2015 GHG GUIDANCE

RECOMMENDED APPROACH TO ADDRESSING CLIMATE CHANGE IN CEQA DOCUMENTS

County of San Diego Planning & Development Services (PDS)

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The California Environmental Quality Act (CEQA) requires public agencies to review the environmental impacts of proposed projects and consider feasible alternatives and mitigation measures to reduce significant adverse environmental effects. The California Natural Resources Agency adopted amendments to the CEQA Guidelines to address greenhouse gas (GHG) emissions, consistent with Legislature's directive in Public Resources Code section 21083.05 (enacted as part of SB97 [Chapter 185, Statutes 2007]). These changes took effect in 2010. The guidance outlined in this document shall be used by County staff for the review of discretionary projects and environmental documents pursuant to CEQA. The guidance will be modified as needed based on more specific guidance from State agencies such as California Air Resources Board (ARB) and the Governor's Office of Planning and Research (OPR).

The intent of this guidance is to provide a consistent, objective and predictable evaluation of significant effects. This guidance is not binding on any decision maker and do not substitute for the use of independent judgment to determine significance or the evaluation of evidence in the record. It is important to note that alternative guidelines may be utilized; however, that analysis must provide references and factually-based rationale for each guideline discussed.

Determination of Need for Climate Change Analysis in CEQA documents

Screening thresholds have been published by the California Air Pollution Control Officers Association (CAPCOA) for determining the need for additional analysis and mitigation for GHG-related impacts under CEQA. The annual 900 metric ton carbon dioxide equivalent (MT CO_2e) screening level referenced in the CAPCOA white paper (http://www.capcoa.org/wp-content/uploads/downloads/2010/05/CAPCOA-White-Paper.pdf) is being used by the County as a conservative criterion for determining the size of projects that would require further analysis and mitigation with regard to climate change. The CAPCOA white paper reports that the 900 metric ton screening level would capture more than 90% of development projects, allowing for mitigation towards achieving the State's GHG reduction goals. The following table shows the general sizes of projects that would generally require additional analysis and mitigation.

Project Sizes that Would Typically Require a Climate Change Analysis *	
Project Type**	**Project Size Equivalency**
Single Family Residential	50 units or more
Apartments/Condominiums	70 units or more
General Commercial Office Space	35,000 square feet or more
Retail Space	11,000 square feet or more
Supermarket/Grocery Space	6,300 square feet or more
*A determination on the need for a climate change analysis for project types not included in the table will be made on a case-by-case basis considering the 900 metric ton criterion. **A project with a combination of types may demonstrate compliance with the screening threshold through addition of the ratios of each contribution by the associated equivalency threshold.	

If a proposed project is the same type and equal to, or smaller than the project size listed in the table above, it is presumed that the construction and operational GHG emissions for that project would not exceed 900 MT CO_2e per year, and there would be a less-than-cumulatively considerable impact. It should be noted that the screening level assumes that the project does not involve unusually extensive construction activities and does not involve operational characteristics that would generate unusually high GHG emissions. Therefore, the determination of the need for a climate change analysis must consider project specific details that could contribute to a climate change impact.

Requirements for Climate Change Technical Reports and CEQA Analyses

The following are the minimum recommended components of a Climate Change Analysis prepared for privately-initiated discretionary projects in the County:

Introduction and Project Description. This section explains the purpose of the report and a summary of the most current scientific information related to climate change. A brief project description and general location is required, but it must include all elements of the project that would or could generate GHG emissions, with an estimated timeframe for project implementation. This section would also identify the project design and location features that will have the effect of reducing GHG emissions.

Environmental Setting. This includes a description of the existing environmental conditions or setting, without the project, which constitutes the baseline physical conditions for determining the project's impacts. Existing uses onsite that generate GHG emissions under baseline conditions must be disclosed and associated GHG emissions should be quantified to establish the baseline conditions.

Regulatory Setting. This includes a discussion of the existing regulatory environment pertaining to GHG emissions.

Guidelines for Determining Significance. This includes identification and justification of the selected significance guideline used to assess impacts. This section should explain that climate change is not generally considered a direct impact but would be analyzed as a potential cumulative impact under CEQA. This section should discuss the suggested questions referenced in the *CEQA Guidelines*, Appendix G, VII. Greenhouse Gas Emissions.

The report must include a clearly stated significance guideline to determine the significance of impacts. PDS recommends the following guideline:

> *"A proposed project would have a cumulatively considerable contribution to climate change impacts if it would result in a net increase of construction and operational greenhouse gas emissions, either directly or indirectly, and if the project would incorporate mitigation that achieves less than a 16-percent total reduction compared to unmitigated emissions."*

The guideline used in the report should demonstrate that the subject project complies with GHG reduction requirements under AB 32, the Global Warming Solutions Act of 2006. The guideline would apply to projects whose GHG emissions exceed 900 MT CO_2e per year. The report should discuss the reasons for choosing the significance guideline, referencing AB 32 legislation and implementing strategies that have been developed to reduce GHG emissions to meet statewide reduction targets.

Impact Analysis (Horizon Year 2020). This section should provide a detailed accounting of the project's construction and operational GHG emissions. Construction GHG Emissions should

account for emissions associated with the use of heavy construction equipment, construction worker vehicle miles traveled (VMT), and truck trips required to deliver construction materials to the project site. Construction emissions may be amortized over the expected (long-term) operational life of a project, which can conservatively be estimated at 20 years, unless evidence is provided demonstrating a longer or shorter project life. Operational GHG emissions should include energy use (including electricity, natural gas and water and wastewater), transportation VMT, area sources and solid waste. Emissions associated with other sectors, such as agricultural uses or industrial operations, should be quantified depending upon the individual project's proposed uses. The GHG inventory must include justification and references to document the assumptions that are made about the emissions calculations. Activity data, such as trip distances, and emission factors specific to the County must be used, where available. If modeling tools such as CalEEMod are used to quantify emissions, the County suggests the current version of the model should be utilized. Alternatively, emissions may be estimated using emission factors from EMFAC or OFFROAD, provided the current versions are used and the sources are appropriately cited. It should be noted that the URBEMIS model will no longer be accepted by the County for new projects.

Unmitigated GHG emissions attributable to the project at full buildout in 2020 would be compared to GHG emissions with mitigation. Unmitigated GHG emissions represent the proposed project as described in the application, in compliance with any applicable standards and regulations. If, compared to the unmitigated project, proposed mitigation would reduce GHG emissions by at least 16%, this level of mitigation would represent a fair share of what is necessary statewide to achieve AB 32 targets. This is because the 2020 "business as usual" (no action is taken) scenario would need to be reduced by 15.75% to get to 1990 levels, according to analysis provided by ARB.[1] A project that provided mitigation of 16% would be reducing potential GHG emissions at the same rate as is needed throughout the state to achieve the AB 32 emissions reduction target. This level of mitigation would represent a fair share of what is needed throughout the state to achieve the AB 32 emissions reduction target and would be considered adequate to avoid a cumulatively considerable contribution to the significant cumulative impact of climate change. Impact analysis shall occur relative to the existing environmental baseline and consider whether project-related emissions are cumulatively considerable.

Early coordination with the County is recommended to ensure that mitigation levels toward the 16% target are appropriately estimated. Mitigation to achieve the 16% requirement cannot include a reduction in the project size or scale. Mitigation identified toward this 16% target cannot include the effects of the Pavley I clean car standard or the 20% Renewable Portfolio Standard because these programs are already included in the calculations that support the 16% mitigation requirement. Other statewide measures, however, can be included without risk of "double counting." Renewable Portfolio Standards beyond 20% can be included toward the minimum 16% mitigation requirement. The Low Carbon Fuel Standard can be included as a part of the 16% mitigation requirement. Since some GHG emissions models build in different statewide measures, it is important to coordinate with County staff to ensure that the correct approach is being used to estimate the effects of mitigation, particularly since new statewide measures will be established over time and certain of these measures are likely to be included

[1] California Air Resources Board. 2011 (August). *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document*. Available: http://www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf. It should be noted that ARB made slight revisions to the 1990 and 2020 GHG inventories in the latest update to the Scoping Plan (May 2014). The revisions were based on updated global warming potentials. However, the resulting inventories differed by less than 1% from what was reported in the FED document referenced here.

in updates to GHG emissions models. Effects of transportation-related regulatory measures should be quantified using CalEEMod or EMFAC.

It should be noted that the terminology used to denote the two emissions scenarios may differ depending upon the individual project. For example, for a project that meets the 16% reduction requirement through project design features that are already part of the project description, the two scenarios could be denoted as "GHG Emissions without Project Design Features" and "GHG Emissions with Project Design Features." Projects that require mitigation measures to achieve the 16% reduction would denote the scenarios as "Unmitigated GHG Emissions" and "Mitigated GHG Emissions."

Impact Analysis (Horizon Year 2030 and 2050). The County anticipates that a portion of projects submitted for review would have buildout dates beyond 2020. While there has been no legislative action to adopt the 2050 GHG reduction target recommended in Executive Order S-3-05, it is important to quantify and report emissions at project buildout and for a mid-term year (2030) and 2050. The analysis should disclose the project's emissions for 2030 and 2050, in addition to 2020, and should show the progress the project would make towards achieving the GHG reduction goals for these years. The analysis should include information that is currently available about the state of the science and measures in place that are expected to achieve reductions beyond 2020. The goal evaluated for 2050 should be 80% below the level of emissions in 1990, which can be assumed to be a project's mitigated GHG emissions in 2020 if it meets the 16% reduction requirement. The goal for 2030 should be interpolated from the goals for 2020 and 2050.[2]

Project Design Features and Mitigation Measures: The analysis must include specific, enforceable measures to reduce project emissions. To the extent feasible, each measure should include references or a logical, fact based explanation as to why a specific measure will achieve the stated reductions. While it will generally be possible to quantify reductions associated with energy and water related measures, other measures may require qualitative discussion of reductions achieved.

This section must clearly differentiate between Design Features and Mitigation Measures. Design Features should also typically be referenced in the project description. Measures that are not specific or enforceable will not be accepted as mitigation. Specific enforceable measures identified in the report would need to provide some assumptions about the carbon emission reductions that would be achieved from each measure.

Many local, regional, and state agencies have produced lists of feasible mitigation strategies that can be used to reduce GHG emissions. These lists of mitigation strategies can be consulted when developing feasible mitigation for projects within the County, including, but not limited to:

Governor's Office of Planning and Research. 2008. Technical Advisory. CEQA AND CLIMATE CHANGE: Addressing Climate Change through California Environmental Quality Act (CEQA) Review. See Attachment 3, "Examples of GHG Reduction Measures." Available: http://opr.ca.gov/docs/june08-ceqa.pdf.

California Air Pollution Control Officers Association (CAPCOA). 2008 (January). CEQA & Climate Change. Evaluating and Addressing Greenhouse Gas Emissions from Projects

[2] The County estimates the 2030 goal to be 27% below the level of emissions in 1990, which for a subject project would be its mitigated emissions in 2020 if it meets the 16% reduction requirement. This goal will be updated once additional guidance is available from the California Air Resources Board.

Subject to the California Environmental Quality Act. See page 79, “Mitigation Strategies for GHG.” Available: http://www.capcoa.org/wp-content/uploads/downloads/2010/05/CAPCOA-White-Paper.pdf.

California Air Pollution Control Officers Association (CAPCOA). 2010 (August). Quantifying Greenhouse Gas Mitigation Measures. A Resource for Local Government to Assess Emission Reduction from Greenhouse GasMitigation Measures. Available: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.

Attorney General of the State of California. 2008 (December). The California Environmental Quality Act. Addressing Global Warming Impacts at the Local Agency Level. Available: http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf.

Conclusion: Make a clear conclusion whether the project exceeds the Guideline for Determining Significance, specifically stating the guideline used. Make a clear conclusion as to whether the impact is considered fully mitigated.