GHG emissions for the Apple Campus 2 project. In some cases, the application from Apple did not provide documentation of the inputs, assumptions, calculation methods, or other relevant information to enable ARB staff to replicate the emission calculations. Staff therefore used independently acquired, appropriate data inputs to develop these estimates. In other cases, ARB staff used independent data and methods to develop estimates that were missing from the application entirely. The methodology and references for staff's independent evaluation are shown in Attachment 1.

Staff conducted an analysis of 2011 Full Occupancy Baseline emissions and 2016 Project Operational emissions from sectors included in the application: energy, mobile, waste, and water. The full occupancy baseline refers to the existing buildings on the development site with total facility floor space of 2,657 thousand square feet and a population of 9,500 employees. The 2016 project refers to the complete build out of the project with a total floor space of 3,340 thousand square feet of floor space and approximately 13,000 employees.

Baseline Emissions

For energy use, staff developed GHG emissions estimates for electricity and natural gas consumption from the Project square footage data and factors for energy consumption per unit area. Staff used a comprehensive study of commercial sector energy use conducted by California Energy Commission (CEC) to obtain factors for energy use per square foot. The factors were applied to baseline square footage to obtain total annual energy consumption. The emission factor used to convert energy use to emissions was developed by ARB staff using total statewide energy consumption data from CEC and total electricity GHG emissions from ARB's statewide GHG inventory, and incorporates reductions from California's Renewable Portfolio Standard.

To estimate emissions from the mobile sector, staff used vehicle trip data, combined with trip length and vehicle emission factors to develop emissions estimates for commute trips, non-commute trips, visitor/vendor trips, and Apple Transit. Data on total vehicle trips and trip length were essentially the same as those used in Apple's application, with the exception of commute trips. For commute trips, staff used an average one-way trip length of 11.98 miles/employee/day rather than 9.5 mile trip length suggested by Apple. The 11.98 mile trip length is referenced in the San Francisco Bay Area Regional Transportation Plan and staff believes it is more representative of an

average one-way trip length in the Bay Area. Staff used vehicle class-specific CO2 emission factors from EMFAC2011 for all mobile sector GHG emission calculations. Staff calculated waste emissions using number of employees, average annual waste generation per person, a waste diversion rate, and an emission factor based on metric tons of GHGs emitted per metric ton of municipal solid waste deposited in a landfill. Staff used commercial solid waste generation data from the City of Los Angeles to develop estimates for annual per capita waste generation. Waste diversion rate data were obtained from CalRecycle and the GHG emission factor for landfilled waste was developed by ARB staff using information from ARB's statewide GHG inventory.

Staff calculated emissions from the water use associated with the project's office buildings and landscaping. For office buildings, the total square footage of office space was used, combined with an average water use factor developed by the City of Milpitas for professional/administrative offices and a GHG emission intensity factor in tons of CO2 per acre-foot were used to estimate GHG emissions. The emission intensity factor for water was developed in a report issued by the University of California for California EPA's Water Energy Team of the Climate Action Team (WetCat).

To calculate emissions from water used for landscaping, staff used the total landscaped area and factored the average water use factor for park/recreational areas in gallons per day per acre and by an emissions intensity factor in tons of CO2 per acre-foot. Table 3 summarizes staff's assessment of GHG emissions from the 2011 Full Occupancy Baseline.

Table 3
ARB Staff Assessment of GHG Emissions for
2011 Full Occupancy Baseline

Sector	Emissions (MTCO2e/year)
Energy	23,839
Mobile	29,744
Waste	533
Water	366
Total	***54,482***

Project Operational Emissions

In 2016 the project is expected to have a population of 13,000 employees with a total floor space from all buildings of 3,340 ksf. Staff calculated operational emissions from the project's energy use, transportation, waste, and water with anticipated mitigation measures, based on information provided in Apple's application.

Staff used the same quantification methods to develop emissions estimates for the project in 2016 as were used for calculating baseline emissions with the following major exceptions:

1) Accounted for GHG emissions from energy demand mitigated by the energy generation on-site.

2) Office space electricity and natural gas usage incorporate a 30 percent energy efficiency improvement relative to the baseline calculations; this is consistent with efficiency gains proposed by Apple.

3) Emissions associated with electricity consumption from charging electric vehicles were developed from the total expected number of electric vehicles, the expected total daily miles driven, unit energy demand for existing electric vehicle technology (based on USEPA data on the Nissan Leaf), number of charges per year (assumed to equal the number of workdays), and a GHG emission factor developed by staff using data from CEC and ARB's GHG inventory.

4) Some emissions from the mobile sector (for Commute and Non-Commute trips) were assumed to be offset by the use of electric vehicles consistent with electric vehicle use data proposed by Apple.

5) Emissions from water use incorporate a 30 percent increase in water efficiency in 2016 as suggested by Apple.

Staff calculated mitigated emissions from using solar panels based on Apple-provided information on total capacity of the proposed solar arrays, combined with data from the California Statewide Utility Codes and Standards Program on average energy generation from solar panels in the Santa Clara climate zone, and an ARB developed emission factor. Mitigated emissions from the use of Apple's proposed use of biogas sustained fuel cells were estimated by staff using total capacity and operating hours from Apple's application and an ARB-developed emission factor. Staff assumed 10 percent downtime for fuel cell system maintenance per year.

Based on a comparison of the total annual energy demand against the total annual on-site energy generation using conservative estimates, staff agrees that Apple should be able to generate sufficient energy to offset the annual energy demands for normal operations. Therefore, staff concurs that the Apple project can potentially have net zero emissions from the energy sector.

Table 4 below summarizes staff's assessment of Apple's 2016 project operational emissions.

Table 4
ARB Staff Assessment of
2016 Project Operational GHG Emissions

Sector	Emissions (MTCO2e/year)
Energy	--
Mobile	33,661
Waste	729
Water	373
Total	***34,763***

Construction Emissions

The application indicates that the project's future year reductions will fully offset construction emissions. The application states that construction emissions were quantified using CalEEMod default values based on the total square footage of the project and on the estimated number of haul/vendor trips required to import/export expected fill. The estimate of construction emissions stated in the application is 14,391 MTCO2e.

Staff contends that some operation of the current facilities will likely continue during the course of construction, and therefore, the annual operational and construction emissions during the construction phase could be greater than the baseline operational emissions. If the facility is completely demolished within the first month of construction, most of the 9,500 Apple employees will continue to work in the area and will continue to exact their carbon footprint. The GHG emissions from the construction activities will amount to an increase in emissions above and beyond the baseline operational emissions.

Therefore, staff believes that amortization of the GHG emissions from construction through reductions achieved over the operational life of the project is not an acceptable mitigation approach since it allows a net increase in GHG emissions during the construction phase.

On June 8, 2012, Apple provided ARB staff with revised information indicating that the total one-time estimated emissions from project construction are 47,819 MTCO2e. This estimate was developed based on a direct assessment of several factors, including the number, type, and power consumption of equipment used on-site during demolition and construction.

Conclusions and Recommendations

ARB staff reviewed the GHG emission estimates and the methodology provided by the applicant. ARB staff also conducted an independent analysis of the baseline and project operational emissions and mitigation measures using data sources other than those used by the applicant.

Based on an evaluation of the documentation provided in the application, and staff's independent assessment of baseline and project operational emissions, staff concludes that project operational emissions in 2016 will be net zero additional emissions relative to the baseline as shown in Table 5 below.

Table 5
ARB Staff Assessment of 2011 Full Occupancy Baseline and 2016 Project Operational GHG Emissions (MTCO2e/year)

Sector	2011 Full Occupancy Baseline	2016 Project Scenario	*Net Increase*
Energy	23,839	--	*-23,839*
Mobile	29,744	33,661	*3,917*
Waste	533	729	*196*
Water	366	373	*7*
Total	***54,482***	***34,763***	***-19,719***

Apple will participate in California's Direct Access program to offset construction GHG emissions from the Apple Campus 2 project. Based on information provided by Apple, the anticipated construction emissions anticipated over the expected three-year construction phase beginning 2013 through 2015 are 47,819 MTCO2e. Construction emissions will be fully offset through the purchase of 100 percent renewable power through the Direct Access program for Apple facilities in Cupertino and in the Cupertino area. Apple's participation in the Direct Access program is expected to contemporaneously offset Apple Campus 2 construction emissions from 2013 through 2015 in Cupertino.

Soitec Solar Energy Project
Supporting Documents

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

April 16, 2013

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown Jr.
State Capitol, First Floor
Sacramento, California 95814

Dear Mr. Alex:

Pursuant to Assembly Bill 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA), if certain conditions are met. One condition for the Governor's certification is that a project does not result in any net additional emission of greenhouse gases (GHGs), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On January 7, 2013, in accordance with the Governor's Guidelines for applications for the CEQA streamlining, Soitec Solar Development, LLC submitted the "Rugged Solar LLC Project Climate Change and Greenhouse Gas Emissions Analysis" and the "Greenhouse Gas Analysis, Tierra del Sol Farm Project" (Analyses) for its proposed Soitec Solar Energy Project (Project) to ARB. The Analyses were subsequently revised and resubmitted on March 7, 2013. The Analyses included the proposed methodologies for quantifying the net additional GHGs from the Project and documentation that the Project does not result in any net additional GHG emissions. After evaluating the Analyses in consultation with the lead agency, ARB found that it provided an adequate technical basis for estimating the total GHG emissions and required mitigation for the Project. Based on the information submitted, ARB staff has determined that Soitec Solar Energy Project will not result in any net additional greenhouse gas emissions.

ARB staff's evaluation of the Analyses and the Executive Order noting our determination are enclosed.

If you have questions regarding ARB's evaluation or determination, please contact Mr. Michael Tollstrup at (916) 323-8473 or by e-mail at mtollstr@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures (3)

cc: Michael Tollstrup, Chief
Project Assessment Branch

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER LP-13-001

Relating to Determination of Any Net Additional Greenhouse Gas Emissions Pursuant to Public Resources Code section 21183, subd.(c)

For Soitec Solar Energy Project, Soitec Solar Development, LLC

WHEREAS, in September 2011, Governor Brown signed Assembly Bill 900, "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, in accordance with the AB 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, in accordance with California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHGs), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for applications for the CEQA streamlining require, for purposes of ARB's determination on GHGs, that an applicant submit electronically to ARB a proposed methodology for quantifying a project's net additional GHGs and documentation that the project does not result in any net additional GHGs;

WHEREAS, in accordance with the Governor's Guidelines, Soitec Solar Development, LLC submitted its GHG methodologies and documentation to ARB on the proposed Soitec Solar Energy Project (Project) on January 7, 2013;

WHEREAS, Soitec Solar Development, LLC submitted revised GHG methodologies and documentation to ARB on March 7, 2013;

WHEREAS, the "Rugged Solar LLC Project Climate Change and Greenhouse Gas Emissions Analysis" and the "Greenhouse Gas Analysis, Tierra del Sol Farm Project" (Analyses) submitted for the Soitec Solar Energy Project state that the Project's estimated GHG emissions are as follows:

1. Construction GHG Emissions: 8,250 metric tons of carbon dioxide equivalent ($MTCO_2e$) generated by the equipment used for construction activities and from both on-site and off-site motor vehicles.

2. Direct Operation-Related GHG Emissions: 10,230 $MTCO_2e$ from fossil fuel combustion used to support operation of the facility, including employee transportation.

3. Indirect Operation GHG Emissions: 18,870 $MTCO_2e$ emissions from electricity use and sulfur hexafluoride usage associated with electrical switchgear.

4. Total Project Lifetime GHG Emissions: 37,350 $MTCO_2e$ from construction and operation of the Project during a projected 30-year operational lifetime.

WHEREAS, in the Analyses submitted, Soitec Solar Development, LLC proposes to secure 37,350 $MTCO_2e$ carbon credits from a qualified greenhouse gas emission broker such as Evolution Markets, based in San Francisco, California, or from a similar type of broker, to mitigate the total identified construction and operational GHG emissions prior to the commencement of the Project;

WHEREAS, ARB staff has reviewed and evaluated the submitted Analyses in consultation with the lead agency; prior to finalizing its determination, staff shared a draft of its evaluation with the lead agency;

WHEREAS, staff's evaluation of the Analyses found that it provides an adequate technical basis for estimating the total GHG emissions and required mitigation for the Project;

WHEREAS, ARB's review and evaluation of the Project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900; ARB's determination is not in lieu of any findings or determination required to be made by the lead agency or a responsible agency pursuant to any other requirement under state or federal law, including CEQA; the lead agency remains responsible for full compliance with CEQA for this project.

NOW, THEREFORE, based on ARB staff's evaluation (Enclosure 2) of the Analyses submitted by Soitec Solar Development, LLC (Enclosure 3), I determine that the Soitec Solar Energy Project will not result in any net additional greenhouse gas emissions pursuant to Public Resources Code section 21183(c).

Executed at Sacramento, California this 16th day of April 2013.

Richard W. Corey
Executive Officer

Enclosure 2

Air Resources Board
Staff Evaluation

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Air Resources Board Evaluation
of Greenhouse Gas Emission Methodologies and Documentation
Pursuant to Public Resources Code Section 21183, subdivision (c)

Project Information

Project Name: Soitec Solar Energy Project
Project Applicant: Soitec Solar Development, LLC
Project Location: Unincorporated portion of San Diego County near the community of Boulevard
Project Description: The proposed Soitec Solar energy Project (Project) consists of two sub-components, including the Tierra del Sol Solar Farm which would be a 60 megawatt (MW) net solar power generating installation and the Rugged Solar Farm, which would be an up-to 80 megawatt net solar power generating installation. Both the Tierra del Sol and Rugged Solar Farms will be located in an unincorporated portion of San Diego County. The Project will utilize concentrating photovoltaic (CPV) electric generation system technology for the generation of solar energy. The entire up-to 140 megawatt Project would be developed over an area of approximately 1,185 acres of privately-owned land, plus the necessary transmission line rights-of-way. The precise location and length of which shall be finalized at a future date.

AB 900 Standards for Net Zero Additional GHG Emissions

The Governor may certify a project for streamlining pursuant to Assembly Bill 900 "Jobs and Economic Improvement through Environmental Leadership Act" if certain conditions are met. (Public Resources Code § 21178 et seq.) One such condition is that the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the Air Resources Board pursuant to Division 25.5. (commencing with Section 38500) of the Health and Safety Code." (Public Resources Code § 21183, subdivision (c).)

Per the Governor's Guidelines for AB 900 applications, applicants shall submit to ARB a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, will be monitored and enforced consistent with section 21183, subdivision (d) of the Public Resources Code.

The role of ARB staff in the GHG emissions determination of a proposed AB 900 project is limited to an evaluation of the quantification methods and documentation submitted by the project applicant for purposes of the Governor's certification. ARB staff evaluate the technical elements of a project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions

and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

Applicants Proposed Method of Compliance

In accordance with the Governor's Guidelines, Soitec Solar Development, LLC submitted the "Rugged Solar LLC Project Climate Change and Greenhouse Gas Emissions Analysis" and the "Greenhouse Gas Analysis, Tierra del Sol Farm Project" (Analyses) for the proposed Project to the Air Resources Board (ARB) for review and evaluation. The Analyses state that the proposed Project would emit an estimated 8,250 metric tons carbon dioxide equivalent ($MTCO_2e$) greenhouse gas (GHG) emissions during construction and 29,100 $MTCO_2e$ GHG emissions during 30 years of operation, for a total of 37,350 $MTCO_2e$ of GHG emissions.

The Analyses state that the proposed Project will result in the displacement of more GHG intensive forms of energy production, and therefore, would result in an overall net reduction in GHG emissions. However, the Analyses state that to ensure the proposed Project meets the requirements of Public Resources Code section 21183, subdivision (c), Soitec Solar Development, LLC has proposed to secure voluntary carbon credits equivalent to 37,350 $MTCO_2e$ to mitigate the GHG emissions expected to be generated during construction and operation of the proposed Project. By mitigating the total projected GHG emissions, the Analyses conclude that the proposed Project will not result in any net additional GHG emissions.

The Analyses state that a programmatic Environmental Impact Report (EIR) is being prepared for the proposed Project pursuant to the California Environmental Quality Act (CEQA). Prior to approval of the proposed Project, the EIR must be certified by the lead agency (San Diego County) and a mitigation monitoring and reporting plan must be adopted. According to the Application for CEQA Streamlining Under the "Jobs and Economic Improvement through Environmental Leadership Act" submitted with the Analyses, the applicant expects that all mitigation measures necessary to ensure compliance will be included in the mitigation monitoring and reporting plan, as conditions of project approval, or both. Furthermore, the applicant will be required to implement all mitigation measures contained in the mitigation monitoring and reporting plan and adhere to all conditions of project approval set forth by San Diego County.

GHG Emissions Calculation Methodology

The Analyses evaluated the emissions of four categories of GHGs: carbon dioxide, nitrous oxide, methane, sulfur hexafluoride. Hydrofluorocarbons and perfluorocarbons were not evaluated as they are not expected to be emitted at the Project. Carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) are GHGs emitted by combustion sources and would be directly emitted by the equipment and vehicles used for constructing the Project. Sulfur hexafluoride (SF_6) may be emitted from some types of electrical switchgear associated with the Project.

The Analyses state that CO_2 is expected to be the primary GHG of concern for this project, however, the applicant included emission estimates of CH_4, N_2O, and SF_6. ARB staff agrees that in most cases CO_2 drives the projected GHG emissions associated with fuel combustion. ARB staff expects that there may be SF_6 emissions associated with the Project due to gas-insulated switchgear being used in conjunction with the Project. ARB staff would not expect any HFC or PFC emissions associated with the Project because of the specialty nature of these compounds, one of the most common forms of usage is as a refrigerant.

The CO_2 emissions from construction equipment and motor vehicle use were estimated in the Analyses using URBEMIS 2007 version 9.2.4, Road Construction Emissions Model version 7.1.2, OFFROAD 2007 and EMFAC 2011 emission models. Since the URBEMIS and OFFROAD models do not estimate all GHG pollutants, the estimated emissions were adjusted to compensate.

ARB staff agrees that URBEMIS with revised load factors from EMFAC 2011 is an appropriate model for estimating CO_2 emissions from mobile equipment. Staff agrees that using CO_2 emissions from URBEMIS and back-calculating comparable N_2O and CH_4 emissions is a reasonable way to estimate these emissions.

The Analyses separated construction emissions from the Project into those associated with the Rugged and Tierra del Sol sub-projects, and are shown in the table below.

Annual Construction Emissions ($MTCO_2e$)

Year	Rugged	Tierra del Sol	Combined
2014	4,548	2,190	6,738
2015	415	1,097	1,512
Total	**4,963**	**3,287**	**8,250**

The Analyses state that the Project's operation would emit GHGs from the use of equipment and vehicles. It further states that GHGs could be emitted as fugitive emissions from electrical switchgear that contains SF_6 and indirect GHG emissions due to electricity use from off-site generators.

The Analyses estimated GHG emissions for on-site equipment based on anticipated project-based activity data and OFFROAD and EMFAC emission factors. The Analyses estimated vehicle emissions using the same methodology used to estimate vehicle emissions during construction. SF_6 emissions were assumed to be emitted at half the allowable level for calendar year 2020 under ARB's Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (GIS) (California Code of Regulations, title 17, sections 95350 – 95359), which is also a common manufacturer guarantee level of emissions from GIS.

ARB staff agrees that using projected project-based activity data from equipment and vehicles is a valid basis for estimating GHG emissions from these devices. The models used are a reasonable source for emission factors from these devices. Staff agrees that this is an appropriate methodology for the same reasons as were detailed under the review of the applicant's estimation of GHG emissions from equipment used during construction.

ARB adopted a regulation pertaining to the maximum allowable SF_6 emission rate from gas insulated switchgear. The regulation starts at a ten percent leak rate allowed in 2011 and decrease one percent per year until it reaches a one percent allowable leak rate in 2020. The Analyses assumed that the switchgear used would emit at the rate of one-half of a percent, based on installed capacity, annually from the time of installation through the life of the project. Currently available new switchgear typically has a maximum leak rate of one-half percent or less. As such, ARB staff agrees that the applicant used a reasonable estimation of SF_6 emissions.

Annual GHG Emission Estimates from Project Operation (MTCO2e/yr)

	Rugged	Tierra del Sol	Annual Emissions	Lifetime Emissions[1]
Fossil Fuel Combustion	166	166	332	9,960
Indirect Electricity Use	346	275	621	18,630
Fugitive Sulfur Hexafluoride	4	4	8	240
Water and Wastewater	7	2	9	270
Total Annual Operations	**523**	**447**	**970**	**29,100**

The Analyses derived the Project's total GHG emissions by combining construction and operational GHG emission for a 30-year project life. This yields a total GHG estimate of 37,350 $MTCO_2e$. Based on the staff evaluation of the calculations for estimating emissions as described above, staff agrees that 37,350 $MTCO_2e$ is a reasonable estimate of the Project's total GHG emissions over the lifetime of the Project.

Carbon Credits

Soitec Solar Development, LLC proposes to secure 37,350 MTCO2e worth of voluntary carbon credits from Evolution Markets, based in San Francisco, California, or from a similar type of broker that deals directly with voluntary credit generators.

[1] Based on 30-year operational project life.

Conclusions and Recommendations

The ARB staff reviewed the GHG emission estimates and the methodology provided by the applicant. During its review, ARB staff had numerous conversations with the CEQA lead agency, the County of San Diego, and consultants working on the CEQA evaluation for this Project. Based on these discussions with lead agency representatives, staff concluded that the emissions estimates and methodology submitted to ARB are consistent with how the lead agency is planning to evaluate the Project's GHG emissions.

Based on the staff's evaluation of the documentation provided in the Analyses and the discussions with the lead agency's consultants, staff concludes that the project applicant has reasonably documented and estimated the Project's anticipated GHG emissions. If Soitec Solar Development, LLC secures the proposed GHG emission credits proposed in the Analyses, then the Project's estimated GHG emissions would be fully mitigated.

Based on this evaluation, ARB staff has determined that the Soitec Solar Energy Project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, pursuant to Public Resources Code section 21183, subdivision (c).

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Application for CEQA Streamlining Under the "Jobs and Economic Improvement through Environmental Leadership Act (AB 900) (Public Resources Code Section 21178 *et seq.*)

This application was prepared in accordance with the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act (CEQA), which is provided by the Governor's Office of Planning and Research (http://opr.ca.gov/s_californiajobs.php). This application includes the necessary information to enable the Governor to determine whether the project satisfies the statutory requirements for CEQA streamlining.

PROJECT INFORMATION

Project Title: Soitec Solar Energy Project

Project Applicant: Soitec Solar Development, LLC

Project Location: Boulevard, California an Unincorporated Community of San Diego County

Project Description: The proposed Soitec Solar Energy Project (Project) consists of two sub-components, including the Tierra del Sol Solar Farm, which would be a 60 megawatt (MW) net solar power generating installation, and the Rugged Solar Farm, which would be an up-to 84 MW net solar power generating installation. Both the Tierra del Sol and Rugged Solar Farms will be located in an unincorporated portion of San Diego County. The Project will utilize concentrating photovoltaic (CPV) electric generation system technology for the generation of solar energy. The entire up-to-144 MW Project would be developed over an area of approximately 1,185 acres of privately-owned land, plus the necessary transmission line rights-of-way, the precise location and length of which shall be finalized at a future date.

CONSISTENCY WITH STATUTORY REQUIREMENTS FOR CEQA STREAMLINING

The following information is provided to illustrate that the Project satisfies the statutory requirements for CEQA streamlining as defined by the criteria set forth in the Governor's Guidelines for Streamlining Judicial Review under CEQA (Public Resources Code (PRC) Section 21178 et seq.).

1. The Project meets the criteria set forth in PRC Section 21180(b)(2).

PRC Section 21180(b)(2). *A clean renewable energy project that generates electricity exclusively through wind or solar, but not including waste incineration or conversion.*

The Project will be an up-to 144 megawatt (MW) net solar power generating CPV system installation located in an unincorporated portion of San Diego County. The entire 144 MW project would be comprised of two sub-components—the Tierra del Sol Solar Farm, with a capacity of up to 60 MW, and the Rugged Solar Farm, with a capacity of up to 84 MW.

2. **The Project meets the requirements of PRC Section 21181.**

PRC Section 21181. *This chapter does not apply to a project if the applicant fails to notify a lead agency prior to the release of the draft environmental impact report for public comment that the applicant is electing to proceed pursuant to this chapter. The lead agency shall notify the Secretary of the Natural Resources Agency if the applicant fails to provide notification pursuant to this section.*

The County of San Diego shall act as lead agency under CEQA for the Project. On November 7, 2012, San Diego County was notified that the Project intends to seek certification under the Jobs and Economic Improvement through Environmental Leadership Act, and is planning on including the requisite public notification information in the Draft EIR.

See Attachment A, Soitec communication to County giving notice of intent to seek AB 900 certification.

3. **The Project will satisfy the minimum investment requirement of PRC Section 21183(a).**

PRC Section 21183(a). *The project will result in a minimum investment of one hundred million dollars ($100,000,000) in California upon completion of construction.*

Soitec's investment in California is expected to exceed one hundred million dollars ($100,000,000) for each of the Tierra del Sol and Rugged Solar Farms individually, and when considered collectively as the Project.

Soitec's capital expenditures for the entire Project are expected to be approximately $469,000,000, based on anticipated project costs of $268,000,000 for the Rugged Solar Farm, and $201,000,000 for the Tierra del Sol Solar Farm. Accordingly, the Project is expected to far exceed the one hundred million dollar ($100,000,000) minimum investment in California in accordance with PRC Section 21183(b).

See Attachment B, Soitec letter from Clark Crawford substantiating minimum investment.

4. **The prevailing and living wage requirements of PRC Section 21183(b) will be satisfied.**

PRC Section 21183(b). *The project creates high-wage, highly skilled jobs that pay prevailing wages and living wages and provide construction jobs and permanent jobs for Californians, and helps reduce unemployment.*

PRC Section 21183(b) will be satisfied. The Project will create high-wage,

highly skilled jobs for construction professionals including but not limited to carpenters, electricians, and heavy equipment operators that pay prevailing wages and living wages, and will provide permanent jobs for Project operating staff. By virtue of its job creation and indirect economic benefits, the Project will also reduce unemployment.

The total number of construction workers (consisting of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel) is expected to be up to 266 workers during peak construction periods over an approximate 12-18 month period. The average on-site construction workforce would consist of approximately 150 construction, supervisory, support, and construction management personnel.

Approximately 35 permanent, full-time personnel would be employed at the solar plant sites during daytime working hours assuming all units are operational. Temporary personnel would be employed, as needed, during seasonal periods when panel washing is required. The plant electricians and instrumentation technicians would perform activities such as the tightening of mechanical fasteners, replacement of damaged or exposed wiring, tracker-drive maintenance or fluid replenishment, or PCS maintenance such as filter replacement, equipment testing, or minor equipment repair. Occasionally, there will be a need to replace a CPV panel. Currently the life of the Project is anticipated to be 30 years.

See Attachment B, Soitec letter from Clark Crawford substantiating prevailing and living wage commitment.

5. **The project will not result in any net additional greenhouse gas (GHG) emissions pursuant to PRC Section 21183(c).**

PRC Section 21183(c) *The project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.*

A Climate Change and Greenhouse Gas Emissions Analysis was prepared for Rugged by AECOM, and a Greenhouse Gas Analysis Technical Report was prepared for Tierra del Sol by Dudek. *See* Attachments C and D.

As discussed in the Rugged and Tierra del Sol analyses, the proposed Project will emit the following:

Rugged

The Rugged Solar Farm is expected to result in greenhouse gas emissions totaling 5,670 metric tons carbon dioxide equivalent ($MTCO_2e$) during construction, and 15,540 $MTCO_2e$ (518 x 30 years) during its thirty-year operating life, for total life-time

emissions of 21,210 $MTCO_2e$.

Importantly, the Rugged Solar Farm is expected to produce enough energy to reduce greenhouse gas emissions from traditional fossil fuel electrical generation by approximately 106,990 $MTCO_2e$ per year, or 3,209,700 $MTCO_2e$ over the life of the facility.[1]

Subtracting the Rugged Solar Farm's anticipated life-time greenhouse gas emissions from construction and operations, from its anticipated greenhouse gas offset, **results in a total reduction in greenhouse gas emissions of 3,188,490 $MTCO_2e$.**

Tierra del Sol

The Tierra del Sol Solar Farm is expected to result in greenhouse gas emissions totaling 2,663 $MTCO_2e$ during construction, and 12,480 $MTCO_2e$ (416 x 30 years) during its thirty-year operating life, for total emissions of 15,143 $MTCO_2e$.

Importantly, the Tierra del Sol Solar Farm is expected to produce renewable energy with minimal greenhouse gas emissions, thereby reducing greenhouse gas emissions from traditional fossil fuel electrical generation by an estimated 81,334 $MTCO_2e$ per year, or 2,440,020 $MTCO_2e$ over the life of the facility.[2]

Subtracting the Tierra del Sol Solar Farm's anticipated life-time greenhouse gas emissions from construction and operations, from its anticipated greenhouse gas offset, **results in a total reduction in greenhouse gas emissions of 2,424,887 $MTCO_2e$.**

Project

The following table summarizes the Project's greenhouse gas emissions for construction and operations, as compared to its anticipated greenhouse gas offset.

Table 1. Project Greenhouse Gas Emissions (in $MTCO_2e$)

	Rugged	**Tierra del Sol**	**Project**
Construction	5,670	2,663	**8,333**
Operations	15,540	12,480	**28,020**
Total $MTCO_2e$ Emissions	**21,210**	**15,143**	**36,353**
$MTCO_2e$ Offset	(3,209,700)	(2,440,020)	(5,649,720)
Total $MTCO_2e$ Emissions	**(3,188,490)**	**(2,424,887)**	**(5,613,377)**

As discussed in the greenhouse gas analyses prepared for the Project (see Attachments C and D), the proposed up-to-144 MW solar Project will result in the displacement of greenhouse gas-intensive forms of energy production, and therefore, will **result in an overall net reduction in GHG emissions of 5,613,377 $MTCO_2e$.**

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1 See Attachment C, Climate Change and Greenhouse Gas Emissions Analysis, Appendix A, Rugged GHG Emissions Offset.

2 See Attachment D, Tierra del Sol Greenhouse Gas Analysis Technical Report, Appendix A, Tierra del Sol GHG Emissions Offset.

Project Offsets

As demonstrated above, the Project already will result in an overall net reduction in GHG emissions of **5,617,377** $MTCO_2e$ over the life of the Project. On that basis, Soitec does not believe that any additional offsets are required to substantiate PRC Section 21183(c)'s requirement that the project not "result in any net additional emission of greenhouse gases."

Nevertheless, Soitec will obtain voluntary greenhouse gas credits to offset its total construction and operational greenhouse gas emissions totaling 36,353 $MTCO_2e$ from a qualified greenhouse gas emissions broker such as Evolution Markets, based in San Francisco, California, or from a similar type of broker that deals directly with voluntary credit generators. From such a broker Soitec would secure 36,353 MT of greenhouse gas credits or similar carbon offsets to mitigate the construction and operations of the Project.

6. **There will be a binding agreement between the project proponent and the lead agency establishing the requirements set forth in PRC sections 21183(d), (e), and (f).**

PRC Section 21183(d). *The project applicant has entered into a binding and enforceable agreement that all mitigation measures required pursuant to this division to certify the project under this chapter shall be conditions of approval of the project, and those conditions will be fully enforceable by the lead agency or another agency designated by the lead agency. In the case of environmental mitigation measures, the applicant agrees, as an ongoing on, that those measures will be monitored and enforced by the lead agency for the life of the obligation.*

PRC Section 21183(e). *The project applicant agrees to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the Rules of Court adopted by the Judicial Council pursuant to subdivision (f) of Section 21185.*

PRC Section 21183(f). *The project applicant agrees to pay the costs of preparing the administrative record for the project concurrent with review and consideration of the project pursuant to this division, in a form and manner specified by the lead agency for the project.*

A programmatic EIR is being prepared for the proposed Project pursuant to CEQA. Prior to approval of the Project, the EIR must be certified by the lead agency (San Diego County) and a mitigation monitoring and reporting plan must be adopted. It is expected that mitigation measures resulting from this application for CEQA streamlining will be included in the mitigation monitoring and reporting plan and/or as conditions of project approval. The applicant will be required to implement all mitigation measures contained in the mitigation monitoring and reporting plan and adhere to all conditions of project approval set forth by San Diego County.

8150 Sunset Boulevard
Supporting Documents

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

March 27, 2014

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown, Jr.
State Capitol, First Floor
Sacramento, California, 95814

Dear Mr. Alex:

Pursuant to Assembly Bill 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act if certain conditions are met. One condition for the Governor's certification is that a project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On January 29, 2014, the applicant's representative for the project known as the 8150 Sunset Boulevard Mixed Use Project (Sunset Blvd. Project) submitted to ARB information regarding the GHG emission estimates for its proposed project in Los Angeles, California. ARB staff conducted an analysis of the baseline and project related emissions and concluded that the Sunset Blvd. Project will not result in any net additional GHG emissions relative to the baseline.

I have enclosed an ARB Executive Order documenting our determination. ARB staff's evaluation of the Sunset Blvd. Project is included in Attachment A and the documentation submitted by the applicant's representative is included in Attachment B.

If you have any questions regarding ARB's evaluation or determination, please contact Mr. Kurt Karperos, Chief, Air Quality Planning and Science Division at (916) 322-5350 or kkapero@arb.ca.gov.

Sincerely,

for

Richard W. Corey
Executive Officer

Enclosures

cc: Mr. Kurt Karperos, Chief
Air Quality Planning and Science Division

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: http://www.arb.ca.gov.

bcc: via email:

Christina Morkner-Brown, OLA
Jon Taylor, AQPSD
Joshua Cunningham, AQPSD
Holger Sdun, AQPSD
Terry Roberts, AQPSD

via hard copy:

EO Chron (2)
AQPSD Chron

Assignment #9119 / #18462

X:\AB900\Sunset Blvd Mixed Use\ARB Determination\FINAL\Cover Letter to OPR

Enclosures:
X:\AB900\Sunset Blvd Mixed Use\ARB Determination\FINAL\EO for Sunset Blvd
X:\AB900\Sunset Blvd Mixed Use\ARB Determination\FINAL\ARB Staff Evaluation
X:\AB900\Sunset Blvd Mixed Use\ARB Determination\FINAL\Project Application

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-14-023

Relating to Determination of Any Net Additional Greenhouse Gas Emissions Pursuant to Public Resources Code section 21183, subd. (c)

For 8150 Sunset Boulevard Mixed Use Project, Los Angeles, CA

WHEREAS, in September 2011, Governor Brown signed Assembly Bill 900, "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, in accordance with the AB 900, the Governor may certify certain projects for streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, in accordance with California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHGs), including GHG emissions from construction and operation of the project, as determined by the Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for applications for the CEQA streamlining require, for purposes of ARB's determination on GHGs, that an applicant submit electronically to ARB a proposed methodology for quantifying a project's net additional GHGs and documentation that the project does not result in any net additional GHGs;

WHEREAS, PRC Services Corporation (PRC), on behalf of the project applicant, submitted GHG documentation to ARB on the proposed 8150 Sunset Boulevard Mixed Use Project (Project) on January 29, 2014;

WHEREAS, the Application for Environmental Leadership Development Project (Application) for the Project submitted by PRC included the Project's estimated GHG emissions for the full occupancy baseline and estimated GHG emissions for the Project's operational and construction emissions;

WHEREAS, ARB staff conducted a technical evaluation of the GHG emission estimates submitted by PRC in the Application, and confirmed that the Application appropriately estimates the baseline and future emissions using appropriate data and methodology;

WHEREAS, based on ARB staff's evaluation, the Project will result in lower total GHG emissions from project construction and operations in 2015 and all future years than the full occupancy baseline GHG emissions;

WHEREAS, ARB's review, evaluation, and assessment of the Project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900; ARB's determination is not in lieu of any findings or determinations required to be made by the lead agency or a responsible agency pursuant to any other requirement under state or federal law, including CEQA; the lead agency remains responsible for full compliance with CEQA for this project;

NOW, THEREFORE, based on ARB staff's evaluation of the Project's full occupancy baseline and future operational emissions (Attachment 1) and review of the application submitted by PRC (Attachment 2), I determine that the 8150 Sunset Boulevard Mixed Use Project will not result in any net additional greenhouse gas emissions pursuant to Public Resources Code section 21183(c).

Executed at Sacramento, California this 27th day of March 2014.

Richard W. Corey
Executive Officer

Attachments
1. ARB Staff Evaluation
2. Project Application

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

EDMOND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

April 8, 2014

Honorable Mark Leno, Chair
Honorable Nancy Skinner, Vice-Chair
Joint Legislative Budget Committee
[add full address]
Sacramento, CA 94249-0019

Re: 8150 Sunset, AB 900 Certified Project

Dear Senator Leno and Assemblywoman Skinner:

Governor Brown has determined that the 8150 Sunset Project in the City of Los Angeles is eligible for streamlined judicial review under the Jobs and Economic Improvement Act (AB 900), Public Resources Code section 21184. Pursuant to that provision, I am forwarding the Governor's determination to the Joint Legislative Budget Committee.

If you have any questions or comments, please do not hesitate to contact me or my staff.

Sincerely,

Ken Alex
Director

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Executive Department
State of California

GOVERNOR'S CERTIFICATION GRANTING STREAMLINING FOR THE 8150 SUNSET BLVD. PROJECT IN THE CITY OF LOS ANGELES

I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the Jobs and Economic Improvement Act of 2011, Public Resources Code Sections 21178 et seq., make the following determinations:

The 8150 Sunset Blvd. Project, a $200 million dollar mixed use residential/commercial redevelopment on a 2.56 acre site in Hollywood, will create new jobs, reduce energy usage and use clean energy, and promote infill development. A copy of the Project's Application, which contains information supporting this certification, is attached as Exhibit 1. All materials associated with this application are available online at http://opr.ca.gov/s_californiajobs.php.

1. Project Applicant: AG-SCH 8150 Sunset Boulevard Owner, L.P.

2. Project Description: A mixed use commercial/residential project located at 8150 Sunset Blvd., in Los Angeles, consisting of 249 apartment units (28 affordable housing) and 111,339 square feet of commercial retail and restaurant space in two buildings of 16 stories. The project will redevelop a 2.56 acre site on the Sunset Strip in Hollywood, and include a 9134 square foot public space and a 34,050 square foot central public plaza. Parking will be on site.

3. Lead Agency: City of Los Angeles

4. The project meets the criteria set forth in Public Resources Code section 21180(b)(1). It is

    a. A mixed use residential/commercial project;
    b. Designed to be eligible for LEED Silver certification;
    c. Designed to achieve a 10-percent greater standard for transportation efficiency than for comparable projects (see Ex. 2); and
    d. Located on an in-fill site.

5. The project is consistent with the Sustainable Communities Strategy for the Southern California region. (See Ex. 3.)

6. The size and scope of the project clearly establish that the project entails a minimum investment of $100 million in California through the time of completion of construction.

7. The project applicant has provided information establishing that the prevailing and living wage requirements of Public Resources Code section 21183(b) will be satisfied. (See Ex. 1, pages 11-12.)

8. The project applicant has provided information establishing that the project will not result in any net additional greenhouse gas emissions, and the Deputy Executive Officer of the Air Resources Board has made the determination that the project does not result in any net additional greenhouse gas emissions. (See Application, and CARB Determination, dated March 27, 2014, attached as Ex. 4.)

9. The project applicant has provided documentation reflecting a binding agreement establishing the requirements set forth in Public Resources Code sections 21183(d), (e), and (f). (See Exhibit 5.) For this project, the applicant must ensure that the proposed travel demand management strategy (as set forth in the Project Application) is incorporated into the project or identified as mitigation for the project, and that the management strategy will be monitored and adjusted to ensure a ten percent reduction in motor vehicle trips.

Therefore, I hereby certify that the 8150 Sunset Blvd. Project is an eligible project under the Jobs and Economic improvement Act of 2011, Public Resources Code Sections 21178 et seq.

EDMUND G. BROWN JR.
Governor of California

April 8, 2014

Application for CEQA Streamlining Under the "Jobs and Economic Improvement through Environmental Leadership Act" (Public Resources Code Section 21178 et seq.)

GREENHOUSE GAS EMISSIONS METHODOLOGY AND DOCUMENTATION

For the Proposed

8150 Sunset Boulevard Mixed-Use Project
Los Angeles, CA 90046

~~January~~ March 2014~~

***Prepared for*:**

AG-SCH 8150 SUNSET BOULEVARD OWNER, L.P.
P.O. Box 10506
Beverly Hills, CA 90213

Prepared by:

PCR SERVICES CORPORATION
80 South Lake Avenue, Suite 570
Pasadena, CA 91101
TEL 626.204.6170
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restaurant, and residential land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. Annual water demand and wastewater GHG emissions due to electricity are generally calculated in CalEEMod using the general formula shown previously as Equation 5.

The CalEEMod tool calculates water demand based on annual rates in the Pacific Institute *Waste Not Want Not* report.[38] The CalEEMod tool provides options to account for the use of water saving features such as the use of low-flow water fixtures (e.g., low-flow faucets, low-flow toilets). The Project would incorporate PDFs to reduce indoor and outdoor water usage, as summarized previous in PDF-GHG-1. Implementation of these PDFs would reduce indoor water usage by approximately 35 percent compared to typical usage values for developments meeting the minimum requirements. These water reduction factors have been accounted for in the CalEEMod tool.

The CEC's estimate for energy intensity of the water use cycle in Southern California, as provided in the 2006 CEC report *Refining Estimates of Water-Related Energy Use in California*, is used to calculate the energy usage related to water supply, treatment, and distribution and wastewater treatment.[39] The same electricity GHG emissions factors discussed in **Section 3.3.2(b)**, *Operational Energy – Electricity*, are used for water and wastewater energy usage.

The emissions of GHGs associated with wastewater treatment process emissions are also calculated using the CalEEMod tool. The emissions are based on the type of treatment (e.g., aerobic, facultative lagoons, septic systems). The emissions are calculating using the default settings in CalEEMod for the type of wastewater treatment. Calculation formulas are described in detail in the *California Emissions Estimator Model User's Guide, Appendix A*.[40] As stated in the *User's Guide*, the GHGs emitted from each type of wastewater treatment are based on the CARB's *Local Government Operations Protocol* (LGOP),[41] which are in turn based on United States Environmental Protection Agency (USEPA) methodologies.[42] The default CalEEMod settings for wastewater treatment are: 10.33 percent septic tank, 87.46 percent aerobic, 2.21 percent facultative lagoons and 100 percent anaerobic combustion of gas.

The estimated annual emissions from water and wastewater from the Project are provided in **Table 15**, *Project Water and Wastewater Greenhouse Gas Emissions*. Detailed emissions calculations are provided in Appendix B.

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[38] *Gleick, P.H.; Haasz, D.; Henges-Jeck, C.; Srinivasan, V.; Cushing, K.K.; Mann, A. 2003. Waste Not, Want Not: The Potential for Urban Water Conservation in California. Published by the Pacific Institute for Studies in Development, Environment, and Security. Full report available online at: http://www.pacinst.org/reports/urban_usage/waste_not_want_not_full_report.pdf. Appendices available online at: http://www.pacinst.org/reports/urban_usage/appendices.htm.*

[39] *California Energy Commission, Refining Estimates of Water-Related Energy Use in California, PIER Final Project Report, CEC-500-2006-118, (2006).*

[40] *California Air Pollution Control Officers Association, California Emissions Estimator Model User's Guide, (2013).*

[41] *California Air Resources Board, Local Government Operations Protocol, Chapter 10: Wastewater Treatment Facilities, (2008).*

[42] *United States Environmental Protection Agency, Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2006, Chapter 8: Waste, (2008).*

Event Center and Mixed-Use Development at Mission Bay Blocks Supporting Documents

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

April 20, 2015

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown, Jr.
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act of 2011 (AB 900) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On February 19, 2015, Golden State Warriors Arena LLC (GSW) submitted an application to ARB with its proposed GHG methodologies and documentation for the proposed Event Center and Mixed-Use Development at Mission Bay Blocks 29-32 (Event Center), as required by the Governor's Guidelines for applications for CEQA streamlining. An addendum to the application with additional information was submitted on March 16, 2015. ARB staff conducted a technical evaluation of the GHG emission estimates and voluntary mitigation submitted by GSW and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the Event Center. Based on the documentation submitted by GSW, ARB has determined the Event Center does not result in any net additional GHG emissions for purposes of certification under AB 900.

ARB staff's evaluation and an Executive Order noting ARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Karen Magliano, Chief, Air Quality Planning and Science Division, at (916) 322-7137 or by email at karen.magliano@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

cc: Ms. Catherine Reilly
Office of Community Investment and Infrastructure
1 South Van Ness Avenue, 5th Floor
San Francisco, California 94103

Ms. Karen Magliano, Chief
Air Quality Planning and Science Division

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-15-022

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for Golden State Warriors Event Center and Mixed-Use Development at Mission Bay Blocks 29-32

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), including GHG emissions from construction and operation of the project, as determined by the California Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for applications for the CEQA streamlining require for purposes of ARB's determination on GHGs that an applicant submit electronically to ARB a proposed methodology for quantifying the project's net additional GHGs and documentation that the project does not result in any net additional GHGs;

WHEREAS, according to the Governor's Guidelines, Golden State Warriors Arena LLC (GSW), an affiliate of Golden State Warriors, LLC, which owns and operates the Golden State Warriors National Basketball Association team, submitted its initial proposed GHG methodologies and documentation to ARB on the proposed Event Center and Mixed-Use Development at Mission Bay Blocks 29-32 (Event Center) on February 19, 2015, with an addendum submitted on March 16, 2015, when the application was deemed complete;

WHEREAS, the documentation submitted for the Event Center estimates the project's net additional GHG emissions as follows:

1. Construction GHG Emissions: 10,066 metric tons CO2e emissions for project construction generated by the equipment used for construction activities and from both onsite and off-site motor vehicles;

2. Operation-Related GHG Emissions: Additional 4,099 metric tons CO2e emissions during the first year of project operation and declining additional emissions in future years over the lifetime of the project.

WHEREAS, in documentation submitted the project applicant proposes to secure 10,066 metric tons of one-time carbon credits to offset emissions generated during construction and to secure carbon credits on an on-going basis to offset the net increase in emissions generated during project operation through a voluntary carbon credits market from

a voluntary credit generator to fully offset these identified construction and operations GHG emissions;

WHEREAS, ARB staff reviewed and evaluated the submittal in consultation with the lead agency; prior to finalizing its determination, staff shared a draft of its evaluation with the lead agency;

WHEREAS, ARB staff conducted a technical evaluation of the GHG emission estimates and voluntary mitigation included in the documentation submitted by GSW and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the Event Center;

WHEREAS, ARB's review and determination on the project's GHG emissions is for the limited purpose of the Governor's findings and certification under the AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full compliance with CEQA for this project;

NOW, THEREFORE, based on ARB Staff's Evaluation (Attachment 1) of the application submitted by GSW (Attachments 2 and 3), I determine that the Golden State Warriors Event Center and Mixed-Use Development at Mission Bay Blocks 29-32 does not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this 21st day of April 2015, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. ARB Staff Evaluation of AB 900 Application
2. GSW AB 900 Application
3. Addendum to GSW AB 900 Application

ATTACHMENT 1

ARB Staff Evaluation of AB 900 Application

ARB Staff Evaluation for
Golden State Warriors Event Center and Mixed-Use Development at Mission Bay Blocks 29-32

I. Introduction

GSW Arena LLC ("Applicant"), an affiliate of the Golden State Warriors (GSW), LLC, which owns and operates the National Basketball Association (NBA) team, proposes to construct a multi-purpose event center, along with office and retail space and parking land uses on an 11-acre site (Blocks 29-32) within the Mission Bay South Redevelopment Plan Area of the City and County of San Francisco, California. The project would involve relocating the GSW NBA games and associated operations to the proposed Mission Bay Arena and associated office space from the existing Oracle Arena and team headquarters in Oakland, California. The Applicant is seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the project does not result in any net additional greenhouse gas (GHG) emissions as determined by the Air Resources Board (ARB). As part of the determination, ARB staff prepared this technical evaluation of the GHG emissions from the project.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in their AB 900 application, and ARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

ARB staff reviewed the projected GHG emissions provided by the Applicant and independently confirmed GHG emission factors used to estimate construction and operational emissions. Staff concurs with the GHG quantification in the Applicant's proposal (Attachments 2 and 3).

Based on an evaluation of the documentation provided by the Applicant, ARB staff concludes that, with voluntary GHG offset commitments documented in Attachment 3, the project would not result in any net additional GHG emissions relative to the baseline

as summarized in Tables 1 and 2 below. ARB staff confirms that the proposed project would meet the GHG emissions requirements of the "Jobs and Economic Improvement through Environmental Leadership Act." (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project construction-generated GHG emissions. Project construction is expected to be completed in approximately 24 months, with construction beginning as early as 2015. The Applicant has committed to offset the GHG emissions generated during project construction no later than six months after the issuance of a Temporary Certificate of Occupancy for the project. The Applicant will enter into a binding and enforceable agreement with the lead agency (the City and County of San Francisco's Office of Community Investment and Infrastructure [OCII]) to offset all GHG emissions associated with project construction and will purchase any necessary offsets from a qualified GHG emissions broker.

Table 1: Project Construction-Generated GHG Emissions[1]

Emission Source	**GHG Emissions (MT CO_2e/year)**		
	Year 1 (2015-16)	**Year 2 (2016-17)**	**Total**
Off-road equipment	3,997	1,358	5,355
Construction trips	2,355	2,355	4,711
Total	6,352	3,714	**10,066**
GHG Offsets Required[2]			-10,066

Notes:
GHG = greenhouse gas; MT CO2e = Metric tons carbon dioxide equivalent
[1] Source: GSW 2015; Exhibit H, pg. 4
[2] The applicant has committed to purchase GHG offsets for construction-related GHG emissions no later than six months after issuance of a Temporary Certificate of Occupancy. Procurement and retirement of verifiable, permanent GHG offsets will be a condition of project approval enforceable by the project's lead agency.

Table 2 summarizes the net increase in project operation-related GHG emissions through the useful life of the project, which the Applicant has defined as 30 years. In the absence of any formal plans for redevelopment of the existing Oracle Arena, ARB assumed Oracle Arena remains as the reference point for the purpose of defining a baseline. The Applicant has committed to execute a contract to offset the net increase in GHG emissions generated during project operation no later than six months after the arena component of the project is 90 percent leased and occupied. The Applicant will enter into a binding and enforceable agreement with the project's lead agency (OCII) to offset all GHG emissions associated with project operation and will purchase any necessary offsets from a qualified GHG emissions broker.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)			
	Baseline (Oracle Arena and GSW Headquarters)	Proposed Project (Mission Bay Event Center)	Difference	GHG Offsets Required[3]
2017	15,034	19,133	4,099	-4,099
2018	14,780	18,813	4,032	-4,032
2019	14,527	18,493	3,966	-3,966
2020	14,253	18,139	3,886	-3,886
2021	14,049	17,854	3,805	-3,805
2022	13,815	17,529	3,714	-3,714
2023	13,553	17,163	3,611	-3,611
2024	13,348	16,879	3,530	-3,530
2025	13,086	16,513	3,427	-3,427
2026	12,881	16,228	3,347	-3,347
2027	12,677	15,944	3,267	-3,267
2028	12,502	15,700	3,198	-3,198
2029	12,356	15,497	3,140	-3,140
2030	12,210	15,293	3,083	-3,083
2031	12,093	15,131	3,037	-3,037
2032	12,006	15,009	3,003	-3,003
2033	11,918	14,887	2,968	-2,968
2034	11,860	14,806	2,946	-2,946
2035[4]	11,802	14,724	2,923	-2,923

Notes:
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent
Totals may not sum exactly due to rounding.
[1] Source: GSW 2015; Exhibit H, pg. 13
[2] The applicant estimates a useful life of the project of 30 years with first year of occupancy as early as 2017.
[3] The applicant has committed to purchase GHG offsets for the annual net increase in operation-related GHG emissions for the entire useful life of the project, through a binding and enforceable agreement with the lead agency. Procurement and retirement of verifiable, permanent GHG offsets will be a condition of approval enforceable by the project's lead agency.
[4] Emissions projections for both the baseline and the proposed project are constant after 2035. The useful life of the project would end in 2047, as defined by the Applicant.

III. Overview of AB 900

AB 900 provides a streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing

with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).)

The Governor's Guidelines for AB 900 applications require applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (d).

The role of ARB staff in the GHG emissions determination of a proposed AB 900 project is limited to an evaluation of the quantification methods and documentation submitted by the Applicant for purposes of the Governor's certification. ARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

IV. Existing Conditions

The GSW NBA team currently hosts games at Oracle Arena in Oakland (500,000 square feet arena), where its office headquarters and support facilities (25,000 square feet) are also located. Oracle Arena also hosts non-game events such as family shows, concerts, conferences, and other events with lower attendance than NBA basketball games.

The proposed project site is located in the Mission Bay South Redevelopment Plan Area, which is designated as a Priority Development Area. The proposed project site is currently vacant, only occupied by paved surface parking facilities and previously disturbed land.

The Mission Bay South Redevelopment Plan Area–of which the proposed project site (Blocks 29-32) is a part–was subject to a previous programmatic environmental review under CEQA. The Mission Bay Final Subsequent Environmental Impact Report (FSEIR) was certified in 1998. Development consistent with the Redevelopment Plan is allowed on the proposed project site, including up to 1.1 million gross square feet of previously entitled commercial uses.

V. Proposed Project Description

ENVIRON International Corporation (ENVIRON), on behalf of the Applicant, prepared a GHG emissions assessment for the proposed project to demonstrate that the requirements of AB 900 can be met. A full copy of this proposal can be found in Attachment 2, Exhibits G and H.

The proposed project would result in demolition and removal of the existing paved parking lots from the site. Construction is proposed to begin in 2015 and conclude in 2017. The project could become operational as early as 2017.

This proposed facility would include a 750,000 square foot (18,064 seat) event center and practice facility, GSW headquarters/offices (25,000 square feet), parking and loading (234,411 square feet), non-GSW office space (580,000 square feet), retail uses (125,000 square feet), and open space. It was determined by the Applicant and the lead agency that the non-GSW office (580,000 square feet) and retail (125,000 square feet) uses were consistent with, and therefore covered by, the prior environmental analysis (Mission Bay FSEIR) and are already entitled for development consistent with the Mission Bay Redevelopment Plan Area. For this reason, GHG emissions that could be attributable to the previously entitled development of office and retail space are treated as part of the baseline (no project) scenario and also as part of the proposed project scenario. In other words, the GHG emissions from the non-GSW office and retail uses would be automatically offset and are not included in this evaluation.

The lead agency did not assume that the event center would fall within the scope of the vested development rights consistent with the Mission Bay Redevelopment Plan Area due to the unique nature of the arena land use type. The event center and relocation of associated GSW operations are the subject of the Supplemental environmental analysis for which the applicant is seeking AB 900 certification.

For this reason, the applicant prepared a full evaluation of the GHG emissions attributable to the proposed event center and GSW operations as relocated to Mission Bay. The applicant also assumed that 50 percent of non-basketball game events would continue to occur at Oracle Arena[1], and those emissions were included as part of the GHG emissions profile for the proposed project.

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[1] Any future plans to repurpose Oracle Arena are unknown at this time. The Applicant has not, and need not attempt to speculate on the potential repurposing or demolition of Oracle Arena. It is reasonable to assume that the market for event space will continue in Oakland, and that Oracle Arena will accommodate some non-GSW events into the foreseeable future as it does today.

The Applicant is seeking Leadership in Environmental Design (LEED) Gold certification for energy efficiency for the proposed project. In addition, the co-location of the proposed Mission Bay Events Center with office and retail uses is anticipated to result in some amount of trip-internalization, which will reduce vehicle trips and vehicle miles traveled (VMT) compared to a scenario with a single land use on the site.

Structured parking for all proposed uses is proposed on site with a total of 950 vehicle parking spaces, which is approximately 320 fewer spaces than would normally be required by development code. Reduced parking is permitted due to transit service accessibility and other transportation demand management strategies proposed to be included in the project by design. Approximately 500 bike parking spaces are proposed on site, which is approximately 440 more than the minimum normally required by development code.

The entire property would be fully built out prior to occupancy. Thus, the proposed project would not result in simultaneous construction and operational GHG emissions from partial occupancy during construction.

VI. Technical Review and Assessment

The Applicant relied upon a variety of sources for activity data and emission factors to quantify GHG emissions. This ARB staff evaluation is focused on reviewing the data sources, emission factors, emission calculations, and assumptions used for the application, and determining whether these sources and assumptions are reasonable.

The Applicant relied upon the California Emissions Estimator Model (CalEEMod), a widely used emissions quantification tool developed in coordination with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the United States Environmental Protection Agency AP-42 emission factors, California Air Resources Board (ARB) on-road and off-road equipment emission models such as the Emission Factor 2011 model (EMFAC2011), the Off-road Emissions Inventory Program model (OFFROAD), and studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle. The Applicant used CalEEMod, or its underlying data, to calculate all GHG emissions, including construction, electricity, natural gas, mobile, solid waste, and water and wastewater. Stationary source emission sources were calculated manually outside the model.

VII. Project Construction Emissions

Construction-related GHG emissions are one-time direct emissions and would occur over a 24-month construction period. The Applicant estimated GHG emissions associated with project construction by using the CalEEMod tool, which applies ARB-recommended off-road and on-road emissions factors from its OFFROAD2011 and EMFAC2011 emission factor models. With some exceptions, the Applicant used CalEEMod default settings to generate construction-related GHG emissions. The Applicant estimates a total of 10,066 metric tons carbon dioxide equivalent (MT CO_2e) over the two-year project construction period, as shown in Table 1. Construction-related GHG emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule. This includes heavy-duty equipment, such as refuse hauling trucks, excavators, cranes, and conventional work vehicles.

ARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

VIII. Baseline Emissions

Operational emissions from activities at Oracle Arena and the GSW Headquarters in Oakland represent baseline conditions. The baseline includes stationary, energy consumption from electricity and natural gas, mobile, area, solid waste, water, and wastewater-related GHG emissions. The application states that GHG emissions from Oracle Arena and GSW Headquarters within the base year (2017) are estimated as 15,034 MT CO_2e. The application also provided annual GHG estimations through 2035.

ARB staff conducted an independent assessment of the Applicant's GHG emission estimations, demand factors, and assumptions used in the Applicant's baseline calculation, summarized in Table 3 below. ARB's assessment very closely matches the Applicant's annual baseline GHG estimations summarized in Table 2.

Table 3: ARB Staff's Assessment of Baseline Operational Emissions

Venue	Year	Emission Source [MT CO_2e/year][1]						
		Energy	Mobile	Area	Waste	Water	Stationary	Total
Oracle Arena[2]	**2017**	1,413	12,388	0.005	91	517		
GSW HQ[3]		258	365	0.005	2	1	none	
Sub-Total		1,671	12,753	0.010	93	518		**15,035**
	2018	1,623	12,549	0.010	93	518		**14,783**
	2019	1,573	12,344	0.010	93	518		**14,528**
	2020	1,533	12,111	0.010	93	518		**14,255**
	2021	1,533	11,907	0.010	93	518		**14,051**
	2022	1,533	11,673	0.010	93	518		**13,817**
	2023	1,533	11,411	0.010	93	518		**13,555**
	2024	1,533	11,206	0.010	93	518		**13,350**
	2025	1,533	10,944	0.010	93	518		**13,088**
	2026	1,533	10,739	0.010	93	518		**12,883**
	2027	1,533	10,535	0.010	93	518		**12,679**
	2028	1,533	10,360	0.010	93	518		**12,504**
	2029	1,533	10,214	0.010	93	518		**12,358**
	2030	1,533	10,068	0.010	93	518		**12,212**
	2031	1,533	9,951	0.010	93	518		**12,095**
	2032	1,533	9,864	0.010	93	518		**12,008**
	2033	1,533	9,776	0.010	93	518		**11,920**
	2034	1,533	9,718	0.010	93	518		**11,862**
	2035[4]	1,533	9,660	0.010	93	518		**11,804**

Notes:
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent
Totals may not sum exactly due to rounding.
[1] Source: GSW 2015; Exhibit H, pg. 12-13.
[2] Oracle Arena: Assumes 47 games and 42 events annually.
[3] GSW Oakland Headquarters offices.
[4] Emissions projections for both the baseline and the proposed project are constant after 2035. The useful life of the project would end in 2047, as defined by the Applicant.

IX. Project Operational Emissions

The proposed project's operational emissions are characterized by the Mission Bay Event Center, GSW Headquarters relocated to Mission Bay, associated parking and loading area, and continued operation of Oracle Arena at 50 percent of non-NBA game events. The project includes operational GHG emissions from energy consumption (electricity, natural gas), mobile, stationary, area, solid waste, water, and wastewater sources.

ARB staff conducted an independent assessment of the proposed project's emission calculations, demand factors, and assumptions used to estimate project operation GHG emissions and arrived at virtually the same GHG quantification as provided by the applicant. ARB's assessment of the proposed projects operational emissions are summarized in Table 4 below.

Table 4: ARB Staff's Assessment of Proposed Project Operational Emissions

Venue	Year	Emission Source [MT CO_2e/year][1]						
		Energy	**Mobile**	**Area**	**Waste**	**Water**	**Stationary**	**Total**
Oracle Arena[2]	**2017**	333	2,280	0.0023	21	122		
Mission Bay EC[3]		748	16,741	0.014	136	23	106	
GSW HQ[4]		74	104	0.00047	4.6	0.66		
Parking/Loading		446		0.0090				
Sub-Total		1,601	19,125	0.02577	161.60	145.66	106	**21,139**
	2018	1,566	18,819	0.02577	161.6	145.66	106	**20,799**
	2019	1,524	18,512	0.02577	161.6	145.66	106	**20,449**
	2020	1,489	18,162	0.02577	161.6	145.66	106	**20,065**
	2021	1,489	17,856	0.02577	161.6	145.66	106	**19,759**
	2022	1,489	17,506	0.02577	161.6	145.66	106	**19,409**
	2023	1,489	17,112	0.02577	161.6	145.66	106	**19,015**
	2024	1,489	16,806	0.02577	161.6	145.66	106	**18,709**
	2025	1,489	16,412	0.02577	161.6	145.66	106	**18,315**
	2026	1,489	16,105	0.02577	161.6	145.66	106	**18,008**
	2027	1,489	15,799	0.02577	161.6	145.66	106	**17,702**
	2028	1,489	15,536	0.02577	161.6	145.66	106	**17,439**
	2029	1,489	15,318	0.02577	161.6	145.66	106	**17,221**
	2030	1,489	15,099	0.02577	161.6	145.66	106	**17,002**
	2031	1,489	14,924	0.02577	161.6	145.66	106	**16,827**
	2032	1,489	14,792	0.02577	161.6	145.66	106	**16,695**
	2033	1,489	14,661	0.02577	161.6	145.66	106	**16,564**
	2034	1,489	14,574	0.02577	161.6	145.66	106	**16,477**
	2035[5]	1,489	14,486	0.02577	161.6	145.66	106	**16,389**

Notes:
MT CO_2e = Metric tons carbon dioxide equivalent
Totals may not sum exactly due to rounding.
[1] Source: GSW 2015; Exhibit H, pg. 12-13.
[2] Oracle Arena: Assumes 21 non-NBA events annually.
[3] Mission Bay Event Center: Assumes 47 games and 161 events annually.
[4] GSW Headquarters: New GSW Headquarters relocated to Mission Bay.
[5] Emissions projections for both the baseline and the proposed project are constant after 2035. The useful life of the project would end in 2047, as defined by the Applicant.

There were two GHG emission credits applied to the project that resulted in reduced operational emissions, discussed in the following paragraph.

Because the proposed project is seeking LEED Gold certification for energy efficiency, the project would consume less energy than a comparable code-compliant project not seeking this certification. Thus, the proposed land uses would generate lower GHG emissions due to greater building energy efficiency when compared with a similarly sized code-compliant project. In addition, because of the co-location of the Event Center with office and retail land uses, it is reasonable to assume that some amount of trip internalization and reduced vehicle trips would occur. Reasonable GHG emission credits due to trip linking were also applied to the project that reduced mobile-source emissions compared to a project without the proposed mix of land uses.

Table 5 below summarizes ARB staff's independent assessment of the comparison between baseline and the proposed project's GHG emissions after applying the emissions credits for energy efficiency and trip linking.

Table 5: Summary of ARB Staff's Assessment of Baseline and Project Operational Emissions

Year	Annual Operational Emissions [MT CO_2e/year]				
	Oracle Arena and GSW HQ (Baseline)	Project Operational Emissions			
		Proposed Project	Credits		Total
			Energy Eff.	Trip Link	
2017	**15,035**	21,139	-647	-1,362	**19,131**
2018	**14,783**	20,799	-639	-1,340	**18,819**
2019	**14,528**	20,449	-632	-1,318	**18,499**
2020	**14,255**	20,065	-627	-1,293	**18,145**
2021	**14,051**	19,759	-627	-1,271	**17,861**
2022	**13,817**	19,409	-627	-1,246	**17,536**
2023	**13,555**	19,015	-627	-1,218	**17,170**
2024	**13,350**	18,709	-627	-1,196	**16,886**
2025	**13,088**	18,315	-627	-1,168	**16,520**
2026	**12,883**	18,008	-627	-1,147	**16,234**
2027	**12,679**	17,702	-627	-1,125	**15,950**
2028	**12,504**	17,439	-627	-1,106	**15,706**
2029	**12,358**	17,221	-627	-1,090	**15,504**
2030	**12,212**	17,002	-627	-1,075	**15,300**
2031	**12,095**	16,827	-627	-1,062	**15,138**
2032	**12,008**	16,695	-627	-1,053	**15,015**
2033	**11,920**	16,564	-627	-1,044	**14,893**
2034	**11,862**	16,477	-627	-1,037	**14,813**
2035[1]	**11,804**	16,389	-627	-1,031	**14,731**

Notes:
MT CO_2e = Metric tons carbon dioxide equivalent
Totals may not sum exactly due to rounding.
[1] Emissions projections for both the baseline and the proposed project are constant after 2035. The useful life of the project would end in 2047, as defined by the Applicant.

On average, ARB's estimate of annual emissions (Table 5) differs from the application (Table 2) by less than one percent. This difference is insignificant and indicates that the methodology and estimated GHG operational project GHG emissions provided by the Applicant are appropriate.

Based on the Applicant's proposal, annual project operational emissions would exceed baseline emissions by approximately 20 percent throughout the lifetime of the project.

The applicant used GHG emission factors for electricity that will change over time due to the California Renewable Portfolio Standard (RPS), a program designed to meet statewide GHG reduction targets. The RPS requires 33 percent of grid electricity to come from renewable sources by 2020. Additionally, current ARB mobile-source emission factor estimates were used. These emission factors are based on a modified version of the ARB EMFAC2011 on-road inventory and include current emission reduction rules such as the Low Carbon Fuel Standard (LCFS), Advanced Clean Cars (LEV III), and the Phase I Heavy-Duty Vehicle GHG rule, to reflect the entire "on-road" fleet statewide.

The implementation of the above regulations is anticipated to result in continuous GHG reductions from the energy and mobile sectors and reduce overall GHG emissions over the life of the project. Applying these emission factors will affect the estimate of operational GHG emissions for both the baseline and the proposed project, resulting in an annual net difference of approximately 20 percent.

X. Method to Offset Emissions

Under the proposed methodology, the proposed project would result in a one-time net increase of 10,066 MT CO_2e during project construction, and an estimated net increase in GHG emissions of 4,099 MT CO_2e during the first year of project operation. Operational emissions will be on-going for the duration of the project life, and are expected to decline over the life of the project as emissions factors decline associated with adoption of lower-GHG-emitting vehicle technologies and renewable sources of electricity. The project sponsor agreed to meet the requirement set forth in California Public Resources Code section 21183, subdivision (c) to demonstrate that the project would result in no net additional GHG emissions through the purchase of voluntary carbon credits sufficient to offset all projected additional GHG emissions, as detailed in Attachment 3.

Notably, the commitments to enter into contracts to offset net additional GHG emissions will be incorporated as an improvement measure in the FSEIR for the proposed project. All improvement measures will be enforceable through the project's Mitigation Monitoring and Reporting Program (MMRP), which represents a binding and enforceable agreement between the Project Sponsor and the lead agency (OCII).

XI. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant and its commitment to purchase GHG offsets, ARB staff concludes that the project operational

and construction emissions will not result in any net additional GHG emissions relative to the baseline.

March 16, 2015

Ken Alex, Governor's Office of Planning and Research
Kurt Karperos, California Air Resources Board

Re: Greenhouse Gas Emissions Offset Commitments

Dear Mr. Alex and Mr. Karperos:

This letter is a supplement to the application filed on February 19, 2015 by GSW Arena LLC (the "Project Sponsor"), an affiliate of Golden State Warriors, LLC, which entity owns and operates the Golden State Warriors National Basketball Association team, and is the project sponsor of the Golden State Warriors event center and mixed-use development project located at Blocks 29-32 in the South Mission Bay Area of San Francisco (the "Project").

As you know, the Project Sponsor has applied for certification by the Governor as a leadership project under the Jobs and Economic Improvement Through Environmental Leadership Act of 2011, as amended (collectively, "AB 900" or the "Act"). The application includes projected emissions for the Project that show certain projected net additional emissions of greenhouse gases as a result of the construction of the Project and as a consequence of Project operations. The Project Sponsor agrees to meet the requirement set forth in California Public Resources Code Section 21183 (c), which requires that the Project demonstrate that it will not result in net additional emissions of greenhouse gases, through the acquisition of voluntary carbon credits sufficient to offset all projected additional emissions, in the following manner:

1. No later than six (6) months after the issuance of a Temporary Certificate of Occupancy for the Project, the Project Sponsor shall provide to the lead agency, the Office of Community Investment and Infrastructure ("OCII"), a calculation of the net additional emissions resulting from the construction of the Project (the "Construction Emissions"), to be calculated in accordance with the methodology agreed upon by the Air Resources Board (ARB) in connection with the AB 900 certification of the Project (the "Agreed Methodology"). Project Sponsor shall provide courtesy copies of the calculations to the ARB and the Governor's Office promptly following transmittal of the calculations to OCII. Project Sponsor 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 Project Sponsor shall provide courtesy copies of any such

contracts to the ARB and the Governor's Office promptly following the execution of such contracts.

2. No later than six (6) months after Project Stabilization, to be defined as the date following Project completion when the Project is ninety percent (90%) leased and occupied (and with respect to the arena component, of the Project, ninety percent (90%) of the available booking dates are utilized) , the Project Sponsor shall submit to OCII a projection of operational emissions arising from the Project, based on data accumulated to that date and reasonable projections of operational emissions for the useful life of the Project of [thirty (30)] years, to be calculated in accordance with the Agreed Methodology (the "Operational Emissions"). The Project Sponsor shall provide courtesy copies of the calculations to the ARB and the Governor's Office promptly following transmittal to OCII. Project Sponsor 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 Operational Emissions, on a net present value basis in light of the fact that Project Sponsor is proposing to acquire such credits in advance of any creation of the emissions subject to the offset. The Project Sponsor shall provide courtesy copies of any such contracts to the ARB and the Governor's Office promptly following the execution of such contracts.

The commitments outlined herein will be incorporated into the the Project's Final Subsequent Environmental Impact Report (FSEIR) as a proposed improvement measure. The Project Sponsor will agree to comply with all improvement measures and mitigation measures contained in the FSEIR through the Project's Mitigation Monitoring and Reporting Program, which represents a binding and enforceable agreement with the Project's lead agency, the Office of Community Investment and Infrastructure (OCII).

Please do not hesitate to call if you have any questions.

Sincerely,

David Kelly
General Counsel, GSW Arena LLC

101887198.3

Qualcomm Stadium Reconstruction Project
Supporting Documents

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

September 8, 2015

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown, Jr.
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On August 24, 2015, the City of San Diego (City) submitted an application to ARB with its proposed GHG quantification methodologies and supporting documentation for the proposed Qualcomm Stadium Reconstruction Project (proposed project), as required by the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act. An addendum to the application with clarifying information was submitted on September 2, 2015. ARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation submitted by the City, and confirmed that the City's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the City, ARB has determined the proposed project does not result in any net additional GHG emissions for purposes of certification under AB 900.

ARB staff's evaluation and an Executive Order noting ARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Karen Magliano, Chief, Air Quality Planning and Science Division, at (916) 322-5350 or by email at karen.magliano@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

Electronic cc:
Mike Hansen, Mayor's Office, City of San Diego
Kerry Santoro, Development Services Department, City of San Diego
Kris Shackelford, Public Works Department, City of San Diego
Carrie Gleason, City Attorney's Office, City of San Diego
Scott Morgan, Governor's Office of Planning and Research
Karen Magliano, Chief, Air Quality Planning and Science Division

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-15-049

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for City of San Diego Stadium Reconstruction Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review Under the California Environmental Quality Act require for purposes of ARB's determination on GHG emissions that an applicant submit electronically to ARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, the City of San Diego (City) submitted its initial proposed GHG quantification methodologies and documentation to ARB on the proposed Qualcomm Stadium Reconstruction Project (proposed project) on August 24, 2015, and clarifying documentation submitted on September 2, 2015 when the application was deemed complete;

WHEREAS, the application submitted for the proposed project estimates the project's net additional GHG emissions as follows:

1. Construction GHG Emissions: 48,270 metric tons CO2e emissions from project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: Additional 11,255 metric tons CO2e emissions during the first full year of project operation (2020) and declining operational emissions in future years over the lifetime of the project.

WHEREAS, in the application, the City proposes to secure 48,270 metric tons of one-time carbon credits to offset emissions generated during construction and to secure carbon credits on a net present value basis to offset the net increase in emissions generated during project operation through a voluntary carbon credits market from a voluntary credit generator to fully offset these identified construction and operational GHG emissions;

WHEREAS, ARB staff reviewed and evaluated the application in consultation with the lead agency (the City of San Diego);

WHEREAS, ARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the City and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the proposed project;

WHEREAS, ARB's review and determination on the proposed project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for this project;

NOW, THEREFORE, based on ARB Staff's Evaluation (Attachment 1) of the application submitted by the City (Attachments 2 and 3), I determine that the Stadium Reconstruction Project does not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this 8th day of September 2015, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. ARB Staff Evaluation of AB 900 Application
2. City of San Diego AB 900 Application
3. Addendum to City of San Diego AB 900 Application

ATTACHMENT 1

ARB Staff Evaluation of AB 900 Application

ARB Staff Evaluation for
Proposed City of San Diego Stadium Reconstruction Project

September 8, 2015

I. Introduction

The City of San Diego (City) proposes to construct a new multi-use sports, entertainment, and recreational stadium, to replace the existing Qualcomm Stadium used by the San Diego Chargers National Football League (NFL) team in San Diego, California. The proposed project would involve construction of a new stadium on a portion of the existing stadium site, and demolition of the existing 48-year old Qualcomm Stadium. The City is the Lead Agency and the Applicant seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the Air Resources Board (ARB). This is the only condition that involves a determination by ARB. ARB staff prepared this technical evaluation of the GHG emissions from the proposed project as part of its determination.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and ARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

ARB staff reviewed the projected GHG emissions provided by the Applicant and confirmed the GHG emission factors used to estimate construction and operational emissions. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant, ARB staff concludes that, with commitments to purchase voluntary carbon credits documented in Attachments 2 and 3, the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. ARB staff confirms that the proposed project would meet the GHG emissions requirements of the

"Jobs and Economic Improvement through Environmental Leadership Act." (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project construction-generated GHG emissions. Project construction is expected to be completed in approximately five years, with construction beginning as early as 2016. The Applicant, as the Lead Agency, has committed to offset the GHG emissions generated during project construction within six months of occupancy, and will purchase any necessary carbon credits from a qualified voluntary carbon credit generator.

Table 1: Project Construction-Generated GHG Emissions[1]

Construction Year	**GHG Emissions (MT CO_2e/year)**
2016	822
2017	11,690
2018	11,717
2019	21,320
2020	2,723
Total	**48,270**
GHG Credits Required[2]	-48,270

Notes:
GHG = greenhouse gas; MT CO2e = Metric tons carbon dioxide equivalent
[1] Source: as documented in Attachment 2, and confirmed by ARB staff.
[2] The Applicant has committed to purchase carbon credits in an amount sufficient to offset all net additional construction-related GHG emissions. No later than six months after the issuance of a Temporary Certificate of Occupancy for the project, the Applicant shall confirm the estimate of construction-generated GHG emissions according to the methodology followed in the AB 900 application (Attachment 2). The Applicant has also agreed to submit courtesy copies of executed contracts for purchased carbon credits to ARB. These commitments will be referenced as enforceable conditions of the Conditional Use Permit and the Site Development Permit. By approving and issuing these permits, the City will agree to comply with these conditions.

Table 2 summarizes the net increase in project operation-related GHG emissions through the lifetime of the proposed project, which the Applicant has defined as 30 years. The continued operation of Qualcomm Stadium (i.e., the "No Project" scenario) in year 2019 serves as the reference point for the purpose of defining a baseline.

The Applicant, as the Lead Agency, has committed to execute one or more contracts to offset the net increase in GHG emissions generated during project operation no later than six months after project stabilization (the date following project completion when 90 percent of the available booking dates for the proposed stadium are secured). The Applicant will purchase voluntary carbon credits for the net increase in operational

emissions on a net-present value basis. The Applicant has agreed to submit courtesy copies of executed contracts for purchased carbon credits to ARB. Importantly, these commitments to offset all net increases in GHG emissions will be referenced as enforceable conditions of the Conditional Use Permit and the Site Development Permit issued by the City. By approving and issuing these permits, the City will agree to comply with these conditions.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)			
	Baseline (Qualcomm Stadium)	Proposed Project (Stadium Reconstruction)[3]	Difference[3]	GHG Credits Required[4]
2019	18,323	28,678	10,355	-10,355
2020	-	29,578	11,255	-11,255
2021	-	27,349	9,026	-9,026
2022	-	27,027	8,704	-8,704
2023	-	26,706	8,383	-8,383
2024	-	26,384	8,061	-8,061
2025	-	27,860	9,537	-9,537
2026	-	25,890	7,567	-7,567
2027	-	25,716	7,393	-7,393
2028	-	25,543	7,220	-7,220
2029	-	25,370	7,047	-7,047
2030	-	26,928	8,605	-8,605
2031	-	25,123	6,800	-6,800
2032	-	25,048	6,725	-6,725
2033	-	24,974	6,651	-6,651
2034	-	24,900	6,577	-6,577
2035[5]	-	26,529	8,206	-8,206

Notes:
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.
[1] Source: as documented in Attachment 2, and confirmed by ARB staff.
[2] The Applicant estimates a useful life of the project of 30 years with first year of occupancy as early as 2019.
[3] The Applicant expects that the annual number of events hosted at the proposed stadium would fluctuate year-to-year. This analysis conservatively assumed that three NFL post-season events would occur at the proposed stadium approximately every five years. There were no NFL post-season events included in the baseline assumptions for the existing stadium.
[4] The Applicant has committed to purchase carbon credits in an amount sufficient to offset the net increase in operation-related GHG emissions. No later than six months after project stabilization (the date following project completion when 90 percent of the available booking dates for the proposed stadium are secured), the Applicant shall confirm the estimate of the net additional operation-related GHG emissions according to the methodology followed in the AB 900 application (Attachment 2) and information accumulated to date about the projected level of events. The Applicant has also agreed to submit courtesy copies of executed contracts for purchased carbon credits to ARB. These commitments will be referenced as enforceable conditions of the Conditional Use Permit and the Site Development Permit. By approving and issuing these permits, the City will agree to comply with these conditions.
[5] Emissions projections after year 2035 for the proposed project would be similar to, or less than the emissions estimated for 2035. The life of the project is estimated as 30 years, which would be approximately 2049, as defined by the Applicant.

III. Overview of AB 900

AB 900 provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).)

The Governor's Guidelines for AB 900 applications require applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (d).

The role of ARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation submitted by the Applicant to determine whether the project would result in no net additional emissions of GHG emissions. ARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

IV. Existing Conditions

The San Diego Chargers NFL team currently hosts games at Qualcomm Stadium–a 70,560 seat arena–located on 15 acres within a 166-acre property. The property is located within the Mission Valley Community Plan area within the City of San Diego. Qualcomm Stadium also hosts other events such as professional and amateur sporting events, and other cultural and commercial events with lower attendance than NFL games.

V. Proposed Project Description

The proposed project would be sited on a 17-acre footprint in the northeast corner of the existing 166-acre Qualcomm Stadium property, currently occupied by paved surface parking lots. Construction of the new stadium is proposed to begin in 2016 and conclude in 2019. The existing Qualcomm Stadium would be demolished once the new

stadium becomes operational in as early as 2019. All construction activities are expected to conclude in 2020. The Applicant anticipates leasing or subleasing the new stadium to end users such as the San Diego Chargers NFL team, and other professional, collegiate, and amateur sports teams.

This proposed stadium would include a permanent capacity of 68,000 seats, expanding to approximately 72,000 seats for special events, and capable of hosting NFL football games, other professional and amateur sporting events, entertainment, cultural, and commercial events.

The Applicant is seeking Leadership in Energy and Environmental Design (LEED) Gold certification for energy efficiency for the proposed project. In addition, the new stadium would supply 5,020 fewer on-site parking spaces compared to the existing stadium. The City is preparing a Transportation Demand Management (TDM) Plan for the new stadium to help address the planned shortage of on-site parking during the first few years of project operation. The Applicant anticipates meeting a greater amount of the project's travel demand through light rail transit compared to existing conditions.

VI. Technical Review and Assessment

AECOM International Corporation (AECOM), on behalf of the Applicant, prepared a GHG emissions assessment for the proposed project to demonstrate that the requirements of AB 900 can be met. A full copy of this proposal can be found in Attachment 2, with additional supporting detail in Attachment 3.

The Applicant relied upon a variety of sources for activity data and emission factors to quantify GHG emissions. This ARB staff evaluation is focused on reviewing the data sources, emission factors, emission calculations, and assumptions used for the application, and determining whether these sources and assumptions are reasonable.

The Applicant relied upon the California Emissions Estimator Model (CalEEMod), a widely-used emissions quantification tool developed in coordination with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely-accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the United States Environmental Protection Agency AP-42 emission factors, ARB's on-road and off-road equipment emission models such as the Emission Factor 2011 model (EMFAC2011), and the Off-road Emissions Inventory Program model (OFFROAD). The Applicant used CalEEMod, in combination with project-specific data, to calculate GHG emissions from construction and mobile-source (transportation) emissions.

Because of the unique nature of the stadium land use type, the Applicant relied on off-model estimation methods to calculate emissions from electricity, natural gas, area-source (e.g., landscaping and maintenance equipment), stationary-source (e.g. emergency back-up generators), solid waste, water, and wastewater that would more accurately reflect consumption rates and emissions-generating activities than CalEEMod defaults. ARB staff also verified the emission factors and data sources used for the off-model estimation methods, and determined that they are reasonable.

VII. Project Construction Emissions

Construction-related GHG emissions are one-time, direct emissions and would occur over a five year construction period. The Applicant estimated GHG emissions associated with project construction by using the CalEEMod tool, which applies ARB-recommended off-road and on-road emissions factors from its OFFROAD2011 and EMFAC2011 emission factor models. With some exceptions, the Applicant used CalEEMod default settings to generate construction-related GHG emissions. The Applicant estimates a total of 48,270 metric tons carbon dioxide equivalent (MT CO_2e) over the five-year project construction period, as shown in Table 1 above. Construction-related GHG emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule. This includes heavy-duty equipment, such as refuse hauling trucks, excavators, cranes, and conventional work vehicles.

ARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

VIII. Baseline Operational Emissions

Operational emissions from activities at the existing Qualcomm stadium represent baseline conditions. The “no project scenario” in year 2019 serves as the baseline for purposes of this analysis. The baseline assumes Qualcomm stadium would continue in the future to operate and host similar events with similar attendance to current levels. GHG emissions were quantified for mobile, electricity, natural gas, area, stationary, solid waste, water, and wastewater-related sources. The application states that GHG emissions from Qualcomm Stadium within the base year (2019) are estimated as 18,323 MT CO_2e.

ARB staff evaluated the Applicant’s GHG emission estimations, demand factors, and assumptions used in the Applicant’s baseline calculations, summarized in Table 2 above. ARB’s assessment agrees with the Applicant’s annual baseline GHG estimations summarized in Table 2.

IX. Proposed Project Operational Emissions

Operational GHG emission sources from the proposed project include mobile, electricity, natural gas, area, solid waste, water, and wastewater sources. The proposed project does not propose any on-site stationary emissions sources (e.g., emergency back-up generators). Operational GHG emissions from the proposed project were assumed to begin in 2019.

ARB staff evaluated the proposed project's emission calculations, demand factors, and assumptions used to estimate operational GHG emissions and arrived at approximately the same GHG quantification as provided by the Applicant (within 0.1 percent).

There were several competing factors that affected the GHG emissions estimated for the proposed project, discussed below.

An increase in the number of events is anticipated at the new stadium, compared to the baseline at the existing stadium. Although the new stadium proposes fewer seats, less on-site parking, and a TDM Plan to increase travel to the stadium through alternative modes, the increase in the annual number of events results in greater mobile-source emissions compared to the baseline. Detailed assumptions about the increase in number of events and associated attendance are in Attachment 2.

The proposed project is seeking LEED Gold certification for energy efficiency and would include an on-site solar photovoltaic (PV) system installed over one acre of surface parking stalls with minimum 100 kilowatts of renewable electricity generation capacity. The solar PV system could be designed as large as five acres; however, biological resources and other site constraints would influence the final design of the solar PV system. Overall, the proposed project would consume less electricity and natural gas and would generate lower energy-related GHG emissions than the existing stadium.

The applicant used GHG emission factors for electricity from San Diego Gas and Electric that will change over time due to the California Renewable Portfolio Standard (RPS), a program designed to require 33 percent of grid electricity to come from renewable sources by 2020. Additionally, mobile-source emission factors used were based on a modified version of the ARB EMFAC2011 on-road inventory and include current emission reduction rules in place as of 2011. Additional vehicle regulations implemented since that time (e.g., ARB's Advanced Clean Cars regulations) are not included in the emission factors used for this project, and would further reduce the GHG emissions reported in Table 2.

The Applicant's assumptions and inputs are reasonably conservative, and represent an upper-bound for the net increase in GHG emissions that could occur. Based on the

Applicant's proposal, annual project operational emissions would exceed baseline throughout the lifetime of the project.

X. Method to Offset Emissions

Under the GHG quantification methodology used by the Applicant, the proposed project would result in a one-time net GHG emissions increase of 48,270 MT CO_2e during project construction, and an estimated net increase of 11,255 MT CO_2e during the first year of full project operation (2020). Operational emissions will be on-going for the duration of the project life, and are expected to decline over the life of the project as emissions factors decline associated with adoption of lower-GHG-emitting vehicle technologies and renewable sources of electricity. The Applicant has agreed to meet the requirement set forth in California Public Resources Code section 21183, subdivision (c) to demonstrate that the proposed project would result in no net additional GHG emissions through the purchase of voluntary carbon credits sufficient to offset all projected additional GHG emissions, as detailed in Attachments 2 and 3.

Notably, the commitments to enter into contracts to offset net additional GHG emissions were incorporated as an improvement measure in the Draft Environmental Impact Report for the proposed project, and will be requirements incorporated into permit conditions. By approving the Conditional Use Permit and Site Development Permit, the City (as the Applicant) will agree to comply with these conditions.

XI. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant and its commitment to purchase voluntary carbon credits, ARB staff concludes that the project operational and construction emissions will not result in any net additional GHG emissions relative to the baseline.

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

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(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

AB 900 Application

For the
Qualcomm Stadium Reconstruction Project

Prepared for
City of San Diego

August 2015

401 West A Street, Suite 1200
San Diego, California 92101

Each goal includes objectives and performance metrics to determine if the goals are being met by the strategies in the TDM plan, which is an enforceable but flexible approach to increasing transportation efficiency. The strategies are meant to be mixed and matched depending on the available resources, needed effectiveness, and results. The strategies selected should consider the estimated cost, influence, and overall rating. Choosing the implementation strategies shall vary from year to year and can be mixed and matched in order to achieve the results needed to be a flexible, living document that is adaptable over time and responsive to available resources and budget. The Draft TDM plan includes but is not limited to the following objectives and strategies:

- **Objective 1A:** Encourage carpooling
    - **Example Strategy:** Pricing Analysis of Carpool Incentive Pricing. A full analysis of pricing incentives related to carpooling to assess effectiveness and attendee satisfaction.
    - **Example Strategy:** Increased parking price based on car occupancy. Cars with 2 or less people will pay more for parking. Vehicles with 6 or more people will pay less.
    - **Example Strategy:** Significantly increase parking price for Single Occupancy Vehicles. Charge an additional amount for an attendee parking onsite without any passengers
- **Objective 2A:** Reduce parking demand
    - **Example Strategy:** Provide an Offsite Parking Shuttle Service. Establish a shuttle route to service key offsite parking locations to reduce the number of attendee trips seeking offsite parking locations and more efficiently transport attendees to the stadium.
    - **Example Strategy:** Provide Sponsorship Opportunities on Offsite Parking Locations. Identify key offsite parking lots that will provide opportunities for sponsor activities, tents, food and beverage and entertainment in order to create a pre-game tailgate experience that will be serviced by an offsite parking shuttle to avoid attendees circling the neighborhood for offsite parking locations.
- **Objective 3A:** Maximize high trolley ridership during weekday game days
    - **Example Strategy:** Marketing and Outreach Campaign. In coordination with the City, NFL, MTS, and San Diego Association of Governments (SANDAG) to create a marketing campaign to encourage attendees to take the trolley. Utilize the same efforts as the 2003 Super Bowl at Qualcomm Stadium. Free transit passes during stadium events as giveaways or raffle winnings could be included.

Other elements could also include free promotions and giveaways exclusively for attendees who used MTS passes.

- **Example Strategy:** Provide Transportation Information Kiosks. Provide permanent transportation information kiosks near the stadium entrances with all transportation information including local transit, regional connections, and alternative modes of transportation. Transportation guides will be available at these kiosks to provide information on the best time to arrive to the stadium during large events and other relevant information.

- **Objective 4A:** Encourage walking and bicycle mode
  - **Example Strategy:** Host a Bike Valet. Host a bike valet onsite during large stadium events (Approximately 300 spaces).
  - **Example Strategy:** Coordinate Bike Pools and Walk Pools. Coordinate and promote City led bicycle pools and walk pools where attendees can meet up at a set location and bike or walk to the stadium together.

The TDM Plan will be prepared before the Final Environmental Impact Report is published, would take effect prior to the start of the new stadium construction phase and would be implemented throughout the life of the Project and long-term operation. The TDM Plan will be implemented in tandem with the Project construction schedule to anticipate the greatest impacts and mitigate all impacts before they occur. With the construction mobilization schedule occurring towards the end of the NFL 2016 Season, the TDM Plan will begin implementation in August 2016. Working group meetings should begin in January 2016 in order to communicate clear implementation strategies before the beginning of the NFL 2016 season.

The TDM Plan includes an ongoing annual assessment as a part of its implementation. In this assessment, performance metrics must be collected once a year in order to assess the success or failure of the implementation strategies. If one of the metrics does not meet the threshold, the TDM Working Group will reassess the chosen implementation strategies. Should additional best practices and implementation strategies arise to address the goals, the TDM shall be assessed annually to accommodate changes to the plan. A new role of Stadium TDM Coordinator will be created by the City. This TDM Coordinator will be responsible for the assessment cycle of this plan, scheduling regular meetings with the TDM Working Group and updating the TDM plan.

Based on the projected changes in parking, transit use and vehicle trips, as well as the implementation of the TDM plan, the Project will achieve at least 10 percent greater transportation efficiency than the existing Qualcomm Stadium. Additional information on transportation efficiency is included in Attachment B.

Crossroads Hollywood
Supporting Documents

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

November 14, 2016

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown, Jr.
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the Air Resources Board (ARB).

On August 26, 2016, CHE-HAR Crossroads SPV, LLC (the Applicant) submitted an application to ARB with its proposed GHG quantification methodologies and supporting documentation for the proposed Crossroads Hollywood project (proposed project), as required by the Governor's Guidelines for Streamlining Judicial Review under CEQA. A revision to the application with clarifying information pertaining to the GHG emissions quantification methodology was submitted on October 28, 2016. ARB staff conducted an evaluation of the GHG emission estimates and voluntary improvement measures submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, ARB has determined the proposed project does not result in any net additional GHG emissions for purposes of certification under AB 900.

ARB staff's evaluation and an Executive Order noting ARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Karen Magliano, Chief, Air Quality Planning and Science Division, at (916) 322-5350 or by email at karen.magliano@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

Electronic cc:
Paul Bauer, Mercury LLC

Glenn Gritzner, Mercury LLC

Kydra Joy Casper, Liner Law LLP

Stephanie Eyestone-Jones, Eyestone Environmental

Mark Hagmann, Eyestone Environmental

Madonna Marcelo, Eyestone Environmental

Scott Morgan, Governor's Office of Planning and Research

Karen Magliano, Chief
Air Quality Planning and Science Division

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-16-095

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for Crossroads Hollywood Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (ARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act require for purposes of ARB's determination on GHG emissions that an applicant submit electronically to ARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, CRE-HAR Crossroads SVP, LLC (the Applicant) submitted its initial proposed GHG quantification methodologies and documentation to ARB on the proposed Crossroads Hollywood Project (proposed project) on August 26, 2016, and clarifying documentation submitted on September 28, 2016 when the application was deemed complete;

WHEREAS, the application submitted for the proposed project estimates the project's net additional GHG emissions as follows:

1. Construction GHG Emissions: Additional 9,440 metric tons CO2e emissions from project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: Additional 14,294 metric tons CO2e emissions during the first full year of project operation (2022) and

declining operational emissions in future years over the lifetime of the project.

WHEREAS, in the application, the applicant proposes to secure 9,440 metric tons of one-time carbon credits to offset emissions generated during construction and to secure 374,209 metric tons of carbon credits on a net present value basis to offset the net increase in emissions generated during project operation through a voluntary carbon credits market from a qualified GHG emissions broker to fully offset these identified construction and operational GHG emissions;

WHEREAS, ARB staff reviewed and evaluated the application in consultation with the lead agency (the City of Los Angeles);

WHEREAS, ARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the proposed project;

WHEREAS, ARB's review and determination on the proposed project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for this project;

NOW, THEREFORE, based on ARB Staff's Evaluation (Attachment 1) of the documentation submitted by the Applicant (Attachment 2), I determine that the Crossroads Hollywood Project does not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this 14th day of November 2016, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. ARB Staff Evaluation of AB 900 Application for Crossroads Hollywood Project
2. Crossroads Hollywood Project Greenhouse Gas Emissions Methodology Documentation for AB 900 Application

ATTACHMENT 1

ARB Staff Evaluation of AB 900 Application for

Crossroads Hollywood Project

ARB Staff Evaluation of AB 900 Application for

Crossroads Hollywood Project

November 18, 2016

I. Introduction

CRE-HAR Crossroads SPV, LLC (the Applicant) proposes to construct a mixed-use development project, located in the Hollywood neighborhood of Los Angeles, California. The proposed project would involve demolition of existing uses, rehabilitation of the existing historic Crossroads of the World site, and construction of nine new mixed-use buildings on several parcels of land. The City of Los Angeles is the Lead Agency, and the developer is the Applicant seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the Air Resources Board (ARB). This is the only condition that involves a determination by ARB. ARB staff prepared this technical evaluation of the GHG emissions from the proposed project as part of its determination.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and ARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

ARB staff reviewed the projected GHG emissions provided by the Applicant and confirmed the GHG emission factors used to estimate construction and operational emissions. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant, ARB staff concludes that, with commitments to purchase voluntary carbon credits documented in Attachment 2, the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. ARB staff confirms that the proposed project would meet the GHG emissions requirements of the

Jobs and Economic Improvement through Environmental Leadership Act. (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project construction-generated GHG emissions. Project construction is expected to be completed in approximately five years, with construction beginning as early as 2018. The Applicant has committed to offset the GHG emissions generated during project construction within six months of occupancy, and will purchase any necessary carbon credits from a qualified GHG emissions broker. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to ARB and the Governor's Office. The commitments to enter into contracts to offset net additional GHG emissions will be a condition of project approval, which represents a binding and enforceable agreement between the Applicant, or its successor, and the lead agency (City of Los Angeles).

Table 1: Project Construction-Generated GHG Emissions[1]

Construction Year	**GHG Emissions (MT CO_2e/year)**
2018	3,315
2019	2,229
2020	2,180
2021	1,716
Total	**9,440**
GHG Credits Required[2]	9,440

Notes:
GHG = greenhouse gas; MT CO2e = Metric tons carbon dioxide equivalent
[1] Source: as documented in Attachment 2, and confirmed by ARB staff.
[2] The Applicant has committed to enter into one of more contracts to purchase carbon credits from a qualified GHG emissions broker (to be selected from an accredited registry) in an amount sufficient to offset all net additional construction-related GHG emissions. No later than six months after the issuance of a Temporary Certificate of Occupancy for the project, the Applicant shall provide the lead agency (the City of Los Angeles) a calculation of the net additional GHG emissions resulting from construction of the Project according to the methodology followed in the Greenhouse Gas Emissions Methodology Documentation (Attachment 2). The Applicant has also agreed to promptly submit copies of executed contracts for purchased carbon credits to ARB and to the Governor's office. The commitments to enter into contracts to offset net additional GHG emissions will be incorporated as a condition of project approval, which is binding and enforceable by the lead agency.

Table 2 summarizes the net increase in project operation-related GHG emissions through the lifetime of the proposed project, which the Applicant has defined as 30 years. The continued operation of the existing land uses that would be demolished under the proposed project serves as the reference point for the purpose of defining a baseline.

The Applicant has committed to execute one or more contracts to offset the net increase in GHG emissions generated during project operation for any building in the project prior to issuance of any Certificate of Occupancy for that building. The Applicant will purchase voluntary carbon credits for the net increase in operational emissions on a net-present value basis. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to ARB and the Governor's Office. The commitment to enter into contracts to offset net additional GHG emissions will be a condition of project approval, which represents a binding and enforceable agreement between the Applicant, or its successor, and the lead agency (City of Los Angeles).

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)			
	Baseline	**Proposed Project**	**Difference**	**GHG Credits Required**[3]
2022	3,757	18,051	14,294	14,294
2023	3,757	17,788	14,031	14,031
2024	3,757	17,583	13,826	13,826
2025-2029	3,757	17,321	13,564	13,564
2030-2051[4]	3,757	15,890	12,133	12,133
Total Projected GHG Credits Required to Offset Estimated Project Operational GHG Emissions Over Project Lifetime				374,209

Notes:
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.
[1] Source: as documented in Attachment 2, and confirmed by ARB staff.
[2] The Applicant estimates a useful life of the project of 30 years with first year of occupancy as early as 2022.
[3] The Applicant has committed to purchase carbon credits in an amount sufficient to offset the net increase in operation-related GHG emissions. Prior to issuance or any Certificate of Occupancy for any building in the project, the Applicant or its successor shall enter into one or more contracts to purchase carbon credits from a qualified GHG emissions broker (to be selected from an accredited registry), which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the operational emissions attributable to each building constructed within the project. Prior to execution of the contract(s), the Applicant shall provide the lead agency (the City of Los Angeles) a calculation of the net additional operational GHG emissions according to the methodology followed in the Greenhouse Gas Emissions Methodology Documentation (Attachment 2). The Applicant has also agreed to promptly submit copies of executed contracts for purchased carbon credits to ARB and to the Governor's office. The commitments to enter into contracts to offset net additional GHG emissions will be incorporated as a condition of project approval, which is binding and enforceable by the lead agency.
[4] Emissions projections after year 2030 for the proposed project would be similar to, or less than the emissions estimated for 2030. The life of the project is estimated as 30 years, which would be approximately 2022 through 2051, as defined by the Applicant.

III. Overview of AB 900

AB 900, as amended by SB 743 (2013) and SB 734 (2016) provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).)

The Governor's Guidelines for AB 900 applications require applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (d).

The role of ARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation submitted by the Applicant to determine whether the project would result in no net additional emissions of GHG emissions. ARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

IV. Existing Conditions

The existing project site consists of a mix of low-density commercial and office uses, 84 multi-family residential units, and surface parking lots located on four city blocks on approximately eight acres of land. The property is located within the Hollywood Community Plan area within the City of Los Angeles. The project site includes Crossroads of the World complex, which consists of approximately 50,000 square feet of retail, office, and entertainment uses, and is a designated historic resource.

V. Proposed Project Description

The proposed project would involve construction of a mixed-use development on the eight acre project site described above. The project proposes to demolish 84 residential units and 115,781 square feet of commercial uses, and construct 950 new residential units, a 308 room hotel, and 280,000 square feet of new commercial uses. The historic

Crossroads of the World complex would be retained, preserved, and rehabilitated as part of the project. The baseline and proposed land uses are summarized in below.

Table 3: Baseline and Proposed Land Uses

Land Use Type	Baseline Land Uses to be Demolished	Proposed Land Uses
Residential	84 du	950 du
Retail	26,690 sf	101,800 sf
Office	79,107 sf	95,000 sf
Restaurant	475 sf	83,200 sf
Hotel	-	308 rooms
Parking	344 spaces	2,596 spaces

Notes:
du = dwelling units, sf = square feet
Source: as documented in Attachment 2, and confirmed by ARB staff.

Construction is proposed to begin in 2018 and conclude in 2021. The proposed project was assumed to become operational in as early as 2022.

The Applicant is seeking Leadership in Energy and Environmental Design (LEED) Silver certification for energy efficiency for the proposed project, and would install a 135 kilowatt (kW) photovoltaic (PV) system, which would generate approximately one percent of the project's electrical demand on-site. In addition, the project would be located within 0.25 mile walking distance from subway and bus lines. The project would provide 1,307 short- and long-term bicycle parking spaces, along with shower facilities for bicycle commuters. The project would provide electric vehicle charging stations and preferential parking for alternative fueled vehicles. The project would also implement a Transportation Demand Management (TDM) program that includes strategies to promote non-auto travel. The TDM program would be expected to further reduce commute vehicle trips to the project site.

VI. Technical Review and Assessment

Eyestone Environmental, on behalf of the Applicant, prepared a GHG emissions assessment for the proposed project to demonstrate that the requirements of AB 900 can be met. A full copy of this proposal can be found in Attachment 2.

The Applicant relied upon a variety of sources for activity data and emission factors to quantify GHG emissions. This ARB staff evaluation is focused on reviewing the data

sources, emission factors, emission calculations, and assumptions used for the application, and determining whether these sources and assumptions are reasonable.

The Applicant relied upon Version 2013.2.2 of the California Emissions Estimator Model (CalEEMod), a widely-used emissions quantification tool developed in coordination with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely-accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the United States Environmental Protection Agency AP-42 emission factors, ARB's on-road and off-road equipment emission models such as the Emission Factor 2011 model (EMFAC2011), and the Off-road Emissions Inventory Program model (OFFROAD). The Applicant used CalEEMod, in combination with project-specific data and ARB's more recent EMFAC 2014 mobile-source emission factors, to calculate GHG emissions from construction and operational emissions.

VII. Project Construction Emissions

Construction-related GHG emissions are one-time, direct emissions and would occur over a 48-month construction period. The Applicant estimated GHG emissions associated with project construction by using the CalEEMod tool. With some exceptions, the Applicant used CalEEMod default settings to generate construction-related GHG emissions. The Applicant estimates a total of 9,440 metric tons carbon dioxide equivalent (MT CO_2e) over the project construction period, as shown in Table 1 above. Construction-related GHG emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule. This includes heavy-duty equipment, such as refuse hauling trucks, excavators, cranes, and conventional work vehicles.

ARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

VIII. Baseline Operational Emissions

Operational emissions from land uses at the existing project site that would be demolished and removed as part of the project represent baseline conditions. Operational emissions in year 2015 serves as the baseline for purposes of this analysis, which represents existing conditions at the time the Notice of Preparation was issued for the project. GHG emissions were quantified for mobile, electricity, natural gas, area, solid waste, water, and wastewater-related sources. The application states that GHG emissions associated with existing conditions in 2015 are estimated as 3,757 MT CO_2e.

ARB staff evaluated the Applicant's GHG emission estimations, demand factors, and assumptions used in the Applicant's baseline calculations, summarized in Table 2 above. ARB staff concluded that the methodology and estimated baseline GHG emissions provided by the Applicant are appropriate.

IX. Proposed Project Operational Emissions

Operational GHG emission sources from the proposed project include mobile, electricity, natural gas, area, stationary, solid waste, water, and wastewater sources. Operational GHG emissions from the proposed project were assumed to begin in 2022.

The proposed project is seeking LEED Silver certification for energy efficiency and would include an on-site solar PV system with minimum 135 kW of renewable electricity generation capacity.

The Applicant used GHG emission factors for electricity from Los Angeles Department of Water and Power, that will change over time due to the California Renewable Portfolio Standard (RPS), a program designed to require 33 percent of grid electricity to come from renewable sources by 2020, and 50 percent renewable sources by 2030. Additionally, mobile-source emission factors used were based on the ARB EMFAC2014 on-road inventory. Declining mobile-source emission factors were used to estimate GHG emissions from vehicles over the project's lifetime, which reflect additional improvements in fleet fuel economy due to ARB's Advanced Clean Cars regulations, and were not reflected in CalEEMod.

The Applicant used CalEEMod default emission factors and calculation methods to estimate GHG emissions from water consumption and solid waste disposal. The Applicant also estimated that a nominal amount of GHG emissions would be associated with monthly testing of on-site emergency backup generators (i.e., stationary sources).

The Applicant's assumptions and inputs are reasonably conservative, and represent an upper-bound for the net increase in GHG emissions that could occur. ARB staff evaluated the proposed project's emission calculations, demand factors, and assumptions used to estimate operational GHG emissions and concluded that the methodology and estimated operational GHG emissions provided by the Applicant for are appropriate.

Based on the Applicant's proposal, annual project operational emissions would exceed baseline throughout the lifetime of the project, as summarized in Table 2.

X. Method to Offset Emissions

Under the GHG quantification methodology used by the Applicant, the proposed project would result in a one-time net GHG emissions increase of 9,440 MT CO_2e during project construction, and an estimated net increase of 14,294 MT CO_2e during the first year of full project operation (2022). Operational emissions would be on-going for the duration of the project life (defined as 30 years), and would be expected to decline over the life of the project as emission factors decline associated with adoption of lower-GHG-emitting vehicle technologies and renewable sources of electricity. The Applicant has agreed to meet the requirement set forth in California Public Resources Code section 21183, subdivision (c) to demonstrate that the proposed project would result in no net additional GHG emissions through the purchase of voluntary carbon credits sufficient to offset all projected additional GHG emissions, as detailed in Attachment 2.

The Applicant will purchase voluntary carbon credits for the net increase in construction and operational emissions prior to issuance of any Certificate of Occupancy for the project. The commitments to enter into contracts to offset net additional GHG emissions will be incorporated as condition of project approval, which represents a binding and enforceable agreement between the Applicant and the lead agency (City of Los Angeles). The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to ARB and the Governor's Office as evidence that this condition has been met.

XI. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant and its commitment to purchase voluntary carbon credits, ARB staff concludes that the proposed project would not result in any net additional GHG emissions relative to the baseline.

ATTACHMENT 2

Greenhouse Gas Emissions Methodology Documentation for Environmental Leadership Development Project Application

Crossroads Hollywood Project

(Submitted August 26, 2016; Revised October 28, 2016 and November 16, 2016)

Greenhouse Gas Emissions Methodology and Documentation

Crossroads Hollywood Project

Project Applicant:

CRE-HAR Crossroads SPV, LLC
6363 Wilshire Boulevard, #600
Los Angeles, CA 90048

August 2016
(Revised October 2016)

Prepared By:

Eyestone Environmental
6701 Center Drive West, Suite 900
Los Angeles, CA 90045

eyestone ENVIRONMENTAL

Crossroads Hollywood

Greenhouse Gas Emissions Methodology and Documentation

1. Introduction

Eyestone Environmental has been retained to conduct a comprehensive greenhouse gas (GHG) emissions assessment for the Crossroads Hollywood Project (the "Project") and to demonstrate that the Project meets the requirements of the *Jobs and Economic Improvement Through Environmental Leadership Act* ("the Act") (Public Resources Code Section 21178 et seq.), also referred to as Assembly Bill (AB) 900. This assessment describes the methodology used to estimate the GHG emissions from baseline and Project conditions, provides an estimate of the net change in GHG emissions for the Project as compared to baseline conditions, and describes the methodology uses to quantify GHG emission reductions from project design features and mitigation measures. The following baseline and Project-related emission sources have been evaluated:

- Construction Activities—Fossil fueled on- and off-road vehicles and equipment needed for demolition, mass and fine grading, building construction, paving, and architectural coating;
- Direct Emission Sources—Consumption of natural gas on-site for cooking, space heating and water heating, combustion of fossil fuels for lawn care and maintenance activities, and motor vehicles including employee transportation; and
- Indirect Emission Sources—Off-site electricity generation, water conveyance and wastewater treatment, and solid waste disposal.

a. Assembly Bill 900

In September 2011, Governor Brown signed the Act, which required the Governor to establish procedures for applying for streamlined environmental review under the California Environmental Quality Act (CEQA) for projects that meet certain requirements. The Office of Planning and Research (OPR) has provided approved guidelines for submitting applications for streamlined environmental review pursuant to the Act. With respect to GHG emissions, a project must demonstrate that it would not result in any net additional

Table 9
Baseline Condition Solid Waste Disposal Greenhouse Gas Emissions

Land Use	Waste Disposal Rate (tons/yr)	Waste Disposal Rate after 50% Diversion[b] (tons/yr)	Annual GHG Emissions[a,c] ($MTCO_2e$/yr)
Baseline (2015)			
Apartments (Low Rise)	38.6	19.3	8.8
Office	73.6	36.8	16.7
Restaurant	5.7	2.9	1.3
Retail	28	14	6.4
Parking Lot (Spaces)	0	0	0
Total Baseline (2015)			**33.2**
Project (2022)			
Apartments High Rise	349.6	174.8	79.5
Condominiums High Rise	87.4	43.7	19.9
Hotel (Rooms)	168.6	84.3	38.4
Office	88.34	44.2	20.1
Restaurant (High Quality)	38	19	8.6
Restaurant (High Turnover)	495	247.5	112.6
Retail	64.9	32.4	14.8
Supermarket	225.6	112.8	51.3
Parking Structure (Spaces)	0	0	0
Total Project (2022)			**345.2**

[a] *Totals may not add up exactly due to rounding in the modeling calculations.*

[b] *The rates were based on statewide averages and the total amount of waste disposed was reduced by the diversion rate of 50%, pursuant to the City of Los Angeles Solid Waste Management Policy Plan, which was adopted by the City to comply with Assembly Bill 939.*

[c] *CO_2e was calculated using CalEEMod and the results are provided in Section 2.0 of the Operation CalEEMod output file within Appendix C of this assessment.*

Source: Eyestone Environmental, 2016.

(7) Summary of GHG Emissions and Comparison to Baseline Condition

Table 11 on page 43 provides a summary of the determination of net additional GHG emissions comparing the existing site GHG emissions and the Project GHG emissions. As shown in Table 11, the Project site generates approximately 3,757 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year under the Baseline Condition. This excludes any one-time construction GHG emissions that were generated when the existing

Table 10
Baseline Condition Water and Wastewater Greenhouse Gas Emissions

Land Use	Indoor Water Demand[a,b] (Mgal/yr)	Outdoor Water Demand[a,b] (Mgal/yr)	Annual GHG Emissions[a,c] ($MTCO_2e$/yr)
Baseline (2015)			
Apartments (Low Rise)	5.5	3.5	61.3
Office	14.1	8.6	156.1
Restaurant	0.2	<0.1	1.2
Retail	2.0	1.2	22.0
Parking Lot (Spaces)	0	0	0
Total Baseline (2015)			**240.5**
Project (2022)			
Apartments High Rise	32.2	15.6	196.5
Condominiums High Rise	8.1	3.9	49.1
Hotel (Rooms)	5.1	0.4	24.9
Office	11.0	2.2	66.6
Restaurant (High Quality)	8.2	0.4	39.4
Restaurant (High Turnover)	8.2	0.4	39.4
Retail	3.0	1.4	18.1
Supermarket	3.2	<0.1	15.1
Parking Structure (Spaces)	0	0	0
Total Project (2022)			**449.0**

[a] *Totals may not add up exactly due to rounding in the modeling calculations.*

[b] *The Project would be designed to incorporate PDFs that would reduce its water usage with the goal of achieving or exceeding the requirements of USGBC LEED Silver rating (i.e., reduce indoor water use by a minimum of 35% by installing water fixtures that exceed applicable standards and 50% from the outdoor water calculated baseline at peak watering month by installing efficient irrigation).*

[c] *CO_2e was calculated using CalEEMod and the results are provided in Section 2.0 of the Operation CalEEMod output file within Appendix C of this assessment.*

Source: Eyestone Environmental, 2016.

uses and related infrastructure were originally built. Construction of the Project would generate one-time GHG emissions of approximately 3,314 $MTCO_2e$ per year during the first year, 2,229 $MTCO_2e$ during the second year, 2,180 $MTCO_2e$ per year during the third year, and 1,716 $MTCO_2e$ during the fourth year. At Project buildout (2022), the Project Site would generate approximately 18,051 $MTCO_2e$ during the first full year of operation. Future year emissions would decline as a greater percentage of motor vehicles meet more stringent emissions standards, including the Pavley Phase I and Phase II emissions

Table 11
Summary of Annual GHG Emissions ($MTCO_2e/yr$)

GHG Emission Source	2018	2019	2020	2021	2022	2023	2024	2025–2029	2030–2051
Baseline (2015)									
Area					28	28	28	28	28
Energy					1,160	1,160	1,160	1,160	1,160
Mobile					2,296	2,296	2,296	2,296	2,296
Waste					33	33	33	33	33
Water					241	241	241	241	241
Total Baseline (2015)					**3,757**	**3,757**	**3,757**	**3,757**	**3,757**
Project									
Construction	3,314	2,229	2,180	1,716	0	0	0	0	0
Area					62	62	62	62	62
Energy					5,496	5,496	5,496	5,496	4,184
Mobile					11,677	11,414	11,210	10,947	10,947
Waste					345	345	345	345	345
Water					449	449	449	449	330
Emergency Generators					22	22	22	22	22
Total Project	3,314	2,229	2,180	1,716	18,051	17,788	17,583	17,321	15,890
Project less Baseline	3,314	2,229	2,180	1,716	14,294	14,031	13,826	13,564	12,133
Voluntary Carbon Credits[a]	(3,314)	(2,229)	(2,180)	(1,716)	(14,294)	(14,031)	(13,826)	(13,564)	(12,133)
Difference	0	0	0	0	0	0	0	0	0
Exceed Baseline?	No	No	No	No	No	No	No	No	No

[a] *Total voluntary carbon credits required for the life of the Project (30 years) equal 374,209 MT CO_2e.*

Source: Eyestone Environmental, 2016.

standards, and power companies meet the 50 percent Renewables Portfolio Standard. In 2030, annual Project emissions would be reduced to approximately 15,890 $MTCO_2e$. As shown in Table 11 on page 43, the Project would commit to purchase voluntary carbon credits for the life of the Project. Consistent with SCAQMD's definition of the "life of the project" for CEQA GHG purposes, provided in SCAQMD's Governing Board Agenda Item 31, December 5, 2008, the Project would be required to offset 374,209 MT CO_2e over a 30-year lifetime. The SCAQMD recommends that offsets should have a 30-year project life, should be real, quantifiable, verifiable, and surplus and will be considered in the following prioritized manner: (1) project design feature/on-site reduction measures; (2) off-site within neighborhood; (3) off-site within district; (4) off-site within state; and (5) off-site out of state.

(8) Method to Offset Emissions

The Project Sponsor agreed to meet the requirement set forth in California Public Resources Code Section 21183, subdivision (c) to demonstrate that the Project would result in no net additional GHG emissions through the purchase of voluntary carbon credits sufficient to offset all projected additional GHG emissions. A copy of the commitment letter is provided in Appendix A.

Notably, the commitments to enter into contracts to offset net additional GHG emissions will be incorporated as an improvement measure in the Final EIR for the Project. All improvement measures will be enforceable through the Project's Mitigation Monitoring and Reporting Program (MMRP), which represents a binding and enforceable agreement between the Project Sponsor and the lead agency (City of Los Angeles).

Based on this assessment, the Project would not result in any net additional GHGs, including GHG emissions from employee transportation, in accordance with Public Resources Code Section 21183(c) with the purchase of voluntary carbon credits. Therefore, the Project would meet the GHG emissions requirements for streamlined environmental review under CEQA.

6220 West Yucca Project
Supporting Documents

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

June 15, 2017

Mr. Ken Alex, Director
Office of Governor Edmund G. Brown, Jr.
Office of Planning and Research
State Capitol
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

On April 10, 2017, Riley Realty, L.P. (the Applicant) submitted an application to CARB with its proposed GHG quantification methodologies and supporting documentation for the proposed Yucca Argyle project (proposed project), as required by the Governor's Guidelines for Streamlining Judicial Review under CEQA. CARB staff conducted an evaluation of the GHG emission estimates and voluntary improvement measures submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, CARB has determined the proposed project does not result in any net additional GHG emissions for purposes of certification under AB 900.

CARB staff's evaluation and an Executive Order noting CARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Karen Magliano, Chief, Air Quality Planning and Science Division at (916) 322-5350, or by email at karen.magliano@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-07-044

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for 6220 West Yucca Street Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act require for purposes of CARB's determination on GHG emissions that an applicant submit electronically to CARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, Riley Realty, L.P. (the Applicant) submitted its initial proposed GHG quantification methodologies and documentation to CARB on the proposed 6220 West Yucca Street Project (proposed project) on April 10, 2017, and clarifying documentation submitted on June 12, 2017, when the application was deemed complete;

WHEREAS, the application submitted for the proposed project estimates the project's net additional GHG emissions as follows:

1. Construction GHG Emissions: Additional 2,245 metric tons CO2e emissions from project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: Additional 4,405 metric tons CO2e emissions during the first full year of project operation (2021) and declining operational emissions in future years over the lifetime of the project.

WHEREAS, in the application, the applicant proposes to secure 2,245 metric tons of one-time carbon credits to offset emissions generated during construction and to secure 103,669 metric tons of carbon credits on a net present value basis to offset the net increase in emissions generated during project operation through a voluntary carbon credits market from a qualified GHG emissions broker to fully offset these identified construction and operational GHG emissions;

WHEREAS, CARB staff reviewed and evaluated the application in consultation with the lead agency (the City of Los Angeles);

WHEREAS, CARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the proposed project;

WHEREAS, CARB's review and determination on the proposed project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for this project;

NOW, THEREFORE, based on CARB Staff's Evaluation (Attachment 1) of the documentation submitted by the Applicant (Attachment 2), I determine that the 6220 West Yucca Street Project does not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this 15th day of June 2017, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. CARB Staff Evaluation of AB 900 Application for 6220 West Yucca Street Project
2. 6220 West Yucca Street Project Greenhouse Gas Emissions Methodology Documentation for AB 900 Application

ATTACHMENT 1

ARB Staff Evaluation of AB 900 Application for

6220 West Yucca Street Project

CARB Staff Evaluation of AB 900 Application for 6220 West Yucca Street Project

June 15, 2017

I. Introduction

Riley Realty, L.P. (the Applicant) proposes to redevelop an approximately 1.16-acre (net area) property on the south side of West Yucca Street between Argyle Avenue and Vista Del Mar Avenue, generally referenced as 6220 West Yucca Street (project site), with a mixed-use residential, hotel, and commercial/restaurant project (the project). The property is located within the Hollywood community of the City of Los Angeles. There are currently 44 residential units on the project site, all of which would be demolished and removed to allow development of the project. The City of Los Angeles is the Lead Agency, and the developer is the Applicant seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the California Air Resources Board (CARB). This is the only condition that involves a determination by CARB. CARB staff prepared this technical evaluation of the GHG emissions from the proposed project as part of its determination.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and CARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

CARB staff reviewed the projected GHG emissions provided by the Applicant and confirmed the GHG emission factors used to estimate construction and operational emissions. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant, CARB staff concludes that, with commitments to purchase voluntary carbon credits documented in Attachment 2, the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. CARB staff

confirms that the proposed project would meet the GHG emissions requirements of the Jobs and Economic Improvement through Environmental Leadership Act. (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project GHG emissions generated by construction activities. Project construction is expected to be completed over two to three years, with demolition activities beginning as early as 2018. The Applicant has committed to offset the GHG emissions generated during project construction. No later than six months after the issuance of a Temporary Certificate of Occupancy for the project, the applicant will provide to the lead agency, the City of Los Angeles, a calculation of the net additional emissions resulting from the construction of the project, calculated in accordance with the methodology agreed upon by CARB in connection with the AB 900 certification of the project. The applicant will provide courtesy copies of the calculations to CARB and the Governor's Office promptly following transmittal of the calculations to the City of Los Angeles. Additionally, the applicant has agreed to enter into one or more contracts to purchase voluntary carbon credits from a qualified GHG emissions broker in an amount sufficient to offset the Construction Emissions and submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office.

Table 1: Project Construction-Generated GHG Emissions[1]

Construction Year	GHG Emissions (MT CO_2e/year)
2018-2019	1,466
2020	779
Total	**2,245**
GHG Credits Required[2]	2,245

Notes:
GHG = greenhouse gas; MT CO2e = Metric tons carbon dioxide equivalent;
[1] Source: as documented in Attachment 2, and confirmed by CARB staff.
[2] Applicant committed to purchase carbon credits in an amount sufficient to offset net increase in construction-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site within neighborhood; (3) off-site within South Coast Air Quality Management District jurisdiction; (4) off-site within the State; and (5) off-site out of State.

Table 2 summarizes the net increase in project operation related GHG emissions through the lifetime of the proposed project, which the Applicant has defined as 30 years. The continued operation of the existing land uses that would be demolished under the proposed project serves as the reference point for the purpose of defining a baseline. The Applicant has committed to execute one or more contracts to offset the net increase in GHG emissions generated during project operation for any building in

the project prior to issuance of any Certificate of Occupancy for that building. The Applicant will purchase voluntary carbon credits for the net increase in operational emissions on a net-present value basis. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office. The commitment to enter into contracts to offset net additional GHG emissions will be a condition of project approval, which represents a binding and enforceable agreement between the applicant, or its successor, and the lead agency, the City of Los Angeles.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)			
	Baseline	Proposed Project	Difference	GHG Credits Required[3]
2021	626	5,031	4,405	4,405
2022	626	4,926	4,300	4,300
2023	626	4,805	4,179	4,179
2024	626	4,632	4,006	4,006
2025	626	4,527	3,901	3,901
2026	626	4,439	3,813	3,813
2027	626	4,299	3,673	3,673
2028	626	4,231	3,605	3,605
2029	626	4,171	3,545	3,545
2030	626	4,060	3,434	3,434
2031	626	4,017	3,391	3,391
2032	626	3,977	3,351	3,351
2033	626	3,943	3,317	3,317
2034	626	3,914	3,288	3,288
2035	626	3,891	3,265	3,265
2036	626	3,873	3,247	3,247
2037	626	3,859	3,233	3,233
2038	626	3,848	3,222	3,222
2039	626	3,840	3,214	3,214
2040	626	3,834	3,208	3,208
2041	626	3,830	3,204	3,204
2042	626	3,828	3,202	3,202
2043	626	3,827	3,201	3,201
2044	626	3,828	3,202	3,202
2045	626	3,829	3,203	3,203
2046	626	3,831	3,205	3,205
2047	626	3,834	3,208	3,208
2048	626	3,837	3,211	3,211
2049	626	3,841	3,215	3,215
2050	626	3,847	3,221	3,221
Total				**103,669**

Notes: GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.

[1] Source: as documented in Attachment 2, and confirmed by CARB staff.

[2] Applicant estimates a useful life of project of 30 years with first year of occupancy as early as 2021

[3] Applicant commits to purchase carbon credits in an amount sufficient to offset net increase in operation-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site within neighborhood; (3) off-site within South Coast Air Quality Management District jurisdiction; (4) off-site within the State; and (5) off-site out of State.

III. Overview of AB 900

AB 900, as amended by SB 743 (2013) and SB 734 (2016) provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).)

The Governor's Guidelines for AB 900 applications require applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (d).

The role of CARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation submitted by the Applicant to determine whether the project would result in no net additional emissions of GHG emissions. CARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

IV. Existing Conditions

The proposed project site is located within the Hollywood community of the City of Los Angeles. There are currently one single family residence, one duplex with a detached garage and studio apartment over garage, and three, two-story apartment buildings and associated carports and paved surface parking areas. Overall, there are a total of 44 residential units on the project site.

V. Proposed Project Description

The proposed project would involve construction of a mixed-use development including 210 multi-family residential units in 202,545 square feet, 136 hotel rooms in 58,540 square feet, and approximately 12,500 square feet of commercial/restaurant uses in two buildings. Building 1, up to 20 stories tall on the southeast corner of Argyle Avenue and Yucca Street, would include all three uses and would be built over six levels of parking,

10 Van Ness Avenue Mixed-Use Project
Supporting Documents

December 18, 2017

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown, Jr.
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

10SVN, LLC (the Applicant) submitted an original application to CARB on June 4, 2017, and clarifying documentations on October 2 and December 5, 2017, for the proposed 10 South Van Ness project (Proposed Project). As required by the Governor's Guidelines for Streamlining Judicial Review under CEQA, the application includes proposed GHG quantification methodologies and supporting documentation. CARB staff conducted an evaluation of the GHG emission estimates and voluntary improvement measures submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, CARB has determined that the Proposed Project will not result in any net additional GHG emissions for purposes of certification under AB 900 once the conditions of approval of the project described in the enclosed staff analysis document are satisfied. CARB staff's evaluation and an Executive Order noting CARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Nicole Dolney, Chief of Transportation Planning Branch, Air Quality Planning and Science Division at (916) 322-1695 or by email at nicole.dolney@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

cc: See next page.

cc: (continued, via email):

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Ms. Nicole Dolney, Chief
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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-17-081

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for 10 South Van Ness Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act require for purposes of CARB's determination on GHG emissions that an applicant submit electronically to CARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, 10SVN, LLC (the Applicant) submitted its initial proposed GHG quantification methodologies and documentation to CARB on the proposed 10 South Van Ness Project (proposed project) on June 4, 2017, and clarifying documentations submitted on October 2, 2017, and December 5, 2017;

WHEREAS, the application submitted for the proposed project estimates the project's net additional GHG emissions as follows:

1. Construction GHG Emissions: Additional 5,395 metric tons CO2e emissions from project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: Additional 5,001 metric tons CO2e emissions (or 3,274 metric tons CO2e emissions, if a zero-GHG electricity contract is secured) during the first full year of project operation (2023) and declining operational emissions in future years over the lifetime of the project.

WHEREAS, in the application, the applicant proposes to secure 5,395 metric tons of one-time carbon credits to offset emissions generated during construction and to secure 117,391 metric tons (or 64,586 metric tons, if a zero-GHG electricity contract is secured) of carbon credits on a net present value basis to offset the net increase in emissions generated during project operation through purchasing credible offset credits issued by a recognized and reputable carbon registry to fully offset these identified construction and operational GHG emissions;

WHEREAS, on December 5, 2017, the applicant has entered into a binding and enforceable agreement with the City of San Francisco (the lead agency) that all mitigation measures required to certify the project under AB 900 shall be conditions of approval of the project, and those conditions will be fully monitored and enforced by the lead agency for the life of the obligation, pursuant to Public Resources Code section 21183, subdivision (d).

WHEREAS, CARB staff reviewed and evaluated the application in consultation with the lead agency (the City of San Francisco);

WHEREAS, CARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the proposed project;

WHEREAS, CARB's review and determination on the proposed project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for this project;

NOW, THEREFORE, based on CARB Staff's Evaluation (Attachment 1) of the documentation submitted by the Applicant (Attachment 2), I determine that the 10 South Van Ness Project will not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this 18th day of December 2017, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. CARB Staff Evaluation of AB 900 Application for 10 South Van Ness Project
2. 10 South Van Ness Project Greenhouse Gas Emissions Methodology Documentation for AB 900 Application

ATTACHMENT 1

ARB Staff Evaluation of AB 900 Application for

10 South Van Ness Project

CARB Staff Evaluation of AB 900 Application for
10 South Van Ness Project

November 16, 2017

I. Introduction

10 SVN, LLC (the Applicant) proposes to redevelop the 1.17 acre property located at 10 South Van Ness Avenue at the southwest corner of South Van Ness Avenue and Market Street in the Downtown/Civic Center neighborhood of San Francisco. The proposed project would include construction of two 400-foot-tall (420 feet total, inclusive of roofs screens and elevator penthouses), 41-story buildings containing a total of 984 dwelling units and retail space on the ground floor. The Applicant is also considering a taller building design consisting of a single 590-foot-tall tower with 55-stories. This single tower variant would have the same 984 dwelling units and comparable retail space on the ground floor. The proposed project would result in the demolition of the existing 91,088 square-foot, two story, 30 to 45-foot-tall Honda Dealership and Service Center. The Applicant is seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the California Air Resources Board (CARB). This is the only condition that involves a determination by CARB. CARB staff prepared this technical evaluation of the GHG emissions from the proposed project as part of its determination.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and CARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

CARB staff reviewed the projected GHG emissions provided by the Applicant and confirmed the GHG emission factors used to estimate construction and operational emissions. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant, CARB staff concludes that, with commitments to purchase voluntary carbon credits documented in

Attachment 2, the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. CARB staff confirms that the proposed project would meet the GHG emissions requirements of the Jobs and Economic Improvement through Environmental Leadership Act. (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project GHG emissions generated by construction activities. Project construction is expected to be completed over three years, with demolition activities beginning in 2019. The Applicant has committed to offset the GHG emissions generated during project construction. The Applicant will provide courtesy copies of the calculations to CARB and the Governor's Office. Additionally, the Applicant has agreed to enter into one or more contracts to purchase voluntary carbon credits issued by a recognized and reputable carbon registry in an amount sufficient to offset the construction emissions and submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office.

Table 1: Project Construction-Generated GHG Emissions[1]

Construction Year	GHG Emissions (MT CO_2e/year)
2019	2,189
2020	1,436
2021	1,340
2022	430
Total	5,395
GHG Credits Required[2]	**5,395**

Notes:
GHG = greenhouse gas; MT CO2e = Metric tons carbon dioxide equivalent;
[1] Source: as documented in Attachment 2, and confirmed by CARB staff.
[2] Applicant committed to purchase carbon credits in an amount sufficient to offset net increase in construction-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry.

Table 2 summarizes the net increase in project operation related GHG emissions through the lifetime of the proposed project (defined as 30 years). The continued operation of the existing land uses that would be demolished under the proposed project serves as the reference point for the purpose of defining a baseline. The Applicant has committed to execute contracts to offset the net increase in GHG emissions generated during project operation for any building in the project prior to issuance of any Certificate of Occupancy for that building. The Applicant will purchase voluntary carbon credits for the net increase in operational emissions on a net-present

value basis. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office. The commitment to enter into contracts to offset net additional GHG emissions will be a condition of project approval.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)			
	Baseline	**Proposed Project**	**Difference**	**GHG Credits Required**[3]
2022	657	2,948	2,291	2,291
2023	657	5,001	4,344	4,344
2024	657	4,949	4,292	4,292
2025	657	4,897	4,240	4,240
2026	657	4,845	4,188	4,188
2027	657	4,792	4,135	4,135
2028	657	4,740	4,083	4,083
2029	657	4,688	4,031	4,031
2030	657	4,636	3,979	3,979
2031	657	4,583	3,926	3,926
2032	657	4,531	3,874	3,874
2033	657	4,520	3,863	3,863
2034	657	4,508	3,851	3,851
2035	657	4,497	3,840	3,840
2036	657	4,486	3,829	3,829
2037	657	4,474	3,817	3,817
2038	657	4,463	3,806	3,806
2039	657	4,451	3,794	3,794
2040	657	4,440	3,783	3,783
2041	657	4,440	3,783	3,783
2042	657	4,440	3,783	3,783
2043	657	4,440	3,783	3,783
2044	657	4,440	3,783	3,783
2045	657	4,440	3,783	3,783
2046	657	4,440	3,783	3,783
2047	657	4,440	3,783	3,783
2048	657	4,440	3,783	3,783
2049	657	4,440	3,783	3,783
2050	657	4,440	3,783	3,783
2051	657	4,440	3,783	3,783
2052	657	4,440	3,783	3,783
Total				**119,362**

Notes: GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.

[1] Source: as documented in Attachment 2, and confirmed by CARB staff.

[2] Applicant estimates a useful life of project of 30 years with first year of occupancy as early as June 2022. 2023 therefore represents the first full year of operation.

[3] Applicant commits to purchase carbon credits in an amount sufficient to offset net increase in operation-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry.

III. Overview of AB 900

AB 900, as amended by SB 743 (2013) and SB 734 (2016) provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emissions of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).)

The Governor's Guidelines for AB 900 applications require applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (d).

The role of CARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation submitted by the Applicant to determine whether the project would result in no net additional emissions of GHG emissions. CARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

IV. Existing Conditions

The proposed project site is located at 10 South Van Ness Avenue at the southwest corner of South Van Ness Avenue and Market Street in the Downtown/Civic Center neighborhood of San Francisco. Currently a 91,088 square foot, two story, 30 to 45 foot tall Honda Dealership and Service Center occupies the site.

V. Proposed Project Description

The proposed project would involve construction of a new approximately 1,071,100 gross square feet (gsf), 984 unit, 41 story mixed-use residential building, with one below-grade structure and two separate above-grade structures. Above grade, each structure would consist of a tower on top of a podium. Each tower would have its own building core. Below ground level, the building would consist of a single, two level parking garage/basement. The building would have a single foundation supporting all project structures. Each tower would have a maximum height of 400 feet (420 feet total,

inclusive of roof screens and the elevator penthouse on each tower). The podiums would include retail uses and residential lobbies at the Ground Level.

The land uses would include a total of approximately: 935,745 gsf of residential uses, 30,350 gsf of retail uses; 3,000 gsf of rooftop mechanical equipment; and 102,000 gsf of parking with up to 518 vehicle parking spaces. In both towers, residential amenities would be provided on Level 2, and residential units would be provided on Levels 3-41. There would be a total of ten retail spaces ranging from 800 square feet to 11,600 square feet that front onto South Van Ness Avenue, Market Street, 12th Street, and the proposed mid-block alley.

Additional land uses would include approximately 48,150 square feet of usable open space, which would be provided through a combination of publically-accessible open spaces, and common useable open spaces. Publicly-accessible open space would include the 2,975-squarefoot mid-block alley between the two tower podiums, which would provide a pedestrian connection between South Van Ness Avenue and 12th Street. Private common open spaces include amenity terraces on both tower podiums, select floors of the towers, and the roofs of both towers. On the ground floor of the north tower podium, 336 class I bicycle parking spaces would be provided. On-street bicycle parking would include 61 class II bicycle parking spaces.

The baseline and proposed land uses are summarized in Table 3.

Table 3: Baseline and Proposed Land Uses

Land Use Type	Baseline Land Uses to be Demolished	Proposed Land Uses
Residential/Apartments	-	935,745 sf (984 du)
Retail	91,088 sf	30,350 sf
Mechanical	-	3,000 sf
Open Space/Amenities	-	48,150 sf
Parking	-	102,000 sf

Notes:
du = dwelling units, sf = square feet
Source: as documented in Attachment 2, and confirmed by CARB staff.

One 1,500-kW diesel-powered emergency generator and other mechanical equipment would be installed in the garage/basement. Approximately 3,000 gsf of the roof area would be reserved for heating, ventilation, and air conditioning (HVAC) mechanical equipment.

The proposed project's streetscape plan called the "Market Octavia Streetscape Plan" would conform to Market and Octavia Plan and San Francisco Planning Department Standards. To improve walking conditions, the eastern and western sidewalks of 12th Street would be expanded from 15 feet to a width of 21 feet. Eight-foot-wide bulb-outs would be installed at the intersection of 12th and Market streets, and a raised crosswalk would be installed at the intersection of 12th and Stevenson streets.

The proposed project would be required to comply with San Francisco Planning Code Section 169, Transportation Demand Management Program (added by Ordinance 34-17, approved February 2017), and would seek Leadership in Energy and Environmental Design (LEED) silver certification or better, which includes measures applicable to both construction and operation phases.

Single Tower Project Variant

The Applicant is also considering a taller building design consisting of a single tower and podium. The single tower project variant would include construction of a 590-foot-tall, 55-story building. The podium would vary in height, from approximately 90 to 139 feet along the Market Street frontage and up to approximately 164 feet along the southern frontage of the site.

The variant would include up to approximately 984 dwelling units in a combination of studios and one-, two-, and three-bedroom units, similar to the proposed project. The ground floor would contain the same uses as the proposed project, with comparable retail uses, and a single residential lobby. As with the proposed project, 336 class I bicycle spaces would be provided on the ground floor for project residents and ground-floor retail spaces, and 61 class II bicycle spaces would be provided on the sidewalk adjacent to the project site. These bicycle spaces would meet Planning Code requirements. Vehicle parking would be the same as under the proposed project, with 518 vehicle parking spaces provided in a two-level subgrade parking garage/basement.

Usable open space in a combination of publically accessible open spaces (12,091 square feet), common useable open spaces (25,565 square feet), and private open space (9,550 square feet) would be included for a total of 47,206 square feet. The publically accessible open space would consist of a mid-block alley connecting Market Street to 12th Street and a pedestrian plaza along the northeasterly South Van Ness Avenue frontage. The common useable open space would be provided on Levels 14, 16, 29, 37, and 49. The same parking/loading, mechanical equipment, vehicular circulation, Transportation Demand Management plan, streetscape improvements, and sustainability features would be included as in the proposed project. Given that the single tower project variant would have the same program of development as the

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San Francisco CA, 94108

Anny Huang
Manager, Emission Inventory
Analysis Section
California Air Resources Board
Air Quality Planning and Science
Division
P.O. Box 2815
Sacramento, CA 95812

December 5, 2017

10 South Van Ness Project Greenhouse Gas Emissions Offset Commitment Approach

Dear Ms. Huang,

This letter supports the Assembly Bill (AB) 900, Jobs and Economic Improvement through Environmental Leadership Act of 2011 application filed on October 4, 2017, by the Project Sponsor (Applicant), 10 SVN, LLC, for the 10 South Van Ness Mixed-Use Project (Project). The Planning Department from the City and County of San Francisco is the lead agency.

The Applicant submitted the application seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900. The project has committed to meeting the requirements set forth in California Public Resources Code Section 21183 (c), which requires that the Project demonstrate that it will not result in any net greenhouse gas (GHG) emissions and achieves a 10 percent higher standard for transportation efficiency than comparable projects.

The Applicant has committed to no net increase in construction and operation-related GHG emissions. Consistent with policy recommendations included in CARB's Proposed 2017 Climate Change Scoping Plan Update[1], while offsets are a potential way to mitigate GHG emissions, other options will continue to be explored as well to the extent feasible, with the following order of preference: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry. To the extent offsets are used to mitigate GHG emissions, prior to issuance or any Certificate of Occupancy for any building in the project, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the operational emissions attributable to each building constructed within the project over the analysis horizon of 30 years.

[1] Proposed 2017 Climate Change Scoping Plan Update is available at: https://www.arb.ca.gov/cc/scopingplan/revised2017spu.pdf

Prior to execution of the contract(s), the Applicant shall provide the lead agency (the City and County of San Francisco) a calculation of the net additional operational GHG emissions according to the methodology followed in the *California Assembly Bill 900 Greenhouse Gas Analysis for the 10 South Van Ness Mixed-Use Project* document. The Applicant has also agreed to promptly submit copies of executed contracts for purchased carbon credits to CARB and to the Governor's office. The commitments to enter into contracts to offset net additional GHG emissions will be incorporated as a condition of project approval under the Public Resources Code sec. 21183(d), which is binding and enforceable by the lead agency.

Sincerely,
10 SVN, LLC,
a Delaware limited liability company

By: _____
Adam Tartakovsky
Vice President
T: 415.527.9742
E: atartakovsky@crescentheights.com

1045 Olive Street Project
Supporting Documents

March 19, 2018

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown, Jr.
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

1045 Olive, LLC (the Applicant) submitted an original application to CARB on December 22, 2017, and clarifying documentations on January 22, 2018, for the proposed 1045 Olive Street project (Proposed Project). As required by the Governor's Guidelines for Streamlining Judicial Review under CEQA, the application includes proposed GHG quantification methodologies and supporting documentation. CARB staff conducted an evaluation of the GHG emission estimates and voluntary improvement measures submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, CARB has determined that the Proposed Project will not result in any net additional GHG emissions for purposes of certification under AB 900 once the conditions of approval of the project described in the enclosed staff analysis document are satisfied. CARB staff's evaluation and an Executive Order noting CARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Dr. Michael Benjamin, Chief of Air Quality Planning and Science Division at (916) 201-8968 or by email at michael.benjamin@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

cc: (continued, via email):

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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-18-018

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for 1045 Olive Street Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act require for purposes of CARB's determination on GHG emissions that an applicant submit electronically to CARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, 1045 Olive, LLC (the Applicant) submitted its initial proposed GHG quantification methodologies and documentation to CARB on the proposed 1045 Olive Street Project (proposed project) on December 22, 2017, and clarifying documentations submitted on January 22, 2018;

WHEREAS, the application submitted for the proposed project estimates the project's net additional GHG emissions as follows:

1. Construction GHG Emissions: Additional 7,113 metric tons CO2e emissions from project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: Additional 9,681 metric tons CO2e emissions during the first full year of project operation (2023) and declining operational emissions in future years over the lifetime of the project.

WHEREAS, in the application, the applicant proposes to secure 7,113 metric tons of one-time carbon credits to offset emissions generated during construction and to secure

230,886 metric tons of carbon credits on a net present value basis to offset the net increase in emissions generated during project operation through purchasing credible offset credits issued by a recognized and reputable carbon registry to fully offset these identified construction and operational GHG emissions;

WHEREAS, on September 1, 2017, the applicant has entered into a binding and enforceable agreement with the City of Los Angeles (the lead agency) that all mitigation measures required to certify the project under AB 900 shall be conditions of approval of the project, and those conditions will be fully monitored and enforced by the lead agency for the life of the obligation, pursuant to Public Resources Code section 21183, subdivision (e).

WHEREAS, CARB staff reviewed and evaluated the application in consultation with the lead agency (the City of Los Angeles);

WHEREAS, CARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the proposed project;

WHEREAS, CARB's review and determination on the proposed project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for this project;

NOW, THEREFORE, based on CARB Staff's Evaluation (Attachment 1) of the documentation submitted by the Applicant (Attachment 2), I determine that the 1045 Olive Street Project will not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this nineteenth day of March 2018, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. CARB Staff Evaluation of AB 900 Application for 1045 Olive Street Project
2. 1045 Olive Street Project Greenhouse Gas Emissions Methodology Documentation for AB 900 Application

CARB Staff Evaluation of AB 900 Application for 1045 Olive Street Project

February 26, 2018

I. Introduction

1045 Olive, LLC (Applicant) proposed a new mixed-use development (Project) on an approximately 0.96-acre site located at the northwest corner of Olive Street and 11th Street (Project Site) in Downtown Los Angeles, California. The Project Site currently contains four existing single-story commercial buildings totaling 35,651 square feet and 5,952 square feet of paved parking and hardscape area. The Project would demolish and remove the four existing buildings and replaced them with a new 751,777 square foot (net) mixed-use high-rise building.

The development would include a 61-story tower atop a nine level podium structure for a total of 70 floors, up to 810 feet in height. The Project would include 739,273 square feet of residential uses (zoning area) with 794 residential units, and 12,504 square feet of commercial uses accessible at the ground level. Vehicle parking would be provided consistent with the Central City Parking Exception and Downtown Business District parking requirements, with a total of 891 spaces (878 residential and 13 commercial). Bicycle parking would also be provided consistent with the requirements of the Los Angeles Municipal Code (LAMC), with approximately 886 bicycle spaces provided within the parking garage on ground level, mezzanine and one level below grade.

The Applicant is seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the California Air Resources Board (CARB). This is the only condition that involves a determination by CARB. CARB staff prepared this technical evaluation of the GHG emissions from the proposed project as part of its determination.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and CARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

CARB staff reviewed the projected GHG emissions provided by the Applicant and confirmed the GHG emission factors used to estimate construction and operational emissions. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant, CARB staff concludes that, with commitments to purchase voluntary carbon credits documented in Attachment 2, the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. CARB staff confirms that the proposed project would meet the GHG emissions requirements of the Jobs and Economic Improvement through Environmental Leadership Act. (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project GHG emissions generated by construction activities. Project construction is expected to be completed over 3.5 years, with demolition activities beginning in 2019. The Applicant has committed to offset the GHG emissions generated during project construction. The Applicant will provide courtesy copies of the calculations to CARB and the Governor's Office. Additionally, the Applicant has agreed to enter into one or more contracts to purchase voluntary carbon credits issued by a recognized and reputable carbon registry in an amount sufficient to offset the construction emissions and submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office.

Table 1: Project Construction-Generated GHG Emissions[1]

Construction Year	GHG Emissions (MT CO_2e/year)
2019	1,262
2020	1,678
2021	2,666
2022	1,507
Total	7,113
GHG Credits Required[2]	**7,113**

Notes:
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent;
[1] Source: as documented in Attachment 2, and confirmed by CARB staff.
[2] Applicant committed to purchase carbon credits in an amount sufficient to offset net increase in construction-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry.

Table 2 summarizes the net increase in project operation related GHG emissions during a 30-year analysis horizon. The continued operation of the existing land uses that would be demolished under the proposed project serves as the reference point for the purpose of defining a baseline. The Applicant has committed to execute contracts to offset the net increase in GHG emissions generated during project operation for any building in the project prior to issuance of any Certificate of Occupancy for that building. The Applicant will purchase voluntary carbon credits for the net increase in operational emissions on a net-present value basis. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office. The commitment to enter into contracts to offset net additional GHG emissions will be a condition of project approval.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)			
	Baseline	Proposed Project	Difference	GHG Credits Required[3]
2022	468	4,133	3,665	3,665
2023	468	9,681	9,213	9,213
2024	468	9,296	8,828	8,828
2025	468	9,096	8,628	8,628
2026	468	8,928	8,460	8,460
2027	468	8,622	8,154	8,154
2028	468	8,492	8,024	8,024
2029	468	8,378	7,910	7,910
2030	468	8,127	7,659	7,659
2031	468	8,045	7,577	7,577
2032	468	7,970	7,502	7,502
2033	468	7,904	7,436	7,436
2034	468	7,849	7,381	7,381
2035	468	7,804	7,336	7,336
2036	468	7,771	7,303	7,303
2037	468	7,743	7,275	7,275
2038	468	7,722	7,254	7,254
2039	468	7,707	7,239	7,239
2040	468	7,696	7,228	7,228
2041	468	7,688	7,220	7,220
2042	468	7,684	7,216	7,216
2043	468	7,688	7,220	7,220
2044	468	7,688	7,220	7,220
2045	468	7,690	7,222	7,222
2046	468	7,695	7,227	7,227
2047	468	7,700	7,232	7,232
2048	468	7,707	7,239	7,239
2049	468	7,715	7,247	7,247
2050	468	7,725	7,257	7,257
2051	468	7,725	7,257	7,257
2052	468	7,725	7,257	7,257
Total				**230,886**

Notes: GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.
[1] Source: as documented in Attachment 2, and confirmed by CARB staff.

[2] Applicant uses an analysis horizon of 30 years, with first year of occupancy as early as August 2022. Therefore 2023 represents the first full year of operation.

[3] Applicant commits to purchase carbon credits in an amount sufficient to offset net increase in operation-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry.

III. Overview of AB 900

AB 900, as amended by SB 743 (2013) and SB 734 (2016) provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emissions of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).)

The Governor's Guidelines for AB 900 applications require Applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (e).

The role of CARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation submitted by the Applicant to determine whether the project would result in no net additional emissions of GHG emissions. CARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

IV. Existing Conditions

The proposed project site is located at 1045 S. Olive Street in Downtown Los Angeles. The approximately 0.96-acre site occupies a parcel on the southeast corner of the block bounded by 11th Street to the southwest and S. Olive Street to the southeast. The property currently contains four existing commercial buildings totaling 35,651 square feet and 5,952 square feet of paved parking and hardscape area. Existing active land uses include 14,653 square feet of manufacturing space and 5,171 square feet of retail space. The remaining 15,827 square feet is currently vacant. The buildings were originally constructed between about the 1910s to the 1950s.

V. Proposed Project Description

The Project Site is located in the Downtown area and South Park community of the City of Los Angeles (City). The Project Site lies within the southeast quadrant of the block that is surrounded by Olive Street on the east, 11th Street on the south, Grand Avenue on the west and Olympic Boulevard on the north. The block is split by a south to north alley at midblock between S Olive Street and S Grand Avenue. The alley serves as the western boundary of the Project Site.

The Project would remove four existing commercial buildings on the Project Site, and would construct in their place an approximately 751,777 square foot mixed-use high-rise building containing residential condominium units and commercial use spaces along Olive Street and 11th Street. The Project would also include approximately 10,652 square feet of open space. The maximum building height would be 810 feet (approximately 70 stories), and the floor area ratio (FAR) for the transit area mixed use Project would be 13:1.

The development would include a 61-story tower atop a nine level podium structure for a total of 70 floors, up to 810 feet in height. The Project would include a maximum of 794 residential units and 12,504 square feet of neighborhood serving commercial uses located at the ground level. The residential units would be mostly located within the residential tower; however, approximately 40 units, would be located along the top five levels of the Podium facing Olive Street and 11th Street. Approximately 103,380 square feet of amenity/open space would be provided, including a ground level public plaza with streetscaping, landscaping and a public art display. Open space and recreation facilities for residents would be located atop the Podium (10th Floor Terrace), at mid-tower, on a terrace on the tower rooftop and within private balconies. At the pedestrian level, the Project would provide a 17- foot sidewalk along Olive Street and a 15-foot sidewalk (including a 3-foot sidewalk easement) along 11th Street.

The Project's 12,504 square feet of commercial space would be located on the ground level. Access to the individual commercial units would be from 11th Street, Olive Street and the Plaza area. The specific commercial uses may vary; however, it is expected that a substantial amount of the commercial area would be devoted to restaurant uses. For the purposes of assessing GHG emissions, this assessment conservatively assumes that the commercial space would be restaurant uses, which generate greater environmental impacts than retail uses.

Vehicle access (ingress/egress) would be provided from one entrance along Olive Street, near the northern property line, and from two entrances on the alley between 11th Street and Olympic Boulevard. An on-site loading and move-in/out service area would also be accessed from the alley near the center of the Project Site. Vehicle

parking would be provided within 6 subterranean parking levels and in 8 levels of parking above grade within the Podium. The Project would provide up to 891 parking spaces, and up to 886 bicycle spaces.

There are no trees located on the Project Site; however, five street trees are located along the street-side edge of Olive Street. The Project would include the addition of 137 canopy trees and just over approximately 0.2 acres of planting area of native plants, shrubs, perennials, and ground-cover at the Project Site. The Project would provide a large elevated garden on the 8th and 10th floors of the building, three outdoor amenity spaces with planting areas and canopy trees, and a rooftop garden with planting areas and canopy trees. Landscaping would be provided along the street edges and throughout all of the Project's open space and would be selected from a large pallet of native plants.

Construction of the Project would be completed over an approximately 3.5-year period. The Project would export approximately 80,520 cubic yards of soil and generate approximately 3,400 cubic yards of demolition debris (asphalt, interior and exterior building demolition, and general demolition debris).

The baseline and proposed land uses are summarized in Table 3.

Table 3: Baseline and Proposed Land Uses

Land Use Type	Baseline Land Uses to be Demolished	Proposed Land Uses
Residential/Apartments	-	739,273 sf (794 dwelling units)
Retail	5,171 sf	-
Commercial (Restaurant)	-	12,504 sf
Manufacturing	14,653 sf	-
Amenities (Exterior)	-	37,927 sf
Amenities (Interior)	-	23,025 sf
Private Balcony Space	-	39,700 sf
Public Plaza Area	-	2,728 sf
Parking	5,952 sf	426,458 sf (891 spaces)
Vacant	15,827 sf	-

Notes:
du = dwelling units, sf = square feet
Source: as documented in Attachment 2, and confirmed by CARB staff.

VI. Technical Review and Assessment

ESA, on behalf of the Applicant, prepared a GHG emissions assessment for the proposed project to demonstrate that the requirements of AB 900 can be met. A full copy of this proposal can be found in Attachment 2.

The Applicant relied upon a variety of sources for activity data and emission factors to quantify GHG emissions. This CARB staff evaluation is focused on reviewing the data sources, emission factors, emission calculations, and assumptions used for the application, and determining whether these sources and assumptions are reasonable.

The Applicant relied upon Version 2016.3.2 of the California Emissions Estimator Model (CalEEMod), a widely-used emissions quantification tool developed in coordination with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely-accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the United States Environmental Protection Agency AP-42 emission factors, CARB's on-road and off-road equipment emission models such as the Emission Factor 2014 model (EMFAC2014), and the Off-road Emissions Inventory Program model (OFFROAD). The Applicant used the latest CalEEMod version including correction factors to account for compliance with the 2016 Title 24 Building Standards Code, in combination with project-specific data and CARB's EMFAC 2014 mobile-source emission factors, to calculate GHG emissions from construction and operational emissions.

VII. Project Construction Emissions

Construction-related GHG emissions, including demolition-related emissions, are one-time, direct emissions and would occur over an approximately 3.5 year construction period. The Applicant estimated GHG emissions associated with project construction by using the CalEEMod tool. With some exceptions, the Applicant used CalEEMod default settings to generate construction-related GHG emissions. The Applicant estimates a total of 7,113 metric tons carbon dioxide equivalent (MT CO_2e) over the project construction period, as shown in Table 1. Construction-related GHG emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule. This includes heavy-duty equipment, such as refuse hauling trucks, excavators, cranes, and conventional work vehicles.

CARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

VIII. Baseline Operational Emissions

Operational emissions from land uses at the existing project site that would be demolished and removed as part of the project represent baseline conditions. Operational emissions in year 2018 serves as the baseline for purposes of this analysis, which represents existing conditions the year before demolition and construction for the project. GHG emissions were quantified for mobile, electricity, natural gas, area, solid waste, water, and wastewater-related sources. The application states that GHG emissions associated with existing conditions in 2018 are estimated as 468 MT CO_2e.

CARB staff evaluated the Applicant's GHG emission estimations, demand factors, and assumptions used in the Applicant's baseline calculations, summarized in Table 2. CARB staff concluded that the methodology and estimated baseline GHG emissions provided by the Applicant are appropriate.

IX. Proposed Project Operational Emissions

Operational GHG emission sources from the proposed project include mobile, electricity, natural gas, area, stationary, solid waste, water, and wastewater sources. Operational GHG emissions from the proposed project were assumed to begin in August 2022.

The Project will achieve the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Gold Certification and will be designed and operated to meet or exceed the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code. A summary of key green building and LEED measures are provided below:

- The Project will incorporate heat island reduction strategies for 50 percent of the site hardscapes or provide 100 percent structured parking and incorporate heat island reduction strategies for the Project roof areas.
- The Project will promote alternatives to conventionally fueled automobiles by providing electric vehicle charging stations and/or preferred parking for alternative- fuel vehicles, low-emitting, and fuel-efficient and ride-sharing vehicles.
- The Project will optimize building energy performance with a minimum of a 5 percent reduction from the LEED baseline consistent with LEED requirements.
- The Project will reduce water consumption by 40 percent for indoor water and 50 percent for outdoor water from the LEED usage baseline.

- The Project will provide on-site recycling areas with containers to promote the recycling of paper, metal, glass, and other recyclable materials and adequate storage areas for such containers.

Although the Project resides within the Los Angeles Department of Water and Power (LADWP) domain, the Applicant has chosen to use the option of a statewide electricity factor. Therefore, consistent with CARB guidance on statewide electricity emission factors for use with AB 900 projects, a CO_2 emission factor of 595 pounds of CO_2 per MWh was used for electricity emissions for Project operational year 2023. This emission factor reflects a 2020 power grid in compliance with the 33 percent Renewable Portfolio Standard. Future year CO_2 emission factors were scaled proportionately based on the future year renewable energy targets of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. Emission factors for CH4 and N2O were obtained from CalEEMod.

Mobile-source emissions were derived from estimates of vehicle miles traveled (VMT) induced by the Project, assumed fleet mix of the vehicles involved and associated emissions factors. The estimated VMT based on each land use were determined using CalEEMod. This VMT estimate was then reduced based on the AB 900 Traffic Assessment prepared by the Mobility Group. A summary of key characteristics resulting in VMT reductions from the default CalEEMod estimates are provided below:

- Internal Capture Reduction: The Project's restaurant space would provide a convenient local destination for the residential element of the Project without having to drive to other locations. It was estimated that a reduction of 15 percent of the trips to and from the restaurant space would come from the on-site residential element of the Project.

- Transit and Walk/Bike Reduction: The Project is located in a highly-walkable area of downtown Los Angeles with a high level of provision of bicycle facilities and excellent access to the highest level of transit service in Los Angeles, that will provide convenient access to local employment, shopping and entertainment opportunities without using a car for the residents of the Project. Therefore, it was estimated that vehicle trips would be reduced by 20 percent due to transit and walk/bike trips, consistent with Los Angeles Department of Transportation (LADOT) guidelines and methodology.

- Transportation Demand Management (TDM) Reduction: The Project proposes a TDM package to encourage the use of non-auto modes and reduce vehicle trips that could include the following measures:
  - Promotion and support of carpools and rideshares, including parking and transit incentives.

- Preferential parking for carpools and vanpools for employees.
- Provide on-site real-time information displays to make available real-time information on car-sharing, transit, vanpools, taxis.
- External and internal multimodal wayfinding signage.
- Enroll tenants in trip tracking applications, if applicable.
- Transit Welcome Package - to all new residents/employees with information on alternate modes and walk destination opportunities.
- Unbundling of residential parking
- Provide off-street residential and retail parking, and freight-loading spaces, and participate in a Car-Share Program to provide spaces for car-share vehicles.
- Pursue with the City the implementation of on-street commercial loading spaces for deliveries and drop-off.
- Pursue with the City the implementation of on-street passenger drop-off spaces.
- Provide access to collapsible shopping carts and/or cargo bike for ease of local shopping.
- Discounts for employees who utilize public transit to travel to site.
- On-site bicycle amenities such as access to free bicycles for residential guests, on-site repair station and bicycle racks, and lockers/showers for residents and employees, etc.
- Participate in the City's Bike Share Program by providing an area for bike share facilities.

The implementation of the TDM package would result in an estimated reduction of 10 percent of the vehicle trips to and from the residential element of the Proposed Project.

- Pass-by Trip Reduction: The Project's commercial restaurant space would provide a convenient local destination for residents in the local neighborhood without having to drive to other locations. It was estimated that a reduction of 20 percent of trips to and from the restaurant space would result from pass-by customers.

This assessment uses the South Coast Air Basin motor vehicle fleet mix and the fleet average calendar year emissions factors from EMFAC2014 to estimate mobile source GHG emissions.

CalEEMod default emission factors and calculation methods were also used to estimate GHG emissions from natural gas, incorporating the above mentioned reductions in energy use from the USGBC LEED Gold Certification.

Emissions from solid waste disposal used the CalEEMod model with allowed outside inputs for waste disposal and diversion rates obtained from the City of Los Angeles and CalRecycle.

Emissions from water consumption used CalEEMod defaults with additional reductions in water usage incorporated from the USGBC LEED Gold Certification detailed above. The electricity usage related to water supply, treatment, distribution and wastewater treatment used the same statewide emission factors for electricity as were used for on-site electricity calculations.

Emissions from area sources, including equipment used to maintain landscaping, such as lawnmowers and trimmers, were estimated using CalEEMod defaults. The only additional stationary source of emissions is an on-site emergency generator with an estimated capacity rated at approximately 708 kilowatts (950 horsepower), which would provide emergency power primarily for lighting and other emergency building systems. Emissions of GHGs would be generated during maintenance and testing operations and emissions were estimated separately outside of the CalEEMod software using U.S. Environmental Protection Agency (U.S. EPA) emission factors and CalEEMod load factors. Emergency generators are permitted by the SCAQMD and regulated under SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines). Maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year per Rule 1470.

Carbon sequestration was estimated using CalEEMod. The Project's net addition of 137 canopy trees and just over 0.2 acres of native plants, shrubs, perennials, and ground-cover are estimated to sequester 98 metric tons of CO_2 over their active growing period of 20 years (or about 5 metric tons of CO_2 per year for the first 20 years of the Project's operation). The effects of carbon sequestration from canopy trees assumes the Intergovernmental Panel on Climate Change (IPCC) active growing period of 20 years. Accumulation of carbon in biomass decreases as the trees age and would eventually be offset by clipping, pruning, and tree death. Therefore, GHG reductions from carbon sequestration are only applied to the first 20 years of the project's operation.

The Applicant's assumptions and inputs are reasonably conservative, and represent an upper-bound for the net increase in GHG emissions that could occur. CARB staff evaluated the proposed project's emission calculations, demand factors, and assumptions used to estimate operational GHG emissions and concluded that the methodology and estimated operational GHG emissions provided by the Applicant are appropriate.

Based on the Applicant's proposal, annual project operational emissions would exceed baseline throughout the lifetime of the project, as summarized in Table 2.

X. Method to Offset Emissions

Under the GHG quantification methodology used by the Applicant, the proposed project would result in a one-time net GHG emissions increase of 7,113 MT CO_2e during project construction, and an estimated net increase of 9,681 MT CO_2e during the first year of full project operation (2023).

Operational emissions would be on-going for project analysis horizon (defined as 30 years), and would be expected to decline over the life of the project as emission factors decline associated with adoption of lower-GHG-emitting vehicle technologies and renewable sources of electricity. The Applicant has agreed to meet the requirement set forth in California Public Resources Code section 21183, subdivision (c) to demonstrate that the proposed project would result in no net additional GHG emissions through the purchase of credible voluntary carbon credits issued by a recognized and reputable carbon registry sufficient to offset all projected additional GHG emissions, as detailed in Attachment 2. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry, consistent with policy recommendations included in CARB's Proposed 2017 Climate Change Scoping Plan Update. The Applicant will purchase credible voluntary carbon credits issued by a recognized and reputable carbon registry for the net increase in construction and operational emissions prior to issuance of any Certificate of Occupancy for the project. The commitments to enter into contracts to offset net additional GHG emissions will be incorporated as condition of project approval. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office as evidence that this condition has been met.

XI. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant and its commitment to purchase voluntary carbon credits, CARB staff concludes that the proposed project would not result in any net additional GHG emissions relative to the baseline.

Hollywood Center Project
Supporting Documents

CALIFORNIA
AIR RESOURCES BOARD

Mary D. Nichols, Chair
Matthew Rodriquez, CalEPA Secretary
Edmund G. Brown Jr., Governor

June 22, 2018

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown Jr.
State Capitol
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

MCAF Vine LLC; 1750 North Vine LLC; 1749 North Vine Street LLC; 1770 Ivar LLC; 1733 North Argyle LLC; and 1720 North Vine LLC (collectively, the Applicant) submitted an original application to CARB on May 2, 2018, and clarifying documentation on May 17, 2018 and May 29, 2018, for the proposed Hollywood Center Project (Proposed Project). As required by the Governor's Guidelines for Streamlining Judicial Review under CEQA, the application includes proposed GHG quantification methodologies and supporting documentation.

CARB staff conducted an evaluation of the GHG emissions estimates and voluntary improvement measures submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, CARB has determined that the Proposed Project will not result in any net additional GHG emissions for purposes of certification under AB 900, once the conditions of approval of the project described in the enclosed staff analysis document are satisfied.

The following documents are enclosed:

1. CARB Staff's Evaluation of the AB 900 Application for the Hollywood Center Project.

2. CARB's Executive Order G-18-046 Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision noting CARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Dr. Michael Benjamin, Chief, Air Quality Planning and Science Division at (916) 201-8968, or by email at michael.benjamin@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

cc: See next page.

cc: (w/enclosures via email)

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Continued next page.

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Enclosures:

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X:\AB900\Hollywood Center\Sharepoint Uploads\ Attachment 1 (Hollywood Center) CARB Staff Evaluation.docx

X:\AB900\Hollywood Center\Sharepoint Uploads\ Attachment 2 (Hollywood Center AB 900) Application.pdf

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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-18-046

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) For the Hollywood Center Project

WHEREAS, in September 2011, Governor Edmund G. Brown Jr. (Governor) signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review (Guidelines) under CEQA require that, for purposes of CARB's determination on GHG emissions, an applicant submit electronically to CARB a proposed methodology for quantifying a project's net additional GHG emissions, and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, MCAF Vine LLC; 1750 North Vine LLC; 1749 North Vine Street LLC; 1770 Ivar LLC; 1733 North Argyle LLC; and 1720 North Vine LLC (collectively, the Applicant) submitted its initial proposed GHG quantification methodologies and documentation to CARB on the proposed Hollywood Center Project (Proposed Project) on May 2, 2018, and clarifying documentation submitted on May 17, 2018, and May 29, 2018;

WHEREAS, the application submitted for the Proposed Project estimates net additional GHG emissions as follows:

1. Construction GHG Emissions: An additional 9,842 metric tons CO2e emissions from Proposed Project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: An additional 10,145 metric tons CO2e emissions (or 9,096 metric tons CO2e emissions, if the Residential Scenario is selected) during the first full year of Proposed Project operation (2027), and reduced operational emissions in future years over the lifetime of the Proposed Project.

WHEREAS, the Applicant proposes to secure 9,842 metric tons of one-time carbon credits to offset emissions generated during construction and to secure 293,187 metric tons (or 264,813 metric tons, if the Residential Scenario is selected) of carbon credits on a net present value basis to offset the net increase in emissions generated during Proposed Project operation through purchasing credible offset credits issued by an accredited carbon registry to fully offset these identified construction and operational GHG emissions;

WHEREAS, on March 26, 2018, the Applicant has entered into a binding and enforceable agreement with the City of Los Angeles (Lead Agency) that all mitigation measures required to certify the Proposed Project under AB 900 shall be conditions of approval of the Proposed Project, and those conditions will be fully monitored and enforced by the Lead Agency for the life of the obligation, pursuant to Public Resources Code section 21183, subdivision (e).

WHEREAS, CARB staff reviewed and evaluated the application in consultation with the Lead Agency;

WHEREAS, CARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the Applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the Proposed Project;

WHEREAS, CARB's review and determination on the Proposed Project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900, and should not be construed as meeting any other requirement under State or federal law, including CEQA, and the Lead Agency remains responsible for full CEQA compliance for the Proposed Project;

NOW, THEREFORE, based on the *CARB Staff Evaluation of the AB 900 Application for the Hollywood Center Project* submitted by Applicant (Attachment 1 hereto), and the *Greenhouse Gas Emissions Methodology and Documentation* (Attachment 2 hereto), I determine that the Hollywood Center Project will not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this 21st day of June 2018, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. CARB Staff Evaluation of AB 900 Application for the Hollywood Center Project
2. Greenhouse Gas Emissions Methodology and Documentation (Exhibit 7)

ATTACHMENT 1

ARB Staff Evaluation of AB 900 Application for

Hollywood Center Project

CARB Staff Evaluation of AB 900 Application for Hollywood Center Project

May 30, 2018

I. Introduction

MCAF Vine LLC; 1750 North Vine LLC; 1749 North Vine Street LLC; 1770 Ivar LLC; 1733 North Argyle LLC; and 1720 North Vine LLC (collectively, the Applicant) propose a new mixed-use development on an approximately 4.46-acre site, bounded by Yucca Street, Ivar Avenue, Argyle Avenue, and Hollywood Boulevard (The Project). The portion of the Project located between Ivar Avenue and Vine Street is identified as the "West Site," while the portion located between Vine Street and Argyle Avenue is identified as the "East Site." The Project would remove existing underutilized surface parking areas and the approximately 1,237 square foot (sf) former rental car facility while the existing Capitol Records and Gogerty buildings (Capitol Records Complex) will be preserved.

The West Site would be developed with a 35-story West Building and an 11-story West Senior Building, with 449 residential dwelling units, 68 senior affordable dwelling units, 38,841 zoning square foot (zsf) of associated common spaces and 12,691 zsf of retail uses. The West Senior Building and West Building would be connected by a basement which would contain five floors of subterranean parking with 837 total parking spaces.

Two scenarios are being considered for the East Site, one with all residential dwelling units (Residential Scenario) and one which would include some hotel space in place of a portion of the residential units and common space (Hotel Scenario). Both scenarios would preserve the existing Capitol Records Complex and have the same massing, resulting in the same estimated construction emissions. In the Residential Scenario, the East Site would be developed with a 46-story East Building and an 11-story East Senior Building, with 423 residential dwelling units, 65 senior affordable dwelling units, 30,052 zsf of associated common spaces and 17,485 zsf of retail uses. The East Senior Building and East Building would be connected by a basement which would contain five floors of subterranean parking with a total of 684 parking spaces.

The Hotel Scenario for the East Site would include the same 46-story and 11-story buildings with the same associated basement of five floors and 684 parking spaces, however it would consist of 319 residential dwelling units, 220 hotel rooms, 48 senior affordable dwelling units, 150,194 zsf of associated common spaces and 17,485 zsf of retail uses. As the Hotel Scenario would result in higher operational emissions than the

Residential Scenario, the Hotel scenario will be considered the primary scenario for purposes of this evaluation.

The Applicant is seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the California Air Resources Board (CARB). This is the only condition that involves a determination by CARB. CARB staff prepared this technical evaluation of the GHG emissions from the proposed project as part of its determination.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and CARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

CARB staff reviewed the projected GHG emissions provided by the Applicant and confirmed the GHG emission factors used to estimate construction and operational emissions. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant, CARB staff concludes that, with commitments to purchase voluntary carbon credits documented in Attachment 2, the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. CARB staff confirms that the proposed project would meet the GHG emissions requirements of the Jobs and Economic Improvement through Environmental Leadership Act. (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows project GHG emissions generated by construction activities. Project construction is expected to be completed over an approximately 6 year period, with demolition activities beginning as early as 2021. The construction emissions are estimated to be the same for both proposed scenarios. The Applicant has committed to offset the GHG emissions generated during project construction. The Applicant will provide courtesy copies of the calculations to CARB and the Governor's Office. Additionally, the Applicant has agreed to enter into one or more contracts to purchase

voluntary carbon credits issued by an accredited carbon registry* in an amount sufficient to offset the construction emissions and submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office.

Table 1: Project Construction-Generated GHG Emissions[1]

Construction Year	GHG Emissions (MT CO_2e/year)
2021	1,982
2022	1,616
2023	1,300
2024	1,992
2025	1,557
2026	1,395
Total	9,842
GHG Credits Required[2]	**9,842**

Notes:
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent;
[1] Source: as documented in Attachment 2, and confirmed by CARB staff.
[2] Applicant committed to purchase carbon credits in an amount sufficient to offset net increase in construction-related GHG emissions. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by an accredited carbon registry.

Table 2 summarizes the net increase in the Hotel and Residential project scenario operation related GHG emissions during a 30-year analysis horizon. The continued operation of the existing land uses that would be demolished under the proposed project serves as the reference point for the purpose of defining a baseline. The Applicant has assumed that the existing land uses would continue without significant change and so claims no (zero) baseline emissions, a more conservative approach. The Applicant shall use the higher operating emissions of the two scenarios (the Hotel Scenario in this case) as the basis for determining GHG credits needed to offset this part of the Project. The Applicant has committed to execute contracts to offset the net increase in GHG emissions generated during project operation for any building in the project prior to issuance of any Certificate of Occupancy for that building. The Applicant will purchase voluntary carbon credits for the net increase in operational emissions on a net-present value basis. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office. The

* Accredited carbon registries include the American Climate Registry (ACR), Climate Action Reserve (CAR), and Verified Carbon Standard (VCS).

commitment to enter into contracts to offset net additional GHG emissions will be a condition of project approval.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)						
	Baseline	Project: Residential Scenario	Project: Hotel Scenario	Difference (Residential)	Difference (Hotel)	GHG Credits Required[3] (Residential)	GHG Credits Required[3] (Hotel)
2023	0	1,131	1,122	1,131	1,122	1,131	1,122
2024	0	4,510	4,478	4,510	4,478	4,510	4,478
2025	0	4,436	4,405	4,436	4,405	4,436	4,405
2026	0	4,789	4,851	4,789	4,851	4,789	4,851
2027	0	9,096	10,145	9,096	10,145	9,096	10,145
2028	0	8,984	10,013	8,984	10,013	8,984	10,013
2029	0	8,885	9,897	8,885	9,897	8,885	9,897
2030	0	8,569	9,560	8,569	9,560	8,569	9,560
2031	0	8,499	9,478	8,499	9,478	8,499	9,478
2032	0	8,434	9,401	8,434	9,401	8,434	9,401
2033	0	8,377	9,335	8,377	9,335	8,377	9,335
2034	0	8,329	9,279	8,329	9,279	8,329	9,279
2035	0	8,290	9,233	8,290	9,233	8,290	9,233
2036	0	8,262	9,200	8,262	9,200	8,262	9,200
2037	0	8,238	9,172	8,238	9,172	8,238	9,172
2038	0	8,220	9,150	8,220	9,150	8,220	9,150
2039	0	8,206	9,135	8,206	9,135	8,206	9,135
2040	0	8,197	9,124	8,197	9,124	8,197	9,124
2041	0	8,190	9,115	8,190	9,115	8,190	9,115
2042	0	8,186	9,111	8,186	9,111	8,186	9,111
2043	0	8,186	9,110	8,186	9,110	8,186	9,110
2044	0	8,191	9,116	8,191	9,116	8,191	9,116
2045	0	8,193	9,118	8,193	9,118	8,193	9,118
2046	0	8,197	9,122	8,197	9,122	8,197	9,122
2047	0	8,205	9,132	8,205	9,132	8,205	9,132
2048	0	8,211	9,139	8,211	9,139	8,211	9,139
2049	0	8,218	9,146	8,218	9,146	8,218	9,146
2050	0	8,227	9,157	8,227	9,157	8,227	9,157
2051	0	8,227	9,157	8,227	9,157	8,227	9,157
2052	0	8,227	9,157	8,227	9,157	8,227	9,157
2053	0	8,227	9,157	8,227	9,157	8,227	9,157
2054	0	8,227	9,157	8,227	9,157	8,227	9,157
2055	0	8,227	9,157	8,227	9,157	8,227	9,157
2056	0	8,227	9,157	8,227	9,157	8,227	9,157
Total						**264,813**	**293,187**

Notes: GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.

[1] Source: as documented in Attachment 2, and confirmed by CARB staff.

[2] Applicant uses an analysis horizon of 30 years, with first year of occupancy as early as October 2023 for the West Side and December 2026 for the East Side. Therefore 2027 represents the first full year of operation for both sides.

[3] Applicant commits to purchase carbon credits in an amount sufficient to offset net increase in operation-related GHG emissions for the higher of the two scenarios (the Hotel Scenario in this case). The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by an accredited carbon registry.

III. Overview of AB 900

AB 900, as amended by SB 743 (2013) and SB 734 (2016) provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emissions of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, section 21183, subdivision (c).)

The Governor's Guidelines for AB 900 applications require Applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (e).

The role of CARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation submitted by the Applicant to determine whether the project would result in no net additional emissions of greenhouse gases. CARB staff evaluated the technical elements of the project application, assumptions regarding baseline conditions, input data and assumptions used for emissions and mitigation calculations, quantification methods, and an estimate of the project's net GHG emissions after any mitigation.

IV. Existing Conditions

The East Site comprises the 13-story Capitol Records Building and two-story Gogerty Building (Capitol Records Complex). The Capitol Records Building was constructed in 1956. The Gogerty Building was renovated in 2003, but portions of the interior and façade from the original 1930 building are intact. The West Site comprises a one-story former rental car facility and surface parking lot. The Capitol Records Complex on the East Site will be preserved and maintained, while the rental car facility on the West Site will be demolished.

V. Proposed Project Description

The Project is located in the Hollywood Community Plan area of the City of Los Angeles (City) on an approximately 4.46-acre site, bounded by Yucca Street, Ivar Avenue, Argyle Avenue, and Hollywood Boulevard (Project Site). The portion of the Project located between Ivar Avenue and Vine Street is identified as the "West Site," while the

portion located between Vine Street and Argyle Avenue is identified as the “East Site.” The Project is composed of 10 individual parcels, and is currently occupied by the Capitol Records and Gogerty Building (the Capitol Records Complex) and adjoining parking facilities on the East Site, and a former rental car facility and surface parking facilities on the West Site.

The Project would remove existing underutilized surface parking areas and the approximately 1,237 sf former rental car facility (currently leased and utilized by the American Musical and Dramatic Academy College and Conservatory of the Performing Arts) on the West Site and surface parking on the East Site (the Capitol Records Complex would be preserved although its supporting parking area would be altered) and would construct in their place new mixed-use high rise developments to include residential uses including senior affordable units, ground floor fast food and coffee shops and high-turnover sit-down restaurant spaces, public paseos providing contiguous pedestrian access through the site from west to east, landscaping, and vehicle and bicycle parking.

The West Site would be developed with a 35-story West Building and an 11-story West Senior Building. The West Building would contain 449 market rate residential dwelling units with associated residential common spaces (35,001 zsf) and retail uses (12,691 zsf). The West Senior Building would contain 68 senior affordable dwelling units and associated residential common spaces (3,840 zsf). The West Senior Building and West Building would be connected by a basement which would contain five floors of subterranean parking with 837 total parking spaces. The West Site would include approximately 61,075 sf of open space, including 14,970 sf of indoor amenity space, 25,549 sf of outdoor amenity deck, 8,656 sf of outdoor ground level open space, and 11,900 sf of private open space from balconies.

The East Site would preserve the existing Capitol Records Complex and would be developed with a 46-story East Building and an 11-story East Senior Building. There are two scenarios being considered for the East Site: a Residential Scenario and an Hotel Scenario. The East Site Residential Scenario would contain 423 market rate residential dwelling units with associated residential common spaces (26,178 zsf) and retail uses (17,485 zsf). The East Senior Building would contain 65 affordable dwelling units and associated residential common spaces (3,874 zsf). The East Senior Building and East Building would be connected by a basement which would contain five floors of subterranean parking with a total of 684 parking spaces. The East Site Residential Scenario would include approximately 59,100 sf of open space, including 10,900 sf of indoor amenity space, 13,000 sf of outdoor amenity deck, 22,300 sf of outdoor ground level open space, and 12,900 sf of private open space from balconies.

The East Site Hotel Scenario would contain 319 market rate residential dwelling units, 220 hotel rooms (130,278 zsf), associated common spaces (16,420 zsf), and retail uses (17,485 zsf). The East Senior Building would contain 48 affordable dwelling units and associated residential common spaces (3,496 zsf). The East Senior Building and East Building would be connected by a basement which would contain five floors of subterranean parking with a total of 684 parking spaces. The East Site Hotel Scenario would include approximately 59,100 sf of open space, including 10,900 sf of indoor amenity space, 13,000 sf of outdoor amenity deck, 22,300 sf of outdoor ground level open space, and 12,900 sf of private open space from balconies. As the Hotel Scenario would result in higher operational emissions than the Residential Scenario, the Hotel scenario will be considered the primary scenario for purposes of this evaluation.

Vehicular site access to the Project will be provided by driveways located on Ivar Avenue, Yucca Street, and Argyle Avenue. Access to the West Site will be provided via a driveway on Ivar Avenue. Loading access to the West Site will also be provided via Ivar Avenue. Access to the East Site will be provided via an alley off Argyle Avenue. Loading access to the East Site will also be provided via Argyle Avenue. The Yucca Street driveway, located between Vine Street and Argyle Avenue, also provides access to the East Site parking facilities, as well as direct access to the Capitol Records Complex. There would be no vehicular access from Vine Street.

The Project would provide up to 1,521 vehicle parking spaces, including 1,242 spaces dedicated to residential parking, 182 spaces provided for commercial uses, and 97 spaces reserved for the existing Capitol Records Complex use. Bicycle parking would also be provided consistent with the requirements of the Los Angeles Municipal Code (LAMC), with 551 bicycle parking spaces under the Residential Scenario and 554 bicycle parking spaces under the Hotel Scenario.

The Project Site is served by a network of regional transportation facilities that provide access to the greater metropolitan area. The Project Site is located approximately 600 feet north of the Hollywood/Vine Metro Red Line Station, which extends to Union Station and connects Downtown Los Angeles to North Hollywood. The Project is located in proximity to Metro Local Lines 180, 181 and 217 and Metro Rapid Line 780, which serves Hollywood Boulevard and Vine Street. The Project Site is located approximately 500 feet south of the Hollywood Freeway (US-101).

The Project Site contains 19 existing street trees and 49 existing on-site trees, none of which are protected. All existing trees would be removed and the Project would include the addition of 130 trees on the West Site and 122 trees on the East Site for a total of 252 trees. In addition, planting areas would consist of native plants, shrubs, perennials, and ground-cover to the Project Site. Both the West Site and East Site would provide a large elevated garden on Level 2 and outdoor amenity spaces and rooftop terraces on

the senior buildings with planting areas and canopy trees. Landscaping would be provided along the street edges and throughout all of the Project's open space and would be selected from a large palette of native plants.

Construction of the Project would be completed over an approximately 6-year period. The Project would export approximately 321,675 cubic yards of soil and generate approximately 1,616 cubic yards of demolition debris such as asphalt, interior and exterior building demolition, and general demolition debris.

The baseline and proposed land uses are summarized in Table 3.

Table 3: Baseline and Project Scenario Land Uses

Land Use Type	Baseline Land Uses to be Demolished	Residential Scenario Land Uses	Hotel Scenario Land Uses
Rental Car Facility	1,237 sf	-	-
Residential/Apartments	-	1,005 du	884 du
Hotel	-	-	220 du
Commercial (Restaurant)	-	32,318 sf	32,318 sf
Residential (Commons)	-	74,265 sf	63,248 sf
Private Balcony Space	-	24,800 sf	27,544 sf
Open Space	-	69,505 sf	69,505 sf
Parking	-	752,455 sf (1,521 spaces)	752,455 sf (1,521 spaces)
Sidewalk	-	5,114 sf	5,114 sf

Notes:
du = dwelling units, sf = square feet
Source: as documented in Attachment 2, and confirmed by CARB staff.

VI. Technical Review and Assessment

ESA, on behalf of the Applicant, prepared a GHG emissions assessment for the proposed project to demonstrate that the requirements of AB 900 can be met. A full copy of this proposal can be found in Attachment 2.

The Applicant relied upon a variety of sources for activity data and emission factors to quantify GHG emissions. This CARB staff evaluation is focused on reviewing the data sources, emission factors, emission calculations, and assumptions used for the application, and determining whether these sources and assumptions are reasonable.

The Applicant utilized Version 2016.3.2 of the California Emissions Estimator Model (CalEEMod), a widely-used emissions quantification tool developed in coordination with

local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely-accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the United States Environmental Protection Agency (U.S. EPA) AP-42 emission factors, CARB's on-road and off-road equipment emission models such as the Emission Factor 2014 model (EMFAC2014), and the Off-road Emissions Inventory Program model (OFFROAD). The Applicant used the latest CalEEMod version including correction factors to account for compliance with the 2016 Title 24 Building Standards Code, in combination with project-specific data and CARB's EMFAC2014 mobile-source emission factors, to calculate GHG emissions from construction and operational emissions.

VII. Project Construction Emissions

Construction-related GHG emissions, including demolition-related emissions, are one-time, direct emissions and would occur over an approximately 6 year construction period. The Applicant estimated GHG emissions associated with project construction by using the CalEEMod tool and EMFAC2014. With some exceptions, the Applicant used CalEEMod default settings to estimate construction-related GHG emissions. For haul and concrete trucks, EMFAC2014 was used to estimate emissions instead of CalEEMod since CalEEMod assumes these activities occur every day during the relevant construction phases, while the Project will only use these trucks for a portion of the time. The Applicant estimates a total of 9,842 metric tons carbon dioxide equivalent (MT CO_2e) over the project construction period for either scenario, as shown in Table 1. Construction-related GHG emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule. This includes heavy-duty equipment, such as refuse hauling trucks, excavators, cranes, and conventional work vehicles.

CARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

VIII. Baseline Operational Emissions

Baseline conditions are represented by operational emissions from land uses at the existing project site that would be demolished and removed as part of the project. Operational emissions were assumed to continue unchanged and the Applicant has chosen to claim zero baseline emissions. This is a conservative approach, as any baseline operational emissions could otherwise be used to offset project emissions in determining net GHG emissions.

CARB staff concluded that the assumptions provided by the Applicant of continued baseline operations and therefore zero GHG emissions offsets associated with baseline operations are appropriate.

IX. Proposed Project Operational Emissions

Operational GHG emissions from the proposed project include those from mobile, electricity, natural gas, area, stationary, solid waste, water, and wastewater sources. Operational GHG emissions from the proposed project were assumed to begin in October 2023.

The Project will achieve the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Gold Certification and will be designed and operated to meet or exceed the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code. A summary of key green building and LEED measures are provided below:

- The Project will incorporate heat island reduction strategies for 50 percent of the site hardscapes or provide 100 percent structured parking and incorporate heat island reduction strategies for the Project roof areas.
- The Project will promote alternatives to conventionally fueled automobiles by providing electric vehicle charging stations and/or preferred parking for alternative- fuel vehicles, low-emitting, and fuel-efficient and ride-sharing vehicles.
- The Project will optimize building energy performance with a minimum of a 20 percent reduction from the LEED baseline consistent with LEED requirements.
- The Project will reduce water consumption by 40 percent for indoor water and 50 percent for outdoor water from the LEED usage baseline.
- The Project will provide on-site recycling areas with containers to promote the recycling of paper, metal, glass, and other recyclable materials and adequate storage areas for such containers.

Although the Project resides within the Los Angeles Department of Water and Power (LADWP) domain, the Applicant has chosen to use the option of a statewide electricity factor. Therefore, consistent with CARB guidance on statewide electricity emission factors for use with AB 900 projects, a CO_2 emission factor of 595 pounds of CO_2 per MWh was used for electricity emissions for Project operational year 2023. This emission factor reflects a 2020 power grid in compliance with the 33 percent Renewable Portfolio Standard. Future year CO_2 emission factors were scaled proportionately based on the future year renewable energy targets of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. Emission factors for CH4 and N2O were obtained from CalEEMod.

Mobile-source emissions were derived from estimates of vehicle miles traveled (VMT) induced by the Project, assumed fleet mix of the vehicles involved and associated emissions factors. The estimated VMT based on each land use were determined using the Transportation Efficiency Analysis prepared by Fehr and Peers for the Project (Fehr and Peers 2018). The trip lengths are based on the location and urbanization of the project area. The average trip length of each land use is the sum of the trip length of each trip type multiplied by the percentage of trip type. This VMT estimate was then reduced based on the Project's infill nature, location, design, and Travel Demand Management (TDM) program. A summary of key characteristics resulting in VMT reductions are provided below:

- Internal Capture Reduction: The Project's restaurant spaces would provide a convenient local destination for the residential element of the Project without having to drive to other locations. It was estimated that a reduction of 7 percent of the daily vehicle trips to and from the Project's fast food restaurant and the high-turnover sit down restaurant spaces come from the on-site residential element of the Project. It was also estimated that a reduction of 9 percent of daily vehicle trips to and from the high-rise condominiums/townhouses and 8 percent of daily vehicle trips to and from the senior affordable housing on both the West and East Sites of the Project would come from on-site restaurant and outdoor performance space elements of the Project. In addition, it was estimated that a reduction of 6 percent of daily vehicle trips to and from the outdoor performance would come from the on-site residential and restaurant elements of the Project.

- Transit and Walk/Bike Reduction: The Project is located in a highly-walkable area of Hollywood with a high level of provision of bicycle facilities and excellent access to transit services such as the Metro Red Line Hollywood/Vine station and bus stops served by both Metro Local and Rapid Lines within walking distance, that will provide convenient access to local employment, shopping and entertainment opportunities without using a car for the residents of the Project. Therefore, it was estimated that daily vehicle trips would be reduced by 15 percent due to transit and walk/bike trips, consistent with Los Angeles Department of Transportation (LADOT) guidelines and methodology.

- Transportation Demand Management (TDM) Reduction: The Project proposes a TDM package to encourage the use of non-auto modes and reduce vehicle trips that could include the following measures in Table 4:

Table 4: Transportation Demand Management (TDM) Reduction Measures

Parking	• Unbundle residential parking • Unbundle commercial parking coupled with pricing workplace parking and parking cash-out • Contribute to LADOT Express Park program to upgrade local parking meter technology • Daily parking discount for Metro Commuters
Transit	• On-site location to purchase Metro passes and bus info • Transit subsidies for residents and employees • Provide parking spaces for monthly lease to non-resident Metro park-n-ride users • Provide discounted daily parking to non-resident Metro transit pass holders • Bus stop upgrades • Upgrade/repair public sidewalks on route to Metro Red Line Hollywood/Vine Station
Commute Trip Reductions	• Rideshare matching and preferential parking • Guaranteed ride home • Alternative work schedules and telecommute • Business center/work center for residents working at home
Shared Mobility	• On-site car share • Rideshare matching • On-site bike share station and/or subsidized membership (residents, employees); on-site guest bike share service in Hotel scenario (if/when public bike share becomes available) • LADOT Mobility Hub program
Bicycle Infrastructure	• Develop a bicycle amenities plan • Bicycle parking (indoors and outdoors) • Bike lockers, showers, and repair station • Convenient access to on-site bicycle facilities • Contribution towards City's Bicycle Plan Trust Fund
Site Design	• Integrated pedestrian network within and adjacent to site (transit, bike, pedestrian friendly)
Education and Encouragement	• Transportation information center, kiosks and/or other on-site measures • Tech-enabled mobility: website/mobile app for comprehensive commute planning, on-demand rideshare matching, shared-ride reservations, real-time traffic/transit information, push notifications about transportation choices, etc. • Marketing and promotions
Management	• On-site TDM program coordinator and administrative support • Conduct user surveys • Join future Hollywood Transportation Management Organization (TMO)

The implementation of the TDM package would result in an estimated reduction of 13.5 percent of the daily vehicle trips to and from the residential element and 1.2 percent of the daily vehicle trips to and from the restaurant spaces of the Proposed Project.

- Pass-by Trip Reduction: The Project's commercial restaurant spaces would provide a convenient local destination for residents in the local neighborhood without having to drive to other locations. It was estimated that a reduction of 50 percent of daily vehicle trips to and from the Project's fast food restaurant space would result from pass-by customers. It was also estimated that a reduction of 20 percent of daily vehicle trips to and from the Project's high-turnover sit down restaurant spaces would result from pass-by customers.

This assessment uses the South Coast Air Basin motor vehicle fleet mix and the fleet average calendar year emissions factors from CARB's EMFAC2014 and EMFAC2017 models to estimate mobile source GHG emissions. The emissions estimated from EMFAC2014 will be considered for this evaluation as EMFAC2014 is the latest approved on-road emissions model for use in conformity purposes.

CalEEMod default emission factors and calculation methods were also used to estimate GHG emissions from natural gas, incorporating the above mentioned reductions in energy use from the USGBC LEED Gold Certification.

Emissions from solid waste disposal used the CalEEMod model with allowed outside inputs for waste disposal and diversion rates obtained from the City of Los Angeles and CalRecycle.

Emissions from water consumption used CalEEMod defaults with additional reductions in water usage incorporated from the USGBC LEED Gold Certification detailed above. The electricity usage related to water supply, treatment, distribution and wastewater treatment used the same statewide emission factors for electricity as were used for on-site electricity calculations.

Emissions from area sources, including equipment used to maintain landscaping, such as lawnmowers and trimmers, were estimated using CalEEMod defaults. The only additional stationary sources of emissions are two on-site emergency generators (one for the West Site and one for the East Site), each with an estimated capacity rated at approximately 1,500 kilowatts (2,012 horsepower), which would provide emergency power primarily for lighting and other emergency building systems. Emissions of GHGs

would be generated during maintenance and testing operations and emissions were estimated separately outside of the CalEEMod software using U.S. EPA emission factors and CalEEMod load factors. Emergency generators are permitted by the SCAQMD and regulated under SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines). Maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year per Rule 1470.

Carbon sequestration was estimated using CalEEMod. The Project's net addition of 252 trees are estimated to sequester 178 metric tons of CO_2 over their active growing period of 20 years (or about 9 metric tons of CO_2 per year for the first 20 years of the Project's operation). The effects of carbon sequestration from trees assumes the Intergovernmental Panel on Climate Change (IPCC) active growing period of 20 years. Accumulation of carbon in biomass decreases as the trees age and would eventually be offset by clipping, pruning, and tree death. Therefore, GHG reductions from carbon sequestration are only applied to the first 20 years of the project's operation.

The Applicant's assumptions and inputs are reasonably conservative, and represent an upper-bound for the net increase in GHG emissions that could occur. CARB staff evaluated the proposed project's emission calculations, demand factors, and assumptions used to estimate operational GHG emissions and concluded that the methodology and estimated operational GHG emissions provided by the Applicant are appropriate.

Based on the Applicant's proposal, annual project operational emissions would exceed baseline throughout the lifetime of the project, as summarized in Table 2.

X. Method to Offset Emissions

Under the GHG quantification methodology used by the Applicant, the proposed project would result in a one-time net GHG emissions increase of 9,842 MT CO_2e during project construction, and an estimated net increase of 10,145 MT CO_2e during the first year of full project operation (2027), when both the West and East Site are at full operation under the most emissive of the two scenarios (the Hotel Scenario).

Operational emissions would be on-going for project analysis horizon (defined as 30 years), and would be expected to decline over the life of the project as emission factors decline associated with adoption of lower-GHG-emitting vehicle technologies and renewable sources of electricity. The Applicant has agreed to meet the requirement set forth in California Public Resources Code section 21183, subdivision (c) to demonstrate that the proposed project would result in no net additional GHG emissions through the

purchase of credible voluntary carbon credits issued by an accredited carbon registry sufficient to offset all projected additional GHG emissions, as detailed in Attachment 2. The project would obtain offsets using the following prioritization: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by an accredited carbon registry, consistent with policy recommendations included in CARB's Proposed 2017 Climate Change Scoping Plan Update. The Applicant will purchase credible voluntary carbon credits issued by an accredited carbon registry for the net increase in construction and operational emissions prior to issuance of any Certificate of Occupancy for the project. The commitments to enter into contracts to offset net additional GHG emissions will be incorporated as condition of project approval. The Applicant has agreed to submit copies of executed contracts for purchased carbon credits to CARB and the Governor's Office as evidence that this condition has been met.

XI. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant and its commitment to purchase voluntary carbon credits, CARB staff concludes that the proposed project would not result in any net additional GHG emissions relative to the baseline.

Potrero Power Station Mixed-Use Project
Supporting Documents

CALIFORNIA
AIR RESOURCES BOARD

Mary D. Nichols, Chair
Matthew Rodriquez, CalEPA Secretary
Edmund G. Brown Jr., Governor

August 31, 2018

Mr. Ken Alex, Director
Office of Planning and Research
Office of Governor Edmund G. Brown Jr.
1400 10th Street
Sacramento, California 95814

Dear Mr. Alex:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900 (AB 900), statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

California Barrel Company, LLC (the Applicant) submitted an application to CARB on July 16, 2018, for the proposed Potrero Power Station Mixed-Use Project (Proposed Project). As required by the Governor's Guidelines for Streamlining Judicial Review under CEQA, the application includes proposed GHG quantification methodologies and supporting documentation. CARB staff conducted an evaluation of the GHG emissions estimates submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, CARB has determined that the Proposed Project will not result in any net additional GHG emissions for purposes of certification under AB 900. CARB staff's evaluation and an Executive Order noting CARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Nicole Dolney, Chief of Transportation Planning Branch, Air Quality Planning and Science Division at (916) 322-1695 or by email at nicole.dolney@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

cc: See next page.

cc: (via email)

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Air Quality Planning and Science Division
California Air Resources Board
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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-18-080

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for Potrero Power Station Mixed-Use Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act require for purposes of CARB's determination on GHG emissions that an applicant submit electronically to CARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, California Barrel Company, LLC (the Applicant) submitted its proposed GHG quantification methodologies and documentation to CARB on the proposed Potrero Power Station Mixed-Use Project (proposed project) on July 16, 2018, and the application was deemed complete;

WHEREAS, the application submitted for the proposed project estimates the project's GHG emissions as follows:

1. Construction GHG Emissions: Additional 42,453 metric tons CO_2e emissions from project construction and demolition activities. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: a maximum 23,963 metric tons CO_2e emissions during the first full year of project operation (2036) and declining operational emissions in future years over the lifetime of the project.

WHEREAS, CARB staff reviewed and evaluated the application in consultation with the lead agency (the City and County of San Francisco);

WHEREAS, CARB staff conducted an evaluation of the GHG emissions estimates included in the application submitted by the applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions for the proposed project;

WHEREAS, CARB's review and determination on the proposed project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for this project;

WHEREAS, CARB staff reviewed and evaluated the application and determined that the emissions associated with the project would not exceed the baseline at any time during project construction or during the project's operational lifetime;

NOW, THEREFORE, based on CARB Staff's Evaluation (Attachment 1) of the documentation submitted by the Applicant (Attachment 2), I determine that the Potrero Power Station Mixed-Use Project will not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed this 31st day of August 2018, at Sacramento, California.

Richard W. Corey
Executive Officer

Attachments

1. CARB Staff Evaluation of AB 900 Application for Potrero Power Station Mixed-Use Project

2. Application for CEQA Streamlining GHG Emissions methodology and Documentation, Potrero Power Station Mixed-Use Development Project

ATTACHMENT 1 to CARB Executive Order G-18-080

CARB Staff Evaluation of AB 900 Application for Potrero Power Station Mixed-Use Project

CARB Staff Evaluation of AB 900 Application for Potrero Power Station Mixed-Use Project

August 31, 2018

I. Introduction

California Barrel Company, LLC (the Applicant) proposes to redevelop the 29 acre property located at 1201A Illinois Street, the site of the former Potrero Power Plant located within the Central Waterfront Plan Area of San Francisco. The proposed project would include construction of a mix of land uses including 2,400 to 3,000 dwelling units (du), between 1.2 and 1.9 million gross square feet (gsf) of commercial uses, 2,622 vehicle parking spaces, 6.3 acres of public open space, and 25,000 gsf of entertainment and assembly uses. The proposed project would result in the demolition of the existing structures on the power station site, which contains approximately 107,000 gsf of vacant buildings and facilities that were used as warehouses, parking, vehicle storage, and office spaces associated with the former plant. The Potrero Power Plant was decommissioned in 2011 for a variety of reasons, one of which was for redevelopment purposes. The Applicant is seeking certification for the project under Assembly Bill 900 (AB 900), the Jobs and Economic Improvement through Environmental Leadership Act.

AB 900 provides for streamlined judicial review under the California Environmental Quality Act (CEQA) if certain conditions are met. One condition is that the proposed project does not result in any net additional greenhouse gas (GHG) emissions as determined by the California Air Resources Board (CARB). This is the only condition that involves a determination by CARB. CARB staff prepared this technical evaluation of the GHG emissions from the proposed project as part of its determination.

This evaluation includes an executive summary, an overview of the AB 900 zero net additional GHG emissions requirement, a brief description of the proposed project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 application, and CARB staff's recommendation on the AB 900 GHG emissions determination for the proposed project.

II. Executive Summary

CARB staff reviewed the projected GHG emissions provided by the Applicant and confirmed that the GHG emission factors used to estimate baseline, construction, and operational emissions are reasonable. Staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2).

Based on an evaluation of the documentation provided by the Applicant, CARB staff concludes that the proposed project would not result in any net additional GHG emissions relative to the baseline as summarized in Tables 1 and 2 below. CARB staff confirms that the proposed project would meet the GHG emissions requirements of the Jobs and Economic Improvement through Environmental Leadership Act. (Pub. Resources Code, §21178 et seq.) A detailed description of emissions by source is reviewed in subsequent sections.

Table 1 shows the baseline GHG emissions associated with the closure of the former Potrero Power Plant. The baseline emissions for this project are represented by the difference in GHG emissions from operation of the former Potrero Power Plant averaged over the last 10 years of operation leading up to its closure, and the corresponding ongoing GHG emissions that resulted from migrating the former power plant's electricity generation over to the Pacific Gas and Electricity (PG&E) utility grid– the main supplier of electricity to the City and County of San Francisco. The baseline emissions were calculated based on a range of the operational electricity generation statistics from the power plant leading up to its closure. According to the GHG Emissions Reporting Tool maintained by CARB, the average annual GHG emissions reported for the Potrero Power Plant facility from 2008 through 2010 was approximately 323,000 MT CO_2e/year.[1] The range of emissions reported by the applicant for the Potrero Power Plant is reasonable, and the low end of the range was used as a conservative estimate of baseline emissions for purposes of CARB staff's evaluation.

Table 1: Baseline GHG Emissions[1]

Facility	GHG Intensity (lb CO_2e/MWh)	GHG Emissions (MT CO_2e/year)	
		Low	High
Potrero Power Plant (2001-2010 Average)	1,259	220,280	648,370
PG&E (2011-2015 Average)	423	74,010	217,840
Difference	836	146,270	430,530

Notes:
GHG = greenhouse gas; lb = pounds, MT CO2e = Metric tons carbon dioxide equivalent; MWh = megawatt hour; PG&E = Pacific Gas and Electric
[1] Source: based on documentation provided in Attachment 2, and confirmed by CARB staff.

[1] California Air Resources Board. 2018. The California GHG Emissions Reporting Tool. https://www.arb.ca.gov/ei/tools/pollution_map/doc/2010/fac2010_100251_Public.pdf. Accessed July 2018.

Proposed project construction is expected to be completed over multiple phases spanning nearly 15 years, with initial construction activities beginning in 2020. The first phases of the proposed project are expected to become operational as early as 2025. Therefore, construction activities and operational activities would be concurrent for an approximately 10 year period from 2025-2034. Full project operation is estimated to commence in 2035.

Table 2 summarizes the first 30 years of project construction- and operation-related GHG emissions. At no point during the project's lifetime would the proposed project's emissions exceed the baseline.

Table 2: Comparison of Baseline and Project Operation-Related GHG Emissions[1]

Year[2]	GHG Emissions (MT CO_2e/year)			
	Construction	**Operational**	**Total**	**Baseline**
2020	2,184	-	2,184	146,270
2023	2,175	-	2,175	146,270
2024	3,748	-	3,748	146,270
2025	3,140	-	3,140	146,270
2026	5,173	-	5,173	146,270
2027	4,599	7,423	12,022	146,270
2028	2,062	10,957	13,019	146,270
2029	3,454	10,734	14,188	146,270
2030	3,046	13,646	16,692	146,270
2031	1,872	13,392	15,264	146,270
2032	4,338	13,168	17,506	146,270
2033	3,555	18,368	21,923	146,270
2034	1,882	21,889	23,771	146,270
2035	701	21,584	22,285	146,270
2036	526	**23,963**	**24,489**	146,270
2037	-	23,667	23,667	146,270
2038	-	23,392	23,392	146,270
2039	-	23,131	23,131	146,270
2040	-	22,878	22,878	146,270
2041	-	22,639	22,639	146,270
2042	-	22,411	22,411	146,270
2043	-	22,189	22,189	146,270
2044	-	21,972	21,972	146,270
2045	-	21,761	21,761	146,270
2046	-	21,553	21,553	146,270
2047	-	21,345	21,345	146,270
2048	-	21,138	21,138	146,270
2049	-	20,933	20,933	146,270
2050	-	20,734	20,734	146,270
Annual Maximum			**24,489**	
Total Construction Emissions	**42,453 MT CO_2e**	-	-	-

Notes: GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.
[1] Source: as documented in Attachment 2, and confirmed by CARB staff.

[2] The applicant estimated project-related GHG emissions for the first 30 years from project initiation. The project would result in no net increase in GHG emissions above the baseline at any point, and it is anticipated that project-generated emissions would continue to decline in the future due to declining emission factors. Thus, it is reasonable to expect that the project would remain GHG-neutral during its lifetime.

III. Overview of AB 900

AB 900, as amended by SB 743 (2013), SB 734 (2016), and AB 246 (2017) provides streamlined judicial review for development projects if, among other conditions, the "project does not result in any net additional emissions of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).)

The Governor's Guidelines for AB 900 applications require applicants to submit a proposed methodology for quantifying the project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code section 21183, subdivision (e).

The role of CARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation submitted by the Applicant to determine whether the project would result in no net additional emissions of GHG emissions. CARB staff evaluated the technical elements of the project application, including existing emissions in the absence of the project (i.e., baseline), input data and assumptions, quantification methods, and an estimate of the project's net GHG emissions.

IV. Existing Conditions

The proposed project site is located at located at 1201A Illinois Street, the site of the former Potrero Power Plant, in the Central Waterfront Plan Area of San Francisco. The existing structures on the site include approximately 107,000 gsf of vacant buildings and facilities that were used as warehouses, parking, vehicle storage, and office spaces associated with the former power plant. The existing baseline would normally be the GHG emissions associated with ongoing operations at the project site at the time the Notice of Preparation for the project was published. For this project, CARB staff has accepted an alternative baseline for AB 900 purposes for reasons described below.

The Potrero Power Plant began operating in 1901. Beginning in 2001, the San Francisco Board of Supervisors adopted nine different resolutions and ordinances pertaining to the shutdown of the plant. The plant shut down in 2011, pursuant to a 2009 Settlement Agreement between the plant operator (Mirant Potrero, LLC) and the City and County of San Francisco (City) to resolve long-standing disputes between the parties.[2] The agreement included several inducements for the plant's closure, including redevelopment of the site and priority processing for transit-oriented development by the City.

Plant operations would have to cease as a condition for the plant to be eligible for redevelopment following shutdown. Because redevelopment was one of the primary inducements to shut down the power plant, CARB staff believes it is reasonable to include the former power plant's operational emissions, less the replacement emissions associated with transferring the plant's electricity generation over to PG&E's electrical grid via the Transbay Cable, as the baseline for AB 900 purposes.

V. Proposed Project Description

California Barrel Company, LLC (the Applicant) purchased the project site NRG Potrero LLC (formerly Mirant Power, LLC) in 2016. The project proposes to redevelop the 29 acre property located at 1201A Illinois Street, the site of the former Potrero Power Plant located within the Central Waterfront Plan Area of San Francisco. The proposed project would include construction of a mix of land uses including 2,400 to 3,000 dwelling units (du), between 1.2 and 1.9 million gsf of commercial uses, 2,622 vehicle parking spaces (including 50 car share spaces), 6.3 acres of public open space, and 25,000 gsf of entertainment and assembly uses. The proposed project would result in the demolition of approximately 20 existing structures on the power station site, which contains approximately 107,000 gsf of vacant buildings and facilities that were used as warehouses, parking, vehicle storage, and office spaces. The baseline and proposed land uses are summarized in Table 3.

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[2] City and County of San Francisco. 2009. Settlement Agreement. https://www.sfcityattorney.org/wp-content/uploads/2009/08/MIRANT-CLOSURE-SETTLEMENT.pdf. Accessed July 30, 2018.

Table 3: Baseline and Proposed Land Uses

Land Use Type	Baseline Land Uses to be Demolished	Proposed Land Uses
Residential/Apartments	-	2,400-3,000 du
Commercial	107,000 gsf	1.2 and 1.9 million gsf
Entertainment/Assembly	-	25,000 gsf
Open Space/Amenities	-	6.3 acres
Vehicle Parking	-	2,622 spaces

Notes:
du = dwelling units, gsf = gross square feet
Source: as documented in Attachment 2.

The proposed project would include vehicular, bicycle, and pedestrian improvements to adjacent streets. The project proposes 1,829 bicycle parking spaces. The project site proposes a transit bus stop and a bicycle and pedestrian network with off-site connections.

The proposed project would be required to comply with San Francisco Planning Code Section 169, Transportation Demand Management Program (added by Ordinance 34-17, approved February 2017), and would seek Leadership in Energy and Environmental Design (LEED) Gold certification, which includes measures applicable to both construction and operation phases.

VI. Technical Review and Assessment

Ramboll, on behalf of the Applicant, prepared a GHG emissions assessment for the proposed project to demonstrate that the requirements of AB 900 can be met. A full copy of this proposal can be found in Attachment 2.

The Applicant relied upon a variety of sources for activity data and emission factors to quantify GHG emissions. This CARB staff evaluation is focused on reviewing the data sources, emission factors, emission calculations, and assumptions used for the application, and determining whether these sources and assumptions are reasonable.

The Applicant relied upon Version 2016.3.2 of the California Emissions Estimator Model (CalEEMod), a widely-used emissions quantification tool developed in coordination with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely-accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the

United States Environmental Protection Agency (US EPA) AP-42 emission factors, CARB's on-road and off-road equipment emission models such as the Emission Factor 2014 model (EMFAC2014), and the Off-road Emissions Inventory Program model (OFFROAD). The Applicant based calculations of GHG emissions on project-specific data available from the project sponsor where possible. The Applicant also relied on utility-specific carbon intensities to calculate emission factors for the baseline condition.

VII. Baseline Operational Emissions

The baseline emissions for this project are represented by the difference in GHG emissions from operation of the former Potrero Power Plant averaged over the last 10 years of operation leading up to its closure, and the corresponding ongoing GHG emissions that resulted from transferring the former power plant's electricity generation over to the Pacific Gas and Electricity (PG&E) utility grid—the main supplier of electricity to the City and County of San Francisco. The baseline emissions were calculated based on a range of the operational electricity generation statistics from the power plant leading up to its closure. The application states that GHG emissions associated with the baseline would range from 146,270 and 430,530 MT CO_2e per year.

CARB staff evaluated the Applicant's GHG emission estimations, demand factors, and assumptions used in the Applicant's baseline calculations, summarized in Table 1 above. CARB staff concluded that the methodology and estimated baseline GHG emissions provided by the Applicant are appropriate. The low end of the range represents a conservative estimate of the baseline emissions for this project.

VIII. Project Construction Emissions

Construction-related GHG emissions, including demolition-related emissions, are one time, direct emissions and would occur over an approximately 15-year construction period. The Applicant estimated GHG emissions associated with project construction by using project-specific construction equipment inventories and use data provided by the project sponsor, fuel consumption rates provided by US EPA, and emission factors from the CalEEMod tool and CARB data sources. The Applicant estimates a total of 42,453 metric tons carbon dioxide equivalent (MT CO_2e) over the project construction period, as shown in Table 2 above. Construction-related GHG emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule. This includes heavy-duty equipment, such as material hauling trucks, excavators, cranes, and conventional work vehicles.

CARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

IX. Proposed Project Operational Emissions

Operational GHG emission sources from the proposed project include mobile, electricity, natural gas, area, stationary, solid waste, water, and wastewater sources. Operational GHG emissions from the proposed project were assumed to begin in 2025, and are summarized concurrently with construction emissions in Table 2 above.

The proposed project is seeking LEED Gold certification. At the time of this analysis, the exact LEED credits and project features that would be selected to achieve LEED Gold certification have not yet been determined.

Mobile-source emission factors used were based on the CARB EMFAC2014 on-road inventory as reflected in CalEEMod. Declining mobile-source emission factors were used to estimate GHG emissions from vehicles over the project's lifetime, which reflect additional improvements in fleet fuel economy due to CARB's Advanced Clean Cars regulations, and were not reflected in CalEEMod. Mobile-source emissions were also calculated based on project-specific vehicle trip estimates provided by the project sponsor.

CalEEMod default emission factors and calculation methods were also used to estimate GHG emissions from electricity, natural gas, solid waste disposal, water consumption, and area sources. CalEEMod default electricity usage was scaled based on consumption factors provided by the project sponsor. Declining electricity emission factors were used to reflect compliance with renewable portfolio standards over the course of the project lifetime. Estimates of energy-related GHG emissions from the project do not account for LEED Gold certification or other energy efficiency features of the project. Therefore, the estimate of GHG emissions from project-related energy consumption is conservative. The Applicant also assumed 50 hours per year operation for 15 emergency generators.

The Applicant's assumptions and inputs are reasonably conservative, and represent an upper-bound for the net increase in GHG emissions that could occur. CARB staff evaluated the proposed project's emission calculations, demand factors, and assumptions used to estimate operational GHG emissions and concluded that the methodology and estimated operational GHG emissions provided by the Applicant are appropriate.

Based on the Applicant's proposal, annual project construction and operational emissions would not exceed the baseline at any point during the project's lifetime, as summarized in Table 2.

X. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant, CARB staff concludes that the proposed project will not result in any net additional GHG emissions relative to the baseline.

3333 California Street Project
Supporting Documents

September 27, 2018

Heather King, AICP
Air Pollution Specialist
Sustainable Communities Policy and Planning Section
Air Quality Planning and Science Division
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812-2815

Subject: **3333 California Street Mixed-use Project, Case No. 2015-014208ENV**
Greenhouse Gas Emissions Offset Commitment Approach

Dear Ms. King,

The Applicant submitted the application seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900.

The project has committed to meeting the requirements set forth in California Public Resources Code Section 21183 (c), which requires that the Project demonstrate that it will not result in any net greenhouse gas (GHG) emissions and in Public Resources Code Section 21180(b)(1), which requires the Project to achieve a 15 percent greater standard for transportation efficiency than comparable projects. The Applicant has committed to no net increase in construction and operation-related GHG emissions. Consistent with policy recommendations included in CARB's 2017 Climate Change Scoping Plan[1], while offsets are a potential way to mitigate GHG emissions, other options will continue to be explored as well to the extent feasible, with the following order of preference: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry. To the extent offsets are used to mitigate GHG emissions, prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the project that exceeds the existing emissions, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, for the operational emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining (after implementation of any identified, feasible project design feature/on-site reduction measures, off-site local reductions, or off-site regional reductions) operational emissions attributable to that phase over the analysis horizon of 30 years. The phases noted here are for GHG compliance

[1] Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

purposes. Any changes to the actual order and phasing of the project construction would meet the standards for compliance based on the aggregate total phase emissions.

Prior to the issuance of grading permits for construction of each phase of the project, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, for the construction emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining construction emissions attributable to that phase.

Attachment E of the Project's AB 900 application contained a calculation of the net additional construction and operational GHG emissions associated with the Project. Attachment I: Greenhouse Gas Emissions by Phase summarizes the construction and operational emissions by phase. The Applicant will provide documentation to CARB and the Governor's office of any project design features/on-site reduction measures, off-site local reductions, or off-site regional reductions used to mitigate GHG emissions, and shall promptly submit copies of any executed contracts for purchased carbon credits to CARB and to the Governor's office. Any identified project design features/on-site reduction measures, off-site local reductions, or off-site regional reductions used to mitigate GHG emissions and any commitments to enter into contracts to offset net additional GHG emissions will be incorporated as conditions of project approval under the Public Resources Code sec. 21183(e), which shall be binding and enforceable by the lead agency.

Sincerely,

Laurel Heights Partners LLC
a Delaware limited liability company

By: 3333 California LP
a Delaware limited liability partnership
its managing member

By: PSKS LH LLC
a Delaware limited liability company
its general partner

By: Prado LH LLC,
a California limited liability company
its managing member

By: _____
Daniel J. Safier
Manager

September 27, 2018

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Subject: **3333 California Street Mixed-use Project, Case No. 2015-014208ENV**
Additional information requested by ARB

Dear Ms. King,

Below is the additional information/clarification as requested by ARB staff, as prepared for the Applicant by Ramboll US Corporation.

Comment ARB-1:

Documentation regarding existing land uses to be relocated: We interpret the documentation in Attachment E of your AB 900 application to suggest that you have assumed that 100% of the operational GHG emissions associated with the existing land uses on the project site (estimated for year 2020) comprise the baseline emissions against which the proposed project's emissions are compared.

During our pre-application meeting, we discussed the foreseeable relocation of existing tenants currently located on the project site, and whether the relocation of existing tenants would contribute to any ongoing GHG emissions elsewhere (e.g., resulting in new construction, and/or resulting in relocation of existing operational emissions to off-site). This assumption relates to the amount of baseline GHG emissions that should be credited against the increase in GHG emissions from the proposed project to calculate the net change. Please provide justification for this assumption that 100% of existing (baseline) GHG emissions would be eliminated as a result of the project, and would result in no off-site continuation of GHG emissions due to relocation.

Response ARB-1:

The comment requests justification for the assumption that 100% of existing (baseline) GHG emissions would be eliminated as a result of the project. The inclusion of baseline GHG emissions to determine net new project emissions is common practice that has been upheld in the courts in California, and the

assumption that 100% of existing emissions would be eliminated as a result of this Project or Project Variant is justified. The first part of this response describes the regulations and precedent leading to this conclusion. The second part of the response describes how the proposed Project and Project Variant meet these criteria.

Regulations and Precedents:

While we acknowledge that the AB900 and CEQA processes are not the same and there may be differences of approached, looking to the applicable CEQA approach can be a useful guide. The May 2017 Bay Area Air Quality Management District (BAAQMD) CEQA guidelines[1] state:

> *"If a proposed project involves the removal of existing emission sources, BAAQMD recommends subtracting the existing emissions levels from the emissions levels estimated for the new proposed land use. This net calculation is permissible only if the existing emission sources were operational at the time that the Notice of Preparation (NOP) for the CEQA project was circulated or in the absence of an NOP when environmental analysis begins, and would continue if the proposed redevelopment project is not approved. This net calculation is not permitted for emission sources that ceased to operate, or the land uses were vacated and/or demolished, prior to circulation of the NOP or the commencement of environmental analysis. This approach is consistent with the definition of baseline conditions pursuant to CEQA."*

For purposes of assessing the environmental effects of a proposed project, CEQA Guidelines Section 15126.2 states, "the Lead Agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published." See also, CEQA Guidelines Section 15125(a). In Neighbors for Smart Rail v. Exposition Metro Line Construction Authority (2013) 57 Cal. 4th 439, 452-453, the California Supreme Court explained that CEQA does not impose a uniform, inflexible rule for establishing an existing conditions baseline, but rather gives lead agencies discretion.

Other approved AB 900 projects have incorporated the GHG reductions from the removal of 100% of existing emissions sources without analyzing any potential off-site continuation of GHG emissions due to relocation:

- The Apple Campus 2 application took credit for emissions generated by the existing site, which were calculated to be greater than the operational emissions of the proposed project. It did not track whether all employees at the existing site would remain or result in no new emissions elsewhere. This application also described that the existing site was underutilized and emissions did not reflect historic emissions, which could be much higher disclosed.[2]

- The 8150 Sunset Boulevard application took credit for existing commercial and retail uses and concluded that the annual Project operational emissions would be lower than the baseline emissions for all years. It did not track whether these retail uses would relocate or what level emissions they might emit at a different location.[3]

[1] Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.
[2] Available at: http://opr.ca.gov/docs/AppleCampus2App.pdf.
[3] Available at: http://opr.ca.gov/docs/8150_Sunset_GHG_for_AB_900_(Amended_031914).pdf.

- The 6620 West Yucca application took credit for replacing existing low-density residential uses with a high-density mixed-use development. It did not track where the existing residents would move and whether they would continue to produce emissions elsewhere.[4]

Applicability to Project and Project Variant:

The proposed Project and Project Variant would replace existing University of California, San Francisco (UCSF) operations. The project site is currently developed and contains administrative, academic research, social, behavioral, and policy science research department uses. Given that these or similar uses would continue in the absence of the Project or Project Variant and will be removed due to the Project or Project Variant, it is correct to consider them as existing conditions.

Per the regulations and precedents described above, these are sufficient conditions to justify the analysis submitted in the AB 900 application. However, since this Project Applicant does have information about the relocation of the existing emissions sources, this response also describes this information to prove beyond requirements that the emissions are accounted for.

The employees at the existing campus will be relocated to other existing UCSF locations and were considered in the projected populations at these other locations for purpose of environmental impacts in UCSF's Final Long Range Development Plan.[5] Chapter 9, P. 114 states [**emphasis** added]:

> "*If UCSF were to vacate the Laurel Heights campus site, relocation of the 1,200 employees there would likely occur in phases as programs are consolidated at other sites.* ***Therefore, the 1,200 employees currently at the Laurel Heights campus site are included in the projected population of the 2014 LRDP at UCSF's major campus sites at Parnassus Heights, Mission Bay, Mount Zion, and Mission Center, and the environmental impacts of projected UCSF population growth at those sites are evaluated in the 2014 LRDP EIR****. If UCSF does elect to vacate, the relocation of population necessary to vacate the building will occur after the certification of the 2014 LRDP EIR*."

Therefore, given that the emissions from all existing conditions will be removed from the Project or Project Variant site and will not result in increases in emissions elsewhere that have not already been accounted for, the analysis was justified incorporating net new emissions.

Comment ARB-2:

Documentation regarding method to mitigate/offset net increase in GHG emissions: According to the proposed methodology for estimating GHG emissions used in your AB 900 application, both the proposed project and project variant would result in a temporary net increase in GHG emissions due to construction and operational emissions. CARB is still verifying the assumptions and estimates of baseline and project-generated GHG emissions (see item 1 above). However, additional information is needed to document the specific method(s), measure(s), and commitment(s) by which the applicant would mitigate or offset the projected net increase in GHG emissions from either project scenario. Please provide specific commitment language in a revised submittal or in a supplement to your AB 900 application on exactly how the proposed project would achieve no net increase in GHG emissions. The

[4] Available at: http://opr.ca.gov/docs/Application_for_ELDP_wExhibits-6220_West_Yucca_(4-10-17).pdf.
[5] Available at: https://www.ucsf.edu/content/long-range-development-plan-downloads.

additional documentation should include specific language on timing, responsible parties, and any monitoring and enforcement mechanisms for mitigation measures or other commitments.

Response ARB-2:

The comment requests specific commitment language on exactly how the proposed project would achieve no net increase in GHG emissions. In response, we have prepared a new Attachment H: 3333 California Street Project Greenhouse Gas Emissions Offset Commitment Approach that contains the following information:

> The Applicant submitted the application seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900.
>
> The project has committed to meeting the requirements set forth in California Public Resources Code Section 21183 (c), which requires that the Project demonstrate that it will not result in any net greenhouse gas (GHG) emissions and in Public Resources Code Section 21180(b)(1), which requires the Project to achieve a 15 percent greater standard for transportation efficiency than comparable projects. The Applicant has committed to no net increase in construction and operation-related GHG emissions. Consistent with policy recommendations included in CARB's 2017 Climate Change Scoping Plan[6], while offsets are a potential way to mitigate GHG emissions, other options will continue to be explored as well to the extent feasible, with the following order of preference: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry. To the extent offsets are used to mitigate GHG emissions, prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the project that exceeds the existing emissions, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, for the operational emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining (after implementation of any identified, feasible project design feature/on-site reduction measures, off-site local reductions, or off-site regional reductions) operational emissions attributable to that phase over the analysis horizon of 30 years. The phases noted here are for GHG compliance purposes. Any changes to the actual order and phasing of the project construction would meet the standards for compliance based on the aggregate total phase emissions.
>
> Prior to the issuance of grading permits for construction of each phase of the project, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, for the construction emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining construction emissions attributable to that phase.
>
> Attachment E of the Project's AB 900 application contained a calculation of the net additional construction and operational GHG emissions associated with the Project. Attachment I:

[6] Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

> Greenhouse Gas Emissions by Phase summarizes the construction and operational emissions by phase. The Applicant will provide documentation to CARB and the Governor's office of any project design features/on-site reduction measures, off-site local reductions, or off-site regional reductions used to mitigate GHG emissions, and shall promptly submit copies of any executed contracts for purchased carbon credits to CARB and to the Governor's office. Any identified project design features/on-site reduction measures, off-site local reductions, or off-site regional reductions used to mitigate GHG emissions and any commitments to enter into contracts to offset net additional GHG emissions will be incorporated as conditions of project approval under the Public Resources Code sec. 21183(e), which shall be binding and enforceable by the lead agency.

Ramboll also prepared a supplemental Attachment I: Greenhouse Gas Emissions by Phase, which summarizes the emissions by phase to implement the GHG reductions mechanisms described above.

Comment ARB-3:

On the proposed GHG estimation methodology itself, we have a concern about the approach to mix EMFAC model versions for baseline (EMFAC 2014) and proposed project (EMFAC 2017) calculations for mobile-source emissions. The emission rates in 2020 are approximately 6% different for San Francisco County between model versions, which is considerable. We recommend using one version of EMFAC to characterize the baseline emissions and emissions from the proposed project consistently. Please address this recommendation in your revised submittal. You may use either EMFAC 2014 or EMFAC 2017, but the same version should be used for both scenarios. The relevant sections of Attachment E are 3.1.1 and 3.2.1.

Response ARB-3:

As mentioned in section 3.2.1 of Attachment E, mobile source emissions for the Proposed Project and Project Variant were calculated using the same methodology as Baseline emissions. All scenarios used EMFAC2014 default emission factors from CalEEMod®. EMFAC2017 was only used to scale the Proposed Project and Project Variant mobile emissions for future years using the percent change between years. Since the scaling factors were calculated outside of CalEEMod®, the newest version of the EMFAC model (EMFAC2017) was used to estimate percent change over time.

Sincerely,

Laurel Heights Partners LLC
a Delaware limited liability company

By: 3333 California LP
a Delaware limited liability partnership
its managing member

By: PSKS LH LLC
a Delaware limited liability company
its general partner

By: Prado LH LLC,
a California limited liability company
its managing member

By: _____
Daniel J. Safier
Manager

Inglewood Basketball and Entertainment Center Supporting Documents

AB 987 Application for the Inglewood Basketball and Entertainment Center Project

Prepared for
Murphy's Bowl LLC

November 2018

Prepared by

AECOM
300 California Street, Suite 600
San Francisco, California 94104

Information establishing that the project does not result in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

The methodology applied to the proposed IBEC Project and IBEC Project Variants for this AB 987 application is consistent with AB 900 methodology developed by the California Air Resources Board. The GHG analysis quantified emissions anticipated from the IBEC Project and IBEC Project Variants including project construction emissions and operational emissions and compared them against existing baseline emissions in order to determine the IBEC Project's net new emissions. The full details of the analysis are provided in **Attachment G *IBEC Project GHG Analysis***.

To determine the existing 2018 baseline, the GHG analysis quantified emissions for existing buildings on the Project Site that would be removed and for existing uses that would relocate to the IBEC Project Site, including the existing LA Clippers games at the Staples Center, the existing LA Clippers Team Offices in downtown Los Angeles, the existing LA Clippers Training Center in the Playa Vista neighborhood of Los Angeles, and existing non-NBA events that would occur at the IBEC Project arena instead of at various other venues throughout the Los Angeles region (i.e., market-shifted non-NBA events). This analysis assumes that after the LA Clippers Team Offices relocate to the IBEC Project Site, the vacated existing office space would be used by a different, unknown office tenant in the future.

Construction emissions for the proposed IBEC Project and IBEC Project Variants were estimated for all construction years from 2021 through 2024. Construction activities would generate GHG emissions associated with heavy-duty construction equipment, material-hauling trucks, and construction-worker vehicles.

The operational life of the IBEC Project is assumed to be 30 years and operational emissions were estimated from July 1, 2024 (the anticipated beginning of operations) through 2054. Operational emission sources include on-road motor vehicles (mobile), energy (electricity and natural gas), water and wastewater, solid waste, area, and stationary (emergency generators). Mobile source emissions would be generated by vehicle trips from attendees, customers and employees. Energy sources would include both electricity and natural gas consumption. Indirect emissions sources include emissions from electricity generation at off-site utility providers.

Consumption of water and generation of wastewater would also result in indirect GHG emissions because of the electricity consumption associated with the off-site conveyance, distribution, and treatment of water and wastewater. Solid waste disposal from operation of the IBEC Project and IBEC Project Variants would result in indirect, off-site GHG emissions. Area source emissions would be associated with activities such as maintenance of landscaping and grounds. Operation of the emergency generators for testing and maintenance would be a source of direct stationary source emissions.

Operational emissions associated with the IBEC Project, anticipated to occur from July 1, 2024 through 2054, were estimated based on three operational scenarios: (1) IBEC Project without GHG reduction measures, representing IBEC Project operations absent implementation of any GHG reduction measures beyond current building code requirements (e.g., 2019 Title 24 standards); (2) IBEC Project with local, direct GHG reduction measures, demonstrating the reductions in GHG emissions achieved through local, direct measures as defined by AB 987, including the implementation of the IBEC TDM Program and 50% of the reductions attributable to project design features and measures necessary to meet the LEED Gold certification requirement; and (3) IBEC Project with GHG reduction measures, calculating the total net new emissions resulting from the project with implementation of the IBEC TDM Program and 100% of the reductions resulting from the project design features and measures included in the LEED Gold certification strategy.

Design features within the IBEC Project's LEED Gold strategy would include sustainable design measures, such as a 700-kilowatt (kW) solar photo-voltaic (PV) system, generating approximately 1,085,000 kW-hours of clean energy annually. The project design will also comply with CalGreen Code Voluntary Tier 1, which is estimated to achieve a 10 percent reduction in energy consumption over Title 24 2019 standards based on the preliminary design of the IBEC Project.

GHG emissions from construction of the IBEC Project and IBEC Project Variants include emissions from off-road equipment and construction trips. Emissions were estimated for each year that construction would occur based on emission factors for equipment fleet averages specific to that calendar year. Advancements in engine technology, retrofits, and turnover in the equipment fleet are anticipated to result in lower levels of emissions over time as stricter standards are required.

The trip generation analysis assumed two project conditions, annual trip rates for the IBEC Project Without IBEC TDM Program and annual trip rates for the IBEC Project With IBEC TDM Program. The calculations are included in **Attachment G.** The IBEC TDM Program would result in vehicle trip reductions from use of other modes of transportation, such as transit-rail shuttles, public buses, minibuses/microtransit buses, vanpool, charter coach buses, walking, and bicycling. Mobile source emissions for the With IBEC TDM Program scenario also include emissions from IBEC TDM Program measures, such as transit-rail shuttles, public buses, minibuses/microtransit buses, vanpool, and charter coach buses.[16]

The results of the GHG analysis indicate that the IBEC Project and the IBEC Project Variants under the IBEC Project without GHG reduction measures would result in net additional GHG emissions compared to the baseline. Half or 50 percent of these net new GHG emissions must

[16] Mobile source emissions for the Without IBEC TDM Program scenario include employee shuttle trips from off-site parking lots, as off-site employee parking would be used regardless of implementation of the IBEC TDM Program, but do not include trips from other IBEC TDM Program measures.

be reduced by local, direct measures including the IBEC TDM Program and half of the reductions achieved through project design features used to meet the LEED Gold certification requirement. Compliance with AB 987 is demonstrated by Table 3 for the proposed IBEC Project and Table 4 for the IBEC Project Variants. Tables 3 and 4 summarize the GHG emissions and identify the reductions that would be achieved through the local, direct measures implemented for the IBEC Project and IBEC Project Variants, the remaining 50 percent of reductions achieved through project design features used to meet the LEED Gold certification requirement, and the remaining emissions reductions needed to achieve net zero GHG emissions, which could be achieved through the purchase of offset credits and/or through GHG reductions that would result from measures identified in order to satisfy AB 987's separate NOx and $PM_{2.5}$ reduction requirements (i.e., GHG reduction co-benefits).[17]

17 AB 987 requires that, as a condition of project approval, the IBEC project must achieve reductions of 400 tons of oxides of nitrogen (NOx) and 10 tons of particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) over 10 years following the commencement of construction of the project. Of these amounts, 130 tons of NOx and 3 tons of $PM_{2.5}$ must be achieved within the first year following commencement of construction. If the project sponsor can demonstrate and verify to the South Coast Air Quality Management District that it has invested at least $30 million dollars toward achieve those air pollutant reductions, only one-half of these reduction amounts must be achieved.

Table 3. IBEC Project Local Direct Measures Emissions Reductions and Offsets Summary

IBEC Project Condition and Reductions	Emissions Estimates ($MT CO_2e$)	Percent of Net New Emissions
Total Net New Emissions IBEC Project Without GHG Reduction Measures	101,623	100%
Required GHG Reductions from Local, Direct Measures	50,812	50%
Total Emissions Reductions from LEED Gold	7,925	8%
50% of Total Emission Reductions from LEED Gold Qualifying as Local, Direct Measures	3,962	4%
Total Reductions from IBEC TDM Program	54,233	53%
Total Amount of Reductions from Local, Direct Measures (TDM Program and 50% of LEED Gold)	58,195	57%
Total Amount of Reductions from GHG Reduction Measures (TDM Program and 100% of LEED Gold)	62,158	61%
Additional Reductions Needed from Offset Credits and/or Co-benefits of NOx and PM2.5 Reduction Measures	39,466	39%
Total Net New Emissions	0	0%

Notes: Totals may not add due to rounding. MT CO_2e = metric tons carbon dioxide equivalents

Table 4. IBEC Project Variants Local Direct Emissions Reductions and Offsets Summary		
Project Condition and Reductions	**Emissions Estimates (MT CO_2e)**	**Percent of Net New Emissions**
Total Net New Emissions IBEC Project Variants Without GHG Reduction Measures	99,644	100%
Required GHG Reductions from Local, Direct Measures	49,822	50%
Total Emissions Reductions from LEED Gold	7,925	8%
50% of Total Emission Reductions from LEED Gold Qualifying as Local, Direct Measures	3,962	4%
Total Reductions from IBEC TDM Program	54,233	54%
Total Amount of Reductions from Local, Direct Measures (TDM Program and 50% of LEED Gold)	58,195	58%
Total Amount of Reductions from GHG Reduction Measures (TDM Program and 100% of LEED Gold)	62,158	62%
Additional Reductions Needed from Offset Credits and/or Co-benefits of NOx and PM2.5 Reduction Measures	37,486	38%
Total Net New Emissions	0	0%

Notes: Totals may not add due to rounding. MT CO_2e = metric tons carbon dioxide equivalents

The tables confirm that the IBEC Project and the IBEC Project Variants would meet the AB 987 local, direct measures requirement because at least half of the net new emissions would be offset by local, direct measures. The remaining net new emissions of 39,466MT CO_2e for the IBEC Project and 37,486 MT CO_2e for the IBEC Project Variants after implementation of the local, direct measures and the rest of the LEED Gold project design features and measures would need to be offset by the purchase of carbon credits, additional on- or off-site emissions reduction measures, and/or through GHG reduction co-benefits of NOx and $PM_{2.5}$ reduction measures.

As required by AB 987, the proposed IBEC Project cannot result in any net new emission of greenhouse gases, including greenhouse gas emissions from employee transportation. This must be determined by the Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code. Measures for offsetting the net increase in GHG emissions include project design features incorporated to obtain LEED Gold certification, the IBEC TDM Program, potential GHG reduction co-benefits from NOx and $PM_{2.5}$ reduction measures, and carbon credit offsets. The project sponsor has committed to the LEED Gold and IBEC TDM Program, which are required under AB 987, and commits to obtaining sufficient additional GHG emission reductions through purchase of carbon offset credits and/or co-

benefits from NOx and $PM_{2.5}$ reduction measures to ensure there would be no net additional GHG emissions from the IBEC Project or IBEC Project Variants.

If using offset credits, the project sponsor will, to the extent feasible, place the highest priority on the purchase of offset credits that produce emission reduction within the City of Inglewood or the boundaries of the South Coast Air Quality Management District. As shown in Tables 3 and 4 above, the reductions estimated from local, direct GHG reduction measures for the IBEC Project and IBEC Project Variants exceed the requirement under AB 987 to obtain at least 50 percent of GHG emission reductions through such local, direct measures. Therefore, it is anticipated that offset credits would be used to achieve less than 50 percent of the overall GHG emission reductions necessary to meet the net zero GHG emissions requirement.

Carbon credits will be verified by a third party accredited by ARB, such as the American Carbon Registry, Climate Action Reserve, and Verified Carbon Standard. Carbon credits shall be purchased at a net present value although the contracts could propose acquiring the credits in advance of the emission-generating activities to be offset. Contracts to purchase carbon credits for construction emissions will be entered into prior to the issuance of grading permits, and contracts to purchase carbon credits for operational emissions will be entered into prior to the issuance of the final certificate of occupancy for the IBEC Project arena. Copies of the contract(s) shall be provided to ARB and the Governor's office to verify that construction and operational emissions have been offset.

achievement of the 15% reduction in vehicle trips to the City of Inglewood and the Office of Planning and Research no later than January 1, 2030.

3.4.3 Potential Co-Benefits from NO_x and $PM_{2.5}$ Reductions per AB 987

Per the requirements of AB 987, the IBEC Project must also achieve reductions of 400 tons of NOx and 10 tons of $PM_{2.5}$ over 10 years following the commencement of construction of the project. Of these amounts, 130 tons of NOx and 3 tons of $PM_{2.5}$ must be achieved within the first year following commencement of construction. If the applicant can demonstrate and verify to the South Coast Air Quality Management District that it has invested at least $30 million dollars toward achieve those air pollutant reductions, only one-half of these reduction amounts must be achieved. If there are any GHG emission reductions associated with the reduction measures used to meet the NOx and $PM_{2.5}$ requirement (i.e., GHG reduction co-benefits), those reductions can also be counted towards meeting the GHG reductions required for the IBEC Project or IBEC Project Variants, as shown in Tables 16 and 17.

3.4.4 Carbon Credits

Pursuant to AB 987, the project sponsor may obtain offset credits for up to 50 percent of the GHG emissions reductions necessary to achieve the no net new GHG emissions requirement. If using offset credits, the applicant must, to the extent feasible, place the highest priority on the purchase of offset credits that produce emission reduction within the City of Inglewood or the boundaries of the South Coast Air Quality Management District. As show in Tables 16 and 17 above, the reductions estimated from local, direct GHG Reduction Measures for the IBEC Project and IBEC Project Variants exceed the requirement under AB 987 to obtain at least 50 percent of GHG emission reductions through such local, direct measures. Therefore, it is anticipated that offset credits would be used to achieve less than 50 percent of the overall GHG emission reductions necessary to meet the net zero GHG emissions requirement (up to approximately 38 to 39 percent).

Carbon credits shall be verified by a third party accredited by ARB, such as the American Carbon Registry, Climate Action Reserve, and Verified Carbon Standard. Carbon credits shall be purchased at a net present value. although the contracts could propose acquiring the credits in advance of the emission-generating activities to be offset. Contracts to purchase carbon credits for construction emissions will be entered into prior to the issuance of grading permits, and contracts to purchase carbon credits for operational emissions will be entered into prior to the issuance of the final certificate of occupancy for the IBEC Project arena. Copies of the contract(s) shall be provided to ARB and the Governor's office to verify that construction and lifetime operational emissions have been offset.