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December 21, 2009

Dave Warner
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San Joaquin Valley Air Pollution Control District
1990 East Gettysburg Ave.
Fresno, CA 93726-0244

Re: District Policy And Guidance Document For Addressing GHG Emission Impacts under CEQA; Governing Board Meeting on Dec 17, 2009

Dear Mr. Warner:

I am writing concerning the Governing Board's meeting on December 17, 2009 at which the Board approved the District's Policy and Guidance documents for addressing Greenhouse Gas Impacts under the California Environmental Quality Act. We observed during the webcast of the Governing Board's meeting that certain representations were made by the District about our office's position on the policy, including our position in light of additions made to the policy by the District subsequent to the Board's November 5, 2009 meeting. I am writing to make clear that the Attorney General's position on the District's policy and guidance document is reflected in our November 4, 2009 letter (copy attached), and that our position has not changed since then.

Sincerely,

/s/

CLIFFORD L. RECHTSCHAFFEN
Special Assistant Attorney General

For EDMUND G. BROWN JR.
Attorney General

Attachment

Cc: Seyed Sadredin, Executive Director (w/o attachment)

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November 4, 2009

VIA E-MAIL & U.S. MAIL

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RE: Final Draft Staff Report on Greenhouse Gas Emissions Under CEQA

Dear Mr. Warner:

We have reviewed the San Joaquin Valley Air Pollution Control District's September 17, 2009, Final Draft Staff Report on "Addressing Greenhouse Gas Emissions Under the California Environmental Quality Act."[1] We appreciate the Air District's extensive efforts and leadership in this area.[2] We are concerned, however, that the approaches suggested in the Staff Report will not withstand legal scrutiny and may result in significant lost opportunities for the Air District and local governments to require mitigation of greenhouse gas (GHG) emissions.

The Staff Report sets out a proposed threshold of significance for GHG emissions for stationary source projects under the Air District's permitting authority. A threshold of significance is, in effect, a working definition of significance to be applied on a project-by-project basis that can help a lead agency determine which projects normally will be determined to be less than significant, and which normally will be determined to be significant.[3] In the context of GHG emissions, the relevant question is whether the project's emissions, when considered in conjunction with the emissions of past, current, and probable future projects, are

[1] The Attorney General submits these comments pursuant to his independent power and duty to protect the natural resources of the State. (See Cal. Const., art. V., § 13; Cal. Gov. Code, §§ 12511, 12600-12612; *D'Amico v. Board of Medical Examiners* (1974) 11 Cal.3d 1, 14-15.)
[2] The Staff Report states that "[n]o state agency has provided substantial and helpful guidance on how to adequately address GHG emissions under CEQA, nor has there been guidance on how to determine if such impacts are significant." (Report at p. 2.) In fact, there are numerous sources of guidance, including information on the Attorney General's website (http://ag.ca.gov/globalwarming/ceqa.php), a Technical Advisory issued by the Governor's Office of Planning and Research (http://opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf); and the Resources Agency's proposed CEQA Guidelines amendments (http://ceres.ca.gov/ceqa/guidelines/), which is accompanied by a detailed, 78-page Initial Statement of Reasons (http://ceres.ca.gov/ceqa/docs/Initial_Statement_of_Reasons.pdf).
[3] Cal. Code Regs., tit. 14, § 15064.7, subd. (a).

cumulatively considerable.[4] Thresholds can be a useful interim tool until cities and counties have in place programmatic approaches, e.g., Climate Action Plans, which allow local government to consider a wide variety of mitigation opportunities and can substantially streamline the CEQA process for individual projects.[5] Staff's proposed stationary source GHG threshold relies on implementation of GHG emission control technologies. Under this proposal, projects that implement currently unspecified GHG Best Performance Standards ("BPS") would be deemed to not have significant impacts, regardless of the total amount of GHGs emitted.

The Staff Report also recommends a threshold of significance for cities and counties to use in determining whether a development or transportation project's GHG emissions are significant under CEQA. Like the stationary source threshold, this threshold would also rely on performance measures that are not currently identified. BPS for these projects would be any combination of identified GHG reduction measures that reduce project-specific GHG emission by at least 29 percent as compared to "business as usual," as calculated based on a point system to be developed in the future by the Air District.

The Staff Report contains a useful analysis of possible GHG mitigation measures for a variety of stationary sources and for development and transportation projects. This discussion will certainly assist lead agencies and project proponents in considering what mitigation measures currently are available and should be considered. It is not clear to us, however, how much additional analysis the Air District plans to do to support the proposed CEQA thresholds of significance recommended in the Staff Report. A public agency proposing to adopt a CEQA threshold of significance should be able to answer at least the following questions about its proposed approach:

What defined, relevant environmental objective is the threshold designed to meet, and what evidence supports selection of that objective?

The Staff Report does not discuss a particular environmental objective that would be achieved by implementing the proposed thresholds, such as meeting a GHG emissions reduction trajectory consistent with that set forth in AB 32 and Executive Order S-03-05 within the Air District's jurisdiction.[6] It appears that the Air District has not yet determined what amount of

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[4] Cal. Code Regs., tit. 14, § 15064, subd. (h)(1); see also Initial Statement of Reasons at p. 17 ("Due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis.")

[5] See Proposed Cal. Code Regs., tit. 14, § 15183.5, subd. (b) (describing tiering and streamlining available under "Plans for the Reduction of Greenhouse Gas Emissions"), available at http://ceres.ca.gov/ceqa/docs/FINAL_Text_of_Proposed_Amendemts.pdf; Draft Initial Statement of Reasons (discussing proposed § 15183.5) , available at http://ceres.ca.gov/ceqa/docs/Initial_Statement_of_Reasons.pdf#page=56; see also See Attorney General's General Plan/CEQA Frequently Asked Questions, available at http://ag.ca.gov/globalwarming/pdf/CEQA_GP_FAQs.pdf.

[6] Pursuant to these mandates, California is committed to reducing GHG emissions to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. These objectives are consistent with the underlying environmental objective of stabilizing atmospheric concentrations of greenhouse gases at a level that will substantially reduce the risk of dangerous climate change. (See AB 32 Scoping Plan at p. 4 ["The 2020 goal was established to be an aggressive,

GHG reduction it is aiming to achieve. Setting a relevant environmental objective is an essential step in establishing any legally defensible threshold of significance; without it, there is nothing against which to gauge the success of the threshold in operation.

What is the evidence that adopting the threshold will meet this objective?

Because the BPS discussed in the Staff Report are described as "illustrative" only, it is not possible at this time to determine whether the BPS ultimately adopted will reduce GHG emissions in the San Joaquin Valley and, if so, by how much. There is no stated commitment to tie BPS proposed in the future to regional GHG reduction objectives.

How does the threshold take into account the presumptive need for new development to be more GHG-efficient than existing development?

The Staff Report seems to assume that if new development projects reduce emissions by 29 percent compared to "business as usual," the 2020 statewide target of 29 percent below "business as usual" will also be achieved, but it does not supply evidence of this. Indeed, it seems that new development must be more GHG-efficient than this average, given that past and current sources of emissions, which are substantially less efficient than this average, will continue to exist and emit.[7]

Will the threshold routinely require new projects to consider mitigation beyond what is already required by law?

Because "business as usual" for a development project is defined by the Staff Report as what was typically done in similar projects in the 2002-2004 timeframe, and requirements affecting GHG emissions have advanced substantially since that date, it appears that the Air District's proposal would award emission reduction "points" for undertaking mitigation measures that are already required by local or state law.[8]

Similarly, we are concerned that project proponents could "game" the system. Under the current proposal, each project will be considered against a hypothetical project that could have been built on the site in the 2002-2004 time period. It is not clear why the project should be compared against a hypothetical project if that hypothetical project could not legally be built

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but achievable, mid-term target, and the 2050 greenhouse gas emissions reduction goal represents the level scientists believe is necessary to reach levels that will stabilize climate."])

[7] We note that CAPCOA expressly found that an approach that would rely on 28 to 33 percent reductions from BAU would have a "low" GHG emissions reduction effectiveness. CAPCOA, CEQA and Climate Change (Jan. 2008) at p. 56, available at http://www.capcoa.org/CEQA/CAPCOA%20White%20Paper.pdf.

[8] To take one important example, Title 24 has undergone two updates since 2002-2004 – in 2005 and 2008. The 2008 Title 24 standards are approximately 15 percent more stringent that the 2005 version. In addition, a significant number of local governments have adopted green building ordinances that go beyond Title 24 in just the past few years, and many more are considering adopting such ordinances as part of their Climate Action Plans. See http://ag.ca.gov/globalwarming/pdf/green_building.pdf.

today,[9] and the approach would appear to offer an incentive to project proponents to artificially inflate the hypothetical project to show that the proposed project is, by comparison, GHG-efficient.[10]

Will operation of the threshold allow projects with large total GHG emissions to avoid environmental review? What evidence supports such a result?

It appears that any project employing certain, as of yet unidentified, mitigation measures would be considered to not be significant, regardless of the project's total GHG emissions, which could be very large. For instance, under the Air District's proposal, it would appear that even a new development on the scale of a small city would be considered to not have a significant GHG impact and would not have to undertake further mitigation, provided it employs the specified energy efficiency and transportation measures. This would be true even if the new development emitted hundreds of thousands of tons of GHG each year, and even though other feasible measures might exist to reduce those impacts.[11] The Staff Report has not supplied scientific or quantitative support for the conclusion that such a large-emitting project, even if it earned 29 "points," would not have a significant effect on the environment.

Will the threshold benefit lead agencies in their determinations of significance?

For the reasons set forth above, we fear that the recommended approach in its current form may unnecessarily subject lead agencies that follow them to CEQA litigation. This would be detrimental not only to the lead agencies, but to the many project proponents who may face unnecessary delay and legal uncertainty.[12]

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[9] The appropriate baseline under CEQA is not a hypothetical future project, but rather existing physical conditions. (Cal. Code Regs., tit. 14, § 15126.2, subd. (a).)

[10] A detailed analysis of the proposed amendments to Rule 2301 (emissions reduction credit banking) is beyond the scope of this letter. It is important, however, that any such plan comply with CEQA's requirements for additionality. As the most recent draft of the proposed CEQA Guidelines notes, only "[r]eductions in emissions that are not otherwise required may constitute mitigation pursuant to this subdivision." Proposed Cal. Code Regs., tit. 14, § 15126.4, subd. (c), available at http://ceres.ca.gov/ceqa/docs/Text_of_Proposed_Changes.pdf.

[11] In the advance of a programmatic approach to addressing GHG emissions, lead agencies must examine even GHG-efficient projects with some scrutiny where total emissions are large. Once a programmatic approach is in place, the lead agency will be able to determine whether even a larger-emitting project is, or is not, consistent with the lead agency's overall strategy for reducing GHG emissions. If it is, the lead agency may be able to determine that its incremental contribution to climate change is not cumulatively considerable.

[12] The Staff Report states that "[l]ocal land-use agencies are facing increasing difficulties in addressing GHG emissions in their efforts to comply with CEQA." (Report at p. 2.) We strongly believe that this experience is not universal. In fact, many cities and counties are actively taking up their role as "essential partners" in addressing climate change (see AB 32 Scoping Plan at p. 26) by making commitments to develop local Climate Action Plans.

We support staff's continued work in this area. However, before formally endorsing or adopting any particular threshold, we recommend that the Air District consider the issues that we have raised in this letter; if warranted, evaluate the approaches currently under consideration by other districts; and, if possible, work with those districts to devise approaches that are complementary and serve CEQA's objectives.

Sincerely,

/ s /

TIMOTHY E. SULLIVAN
Deputy Attorney General

For EDMUND G. BROWN JR.
Attorney General

CALIFORNIA NATURAL RESOURCES AGENCY

FINAL STATEMENT OF REASONS FOR REGULATORY ACTION

Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97

December 2009

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CALIFORNIA NATURAL RESOURCES AGENCY
FINAL STATEMENT OF REASONS FOR REGULATORY ACTION

December 2009

INTRODUCTION

The California Natural Resources Agency ("the Resources Agency") has adopted certain amendments and additions to certain guidelines implementing the California Environmental Quality Act (Public Resources Code section 21000 *et seq*.) ("CEQA"). Specifically, these amendments implement the Legislature's directive in Public Resources Code section 21083.05 (enacted as part of SB97 (Chapter 185, Statutes 2007)). That section directs the Resources Agency to "certify and adopt guidelines prepared and developed by the Office of Planning and Research" "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions[.]" (Pub. Resources Code, § 21083.05(a)-(b).)

CEQA generally requires public agencies to review the environmental impacts of proposed projects, and, if those impacts may be significant, to consider feasible alternatives and mitigation measures that would substantially reduce significant adverse environmental effects. Section 21083 of the Public Resources Code requires the adoption of guidelines to provide public agencies and members of the public with guidance about the procedures and criteria for implementing CEQA. The guidelines required by section 21083 of the Public Resources Code are promulgated in the California Code of Regulations, title 14, sections 15000-15387 (the "Guidelines" or "State CEQA Guidelines"). Public agencies, project proponents, and third parties who wish to enforce the requirements of CEQA, rely on the Guidelines to provide a comprehensive guide on compliance with CEQA. Subdivision (f) of section 21083 requires the Resources Agency, in consultation with the Office of Planning and Research ("OPR"), to certify, adopt and amend the Guidelines at least once every two years.

Section 21083.05, as noted above, requires the promulgation of Guidelines specifically addressing analysis and mitigation of the effects of greenhouse gas emissions. The Resources Agency has adopted the following changes to the Guidelines ("Amendments") to implement that directive:

Add sections: 15064.4, 15183.5 and 15364.5.

Amend sections: 15064, 15064.7, 15065, 15086, 15093, 15125, 15126.2, 15126.4, 15130, 15150, 15183, Appendix F and Appendix G.

In addition to guidelines implementing SB97, some of the amendments listed above are non-substantive corrections.

The Resources Agency considered reasonable alternatives to the Amendments. The Resources Agency has determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 and to update the Guidelines to reflect recent case law. Thus, the Amendments add no additional substantive requirements; rather, the Guidelines merely assist lead agencies in complying with CEQA's existing requirements. The Resources Agency rejected the no action alternative because it would not respond to the Legislature's directive in SB97. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts are due to existing requirements of CEQA and not the Amendments.

The Resources Agency also initially determined that the Amendments would not have a significant adverse economic impact on business. The Resources Agency has determined that this action would have no impacts on project proponents. However, the Resources Agency is aware that certain of the statutory changes enacted by the Legislature and judicial decisions, described in greater detail below, that are reflected in the Amendments could have an economic impact on project proponents, including businesses. Among other things, project proponents could incur additional costs in assisting lead agencies to comply with CEQA's requirement for analysis of greenhouse gas emissions. However, the Amendments to the Guidelines merely reflect these legislative and judicial requirements, and the Resources Agency knows of no less costly alternative. The Amendments clarify and update the Guidelines to be consistent with legislative enactments that have modified CEQA, and recent case law interpreting it, but does not impose any new requirements. Therefore, the Amendments would not have a significant, adverse economic impact on business.

Some comments were submitted during the public comment period and during the public hearings on the Proposed Amendments suggesting that the adverse economic impacts could result. For example, some suggested that the addition of forestry resources to the Appendix G checklist may increase the regulatory burden on the agricultural industry. Others suggested that application of the Guidelines to renewable energy projects or those implementing AB32 may be counterproductive. Despite those suggestions, no evidence was presented to the Resources Agency supporting those claims. Moreover, those comments did not provide any rationale challenging the Resources Agency's position that the Proposed Amendments implement existing requirements. Therefore, having considered all of the comments submitted on the Proposed Amendments, the Resources Agency concludes that its initial determination that the proposed action will not have a significant adverse economic impact remains correct.

The Amendments do not duplicate or conflict with any federal statutes or regulations. CEQA is similar in some respects to the National Environmental Policy Act ("NEPA"), 42 U.S.C. sections 4321-4343. Federal agencies are subject to NEPA, which

requires environmental review of federal actions. State and local agencies are subject to CEQA, which requires environmental review before state and local agencies may approve or decide to undertake discretionary actions and projects in California. Although both NEPA and CEQA require an analysis of environmental impacts, the substantive and procedural requirements of the two statutes differ. Most significantly, CEQA requirements for feasible mitigation of environmental impacts exceed NEPA's mitigation provisions. A state or local agency must complete a CEQA review even for those projects for which NEPA review is also applicable, although Guidelines sections 15220-15229 allow state, local and federal agencies to coordinate review when projects are subject to both CEQA and NEPA. Because state and local agencies are subject to CEQA unless exemptions apply, and because CEQA and NEPA are not identical, guidelines for CEQA are necessary to interpret and make specific provisions of SB97 and do not duplicate the Code of Federal Regulations.

FINAL STATEMENT OF REASONS

The Administrative Procedure Act requires that an agency prepare a final statement of reasons supporting its proposed regulation. The final statement of reasons updates the information contained in the initial statement of reasons, contains final determinations as to the economic impact of the regulations, and provides summaries and responses to all comments regarding the proposed action. The initial statement of reasons, as updated and revised, are contained in full in this final statement of reasons. The summaries and responses to comments are included in the Natural Resources Agency's file of this rulemaking proceeding.

Below is a brief background on the science relating to the effects of greenhouse gas emissions, as well as the various initiatives that California is implementing to reduce those emissions. Following that background, OPR's public engagement process and the Natural Resources Agency's rulemaking process is briefly described. Next, this Final Statement of Reasons explains the purpose and necessity of each proposed change to the Guidelines. Finally, Thematic Responses, addressing the major themes that were raised in public comments, are provided.

BACKGROUND ON THE EFFECTS OF GREENHOUSE GAS EMISSIONS AND CALIFORNIA'S EFFORTS TO REDUCE THOSE EMISSIONS

This section provides a brief background on the potential effects of greenhouse gas emissions and California's efforts to reduce those emissions.

What Are Greenhouse Gases?

Certain gases in Earth's atmosphere naturally trap solar energy to maintain global average temperatures within a range suitable for terrestrial life. Those gases – which primarily include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons,

perfluorocarbons and sulfur hexafluoride – act as a greenhouse on a global scale. (Health and Safety Code, § 38505(g).) Thus, those heat-trapping gases are known as greenhouse gases ("GHG").

The Legislature defined "greenhouse gases" to include the six gases mentioned above in California's Global Warming Solutions Act. (Health & Saf. Code, § 38500 et seq.) Similarly, the U.S. EPA has found that those same six gases could be regulated under the authority of the Clean Air Act. According to the U.S. EPA:

> (1) These six greenhouse gas share common properties regarding their climate effects; (2) these six greenhouse gases have been estimated to be the primary cause of human-induced climate change, are the best understood drivers of climate change, and are expected to remain the key driver of future climate change; (3) these six greenhouse gases are the common focus of climate change science research and policy analyses and discussions; [and] (4) using the combined mix of these gases as the definition (versus an individual gas-by-gas approach) is consistent with the science, because risks and impacts associated with greenhouse gas-induced climate change are not assessed on an individual gas approach….

(EPA, Endangerment Finding, 74 Fed. Reg. 66496, 66517 (December 15, 2009).) The United Nations Framework Convention on Climate Change also addresses these six gases. (*Id*. at p. 66519.)

<u>What Causes Greenhouse Gas Emissions?</u>

The incremental contributions of GHGs from innumerable direct and indirect sources result in elevated atmospheric GHG levels. (EPA, Draft Endangerment Finding, 74 Fed. Reg. 18886, 18904 (April 24, 2009) ("cumulative emissions are responsible for the cumulative change in the stock of concentrations in the atmosphere"); see also 74 Fed. Reg. 66496, 66538 (same in Final Endangerment Finding).) Some GHG emissions occur through natural processes such as plant decomposition and wildfires. One large source of GHG emissions, for example, is wildfire on forestlands and rangelands, which release carbon as a result of material being burned. (California Board of Forestry and Fire Protection, *2008 Strategic Plan and Report to the CARB on Meeting AB32 Forestry Sector Targets* (October, 2008), at p. 2.)

Human activities, such as motor vehicle use, energy production and land development, also result in both direct and indirect emissions that contribute to highly elevated concentrations of GHGs in the atmosphere. (California Energy Commission, *Inventory of California Emissions and Sinks: 1990 to 2004* (2006).)[1] Transportation

[1] Multiple statewide emission inventories covering the same period of time may vary. This is largely due to inventories characterizing an emission source by sectors (e.g. agriculture, cement, transportation, etc.) which may not be treated the same depending on the methodology used and access to information. Thus,

alone is estimated to account for nearly 40 percent of California's GHG emissions. (California Air Resources Board, *Climate Change Proposed Scoping Plan* (2008), at p. 11 ("Scoping Plan"); California Energy Commission 2007, *2007 Integrated Energy Policy Report*, CEC-100-2007-008-CMF ("2007 IEPR") at p. 18, Figure 1-2.) Emissions attributable to transportation result largely from development that increases, rather than decreases, vehicle miles traveled: low density, unbalanced land uses separating jobs and housing, and a focus on single-occupancy vehicle travel. (California Energy Commission, The Role of Land Use In Meeting California's Energy and Climate Change Goals. (2007) at p. 9.) In approaching regulation of GHG emissions in California, for example, the California Air Resources Board ("ARB") proposes to regulate various economic sectors that are known to emit GHGs, including electric power, transportation, industrial sources, landfills, commercial and residential sectors, agriculture and forestry. (Scoping Plan, Appendix F.) With a growing population and economy, California's total GHG emissions continue to increase. As explained below, this rapid rate of increase in GHG emissions is causing a change in the composition of atmospheric gases that may cause life threatening adverse environmental consequences.

<u>What Effects May Result from Increased Greenhouse Gas Emissions?</u>

Several measurable effects, including, among others, an increase in global average temperatures have been attributed to increases in GHG emissions resulting from human activity. (Intergovernmental Panel on Climate Change, *Working Group 1 Report: The Physical Science Basis* (2001), at p. 101.) Evidence further indicates that a warmer planet may in turn lead to changes in rainfall patterns, a retreat of polar icecaps, a rise in sea level, and changes in ecosystems supporting human, animal and plant life. (U.S. Environmental Protection Agency, *Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act,* April 17, 2009 ("Technical Support Document"), at pp. ES-1 to ES-3.) Climate change is not the only effect of increased GHG emissions. Impacts to human health and ocean acidification are also attributed to increasing concentrations of GHGs in the Earth's atmosphere. (*Id*. at p. 57.)

Globally elevated concentrations of GHGs have been observed to induce a range of associated effects. For example, the effects of atmospheric warming include, but are not limited to, increased likelihood of more frequent and intense natural disasters, increased drought, and harm to agriculture, wildlife, and ecological systems. (Technical Support Document at pp. ES-1, ES-6.) According to a report prepared for the California Climate Change Center:

> Climate change is likely to affect the abundance, production, distribution, and quality of ecosystem services throughout the State of California

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two statewide emissions inventories may be different depending on the agency that created them or its intended application. The CARB is in the process of updating its statewide data and methodologies to be consistent with international and national guidelines. The typical emissions inventory covers 1990 to 2004.

> including the delivery of abundant and clean water supplies to support human consumption and wildlife, climate stabilization through carbon sequestration, the supply of fish for commercial and recreational sport fishing. For example, as described in this report, areas of the state suitable for forage production to support cattle grazing in natural areas could shift as some parts of the state become too dry to support forage and others become wetter. The ability of the State's forests to sequester carbon and support climate stabilization could be hindered as productivity decreases and fires increase. And increased water temperatures in streams due to a decrease in provision of fresh water could seriously reduce salmon reproduction and subsequently reduce the number of salmon available for commercial and recreational harvest. Also, areas of the state suitable for forage production to support cattle grazing in natural areas could shift as some parts of the state become too dry to support forage and others become wetter. All of these ecosystem services have economic value and that value and its distribution is likely to changes under a changing climate.

(Rebecca Shaw, et al., for the California Climate Change Center, *The Impact of Climate Change on California's Ecosystem Services*, March 2009, CEC-500-2009-025-D, at p. 1.)

The effects of increased GHG concentrations are already being felt in California. For example, global atmospheric changes are causing sea levels to rise. An increase of approximately 8 inches has been recorded at the Golden Gate Bridge over the past 100 years. Such sea level rise threatens low coastal areas with inundation and increased erosion. (Scoping Plan, at p. 10.)

While sea levels continue to rise, the Sierra snowpack has been shrinking. Average annual runoff from spring snowmelt has decreased 10% in the last 100 years. Because snow in the Sierra acts as a reservoir, holding winter water for use later in the year, reduced snowpack creates greater potential for summer droughts and reduced hydroelectricity generation. (Office of Environmental Health and Hazard Assessment, April, 2009, Indicators of Climate Change in California, at p. 76.) Climate change is also thought to account for changes in the timing of California's major precipitation events. As explained in a report prepared for the California Climate Change Center:

> reservoirs were designed to store only a fraction of the state's entire yearly precipitation, under the assumption that the annual mountain snowpack would melt at roughly the same time every year. During anomalously high rain or snowmelt events, reservoirs must not only store water, but also discharge excess water to avoid flooding. Water must sometimes be discharged in anticipation of large events to reduce flood risk. The dual functions of storage and flood management require reservoir managers to carefully balance factors such as precipitation, snowmelt timing, reservoir storage capacity, and demand. Even if future precipitation remains

> unchanged, shifts in snowmelt timing can affect California's water supply during the warm season due to reservoir storage capacity constraints.

(Sarah Kapnick and Alex Hall, for the California Climate Change Center, *Observed Changes in the Sierra Nevada Snowpack: Potential Causes and Concerns*, March 2009, CEC-500-2009-016-D, at p. 1.)

Climate change is also expected to increase the number and intensity of forest fires. (Technical Support Document, at p. 91; *see also* Indicators of Climate Change (2009) at p. 131.) A generally warmer climate is associated with a longer summer season, which in turn dries vegetation and fuels making ignition easier and hastens wildfire spread. (*Ibid*; see also A. L. Westerling, for the California Climate Change Center*, Climate Change, Growth and California Wildfire*, March 2009, CEC-500-2009-046-D, at pp. 1-2.) Not only do wildfires release additional carbon and increase air pollutants, but they also cause indirect effects. For example, wildfires reduce vegetative cover leading to increased water runoff, which has affected watersheds and dampens the effectiveness of California's water works infrastructure. This will degrade California's water quality and challenge water treatment operations to provide safe drinking water. Adverse health impacts from heat-related illnesses are expected with hotter temperatures, and, due to poorer air quality, lung disease, asthma, and other respiratory and circulatory problems will be exacerbated. (California Climate Action Team, Executive Summary Report to Governor Schwarzenegger and the California Legislature (2006) at pp. xii to xiii, 27.); see also Technical Support Document, at pp. ES-4, 69-71.)

<u>Why is California Involved in Greenhouse Gas Regulation?</u>

California is vulnerable to the effects of global warming, and, despite its global nature, action to curb GHG emissions is needed on a statewide level. The legislative findings in Assembly Bill 32 (Chapter 448, Statutes 2006) ("AB32"), for example, state:

> … Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.
>
> … Global warming will have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry. It will also increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the state.

(Health & Safety Code, § 38501(a), (b).) The Legislature further declared: "action taken by California to reduce emissions of greenhouse gases will have far-reaching effects by encouraging other states, the federal government, and other countries to act." (*Id*. at subd. (d).) As the world's fifteenth largest emitter of GHGs from human activity and natural sources, California is uniquely positioned to act to reduce GHGs. (Scoping Plan, at pp. 11.)

Reducing greenhouse gas emissions is a necessary response to the threats posed by climate change. Efforts to reduce emissions may result in other significant benefits as well. Governor Schwarzenegger laid out the case for action to reduce greenhouse gas emissions in Executive Order S-3-05:

> … California-based companies and companies with significant activities in California have taken leadership roles by reducing greenhouse gas (GHG) emissions, including carbon dioxide, methane, nitrous oxide and hydrofluorocarbons, related to their operations and developing products that will reduce GHG emissions; …
>
> … [C]ompanies that have reduced GHG emissions by 25 percent to 70 percent have lowered operating costs and increased profits by billions of dollars; …
>
> … [T]echnologies that reduce greenhouse gas emissions are increasingly in demand in the worldwide marketplace, and California companies investing in these technologies are well-positioned to profit from this demand, thereby boosting California's economy, creating more jobs and providing increased tax revenue; …
>
> … [M]any of the technologies that reduce greenhouse gas emissions also generate operating cost savings to consumers who spend a portion of the savings across a variety of sectors of the economy; this increased spending creates jobs and an overall benefit to the statewide economy.

Thus, the Governor, Legislature and private sector have concluded that action to reduce greenhouse gas emissions is necessary and beneficial for the State.

<u>What is California Doing to Reduce its Greenhouse Gas Emissions?</u>

Action to curb greenhouse gas emissions is taking place on many fronts. As described above, the private sector has already taken important steps to increase efficiency and lower costs associated with such emissions. Many local governments have also adopted, or are currently developing, various plans and programs designed to reduce community-wide GHG emissions. (Office of Planning and Research, *The California Planner's Book of Lists* (January 2009) ("Book of Lists"), at pp. 92-100; see also Scoping Plan, at p. 26.) Due to its potential vulnerability to the effects of GHG

emissions, and the wide variety of GHG emissions sources within its borders, California has enacted several laws and programs designed to reduce the State's GHG emissions. Several major legislative initiatives are described below.

AB32 – The Global Warming Solutions Act

Assembly Bill 32 (Chapter 448, Statutes 2006) is a key piece of California's effort to reduce its GHG emissions. AB32 requires the California Air Resources Board ("ARB") to establish regulations designed to reduce California's GHG emissions to 1990 levels by 2020. (Health & Safety Code, § 38550.) On December 11, 2008, ARB adopted its Scoping Plan, setting forth a framework for future regulatory action on how California will achieve that goal through sector-by-sector regulation. (ARB, Resolution No. 08-47; see also Health & Safety Code, § 38561.) ARB must adopt, no later than January 1, 2012, rules and regulations to implement the GHG emissions reductions envisioned in the Scoping Plan. (Health & Safety Code, § 38562.)

The AB32 Scoping Plan outlines a set of actions designed to reduce overall GHG emissions in California to 1990 levels by 2020. The Scoping Plan presents GHG emission reduction strategies that combine regulatory approaches, voluntary measures, fees, policies, and programs. Reduction strategies are expected to evolve as technologies develop and progress toward the State's goal is monitored. Thus, the Scoping Plan sets forth the outline of California's strategy to reduce GHG emissions on a statewide basis.

SB375

As noted above, nearly 40 percent of California's GHG emissions come from the State's transportation sector. (Chapter 728, Statutes 2007, § 1(a).) Technology innovation and lower-carbon fuels alone will not reduce transportation-related emissions sufficiently for California to reach the reduction goals set out in AB32. (*Id*. at § 1(c).) Therefore, in SB375, California enacted several measures to reduce vehicular emissions through land-use planning.

Specifically, SB375 requires ARB to develop "greenhouse gas emission reduction targets for the automobile and light truck sector" for each metropolitan planning organization (MPO). (Gov. Code, § 65080(b)(2)(A).) Once that target is set, each MPO must develop a sustainable communities strategy (SCS), as part of its regional transportation plan, that will set forth a development pattern that will achieve the reduction target approved by the ARB. (*Id*. at subd. (b)(2)(B).) The MPO's transportation planning activities must be consistent with the adopted SCS. (*Id*. at subd. (b).) While an SCS does not supersede a local government's land use authority, SB375 created an exemption from CEQA for local transit-oriented residential projects that are consistent with the applicable SCS as an incentive. (*Id*. at subd. (b)(2)(J); Pub. Resources Code, § 21155.1.)

CEQA and SB97

While AB32 and SB375 target specific types of emissions from specific sectors, the California Environmental Quality Act ("CEQA") regulates nearly all governmental activities and approvals. CEQA generally requires that a lead agency analyze the potential adverse environmental impacts of their decisions, and, if those impacts are determined to be significant, to avoid those impacts through mitigation or project alternatives. As awareness of the causes and effects of GHG emissions has increased, those effects began to be addressed in environmental analyses on a project-level basis. Federal courts, moreover, have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Uncertainty developed, however, among public agencies regarding how GHG emissions should be analyzed in environmental documents prepared pursuant to CEQA.

To provide greater certainty to lead agencies, Governor Schwarzenegger signed Senate Bill 97 (Chapter 148, Statutes 2007). (Governor Schwarzenegger's Signing Message, SB 97.) That statute, among other things, constitutes the Legislature's recognition that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. Pursuant to SB97, OPR developed, and the Resources Agency will adopt, amendments to the State CEQA Guidelines to address analysis and mitigation of the potential effects of GHG emissions in CEQA documents and processes. As new information or criteria established by ARB in the AB 32 process becomes available, OPR and the Resources Agency will periodically update the CEQA Guidelines to account for that new information. This rulemaking package responds to the Legislature's directive in SB97.

Questions concerning the relationship between AB32, SB375 and CEQA were raised in public comments on the Proposed Amendments. The Resources Agency developed responses to those questions in the Responses to Comments, which are appended to this Final Statement of Reasons. Further discussion of the relationship between AB32, SB375 and CEQA is provided in the Thematic Responses at the end of this Final Statement of Reasons.

BACKGROUND ON THE DEVELOPMENT OF THE PROPOSED AMENDMENTS

OPR developed the Proposed Amendments pursuant to Public Resources Code section 21083.05, which states in part:

> On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption.

In developing the Proposed Amendments, OPR actively sought the input, advice, and assistance of numerous interested parties and stakeholder groups. (Letter from OPR Director, Cynthia Bryant, to Secretary for the Natural Resources Agency, Mike Chrisman, April 13, 2009.) Specifically, OPR met with representatives of numerous agencies and organizations to discuss the perspectives of the business community, the environmental community, local governments, non-governmental organizations, state agencies, public health officials, CEQA practitioners and legal experts. In addition, OPR took advantage of numerous regional and statewide conferences to raise awareness about CEQA and GHG emissions among diverse audiences and to seek their input. These activities satisfy the provisions of Government Code section 11346.45 which require early public involvement in complex proposals.

After publishing a preliminary draft, on January 8, 2009, OPR continued to conduct extensive public outreach, including two public workshops, to receive input on the Preliminary Amendments. Both public workshops were well attended, drawing over two hundred participants representing various California business interests, environmental organizations, local governments, attorneys and consultants. In addition to oral comments at its workshops, OPR received over eighty written comment letters.

Some comments suggested additional amendments to the CEQA Guidelines. Other comments sought clarification of the language in the preliminary amendments. OPR incorporated those suggestions and clarifications to the extent possible and appropriate into its April 13, 2009, submittal to the Resources Agency. Some suggestions were not appropriate for inclusion, however, due to conflict with existing statutory authority and/or case law. For example, some comments submitted to OPR during its public workshops indicated that the Guidelines should be addressed to "Climate Change" rather than just the effects of GHG emissions. The focus in the Guidelines on GHG emissions is appropriate for at least three reasons.

First, the Legislative authorization for the Proposed Amendments refers specifically to guidelines on the "mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions." (Pub. Resources Code, § 21083.05.) Had the Legislature intended the Guidelines to address climate change or global warming specifically, it presumably would have so indicated. Second, the precise "effect" of GHG emissions from a project is a factual matter for the lead agency to determine. Such effects may include "climate change," "global warming" and other changes in the physical environment (increased ocean acidity or sea-level rise, for example). (EPA, Draft Endangerment Finding, 74 Fed. Reg. 18886 (April 24, 2009), Technical Support Document, at pp. ES-2 to ES-3; see further discussion at pages 4-5, above.) Thus, rather than limit analysis to a particular effect, the proposed Guidelines on GHG emissions are consistent with the treatment of air pollutants in the existing Appendix G, which focus largely on the concentration of pollutants. (See, e.g., existing State CEQA Guidelines, Appendix G, III.d.) Third, the focus in a cumulative impacts analysis is "whether any additional effect caused by the proposed project should be considered significant given the existing cumulative effect." (*CBE*, *supra*, 103 Cal. App. 4th at 118.)

Thus, the Proposed Amendments appropriately focus on a project's potential incremental contribution of GHGs rather than on the potential effect itself (i.e., climate change). Notably, however, the Proposed Amendments expressly incorporate the fair argument standard. (See, e.g., proposed Section 15064.4(b)(3).) Thus, if there is any substantial evidence supporting a fair argument that a project's GHG emissions may result in any adverse impacts, including climate change, the lead agency must resolve that concern in an EIR.

THE NATURAL RESOURCES AGENCY'S RULEMAKING PROCESS

The Natural Resources Agency commenced the rulemaking process on the Amendments on July 3, 2009, by publishing its Notice of Proposed Action in the California Regulatory Notice Register. (2009 No. 27-Z.) In addition, the Notice of Proposed Action was mailed to over 640 interested parties, and notices were e-mailed to those parties that requested electronic notification. The Natural Resources Agency also posted the Notice, Proposed Text and Initial Statement of Reasons on its website, and invited public comments on the proposed amendments between July 3, 2009, and August 20, 2009. Public hearings were held on August 18, 2009, and August 20, 2009, in Los Angeles and Sacramento, respectively, at which verbal and written comments and presentations were accepted. To ensure that all interested parties were able to provide written comments if they so chose, the Natural Resources Agency extended the public comment period to August 27, 2009. The Natural Resources Agency received over 80 comment letters on the proposed amendments.

Following review of all public comments received during the public review period and at the public hearings, the Natural Resources Agency determined that further revisions to the proposed text were appropriate. It, therefore, mailed a Notice of Proposed Changes to all hearing attendees and all persons that requested notice. Electronic notices were e-mailed to those requesting such notification. The Notice of Proposed Changes, Revised Text of the proposed amendments, comment letters, and all prior rulemaking documents were posted on the Natural Resources Agency's website. Since all revisions to the proposed amendments were sufficiently related to the originally noticed text, public comment was invited between October 23, 2009, and November 10, 2009. The Natural Resources Agency received over 20 comment letters on the revisions to the proposed amendments.

Following the close of the second public comment period, the Natural Resources Agency reviewed and considered all written comments. The Secretary for Natural Resources determined that, other than two non-substantive, clarifying changes in sections 15126.2(a) and 15126.4(c), described below, no further revisions to the proposed amendments was necessary. Secretary Mike Chrisman adopted the amendments described in this Final Statement of Reasons in December 2009.

Throughout the rulemaking process, staff of the Natural Resources Agency met with all interested parties requesting in person meetings. It also attended and presented at various conferences hosted by, among others, the California Chapter of

the American Planning Association, the California State Bar's Environmental Law Conference, County Counsels Association of California, several county bar association meetings and local government forums to provide updates on the proposed amendments and to ensure widespread participation in the Natural Resources Agency's rulemaking process.

Copies of all relevant rulemaking documents, including hearing transcripts, notices, and agendas, are included in the record of proceedings.

ADOPTED AMENDMENTS

Analysis of GHG emissions in a CEQA document presents unique challenges to lead agencies. Such analysis must be consistent with existing CEQA principles, however. Therefore, the Amendments comprise relatively modest changes to various portions of the existing CEQA Guidelines. Modifications address those issues where analysis of GHG emissions may differ in some respects from more traditional CEQA analysis. Other modifications clarify existing law that may apply both to analysis of GHG emissions as well as more traditional CEQA analyses. The incremental approach in the Amendments is consistent with Public Resources Code section 21083(f), which directs OPR and the Resources Agency to regularly review the Guidelines and propose amendments as necessary.

The Legislature expressly left development of the Guidelines to the discretion of OPR and the Resources Agency. That discretion is governed by the Government Code, which requires that any administrative regulations be consistent, and not conflict, with existing statutory authority. (Gov. Code, § 11342.2.) Thus, the Resources Agency intends, as did OPR, the Amendments to incorporate existing law, and where necessary "to implement, interpret, make specific or otherwise carry out the provisions of the statute." (*Ibid*.) In addition, the Guidelines must be "reasonably necessary" to carry out a legislative directive. (*Ibid*.) Because the determination of "reasonable necessity" implicates an agency's expertise, courts will defer to an agency's findings of necessity unless the action is arbitrary, capricious or without reasonable basis. (*Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 109 ("*CBE*").)

The Amendments include changes to or additions of fourteen sections of the existing Guidelines, as well as changes to Appendices F (Energy Conservation) and G (Environmental Checklist Form). The Amendments are discussed below.

SECTION 15064. DETERMINING THE SIGNIFICANCE OF THE ENVIRONMENTAL EFFECTS CAUSED BY A PROJECT.

Specific Purposes of the Amendment

Amendments are proposed to two subdivisions of the existing section 15064. The first, to subdivision (f)(5), is a grammatical correction that qualifies as a "change without regulatory effect" pursuant to section 100(a)(4) of the Office of Administrative Law's regulations governing the rulemaking process. (Cal. Code Regs., tit. 1, § 100(a)(4).) The second set of amendments is to subdivision (h)(3). The latter amendments are described in detail below.

Cumulative Impacts

Existing subdivision (h)(3) allows an agency to find that a project's potential cumulative impacts are less than significant due to compliance with requirements in a plan or mitigation program. (*CBE, supra,* 103 Cal.App.4th at 111 ("a lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and regulation").) In effect, that section creates a rebuttable presumption that compliance with certain plans and regulations reduces a project's potential incremental contribution to a cumulative effect to a level that is not cumulatively considerable.

The existing Guidelines text includes several criteria that define which plans or programs may create such a presumption. To satisfy those criteria, a plan or program must: (1) have been previously approved, (2) contain specific requirements that avoid or substantially lessen the cumulative problem within a defined geographic area, and (3) be either specified in law or approved by a public agency with jurisdiction over affected resources. These criteria ensure that the presumption applies only where plans or programs have undergone public scrutiny and include binding requirements to address a cumulative problem. The existing text lists three types of plans as examples that may be relied upon for a cumulative analysis. The word "e.g." in the existing text indicates, however, that the list is not exclusive. The Third District Court of Appeal upheld what is now section 15064(h)(3) in the *CBE* decision. (*CBE*, *supra*, 103 Cal.App.4th at 115-116.)

Use of Plans and Regulations in a Cumulative Impacts Analysis

The Proposed Amendments include two changes to subdivision (h)(3). First, the Amendments would add several plans and regulations to the list of examples. The Proposed Amendments would add "habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions" to the list of plans and programs that may be considered in a cumulative

impacts analysis. As explained below, the Resources Agency finds that the added plans and regulations satisfy the criteria in the existing text.

"Habitat conservation plans" are defined in the federal Endangered Species Act, and typically include specific requirements to protect listed species within a defined geographic area. (16 U.S.C. § 1539.) Though a habitat conservation plan ("HCP") may be prepared to address the impacts of one particular project, HCPs may also be, and often have been, prepared to address the impacts of cumulative development within a defined area. (Fish and Wildlife Service and National Marine Fisheries Service, Habitat Conservation Planning and Incidental Take Permit Processing Handbook (November 4, 1996), at pp. 1-6 to 1-7, 1-14 to 1-15.) Most HCPs, other than "low effect HCPs," will also likely need to undergo environmental review under the National Environmental Policy Act. (*Id*. at Ch. 5.) In such cases, an applicable HCP may appropriately be used in a cumulative impacts analysis as described in subdivision (h)(3).

"Natural community conservation plans" ("NCCPs") are defined in the California Natural Community Conservation Planning Act. (Fish & G. Code, §§ 2800 et seq.) The purpose of an NCCP is to conserve natural communities at the ecosystem scale while accommodating compatible land uses. An NCCP includes, among others, measures to avoid or minimize impacts to natural communities, conservation obligations, and compliance monitoring. An NCCP is adopted by the Department of Fish and Game as well as local agencies with land use authority in a defined area. As discretionary acts of public agencies, NCCPs must undergo environmental review pursuant to CEQA. Thus, NCCPs satisfy the criteria in existing subdivision (h)(3).

The Legislature recognized local GHG planning efforts in Health & Safety Code section 38561(c) by directing the California Air Resources Board (ARB) to consider such programs in developing its Scoping Plan. Greenhouse gas emission reduction plans are not currently specified in law. However, the ARB's Climate Change Scoping Plan includes a recommended reduction target for local governments and community-level emissions of 15 percent by 2020. (California Air Resources Board, *Climate Change Proposed Scoping Plan* (2008), at p. 27 ("Scoping Plan").) The Scoping Plan also recognized the important role local greenhouse gas reduction plans would play in achieving statewide reductions. The Scoping Plan itself suggests elements that such plans should include. (Scoping Plan, Appendix C, at p. C-49.)

Independent of the Scoping Plan, many local governments have adopted, or are currently developing, various plans and programs designed to curb GHG emissions. (Office of Planning and Research, *The California Planner's Book of Lists* (January 2009) ("Book of Lists"), at pp. 92-100; see also Scoping Plan, at p. 26.) Other public agencies, such as school districts and public universities, may also adopt greenhouse gas reduction plans to govern their own activities. Provided that such plans contain specific requirements with respect to resources that are within the agency's jurisdiction to avoid or substantially lessen the agency's contributions to GHG emissions, both from its own projects and from private projects it has approved or will approve, such plans may be appropriately relied on in a cumulative impacts analysis. Additional guidance regarding

the characteristics of greenhouse gas reduction plans that may be used in this context is provided in the proposed Section 15183.5, and is explained in greater detail below. Thus, greenhouse gas reduction plans satisfying such criteria would satisfy the criteria in existing subdivision (h)(3).

Finally, requirements addressing a cumulative problem may also take the form of regulations. AB 32, for example, requires ARB to adopt regulations that achieve the maximum technologically feasible and cost effective GHG reductions to reach the adopted state-wide emissions limit. (Health & Safety Code, § 38560.) Pursuant to Health and Safety Code section 38560(b), ARB will adopt a first set of regulations by January 1, 2010. Thus, a lead agency may consider whether ARB's GHG reduction regulations satisfy the criteria in existing subdivision (h)(3).

While section 15064(h)(3) creates a presumption that, where a plan, program or regulation governs a project's GHG emissions, and the project complies with those requirements, those emissions are not cumulatively considerable. That presumption is rebuttable, however. The Proposed Amendments do not alter the standard, reflected in the existing Guidelines, that if substantial evidence supports a fair argument that, despite compliance with the requirements in a plan or program, a project may have a significant effect on the environment, then an EIR must be prepared.

Demonstrating How the Plan, Program or Regulation Addresses Cumulative Impacts

In addition to augmenting the list of plans, programs and regulations that give rise to the presumption that a project's contribution is not cumulatively considerable, the Amendments also contain explanatory language designed to ensure that the plan or regulation relied on in a cumulative impacts analysis actually addresses the cumulative effect of concern for the particular project under consideration. This language is necessary to avoid misapplication of subdivision (h)(3). For example, shortly after ARB identified early action items, some lead agencies determined that a project's contribution of GHG emissions was not cumulatively considerable because the project was not inconsistent with the early action items. (See, e.g., Tentative Ruling, San Bernardino County Superior Court Case Nos. 810232, 800607 (ruling that consistency with CAT Strategies alone does not provide sufficient information about the potential impacts of a project); see also California Environmental Protection Agency, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, March 2006, at pp. 39-63.) Such an analysis, however, would fail to account for emissions that are not addressed by the early action items. Because those early action items largely addressed industrial-type emissions, consistency with the early action items would have little relevance for a residential subdivision project. Likewise, consistency with plans that are purely aspirational (i.e., those that include only unenforceable goals without mandatory reduction measures), and provide no assurance that emissions within the area governed by the plan will actually address the cumulative problem, may not achieve the level of protection necessary to give rise to this subdivision's presumption. Thus, by requiring that lead agencies draw a link between the project and the specific provisions of a binding plan or regulation, section 15064(h)(3) would ensure that

cumulative effects of the project are actually addressed by the plan or regulation in question.

Demonstrating that compliance with a plan addresses a cumulative problem is already impliedly required by CEQA. For example, an initial study must include sufficient information to support its conclusions. (State CEQA Guidelines, § 15063(d)(3).) Similarly, section 15128 requires a lead agency to explain briefly the reasons that an impact is determined to be less than significant and therefore was not analyzed in an EIR. The added sentence, therefore, reflects existing law and is necessary to ensure that plans are not misapplied in a CEQA analysis.

Policy Goals

Inclusion of additional plans and programs to the list of examples supports two policy goals. First, an expanded list promotes integration of various regulatory mechanisms to reduce duplication. (See, e.g., Pub. Resources Code, § 21003(a) (state policy is that "[l]ocal agencies integrate the requirements of [CEQA] with planning and environmental review procedures otherwise required by law or by local practice …"), (f) ("[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment").) Second, the addition of GHG emissions reduction plans and regulations for the reduction of GHG emissions reflects the view of both the OPR and the Resources Agency that the effects of GHG emissions resulting from individual projects are best addressed and mitigated at a programmatic level.

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) The Guidelines must address the determination of whether the "possible effects of a project are individually limited but cumulatively considerable." (*Id*. at § 21083(b)(2).) Due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis. (See, e.g., EPA, Draft Endangerment Finding, 74 Fed. Reg. 18886, 18904 (April 24, 2009) ("cumulative emissions are responsible for the cumulative change in the stock of concentrations in the atmosphere"); California Air Pollution Control Officers Association, *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* (January 2008) ("CAPCOA White Paper"), at p. 35 ("GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective").) Existing section 15064(h) governs the analysis of cumulative effects in an initial study. The proposed amendments to section 15064(h)(3), on determining the significance of cumulative impacts in an initial study, are therefore necessary to carry out this legislative directive.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and that the Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and case law interpreting CEQA for determining the significance of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).)[2] Thus, the Amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

[2] Federal court decisions interpreting NEPA is persuasive authority in CEQA cases. (*Western Placer Citizens for an Ag. & Rur. Env. v. County of Placer* (2006) 144 Cal.App. 4th 890, 902.)

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the amendments to this section are intended to reduce the costs of environmental review on lead agencies and project applicants by encouraging the use of existing environmental analysis where available. (Pub. Resources Code, § 21003(d) (use information in existing EIRs in order to reduce duplication), (f) (environmental review should proceed in the most efficient manner possible).)

SECTION 15064.4. DETERMINING THE SIGNIFICANCE OF IMPACTS FROM GREENHOUSE GAS EMISSIONS

Specific Purposes of the Amendment

A key component of environmental analysis under CEQA is the determination of significance. (Pub. Resources Code § 21002; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1106-07.) Guidelines on the analysis of GHG emissions must, therefore, include provisions on the determination of significance of those emissions.

New section 15064.4, on the determination of significance of GHG emissions, reflects the existing CEQA principle that there is no iron-clad definition of "significance." (State CEQA Guidelines, § 15064(b); *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm*. (2001) 91 Cal.App.4th 1344, 1380-81 ("*Berkeley Jets*").) Accordingly, lead agencies must use their best efforts to investigate and disclose all that they reasonably can regarding a project's potential adverse impacts. (*Ibid*; *see also* State CEQA Guidelines, § 15144.) Section 15064.4 is designed to assist lead agencies in performing that required investigation. In particular, it provides that lead agencies should quantify GHG emissions where quantification is possible and will assist in the determination of significance, or perform a qualitative analysis, or both as appropriate in the context of the particular project, in order to determine the amount, types and sources of GHG emissions resulting from the project. Regardless of the type of analysis performed, the analysis must be based "to the extent possible on scientific and factual data." In addition, lead agencies should also consider several factors. The specific provisions of section 15064.4 are discussed below.

<u>Quantitative Analysis</u>

Subdivision (a) of section 15064.4 states that lead agencies should calculate or estimate the GHG emissions resulting from the proposed project. This directive reflects the holding in the *Berkeley Jets* case, which required a Port Commission to quantify emissions of toxic air contaminants even in the absence of a universally accepted methodology for doing so. (*Berkeley Jets*, *supra*, 91 Cal.App.4th at p. 1370 ("The fact that a single methodology does not currently exist that would provide the Port with a precise, or 'universally accepted,' quantification of the human health risk from TAC exposure does not excuse the preparation of any health risk assessment--it requires the Port to do the necessary work to educate itself about the different methodologies that <u>are</u> available") (emphasis in original).) That case also required quantitative analysis of single-event noise, even though the applicable thresholds were expressed as cumulative noise levels. (*Id*. at 1382.) Quantification was required in that context in order to identify existing noise levels, the number of additional flights, the frequency of those flights, the degree to which the increased flights would cause increased noise levels at a given location, and ultimately, the community's reaction to that noise. (*Ibid*.) In other words, quantification would assist the lead agency in determining whether the increased noise would be potentially significant. (*Ibid*. ("CEQA requires that the Port

and the inquiring public obtain the technical information needed to assess whether the ADP will merely inconvenience the Airport's nearby residents or damn them to a somnambulate-like existence"); see also *Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109 ("in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect").)

With the foregoing principles in mind, the quantification called for in proposed section 15064.4(a)(1) is reasonably necessary to ensure an adequate analysis of GHG emissions using available data and tools, in accordance with Public Resources Code Section 21083.05. Even where a lead agency finds that no numeric threshold of significance applies to a proposed project, the holdings in the *Berkeley Jets* and *Protect the Historic Amador Waterways* cases, described above, require quantification of emissions if such quantification will assist in determining the significance of those emissions. OPR and the Resources Agency find that quantification will, in many cases, assist in the determination of significance, as explained below. (State CEQA Guidelines, § 15142 ("An EIR shall be prepared using an interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the consideration of qualitative as well as quantitative factors").)

First, quantification of GHG emissions is possible for a wide range of projects using currently available tools. Modeling capabilities have improved to allow quantification of emissions from various sources and at various geographic scales. (Office of Planning and Research, *CEQA and Climate Change: Addressing Climate Change Through the California Environmental Quality Act Review*, Attachment 2: Technical Resources/Modeling Tools to Estimate GHG Emissions (June 2008); CAPCOA White Paper, at pp. 59-78.) Moreover, one of the models that can be used in a GHG analysis, URBEMIS, is already widely used in CEQA air quality analyses. (CAPCOA White Paper, at p. 59.) Second, quantification informs the qualitative factors listed in proposed section 15064.4(b). Third, quantification indicates to the lead agency, and the public, whether emissions reductions are possible, and if so, from which sources. Thus, if quantification reveals that a substantial portion of a project's emissions result from energy use, a lead agency may consider whether design changes could reduce the project's energy demand.

Proposed section 15064.4(a)(1) also reflects existing case law that reserves for lead agencies the precise methodology to be used in a CEQA analysis. (*See*, *e.g.*, *Eureka Citizens for Responsible Gov't v. City of Eureka* (2007) 147 Cal.App.4th 357, 371-373.) As indicated above, a wide variety of models exist that could be used in a GHG analysis. (CAPCOA White Paper, at pp. 59-78.) Further, not every model will be appropriate for every project. For example, URBEMIS may be an appropriate tool to analyze a typical residential subdivision or commercial use project, but some public utilities projects, such as waste-water treatment plants, may require more specialized models to accurately estimate emissions. (*Id*. at pp. 60-65.) The requirement to

disclose any limitations in the model or methodology chosen also reflects the standard for adequacy of EIRs in existing State CEQA Guidelines section 15151.

Qualitative and Performance Standard Based Analysis

As explained in greater detail below in the Thematic Responses, CEQA does not require quantification of emissions in every instance. If the lead agency determines that quantification is not possible, would not yield information that would assist in analyzing the project's impacts and determining the significance of the GHG emissions, or is not appropriate in the context of the particular project, section 15064.4(a) would allow the lead agency to consider qualitative factors or performance standards. Consideration of qualitative factors is appropriate for several reasons. First, CEQA directs lead agencies to consider qualitative factors. (Pub. Resources Code, § 21001(g) (CEQA's purpose includes to: "require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs and to consider alternatives to proposed actions affecting the environment").) Second, existing section 15064.7 of the State CEQA Guidelines indicate that thresholds of significance may be qualitative, which implies that a determination of significance without a threshold could also evaluate qualitative factors. Third, the existing CEQA Guidelines state that the determination of significance requires a lead agency to use its judgment based on *all* relevant information. (State CEQA Guidelines, § 15064(b); see also *id*. at §§ 15064.7 (thresholds may be qualitative), 15142 (analysis should be interdisciplinary and both qualitative and quantitative).)

Subdivision (a) would also allow a lead agency to rely on performance-based standards to assist in the determination of significance. Just as with quantification, the purpose of engaging in a qualitative or performance standard based analysis is to develop information relevant to a significance determination. Several examples exist of the types of performance standards that might appropriately be used in determining the significance of greenhouse gas emissions. Proposed section 15183.5(b)(1)(D), for example, contemplates that a plan for the reduction of greenhouse gas emissions may contain performance based standards. Where such standards are developed as part of such a plan, a lead agency would have evidence indicating that compliance with such standards would indicate that the impact of greenhouse gas emissions would be less than significant. Further, in adopting SB375, the Legislature acknowledged that regional transportation plans, and the environmental impact reports prepared to analyze those plans, may contain performance standards that would apply to transit priority projects. (See, e.g., Public Resources Code, § 21155.2.) Other potential examples include the Bay Area Air Quality Management District's proposed Best Management Practices for Construction Greenhouse Gas Emissions (calling for use of alternative fuels, local building materials and recycling), and the California Public Utilities Commission's Performance Standard for Power Plans (requiring emissions no greater than a combined cycle gas turbine plant). Compliance with such standards may be relevant to the significance determination, when considered in conjunction with the

project's total projected emissions. Section 15064.4(a) was revised in response to comments to clarify that lead agencies may rely on quantitative or qualitative analyses, or both, in part to emphasize that qualitative analyses and performance standards may be useful supplements to a quantitative analysis.

Similar to use of a significance threshold, a lead agency must exercise care to ensure that performance standards do not replace a full analysis of all potential emissions. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109 ("in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect").) For example, while a Platinum LEED® rating could assist a lead agency in determining whether emissions related to a building's energy use may be significant, that performance standard may not reveal sufficient information to evaluate transportation-related emissions associated with that proposed project.

As indicated above, even a qualitative analysis must be based to the extent possible on scientific and factual data. Further, the type of analysis that is required will depend on the context of a particular project. Given the multitude of different project types and sizes, and different agencies subject to CEQA, the CEQA Guidelines, which are general by necessity, cannot specify precisely when a quantitative analysis may be required or a qualitative analysis may be appropriate. The following hypothetical examples may illustrate, however, how section 15064.4(a) could operate:

> **Project 1**: a small habitat restoration project is proposed in a remote part of California. Workers would drive to the site where they would camp for the duration of the project. Some gas-powered tools and machinery may be required. Cleared brush would either be burned or would decay naturally.
>
> **Project 2**: a large commercial development is proposed in an suburban context. Heavy-duty machinery would be required in various construction phases spanning many months. Following construction, the development would rely on electricity, water and wastewater services from the local utilities. Natural gas burners would be used on site. The development would employ several hundred workers and attract thousands of customers daily. A traffic study has been prepared for the project. The local air quality management district's guidance document recommends that projects of similar size and character should use of URBEMIS, or another similar model, to estimate the air quality impacts of the development.

In the context of Project 2 a quantitative analysis would likely be appropriate. The URBEMIS model, which would likely be used to analyze other emissions, could also be used to estimate emissions from both project-related transportation and on-site indirect emissions (landscaping, hot-water heaters, etc.) Modeling is typically done for projects of like size and character. Other models are readily available to estimate emissions associated with utility use. In the context of Project 2, a lead agency may

find it difficult to demonstrate a good faith effort through a purely qualitative analysis. (See, e.g., *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm*. (2001) 91 Cal.App.4th 1344, 1370.)

In the context of Project 1, however, a qualitative analysis would likely be appropriate. Project 1's emissions are not easily modeled, and the Project is small in scale. While it may be technically possible, quantification of the emissions may not reveal any additional information that indicates the significance of those emissions or how they may be reduced that could not be provided in a qualitative assessment of emissions sources. (See, e.g., Public Resources Code, § 21003(f) ("public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment").)

Factors Potentially Indicating Significance

The qualitative factors listed in the proposed section 15064.4(b) are intended to assist lead agencies in collecting and considering information relevant to a project's incremental contribution of GHG emissions and the overall context of such emissions. Notably, while subdivision (b) provides a list of factors that should be considered by public agencies in determining the significance of a project's GHG emissions, other factors can and should be considered as appropriate.

Determine Whether Emissions Will Increase or Decrease

The first factor in subdivision (b), for example, asks lead agencies to consider whether the project will result in an increase or decrease in different types of GHG emissions relative to the existing environmental setting. All project components, including construction and operation, equipment and energy use, and development phases must be considered in this analysis. (State CEQA Guidelines, § 15378 (project includes "the whole of the action").) For example, a mass transit project may involve GHG emissions during its construction phase, but substantial evidence may also indicate that it will cause existing commuters to switch from single-occupant vehicles to mass transit use. Operation of such a project may ultimately result in a decrease in GHG emissions. Such analysis, provided that it is supported with substantial evidence and fully accounts for all project emissions, may support a lead agency's determination that GHG emissions associated with a project are not cumulatively considerable.

This section's reference to the "existing environmental setting" reflects existing law requiring that impacts be compared to the environment as it currently exists. (State CEQA Guidelines, § 15125.) This clarification is necessary to avoid a comparison of the project against a "business as usual" scenario as defined by ARB in the Scoping Plan. Such an approach would confuse "business as usual" projections used in ARB's Scoping Plan with CEQA's separate requirement of analyzing project effects in

comparison to the environmental baseline. (*Compare* Scoping Plan, at p. 9 ("The foundation of the Proposed Scoping Plan's strategy is a set of measures that will cut greenhouse gas emissions by nearly 30 percent by the year 2020 as compared to business as usual") *with Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1278 (existing environmental conditions normally constitute the baseline for environmental analysis); see also *Center for Bio. Diversity v. City of Desert Hot Springs*, Riverside Sup. Ct. Case No. RIC464585 (August 6, 2008) (rejecting argument that a large subdivision project would have a "beneficial impact on CO2 emissions" because the homes would be more energy efficient and located near relatively uncongested freeways).) Business as usual may be relevant, however, in the discussion of the "no project alternative" in an EIR. (State CEQA Guidelines, § 15126.6(e)(2) (no project alternative should describe what would reasonably be expected to occur in the future in the absence of the project).)

Notably, section 15064.4(b)(1) is not intended to imply a zero net emissions threshold of significance. As case law makes clear, there is no "one molecule rule" in CEQA. (CBE, *supra*, 103 Cal.App.4th at 120.)

Thresholds of Significance

The second factor in subdivision (b) asks whether a project exceeds a threshold of significance for GHG emissions. Section 21000(d) of the Public Resources Code expressly directs public agencies to identify whether there are any critical thresholds for health and safety to identify those areas where the capacity of the environment is limited. A threshold is an "identifiable quantitative, qualitative or performance level" at which impacts are normally less than significant. (State CEQA Guidelines, § 15064.7(a); *see also Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1107.) Lead agencies may rely on thresholds developed by other agencies that have particular expertise in the subject matter under consideration. (*See*, *e.g.*, State CEQA Guidelines, Appendix G, Sample Question III ("[w]here available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make" a significance determination).) For example, a lead agency may look to standards included in a Basin Plan to assist in the determination of whether water quality impacts are significant. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1107 ("[s]uch thresholds can be drawn from existing environmental standards, such as other statutes or regulations").)

Several agencies have developed, or are in the process of developing, thresholds of significance for GHG emissions.[3] For example, thresholds are currently being developed, or have already been adopted by the Bay Area Air Quality Management District for operations and construction,[4] the City of Davis for residential

[3] Reference to these thresholds and proposed thresholds does not reflect an endorsement of those thresholds; rather, they are cited solely for the purpose of demonstrating that agencies are developing such thresholds.
[4] BAAQMD CEQA Guidelines Update: work in progress - http://www.baaqmd.gov/pln/ ceqa/index.htm.

developments,[5] and the South Coast Air Quality Management District for industrial projects.[6] Regardless of the threshold chosen, however, this section does not alter the pre-existing rule under CEQA that if substantial evidence supports a fair argument that a project may result in significant impacts, despite compliance with a threshold, an EIR must be prepared. (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 342.) Further, "in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect." (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109.)

Consistent with the above, if relying on a threshold developed by another agency, lead agencies must exercise caution in selecting a threshold to ensure that the threshold is appropriately applied. For CEQA purposes, a threshold identifies a level below which an environmental impact will normally be less than significant. (State CEQA Guidelines, § 15064.7(a).) Some agencies have adopted "thresholds" pursuant to other laws that may not be applicable in the CEQA context. ARB has adopted several thresholds pursuant to AB32, for example, to address specific purposes that are unrelated to CEQA. For example, the *de minimis* threshold governs the level at which emissions will be regulated by ARB's AB32 regulations. (Health & Safety Code, § 38561(e); Scoping Plan, at pp. 96-97.) CEQA does not permit use of a *de minimis* threshold, however. (*CBE*, *supra*, 103 Cal.App.4th at p. 121.) Additionally, the Reporting Threshold is the level at which emissions from large industrial sources are required to be reported. (Scoping Plan, at pp. 108-109; *see also* CARB Board Resolution 07-54 (2007).) Again, this reporting threshold reflects a policy decision regarding regulation by the ARB, but does not address the level at which environmental harm may occur, and does not satisfy a lead agency's duties under CEQA related to review of projects which may result in significant adverse environmental impacts.

<u>Consistency with a Plan or Regulation</u>

Finally, the third factor in subdivision (b) directs consideration of the extent to which a project complies with a plan or regulation to reduce GHG emissions. That section further states, however, that to be used for the purpose of determining significance, a plan must contain specific requirements that result in reductions of GHG emissions to a less than significant level. This clarification is necessary because of the wide variety of climate action plans and GHG reduction plans that are currently being adopted by public agencies. ARB, for example, recently adopted its statewide Scoping Plan. That plan may not be appropriate for use in determining the significance of individual projects, however, because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping

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[5] City of Davis (2009) Greenhouse Gas Emission Threshold and Standards for New Residential Development; Accessed 5/27/09, http://cityofdavis.org/pgs/sustainability/pdfs/15_4.21.09_GHG%20Standards.pdf

[6] SCAQMD (2008) Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, Accessed 5/27/09 http://www.aqmd.gov/hb/2008/December/081231a.htm.

Plan. (Scoping Plan, at p. 9.) Regulations that will require actual reductions of GHG emissions may not be adopted until 2012. (*Ibid*.) Once those regulations are adopted and being implemented, they may, if appropriate, be used to assist in the determination of significance, similar to the current use of air quality, water quality and other similar environmental regulations. (*CBE*, *supra*, 103 Cal. App. 4th at 111 ("a lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and regulation").)

In addition to the regulations that will be developed to implement the Scoping Plan, this factor would also allow lead agencies to consider plans that are developed to reduce GHG emissions on a regional or local level. (Scoping Plan, at p. 26.) The proposed section 15064.4(b)(3) is intended to be read in conjunction with the section 15064(h)(3), as proposed to be amended, and proposed section 15183.5. Those sections each indicate that local and regional plans may be developed to reduce GHG emissions. If such plans reduce community-wide emissions to a level that is less than significant, a later project that complies with the requirements in such a plan may be found to have a less than significant impact.

Notably, CEQA does not provide a specific definition of "comply" in the context of determining a project's consistency with a particular plan. Some guidance may be gleaned, however, from case law interpreting the requirement that a local government's activities be consistent with its General Plan. In that context, a "zoning ordinance [for example] is consistent with the city's general plan where, considering all of its aspects, the ordinance furthers the objectives and policies of the general plan and does not obstruct their attainment." (*City of Irvine v. Irvine Citizens Against Overdevelopment* (1994) 25 Cal. App. 4th 868, 879.) Reading section 15064.4 together with 15064(h)(3), however, to demonstrate consistency with an existing GHG reduction plan, a lead agency would have to show that the plan actually addresses the emissions that would result from the project. Thus, for example, a subdivision project could not demonstrate "consistency" with the ARB's Early Action Measures because those measures do not address emissions resulting from a typical housing subdivision. (ARB, Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration, October 2007; see also State CEQA Guidelines, §§ 15063(d)(3) (initial study must be supported with information to support conclusions), 15128 (determination in an EIR that an impact is less than significant must be briefly explained).)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) A key component of environmental analysis under CEQA is the determination of significance. (*Id*. at § 21002; *Protect the Historic Amador Waterways, supra,* 116 Cal.App.4th at

1106-07.) The new section 15064.4, on determining the significance of impacts of GHG emissions, is therefore necessary to carry out this legislative directive.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the Amendments were proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for determining the significance of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).)[7] Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, by providing greater certainty to lead agencies regarding the determination of significance of GHG emissions, the cost of environmental analysis, and potential litigation, may be reduced.

[7] Federal court decisions interpreting NEPA is persuasive authority in CEQA cases. (*Western Placer Citizens for an Ag. & Rur. Env. v. County of Placer* (2006) 144 Cal.App. 4th 890, 902.)

SECTION 15064.7. THRESHOLDS OF SIGNIFICANCE

Specific Purposes of the Amendment

Proposed subdivision (c) of section 15064.7 would allow a lead agency to adopt a threshold developed by another agency, or recommended by experts, provided that such threshold is supported with substantial evidence. This proposed regulation is reasonably necessary because many lead agencies perform general governmental functions, and may lack the specific expertise necessary to develop their own thresholds of significance for GHG emissions. Such agencies may rely on thresholds developed by other agencies with specialized expertise (such as an air quality management district) in conducting their CEQA analyses. (OPR, Thresholds of Significance: Criteria for Defining Environmental Significance, September 1994, at p. 7.) In fact, Appendix G of the State CEQA Guidelines expressly encourages lead agencies to rely on thresholds established by local air quality management districts. (State CEQA Guidelines, Appendix G, Question III.)

Several local and regional air districts are in the process of developing thresholds for GHG emissions. As noted above, for example, thresholds are currently being developed, or have already been adopted by the Bay Area Air Quality Management District for operations and construction, the City of Davis for residential developments, and the South Coast Air Quality Management District for industrial projects. Lead agencies within the jurisdiction of an air district, or other agency, that adopts a GHG emissions threshold may adopt such a threshold as its own. In adopting any threshold of significance, including one developed by an expert or agency with specialized expertise, the lead agency must support the threshold with substantial evidence in the administrative record. (State CEQA Guidelines, § 15064.7(b).)

Independent experts may also develop such thresholds for use by public agencies. For example, the California Air Pollution Control Officers Association has published a White Paper on developing thresholds of significance for GHG emissions. (CAPCOA White Paper, at pp. 31-58.) A lead agency could potentially use CAPCOA's suggestions in developing its own thresholds. Because any threshold must be supported with substantial evidence, and must be adopted through a public process, any threshold recommended by an expert that is ultimately adopted will undergo sufficient scrutiny to ensure its legitimacy. (State CEQA Guidelines, § 15064.7(b).)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) Defining "significance" is a critical step in the lead agency's impact analysis and therefore needs to be addressed as part of the Proposed Action. Section 21000(d) of the Public Resources Code encourages the development of thresholds. These sections together

require OPR and the Resources Agency to develop and adopt regulations governing the adoption of thresholds of significance for GHG emissions.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for determining the significance of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, by providing greater certainty to lead agencies regarding the determination of significance of GHG emissions, the cost of environmental analysis, and potential litigation, may be reduced.

SECTION 15065. MANDATORY FINDINGS OF SIGNIFICANCE

Specific Purposes of the Amendment

The amendment to section 15065(b)(1) would change the word "preliminary" to "public." The purpose of this amendment is to make section 15065 consistent with section 21064.5 of the Public Resources Code. The latter provision defines a mitigated negative declaration to be a negative declaration where mitigation measures are added to a project "before the proposed negative declaration and initial study are released for *public* review[.]" (State CEQA Guidelines, § 15070(b)(1).) In contrast, existing CEQA Guidelines section 15065(b)(1), dealing with mandatory findings of significance, would require a commitment to mitigation prior to "preliminary" review. "Preliminary Review," as that term is used in section 15060, refers to a period following receipt of an application during which a lead agency determines whether an exemption applies to the project or whether an EIR would clearly be prepared. Read literally, existing section 15065 would require a commitment to mitigation before an initial study is even conducted. Because the statutory definition of mitigated negative declaration contemplates that mitigation measures may be developed during the preparation of the initial study prior to public review, the change in 15065 from "preliminary" to "public" is appropriate.

Necessity

Section 21083 of the Public Resources Code directs OPR to develop, and the Resources Agency to adopt, guidelines on the implementation of CEQA. The Amendment is necessary to ensure that those guidelines are consistent with relevant statutory definitions.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendmentswould make the existing Guidelines easier to follow as a result of greater internal consistency. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific existing statutory CEQA provisions and/or case law interpreting CEQA. Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, by providing greater consistency within the Guidelines, the cost of environmental analysis, and potential litigation, may be reduced.

SECTION 15086. CONSULTATION CONCERNING DRAFT EIR

The revision to this section is a non-substantive correction to this section's reference to the California Air Resources Board. This revision, therefore, qualifies as a "change without regulatory effect" pursuant to section 100(a)(4) of the Office of Administrative Law's regulations governing the rulemaking process. (Cal. Code Regs., tit. 1, § 100(a)(4).)

SECTION 15093. STATEMENT OF OVERRIDING CONSIDERATIONS

Specific Purposes of the Amendment

Section 21081(b) of the Public Resources Code provides that a lead agency may approve or carry out a project with significant and unavoidable impacts only after the lead agency makes a finding that "specific overriding economic, legal, social, technical or other benefits of the project outweigh the significant effects on the environment." The State CEQA Guidelines describes the factors that a lead agency must weigh in determining whether to approve a project with adverse environmental effects:

> CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment.

(State CEQA Guidelines, § 15021(d).) The California Supreme Court has further observed that "an agency's decision that the specific benefits a project offers outweigh any environmental effects that cannot feasibly be mitigated … lies at the core of the lead agency's discretionary responsibility under CEQA…." (*City of Marina v. Board of Trustees of Cal. State Univ* (2006) 39 Cal.4th 341, 368.)

In the context of GHG emissions, some projects may cause adverse environmental impacts but still provide an overall benefit of reducing GHG emissions on a statewide or regional level. For example, a city may make a policy choice to allow increased housing density within a jobs-rich region in order to reduce region-wide GHG emissions from vehicles and transportation. (See, e.g., 2007 IEPR, at p. 210.) Though the introduction of new housing within the jurisdiction may result in near-term or local adverse impacts related to GHG emissions, doing so may assist the region as a whole in meeting region-wide reduction targets. Thus, subdivision (a) of section 15093 was revised to expressly allow a lead agency to consider this type of environmental benefit of a project in making a statement of overriding considerations.

The revision to section 15093(a) accomplishes two objectives. First, it reminds lead agencies and the public that even a project that appears environmentally beneficial may itself cause adverse environmental impacts, and such impacts must undergo full CEQA review, and, if applicable, a statement of overriding considerations. Second, it discourages purely local interests from dominating consideration of a project by expressly allowing a lead agency to consider region- and statewide benefits of a project. Further, "economic, legal, social, technical and other benefits" could be interpreted to refer to local benefits. This addition would ensure that lead agencies may consider

regional and statewide benefits in considering a project's adverse impacts. Finally, the proposed addition makes clear, consistent with section 15021(d) of the existing State CEQA Guidelines, that the lead agency may consider environmental benefits to balance a project's significant adverse environmental effects that remain even after the adoption of all available feasible mitigation measures.

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) If a lead agency determines that a project's GHG emissions will result in significant and unavoidable impacts, a lead agency may only approve the project if it makes specified findings. (*Id*. at § 21081(b).) This amendment is necessary to ensure that a lead agency considers state-wide and regional benefits of a project in addition to purely local benefits. Because consideration of state-wide and region-wide benefits may also apply to impacts unrelated to GHG emissions, the amendment was worded broadly to address any significant environmental impact.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the proposed revisions. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and/or make specific statutory CEQA provisions and case law interpreting CEQA for making statements of overriding considerations. Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California.

SECTION 15125. ENVIRONMENTAL SETTING

Specific Purposes of the Amendment

Section 15125 reflects existing law requiring examination of project impacts in relation to the existing environment. Subsection (d) states that lead agencies should consider whether the proposed project is inconsistent with applicable local and regional plans. That subsection provides a non-exclusive list of plans for potential consideration. The Amendments would add specific plans, regional blueprint plans and greenhouse gas reduction plans to subdivision (d). The added plans are necessary to ensure that GHG emissions analyses in such plans are addressed.

Specific Plans

Specific Plans address a defined geographic area within the area covered by a General Plan. (Gov. Code, § 65450 ("After the legislative body has adopted a general plan, the planning agency may, or if so directed by the legislative body, shall, prepare specific plans for the systematic implementation of the general plan for all or part of the area covered by the general plan").) Specific Plans must contain "[s]tandards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable." (*Id*. at § 65451(a)(3).) Thus, given that so many local governments are addressing GHG emissions in their policy documents, and that Specific Plans must contain standards and criteria, it is likely that Specific Plans may address GHG emissions, and consistency with adopted Specific Plans should be considered in EIRs.

Regional Blueprint Plans

Regional Blueprint Plans are being developed in many of California's Metropolitan Planning Organizations through grants provided by the California Department of Transportation. While originally designed to address transportation efficiencies, Regional Blueprint Plans typically involve smart growth planning with an aim to reducing vehicle miles traveled at a regional level. As a result, Regional Blueprint Plans can provide information regarding the region's existing transportation setting and identify methods to reduce region-wide transportation-related impacts. (Scoping Plan, Appendix C, at pp. C-74-C-84.) Land use decisions impact many sectors responsible for GHG emissions, including transportation, electricity, water, waste, and others. However, the primary impact of land use development on GHG emissions relates to vehicle use. (Land Use Subcommittee of the Climate Action Team, *LUSCAT Submission to CARB Scoping Plan on Local Government, Land Use, and Transportation* (2008), at p. 13.) Blueprint Plans highlight this relationship between land use and transportation and how this relationship may impact a local community's and region's GHG emissions. Analysis of GHG reduction is not required by Blueprint grants but it is recommended. Therefore, Blueprint Plans provide an indication of the GHG emissions potentially created or reduced by the plan. (LUSCAT (2009), at p. 30.) Given the large percentage of GHG emissions that result from transportation in

California, a project's consistency with a Regional Blueprint Plan can provide information indicating whether the project could have significant environmental impacts related to GHG emissions. (*Ibid*.) Regional Blueprint Plans may, therefore, provide evidence to assist the lead agency in determining whether a project may tend to increase or decrease GHG emissions relative to the existing baseline. Thus, where such a plan has been developed and adopted by an MPO, lead agencies may find it useful to evaluate the project's consistency with that Blueprint Plan.

Plans for the Reduction of Greenhouse Gas Emissions

The Amendments would add plans for the reduction of greenhouse gas emissions to the list of plans in section 15125(d). Many local and regional plans now include policies relating to, and analyses of, GHG emissions. (OPR, Book of Lists, at pp. 92-100; Scoping Plan, at p. 26.) Many such plans include detailed information on the jurisdiction's inventory of GHG emissions and measures to reduce such emissions. (*Ibid*.) Such plans may also include prescriptions for specific mitigation measures to address GHG emissions. (Scoping Plan, Appendix C, at p. C-49.) Where such a plan has been developed and adopted within the relevant jurisdiction, a project's inconsistency with that plan could be an indication of potential adverse environmental impacts.

Notably, while section 15125(d) requires an EIR to discuss any inconsistencies of a project with the listed plans, it does not mandate a finding of significance resulting from any identified inconsistencies. The plans simply provide information regarding the project's existing setting and inconsistency may be an indication of potentially significant impacts. The determination of significance is to be made by the lead agency.

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines addressing the mitigation of GHG emissions and the effects of the GHG emissions. (Pub. Resources Code, § 21083.05.) As indicated above, one potential indicator of a project's potential GHG emissions impacts is whether the project is consistent with applicable plans that have addressed that impact. Thus, the addition of plans that may address GHG emissions to the list of plans in the existing section 15125 is reasonably necessary to ensure that such analysis occurs.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to

implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for analyzing the effects of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the amendments to this section are intended to reduce the costs of environmental review on lead agencies and project applicants by encouraging the use of existing environmental information where available. (Pub. Resources Code, § 21003(d) (use information in existing EIRs in order to reduce duplication), (f) (environmental review should proceed in the most efficient manner possible).)

SECTION 15126.2. CONSIDERATION AND DISCUSSION OF SIGNIFICANT ENVIRONMENTAL EFFECTS.

Amendments are proposed to two subdivisions of the existing section 15126.2. The first, to subdivision (c), adds a cross-reference to the Public Resources Code and another section of the State CEQA Guidelines. This revision, therefore, qualifies as a "change without regulatory effect" pursuant to section 100(a)(4) of the Office of Administrative Law's regulations governing the rulemaking process. (Cal. Code Regs., tit. 1, § 100(a)(4).) The second change, made in response to public comments, adds a sentence to the end of existing subdivision (a). That change is described in greater detail below.

Specific Purposes of the Amendment

Several comments submitted as part of the Natural Resources Agency's SB97 rulemaking process urged it to develop guidance addressing the analysis of the impacts of climate change on a project. These comments similarly suggested that such guidance was appropriate in light of the release of the draft California Climate Adaptation Strategy (Adaptation Strategy), developed pursuant to Executive Order S-13-2008. In considering such comments, it is important to understand several key differences between the Adaptation Strategy and the California Environmental Quality Act. First, the Adaptation Strategy is a policy statement that contains recommendations; it is not a binding regulatory document. Second, the Adaptation Strategy focuses on how the State can plan for the effects of climate change. CEQA's focus, on the other hand, is the analysis of a particular project's greenhouse gas emissions on the environment, and mitigation of those emissions if impacts from those emissions are significant. Given these differences, CEQA should not be viewed as the tool to implement the Adaptation Strategy; rather, as indicated in the Strategy's key recommendations, advanced programmatic planning is the primary method to implement the Adaptation Strategies.

There is some overlap between CEQA and the Adaptation Strategy, however. As explained in both the Initial Statement of Reasons and in the Adaptation Strategy, section 15126.2 may require the analysis of the effects of a changing climate under certain circumstances. (Initial Statement of Reasons, at pp. 68-69.) In particular, Section 15126.2 already requires an analysis of placing a project in a potentially hazardous location. Further, several questions in the Appendix G checklist already ask about wildfire and flooding risks. Many comments on the proposed amendments asked for additional guidance, however.

Having reviewed all of the comments addressing the effects of climate change, the Natural Resources Agency revised the proposed amendments to include a new sentence in Section 15126.2 clarifying the type of analysis that would be required. Existing section 15126.2(a) provides an example of a potential hazard requiring analysis: placing a subdivision on a fault line. The new sentence adds further examples, as follows:

> Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.

According to the Office of Planning and Research, at least sixty lead agencies already require this type of analysis. (California Governor's Office of Planning and Research, State Clearinghouse, The California Planners' Book of Lists (January, 2009), at p. 109.) This addition is reasonably necessary to guide lead agencies as to the scope of analysis of a changing climate that is appropriate under CEQA.

As revised, section 15126.2 would provide that a lead agency should analyze the effects of bringing development to an area that is susceptible to hazards such as flooding and wildfire, both as such hazards currently exist or may occur in the future. Several limitations apply to the analysis of future hazards, however. For example, such an analysis may not be relevant if the potential hazard would likely occur sometime after the projected life of the project (i.e., if sea-level projections only project changes 50 years in the future, a five-year project may not be affected by such changes). Additionally, the degree of analysis should correspond to the probability of the potential hazard. (State CEQA Guidelines, § 15143 ("significant effects should be discussed with emphasis in proportion to their severity and probability of occurrence").) Thus, for example, where there is a great degree of certainty that sea-levels may rise between 3 and 6 feet at a specific location within 30 years, and the project would involve placing a wastewater treatment plant with a 50 year life at 2 feet above current sea level, the potential effects that may result from inundation of that plant should be addressed. On the other extreme, while there may be consensus that temperatures may rise, but the magnitude of the increase is not known with any degree of certainty, effects associated with temperature rise would not need to be examined. (State CEQA Guidelines, § 15145 ("If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate the discussion of the impact").) Lead agencies are not required to generate their own original research on potential future changes; however, where specific information is currently available, the analysis should address that information. (State CEQA Guidelines, § 15144 (environmental analysis "necessarily involves some degree of forecasting. While seeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can").)

The decision in *Baird v. County of Contra Costa* (1995) 32 Cal.App.4th 1464, does not preclude this analysis. In that case, the First District Court of Appeal held that a county was not required to prepare an EIR due solely to pre-existing soil contamination that the project would not change in any way. (Id. at 1468.) No evidence supported the petitioner's claim that the project would "expose or exacerbate" the pre-existing contamination, which was located several hundred to several thousand feet from the project site. (Id. at n. 1.) Moreover, the project would have no other significant effects on the environment, and other statutes exist to protect residents from contaminated soils. Thus, the question confronting that court was whether pre-existing contamination near the project was, by itself, enough to require preparation of an EIR. It held that, in those circumstances, an EIR was not required. That court also acknowledged, however, that where there is a potential for ultimately changing the environment, an EIR could be required. (Id. at p. 1469.) Thus, unlike the circumstances in the *Baird* case, the analysis required in section 15126.2(a) would occur if an EIR was otherwise required. Similarly, the addition to that section contemplates hazards which the presence of a project could exacerbate (i.e., potential upset of hazardous materials in a flood, increased need for firefighting services, etc.).

This revision was described in the Natural Resources Agency's Notice of Proposed Changes and the public was invited to present comments on that change. The Natural Resources Agency determined that the change was sufficiently related to the original proposal described in the Notice of Proposed Action, so a fifteen day comment period was appropriate. It is sufficiently related because the Notice of Proposed Action explained that the rulemaking activity was intended to address the directive in SB97 to provide guidelines on the analysis of the "effects of greenhouse gas emissions." As explained in the Initial Statement of Reasons, the Natural Resources Agency initially chose not to provide specific guidance on the analysis of the effects of placing development in an area subject to the effects of climate change because the Agency interpreted existing section 15126.2(a) to already require that analysis under certain circumstances. As indicated above, however, many comments on the proposed amendments suggested revisions to section 15126.2(a) to provide additional guidance. The areas susceptible to hazards include those that may result from a changing climate. Thus, the change is sufficiently related that a reasonable person would be put on notice that such a change could occur as a result of the rulemaking activity described in the Notice of Proposed Action.

Finally, following review of comments on this revision, the Natural Resources Agency clarified that this analysis applies only to "potentially significant" effects of locating developing in areas susceptible to hazards. Because this revision clarifies the last sentence in section 15126.2(a), consistent with the Public Resources Code, and does not alter the requirements, rights, responsibilities, conditions, or prescriptions contained in the originally proposed text, this revision is nonsubstantial and need not be circulated for additional public review. (Government Code, § 11346.8(c); Cal. Code Regs., tit. 1, § 40.)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines addressing the analysis of the effects of GHG emissions. (Pub. Resources Code, § 21083.05.) As explained above, the effects of GHG emissions include flooding, sea-level rise and wildfires. Thus, the addition of a clarifying sentence to existing section 15126.2(a), requiring analysis of the effects of placing developing in hazardous locations, is reasonably necessary to ensure that such analysis occurs with respect to areas subject to potential hazards resulting from climate change.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for analyzing the effects of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans.*, Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to

investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, by providing greater certainty to lead agencies regarding the analysis that may be required of the potential effects of climate change on a project, the cost of environmental analysis, and potential litigation, may be reduced.

SECTION 15126.4. CONSIDERATION AND DISCUSSION OF MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS.

Specific Purposes of the Amendment

Section 21083.05 of the Public Resources Code expressly requires OPR and the Resources Agency to develop regulations on the "mitigation of greenhouse gas emissions." The goals of this legislative mandate are to (1) reduce GHG emissions and (2) to provide consistency in the development of GHG emissions reduction measures. There is no indication, however, that the Legislature intended to alter any existing laws governing mitigation under CEQA. The Amendments, therefore, interpret and make specific existing CEQA law and regulations for mitigation of significant impacts resulting from GHG emissions.

Existing section 15126.4 provides guidance on CEQA's general mitigation requirements. To emphasize that mitigation of GHG emissions is subject to those existing CEQA requirements, OPR and the Natural Resources Agency added a new subdivision (c) to the existing section 15126.4. The Amendments identify five general methods of mitigation that may be tailored to the specific circumstances surrounding a specific project. In response to public comments, the Natural Resources Agency provided additional guidance, described below, in the lead-in sentences introducing those five broad categories of mitigation.

Mitigation of Greenhouse Gas Emissions

Comments submitted on the Amendments indicated general concerns that mitigation for GHG emissions may not be effective or reliable. To further clarify the existing mitigation requirements that would apply to measures to reduce greenhouse gas emissions, the Natural Resources Agency revised the lead-in sentences in subdivision (c). Specifically, the Natural Resources Agency added that all mitigation must be supported with substantial evidence and be capable of monitoring or reporting. This addition reflects the requirement in Public Resources Code that a lead agency's findings on mitigation be supported with substantial evidence and that it must adopt a mitigation monitoring and reporting program along with the project if mitigation measures are required. (Public Resources Code, §§ 21081(a)(1), 21081.6.)

In response to comments, the Natural Resources Agency had originally also proposed to add a sentence indicating that only emissions reductions that were not required by some other law or contract could qualify as mitigation. In response to comments on that proposed revision, that sentence is no longer proposed to be added to the lead-in section; rather, subdivision (c)(3) will be clarified, as described below.

Mitigation Identified in an Existing Plan

The first type of mitigation of GHG emissions that may be considered includes measures identified in an existing plan. As indicated above, many agencies are

beginning to address GHG emissions at a planning level. (OPR, Book of Lists, at pp. 92-100.) Some of those GHG reduction plans include specific measures that may be applied on a project-by-project basis. (*Ibid*; *see also* Scoping Plan, Appendix C, at p. C-49.) Proposed subdivision (c)(1), therefore, would encourage lead agencies to look to adopted plans for sources of mitigation measures that could be applied to specific projects.

Project Design Features

The second type of measure that a lead agency should consider is project design features that will reduce project emissions. Various project design features could be used to reduce GHG emissions from a wide variety of projects. The CAPCOA White Paper provides examples of various project design features that may reduce emissions from commercial and residential buildings. (CAPCOA White Paper, at pp. B-13 to B-18.) For example, according to the California Energy Commission, "[r]esearch shows that increasing a community's density and its accessibility to jobs centers are the two most significant factors for reducing vehicle miles traveled," which is an important component of reducing statewide emissions. (California Energy Commission 2007, *2007 Integrated Energy Policy Report*, CEC-100-2007-008-CMF ("2007 IEPR"), at p. 12; see also CEC, *The Role of Land Use in Meeting California's Energy and Climate Goals* (2007) at p. 20.) This subdivision also refers specifically to measures identified in Appendix F, which include a variety of measures designed to reduce energy use. By encouraging lead agencies to consider changes to the project itself, this subdivision further encourages the realization of co-benefits such as reduced energy costs for project occupants, increased amenities for non-vehicular transportation, and others. Thus, project design can reduce GHG emissions directly through efficiency and indirectly through resource conservation and recycling. (Green Building Sector Subgroup of the Climate Action Team, Scoping Plan Measure Development and Cost Analysis (2008) at p. 6 to 9.)

Off-Site Measures

The third type of measures addressing GHG emissions is off-site measures including offsets. Proposed subdivision (c)(3) recognizes the availability of various off-site mitigation measures. Such measures could include, among others, the purchase of carbon offsets, community energy conservation projects, and off-site forestry projects. (*See*, *e.g.*, South Coast Air Quality Management District, SoCal Climate Solutions Exchange (June 2008), at pp.1; Rodeo Refinery Settlement Agreement, BAAQMD Carbon Offset Fund; Recommendations of the ETAAC, Final Report (February 2008) at pp. 9-5; ARB, Staff Report: Proposed Adoption of California Climate Action Registry Forestry Greenhouse Gas Protocols for Voluntary Purposes (October 17, 2007), at p. 15 ("[t]he three protocols together – the sector, project, and certification protocols – are a cohesive and comprehensive set of methodologies for forest carbon accounting, and furthermore contain all the elements necessary to generate high quality carbon credits"); see also Scoping Plan, Appendix C, at pp. C-21 to C-23.) Off-site mitigation may be appropriate under various circumstances. For example, such mitigation may be

appropriate where a project is incapable of design modifications that would sufficiently reduce GHG emissions within the project boundaries. In that case, a lead agency could consider whether emissions reductions may be achieved through such measures as energy-efficiency upgrades within the community or reforestation programs.

The reference to "offsets" in subdivision(c)(3) generated several comments during the public review period. The offsets concept is familiar in other aspects of air quality regulation. The Federal Clean Air Act, for example, provides that increases in emissions from new or modified sources in a nonattainment area must be offset by reductions in existing emissions within the nonattainment area. (See, e.g., 42 U.S.C. § 7503(a)(1)(A).) California laws also apply to offsets and emissions credits. (See, e.g., Health & Saf. Code, § 39607.5.) Those other laws generally require that emissions offsets must be "surplus" or "additional". Comments on the proposed amendments suggested that to be used for CEQA mitigation purposes, offsets should also be "additional." Thus, the Natural Resources Agency further refined the revisions it publicized on October 23, 2009, by deleting the lead-in sentence stating that "Reductions in emissions that are not otherwise required may constitute mitigation pursuant to this subdivision," and amending subdivision (c)(3) to state that mitigation may include "Off-site measures, including offsets <u>that are not otherwise required</u>, to mitigate a project's emissions[.]"

Moving this concept from the general provisions on mitigation of greenhouse gas emissions to the provision on offsets does not materially alter the rights or conditions in the originally proposed text because the "not otherwise required" concept would only make sense in the context of offsets. Because this revision clarifies section 15126.4(c)(3), consistent with the Public Resources Code and cases interpreting it, and does not alter the requirements, rights, responsibilities, conditions, or prescriptions contained in the originally proposed text, this revision is nonsubstantial and need not be circulated for additional public review. (Government Code, § 11346.8(c); Cal. Code Regs., tit. 1, § 40.)

<u>Sequestration</u>

The fourth type of GHG emissions mitigation measure is sequestration. Indeed, one way to reduce a project's GHG emissions is to sequester project-related GHG emissions and thereby prevent them from being released into the atmosphere. At present, the most readily available, and accountable, way to sequester GHGs is forest management. California forests have a "unique capacity to remove [carbon dioxide, a GHG,] from the air and store it long-term as carbon." (Scoping Plan, Appendix C, at p. C-165.) Forest sequestration functions are, therefore, a key part of the ARB's Scoping Plan and reduction effort. (Scoping Plan, at pp. 64-65.)

The California Climate Action Team has also identified several forest-related sequestration strategies, including, reforestation, conservation forest management, conservation (i.e., avoided development), urban forestry, and fuels management and biomass. (ARB, Staff Report: Proposed Adoption of California Climate Action Registry

Forestry Greenhouse Gas Protocols for Voluntary Purposes (October 17, 2007), at pp. 6-7.) ARB has adopted Forest Protocols for large forestry projects. (ARB, Resolution 07-44 (adopting California Climate Action Registry Forestry Sector Protocol (September 2007), Forest Project Protocol (September 2007) and Forest Verification Protocol (May 2007).) ARB has also adopted Urban Forest Protocols for urban forestry projects. (California Climate Action Registry, Urban Forest Project Reporting Protocol and Verification Protocol (August 2008) (ARB adopted on September 25, 2008).) Such projects could be located on the project site or off-site. (Urban Forest Project Reporting Protocol, at pp. 4-5.) The protocols include methods of measuring the ability of various forestry projects to store capture and store carbon.

Consistent with section 15126.4(a), a lead agency must support its choice of, and its determination of the effectiveness of, any reduction measures with substantial evidence. Substantial evidence in the record must demonstrate that any mitigation program or measure is will result in actual emissions reductions. As a practical matter, where a mitigation program or measure is consistent with protocols adopted or approved by an agency with regulatory authority to develop such a program, a lead agency will more easily be able to demonstrate that off-site mitigation will actually result in emissions reductions. Examples of such protocols include the forestry protocols described above. Where a mitigation proposal cannot be verified with an existing protocol, a greater evidentiary showing may be required.

Measures to be Implemented on a Project-by-Project Basis

Finally, the fifth type of measure that could reduce GHG emissions at a planning level is the development of binding measures to be implemented on a project-specific basis. As explained in greater detail in the discussion of proposed section 15183.5, below, ARB's Scoping Plan strongly encourages local agencies to develop plans to reduce GHG emissions throughout the community. In addition, the CEC's Power Plant Siting Committee is assessing the impacts of GHG emission from proposed new power plants and how they can be mitigated. Comments received during the CEC's informational proceedings warranted a lengthy discussion on the practical application of a programmatic approach to mitigating GHG emissions from new power plants. (CEC, *Committee Guidance on Fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts in Power Plant Siting Applications* (2009) at p. 26 to 28.) Existing State CEQA Guidelines sections 15168(b)(4) and 15168(c)(3) recognize that programmatic documents provide an opportunity to develop mitigation plans that will apply on a project-specific basis. Proposed subdivision (c)(5) recognizes that, for a planning level decision, appropriate mitigation of GHG emissions may include the development of a program to be implemented on a project-by-project basis. (State CEQA Guidelines, § 15126.4(a)(2) ("[i]n the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation or project design").)

This type of mitigation is subject to the limits of existing law, however. Thus, proposed subdivision (c)(5) should not be interpreted to allow deferral of mitigation.

Rather, it is subject to the rule in existing section 15126.4(a)(1)(B) that such measures "may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way." (*See also San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal. App. 4th 645, 670-71.)

Suggestions Rejected

During its public involvement process, OPR received comments on its preliminary draft of the proposed amendments related to mitigation. Some comments suggested provisions that were not included in these Proposed Amendments. Several comments, for example, suggested that the Guidelines provide a specific "hierarchy" of mitigation requiring lead agencies to mitigate GHG emissions on-site where possible, and to allow consideration and use of off-site mitigation only if on-site mitigation is impossible or insufficient. OPR and the Resources Agency recognize that there may be circumstances in which requiring on-site mitigation may result in various co-benefits for the project and local community, and that monitoring the implementation of such measures may be easier. However, CEQA leaves the determination of the precise method of mitigation to the discretion of lead agencies. (State CEQA Guidelines, § 15126.4(a)(1)(B); *see also San Franciscans Upholding the Downtown Plan v. City & Co. of San Francisco* (2002) 102 Cal. App. 4th 656, 697.)

Several comments also suggested that mitigation for GHG emissions must be "real, permanent, quantifiable, verifiable, and enforceable." The Proposed Amendments do not include such standards, however, for several reasons. The proposed standard appears to have been derived from section 38562(d) of the Health and Safety Code, which prescribes requirements for regulations to be promulgated to implement AB32. AB32 is a separate statutory scheme, and, as noted above, there is no indication that the legislature intended to alter standards for mitigation under CEQA. Similarly, standards for mitigation under CEQA already exist and are set out in section 15126.4(a). Specifically, mitigation must be fully enforceable, which implies that the measure is also real and verifiable. Additionally, substantial evidence in the record must support an agency's conclusion that mitigation will be effective, and in the context of an EIR, courts will defer to an agency's determination of a measure's effectiveness. (*Environmental Council of Sacramento v. City of Sacramento* (2006) 147 Cal.App.4th 1018, 1041 (mitigation ratio is supportable even at less than 1:1 given the project's circumstances); *Ass'n of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1398 (lead agency has discretion to resolve dispute regarding the effectiveness of an EIR's mitigation measures).) No existing law requires CEQA mitigation to be quantifiable. Rather, mitigation need only be "roughly proportional" to the impact being mitigated. (State CEQA Guidelines, § 15126.4(a)(4)(B); see also id. at § 15142.)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the mitigation of GHG emissions. (Pub. Resources Code, § 21083.05.) The proposed subdivision (c) sets out types of mitigation of GHG emissions that a lead agency may consider. Thus, that subdivision is reasonably necessary to implement the Legislature's directive.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the proposed action and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the proposed action. This conclusion is based on the Resources Agency's determination that the proposed action is necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the proposed action adds no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the proposed revisions. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The proposed action interprets and makes specific statutory CEQA provisions and/or case law interpreting CEQA for mitigating the impacts of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th

Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the proposed action does not add any substantive requirements, it will not result in an adverse impact on businesses in California. On the contrary, by providing greater certainty to lead agencies regarding the determination of significance of GHG emissions, the cost of environmental analysis, and potential litigation, may be reduced.

SECTION 15130. DISCUSSION OF CUMULATIVE IMPACTS

Specific Purposes of the Amendment

The Proposed Amendments include two revisions to the existing section 15130 of the State CEQA Guidelines. The two proposed amendments are described below.

Section 15130(b)(1)(B)

Section 21083(b) of the Public Resources Code requires that an EIR be prepared if the "possible effects of a project are individually limited but cumulatively considerable." That section further defines "cumulatively considerable" to mean that "the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

In determining whether a project may have significant cumulative impacts, a lead agency must engage in a two-step process. First, it must determine the extent of the cumulative problem. To do so, a lead agency must examine the "effects of past projects, the effects of other current projects, and the effects of probable future projects." Once it does so, the lead agency then determines whether the project's incremental contribution to that problem is cumulatively considerable. Section 21100(e) further provides that "[p]reviously approved land use documents, including but not limited to, general plans, specific plans, and local coastal plans, may be used in a cumulative impact analysis."

The existing Guideline section 15130(b) addresses the first step of the process. It offers two options for estimating the effects resulting from past, present and reasonably foreseeable projects. A lead agency may either rely on a list of such projects, or a summary of projections to estimate cumulative impacts. Existing section 15130(b)(1)(B) allows a lead agency to rely on projections in a land use document or certified environmental document that addresses the cumulative impact under consideration.

The proposed amendments would clarify that plans providing such projections need not be limited to land use plans, so long as the plan evaluates the relevant cumulative effect. The proposed amendments would also allow a lead agency to rely on information provided in regional modeling programs. The best projections of the cumulative effect of GHG emissions may be available in up-to-date models such as the International Council for Local Environmental Initiative's Local Government GHG Protocol[8] and the California Climate Action Reserve's Registry general,[9] industry[10] and

[8] ICLEI (2008) Local Government Operations Protocol; Accessed 6/08/09, http://www.icleiusa.org/action-center/tools/lgo-protocol-1

[9] California Climate Action Registry (2009) General Reporting Protocol: Accessed 6/08/09, http://www.climateregistry.org/resources/docs/protocols/grp/GRP_3.1_January2009.pdf

project type protocols.[11] Such projections may also be supplied in plans that are not strictly "land use" plans. For example, regional transportation plans in certain areas will ultimately include sustainable community strategies which will include projections a region's GHG emissions and related cumulative effects. (Gov Code, § 65080(b)(2).) Finally, some agencies are beginning to develop GHG reduction plans or climate action plans that may also include such projections. (ARB, Scoping Plan, Appendix C, at p. C-49; OPR, Book of Lists, at pp. 92-100.)

The proposed amendments are consistent with section 21083 of the Public Resources Code and CEQA case law. Section 21083 requires consideration of "the effects of past projects, the effects of other current projects, and the effects of probable future projects." Projections in the listed types of plans and models may include inventories of existing emissions and projected future emissions. Section 21100 of the Public Resources Code provides that land use plans "may" be used in a cumulative impacts analysis, but that section does not purport to limit the types of plans that can be used in a cumulative impacts analysis to land use plans. Finally, case law has supported reliance on projections provided by industry, for example, to satisfy the requirement for a discussion of impacts caused by closely related projects. (*Ass'n of Irritated Residents*, *supra*, 107 Cal. App. 4th at 1404.)

While models may provide the most up to date information, lead agencies should still look first to information provided in adopted or certified environmental documents. First, such information has already gone through a public and agency review process. Second, to the extent the model provides information that is not provided in the prior environmental document, the relationship of the model and applicable plans must be explained, along with any changes in circumstances.

Section 15130(d)

The Office of Planning and Research had originally proposed the addition of certain plans to section 15130(d). That section states that previously approved land use plans may be used in a cumulative impacts analysis. Those additions were inadvertently excluded from the proposed amendments that were made available for public review on July 3, 2009. Therefore, the revisions were added to revisions that were made publicly available on October 23, 2009.

The added plans include regional transportation plans and plans for the reduction of greenhouse gas emissions. This change is sufficiently related to the proposal that was originally published. Those plans were proposed for addition to other sections of the proposed amendments, for example, and comments were submitted regarding the use of such plans in cumulative impacts analysis. Plans for the reduction of greenhouse gas emissions were described under section 15064(h)(3), above. Regional

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[10] California Climate Action Registry (2005) Industry Specific Protocols: Accessed 06/08/09, http://www.climateregistry.org/tools/protocols/industry-specific-protocols.html

[11] California Climate Action Registry (2007) Project Protocols: Accessed 06/08/09, http://www.climateregistry.org/tools/protocols/project-protocols.html

transportation plans may contain information regarding transportation-related greenhouse gas emissions that may be useful in a cumulative impacts analysis. As explained above, regional transportation plans in certain areas will ultimately include sustainable community strategies which will include projections a region's GHG emissions and related cumulative effects. (Gov Code, § 65080(b)(2).) Thus, these additions are reasonably necessary to ensure that public agencies perform a cumulative impacts analysis of greenhouse gas emissions as required by Public Resources Code section 21083.05. The additions are also consistent with Public Resources Code section 21100(e) which provides that previously adopted land use plans may be used in a cumulative impacts analysis.

Section 15130(f)

The Natural Resources Agency originally proposed to add subdivision (f) to section 15130 to clarify that sections 21083 and 21083.05 of the Public Resources Code do not require a detailed analysis of GHG emissions solely due to the emissions of other projects. (State CEQA Guidelines, § 15130(a)(1); *Santa Monica Chamber of Commerce v. City of Santa Monica* (2002) 101 Cal.App.4th 786, 799.) Rather, proposed subdivision (f) would have provided that a detailed analysis is required when evidence shows that the incremental contribution of the project's GHG emissions is cumulatively considerable when added to other cumulative projects. (*CBE*, *supra*, 103 Cal.App.4th at 119-120.) In essence, the proposed addition would be a restatement of law as applied to GHG emissions. Analysis of GHG emissions as a cumulative impact is consistent with case law arising under the National Environmental Policy Act. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Other portions of these proposed Guidelines address how lead agencies may determine whether a project's emissions are cumulatively considerable. (See, e.g., Proposed Sections 1506(h)(3) and 15064.4.)

Public comments noted, however, that the new subdivision merely restated the law, and was capable of misinterpretation. The Natural Resources Agency, therefore, determined that because other provisions of the Amendments address the analysis of greenhouse gas emissions as a cumulative impact, and because the reasoning of those is fully explained in the Initial Statement of Reasons, subdivision (f) should not be added to the CEQA Guidelines. The deletion was reflected in the revisions that were made available for further public review and comment on October 23, 2009.

Necessity

Sections 21083 and 21083.05 of the Public Resources Code respectively require that an EIR analyze cumulative impacts and that the effects of GHG emissions be analyzed in CEQA documents. The Amendments include guidance to assist lead agencies to evaluate the cumulative impacts of GHG emissions where an EIR is required. Thus, the Amendments are reasonably necessary to implement the Legislature's directive.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for analysis and mitigation of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the

amendments to this section are intended to reduce the costs of environmental review on lead agencies and project applicants by encouraging the use of existing environmental analysis where available. (Pub. Resources Code, § 21003(d) (use information in existing EIRs in order to reduce duplication), (f) (environmental review should proceed in the most efficient manner possible).)

SECTION 15150. INCORPORATION BY REFERENCE

Specific Purposes of the Amendment

The existing CEQA Guidelines allow lead agencies to incorporate information from other documents by reference. (State CEQA Guidelines, § 15150.) Doing so permits a lead agency to avoid repetitious analysis of general matters and to reduce paperwork. (Pub. Resources Code § 21003 (it is state policy that "persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment").) Existing Guidelines section 15150(f) provides that "[i]ncorporation by reference is most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand."

The key requirements for documents that may be incorporation by reference are set forth in the statutory definition of "EIR." (Pub. Resources Code, § 21061.) Those requirements include:

- The incorporated information is a matter of public record or is generally available to the public; and
- The incorporated information is reasonably available for inspection at a public place or public building.

Descriptions of global, statewide and regional GHG emissions are particularly well-suited to incorporation by reference. Such descriptions can be technical and lengthy. (Public Policy Institute of California, Climate Policy at the Local Level: A Survey of California's Cities and Counties (November 2008), at pp. 24-32 (describing barriers and constraints to adoption of climate action plans and policies).) General descriptions may also remain current enough to be used in several successive environmental documents. In fact, OPR has found that many agencies are addressing GHG emissions in programmatic documents that could be incorporated by reference into later documents. (OPR, Book of Lists, at pp. 92-100.) Thus, the Resources Agency and OPR find that addition of subdivision (e)(4) is reasonably necessary to effectuate the legislative directive that public agencies conduct environmental review in the most efficient manner possible.

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) The Legislature has further directed that resources be conserved wherever possible in the analysis of environment impacts. (*Id*. at § 21003.) Thus, the amendment to add GHG

analyses to the list of documents that may be incorporated by reference is reasonably necessary to implement the Legislature's directive.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the proposed action adds no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the proposed revisions. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for analysis and mitigation of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the amendments to this section are intended to reduce the costs of environmental review on lead agencies and project applicants by encouraging the use of existing environmental analysis where available. (Pub. Resources Code, § 21003(d) (use information in existing EIRs in order to reduce duplication), (f) (environmental review should proceed in the most efficient manner possible).)

SECTION 15183. PROJECTS CONSISTENT WITH A COMMUNITY PLAN OR ZONING

Specific Purposes of the Amendment

Section 21083.3 of the Public Resources Code provides that projects that are consistent with a General Plan, Community Plan or Zoning may not need to analyze cumulative effects that have already been analyzed in an EIR on the prior planning or zoning action. The exemption may apply, for example, where "uniformly applied development policies or standards" will substantially mitigate a cumulative effect. (Pub. Resources Code, § 21083.3(d).) The statute does not define what types of development policies or standards may be used in this context. It does provide, however, that such standards or policies must have been adopted by the lead agency with a finding, supported with substantial evidence, that the policy or standard will substantially mitigate the environmental effect under consideration. (*Ibid*.) Existing Guidelines section 15183 provides several non-exclusive examples of policies and standards that might apply in the context of section 21083.3, including grading ordinances and floodplain protection ordinances.

The inclusion of "[r]equirements for reducing greenhouse gas emissions, as set forth in adopted land use plans, policies or regulations" among the list of examples of "uniformly applied development policies or standards" is consistent with the direction in section 21083.3. First, the text provides that such requirements would be "adopted" by the lead agency. Second, they would be "development policies or standards" because the requirements would be contained in an adopted "land use plan, policy or regulation." Finally, such requirements could substantially mitigate the effects of GHG emissions by "reducing greenhouse gas emissions" in the adopting jurisdiction. (Proposed Section 15183.5(b) would provide elements that may be included in a GHG emissions reduction plan that might be used in the context of section 15183.)

One comment submitted during OPR's public involvement process questioned whether such requirements relating to reductions in GHG emissions would be kept current. (See, e.g., Letter from Joyce Dillard to OPR, January 26, 2009.) Section 21083.3 specifically provides, however, that such requirements would not apply in this context if "substantial new information shows that the policies or standards will not substantially mitigate the environmental effect." (Pub. Resources Code, § 21083.3(d).) Therefore, lead agencies have an incentive to ensure that their policies remain current.

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) The addition to section 15183 is reasonably necessary to carry out the legislature's intent that projects that are consistent with General Plans, Community Plans and Zoning benefit from streamlined CEQA review. Several jurisdictions are beginning to include requirements for reducing GHG emissions in their general plans. (OPR, Book of Lists,

at pp. 92-100; Scoping Plan, Appendix C, at p. C-49.) The addition is also reasonably necessary to effectuate the legislature's intent that OPR and the Resources Agency provide guidance on how to analyze GHG emissions.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Resources Agency rejected the no action alternative because it would not achieve the objectives of the proposed revisions. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for analysis and mitigation of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans.*, Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad.*, 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to

SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the amendments to this section are intended to reduce the costs of environmental review on lead agencies and project applicants by encouraging the use of existing environmental analysis where available. (Pub. Resources Code, § 21003(d) (use information in existing EIRs in order to reduce duplication), (f) (environmental review should proceed in the most efficient manner possible).)

SECTION 15183.5. TIERING AND STREAMLINING THE ANALYSIS OF GREENHOUSE GAS EMISSIONS

Specific Purposes of the Amendment

In adopting SB375, the Legislature found that "[n]ew provisions of CEQA should be enacted so that the statute encourages … local governments to make land use decisions that will help the state achieve its climate goals under AB 32[.]" (Statutes 2008, Ch. 728, § 1(f).) ARB's Scoping Plan similarly recognizes the important role that local governments play in reducing the State's GHG emissions. (ARB, Scoping Plan, at p. 26.) In particular, local government "[d]ecisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas sectors." (*Ibid*.) Decision-making on urban growth and land use planning begins with local general plans. (Gov. Code, § 65030.1 ("The Legislature … finds that decisions involving the future growth of the state, most of which are made and will continue to be made at the local level, should be guided by an effective planning process, including the local general plan, and should proceed within the framework of officially approved statewide goals and policies directed to land use, population growth and distribution, development, open space, resource preservation and utilization, air and water quality, and other related physical, social and economic development factors").)

GHG emissions may be best analyzed and mitigated at a programmatic level. "For local government lead agencies, adoption of general plan policies and certification of general plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews." (OPR, Technical Advisory: CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review, June 19, 2008, at p. 8.) Other lead agencies may also address GHG emissions programmatically in long range development plans, facilities master plans, and other long-range planning documents.

This emphasis on long-range planning is consistent with state policy expressed in CEQA. The Legislature has clearly stated its preference that lead agencies tier environmental documents wherever feasible. (Pub. Resources Code, § 21093(b).) Specifically:

> The Legislature finds and declares that tiering of environmental impact reports will promote construction of needed housing and other development projects by (1) streamlining regulatory procedures, (2) avoiding repetitive discussions of the same issues in successive environmental impact reports, and (3) ensuring that environmental impact reports prepared for later projects which are consistent with a previously approved policy, plan, program, or ordinance concentrate upon environmental effects which may be mitigated or avoided in connection with the decision on each later project. The Legislature further finds and

> declares that tiering is appropriate when it helps a public agency to focus upon the issues ripe for decision at each level of environmental review and in order to exclude duplicative analysis of environmental effects examined in previous environmental impact reports.

(Pub. Resources Code, § 21093(a).) The Amendments, therefore, include the addition of a new section 15183.5 to address both tiering and streamlining of GHG analyses, as well as the proper use of GHG reduction plans in CEQA analyses. Explanation of the rationale of each new subdivision is provided below.

Existing Methods of Streamlining and Tiering

Because GHG emissions raise a cumulative concern, analysis of such emissions in a long-range planning document lends itself to tiering and use in later project-specific environmental review. (Pub. Resources Code, § 21093.) The Legislature has created several tiering and streamlining methods, reflected in various provisions of the existing State CEQA Guidelines, that can reduce duplication in the analysis of GHG emissions. Subdivision (a) clarifies that existing provisions in the State CEQA Guidelines regarding tiering and streamlining may be applied to the analysis of GHG emissions.

Greenhouse Gas Emissions Reduction Plans

Many jurisdictions are beginning to address GHG emissions reductions in "climate action plans" and "gas emissions reduction plans." (OPR, Book of Lists, at pp. 92-100; see also, Scoping Plan, Appendix C, at p. C-49.) ARB's Scoping Plan specifically encourages local governments to develop such plans, and has created a local government operations protocol to assist in that effort. (Scoping Plan, at p. 26.) A community-wide emissions protocol is also under development.

Some comments raised during OPR's public involvement process expressed concern that due to a lack of legislative criteria for such plans, existing provisions in the CEQA Guidelines regarding cumulative impacts may be misused. (See, e.g., Letter from Center for Biological Diversity, et al., to OPR, February 2, 2009, at p. 2.) For example, without specific guidance, a lead agency could erroneously rely on a plan with purely aspirational intent to determine that a later project's cumulative impact is less than significant pursuant to section 15064(h)(3). The proposed subdivision (b) provides criteria to assist lead agencies in determining whether an existing greenhouse gas reduction plan is an appropriate document to use in a cumulative impacts analysis under CEQA.

The existing CEQA Guidelines allow lead agencies to rely on plans for cumulative analysis where the plan has been adopted in a public review process and contains specific requirements to avoid or substantially lessen a cumulative problem. (State CEQA Guidelines, § 15064(h)(3).) The criteria set out in proposed subdivision (b)(1) are designed to ensure that a greenhouse gas reduction plan would satisfy the

requirements described in sections 15064(h)(3) and 15130(d), for the reasons described below.

Criteria (A) and (C) are necessary to define the scope of GHG emissions within the defined geographic area and the incremental contribution of activities that will occur within that area to those emissions. (State CEQA Guidelines, § 15064(h)(3) (plan addresses cumulative impacts "within the geographic area in which the project is located").) Criterion (B) establishes a benchmark to assist the lead agency in determining whether the plan provisions will avoid or substantially lessen cumulative effects of the area's GHG emissions. (*Ibid*. (plan "provides specific requirements that will avoid or substantially lessen the cumulative problem").) Criteria (D) and (E) are necessary to demonstrate that the plan will actually avoid or substantially lessen the cumulative effects of those emissions. (*Ibid*.) Finally, criterion (F) reflects the requirement in sections 15064(h)(3) and 15130(d) that the plan be adopted through a public review process, as well as case law requiring that mitigation plans themselves undergo environmental review. (*California Native Plant Society v. County of El Dorado* (2009) 170 Cal. App. 4th 1026, 1053 (mitigation "programs may offer the best solution to environmental planning challenges, by providing some certainty to developers while adequately protecting the environment" but "in order to provide a lawful substitute for the 'traditional' method of mitigating CEQA impacts, that is, a project-by-project analysis, the fee program must be evaluated under CEQA").) Notably, the criteria provided in subdivision (b) are largely consistent with the elements that ARB recommends be included in a greenhouse gas reduction plan. (ARB, Scoping Plan, Appendix C, at p. C-49.)

Subdivision (b)(2) describes the uses and limitations of plans for the reduction of greenhouse gas emissions in a cumulative impacts analysis for later projects. Specifically, it provides a safeguard to ensure that the later activity was actually addressed in the plan for the reduction of greenhouse gas emissions, and that any applicable requirements of the plan are incorporated into the later project. This requirement is similar the requirement in case law that a lead agency determine that a particular threshold appropriately addresses the impact of concern. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109 ("in preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect").) Finally, subdivision (b)(2) makes specific the requirement that, while the existence of an applicable plan for the reduction of greenhouse gas emissions may create a presumption that compliance with that plan will reduce the incremental contribution of later activities to a less than cumulatively considerable level, the existence of substantial evidence supporting a fair argument to the contrary may still require preparation of an EIR.

<u>Special Situations</u>

Subdivision (c) provides necessary clarification of the partial exemption provided in sections 21155.2 and 21159.28 of the Public Resources Code, enacted as part of SB375 (see description above). The limitation on analysis of global warming applies only to the effects caused by GHG emissions from cars and light duty trucks. That limitation should be read in conjunction with section 21083.05 of the Public Resources Code and State CEQA Guideline sections 15064.4 and 15126.4 which require analysis of all sources of GHG emissions and mitigation if those emissions are significant. Thus, projects that qualify for the limitation in sections 21155.2 and 21159.28 must still analyze emissions resulting from, as applicable, energy use, land conversion, and other direct and indirect sources of emissions. This clarification is reasonably necessary to effectuate the legislative directive in section 21083.3 that OPR and Resources develop guidelines on the analysis of GHG emissions and to avoid confusion regarding the streamlining provisions provided by SB375.

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) The Legislature has also directed that EIRs be tiered wherever possible, and that duplication be minimized. (*Id*. at §§ 21003, 21093, 21094.) Section 15183.5, which provides guidance on tiering and streamlining of GHG emissions analyses, is therefore reasonably necessary to carry out these directives.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Natural Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the Amendments are proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Natural Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Natural Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for analysis and mitigation of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent

of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the Amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the amendments to this section are intended to reduce the costs of environmental review on lead agencies and project applicants by encouraging the use of existing environmental analysis where available. (Pub. Resources Code, § 21003(d) (use information in existing EIRs in order to reduce duplication), (f) (environmental review should proceed in the most efficient manner possible).)

SECTION 15364.5. GREENHOUSE GAS

Specific Purposes of the Amendment

The Legislature has not included a definition of "greenhouse gases" in CEQA, though it did include a definition in AB32. (Health & Saf. Code, § 38505(g).) Thus, new section 15364.5 adds a definition of greenhouse gases. The specified gases are consistent with existing law as they are defined to include those identified by the Legislature in section 38505(g) of the Health and Safety Code.

Notably, the definition in AB32 states that GHG "includes all of the following…." In so stating, the Legislature implies that other gases may also be considered GHGs. The ARB's Scoping Plan also acknowledges that other gases contribute to climate change. (Scoping Plan, at p. 11.) In fact, the EPA's Endangerment Finding explained that several other gases share attributes with GHGs but would not be appropriate for regulation under the Clean Air Act at this time. (EPA Endangerment Finding, at pp. 18896-98.) Therefore, similar to the statutory definition of GHGs in AB32, the definition in the Amendments is not exclusive to the six primary GHGs. The purpose of a more expansive definition is to ensure that lead agencies do not exclude from consideration GHGs that are not listed, so long as substantial evidence indicates that such non-listed gases may result in significant adverse effects. This approach is consistent with the Supreme Court's directive that CEQA be interpreted to provide the fullest possible protection to the environment. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 390.)

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) Section 15364.5 is necessary to make specific the instruction to analyze GHG emissions because it states which gases are considered to be "greenhouse gases" and should be included in the analysis.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Natural Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Natural Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Natural Resources Agency rejected the no action

alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA for analysis and mitigation of GHG emissions that may result from proposed projects. Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating GHG emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al.*, Riverside Co. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans*., Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (*See*, *e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad*., 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the Amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the addition of this section is intended to reduce the costs of environmental review on lead agencies and project applicants by assisting lead agencies in determining which gases should be included in an analysis.

APPENDIX F. ENERGY CONSERVATION

Specific Purposes of the Amendment

CEQA's requirement to analyze and mitigate energy impacts of a project is substantive, and is not merely procedural. (*People v. County of Kern* (1976) 62 Cal.App.3d 761, 774.) Despite the requirement, lead agencies have not consistently included such analysis in their EIRs. (Remy et al., Guide to CEQA, 11th Ed. 2007, at pp. 1007-1008, n. 34.) The following revisions to Appendix F are, therefore, reasonably necessary to ensure that lead agencies comply with the substantive directive in section 21100(b)(3).

Introduction

The revisions to the introduction section include a cross-reference to section 21100(b)(3) of the Public Resources Code to direct lead agencies to the statutory directive underlying Appendix F. This section also includes an addition to make clear that energy impacts that have already been analyzed may not need to be repeated in later EIRs. This sentence is consistent with the Legislative intent in CEQA that information in existing environmental review be used to "reduce delay and duplication in preparation of subsequent environmental impact reports." (Pub. Resources Code, § 21003(d).)

EIR Contents

The amendments to Appendix F revise the section on EIR Contents to clarify that lead agencies "shall" analyze energy conservation in their EIRs. The word "shall" indicates that the duty is mandatory, and makes Appendix F consistent with Public Resources Code section 21100(b)(3). While Appendix F is revised to make clear that an energy analysis is mandatory, the amendments to this section would also make clear that the energy analysis is limited to effects that are applicable to the project.

"Lifecycle"

The amendments to Appendix F remove the term "lifecycle." No existing regulatory definition of "lifecycle" exists. In fact, comments received during OPR's public workshop process indicate a wide variety of interpretations of that term. (Letter from Terry Rivasplata et al. to OPR, February 2, 2009, at pp. 5, 12 and Attachment; Letter from Center for Biological Diversity et al. to OPR, February 2, 2009, at pp. 17.) Thus, retention of the term "lifecycle" in Appendix F could create confusion among lead agencies regarding what Appendix F requires.

Moreover, even if a standard definition of the term "lifecycle" existed, requiring such an analysis may not be consistent with CEQA. As a general matter, the term could refer to emissions beyond those that could be considered "indirect effects" of a project as that term is defined in section 15358 of the State CEQA Guidelines.

Depending on the circumstances of a particular project, an example of such emissions could be those resulting from the manufacture of building materials. (CAPCOA White Paper, at pp. 50-51.) CEQA only requires analysis of impacts that are directly or indirectly attributable to the project under consideration. (State CEQA Guidelines, § 15064(d).) In some instances, materials may be manufactured for many different projects as a result of general market demand, regardless of whether one particular project proceeds. Thus, such emissions may not be "caused by" the project under consideration. Similarly, in this scenario, a lead agency may not be able to require mitigation for emissions that result from the manufacturing process. Mitigation can only be required for emissions that are actually caused by the project. (State CEQA Guidelines, § 15126.4(a)(4).) Conversely, other projects may spur the manufacture of certain materials, and in such cases, consideration of the indirect effects of a project resulting from the manufacture of its components may be appropriate. A lead agency must determine whether certain effects are indirect effects of a project, and where substantial evidence supports a fair argument that such effects are attributable to a project, that evidence must be considered. However, to avoid potential confusion regarding the scope of indirect effects that must be analyzed, the term "lifecycle" has been removed from Appendix F.

Types of Energy Use

The amendments to Appendix F clarify that project design may achieve energy savings through measures related to water use and solid waste disposal. (California Energy Commission, Water Supply-Related Electricity Demand in California, CEC 500-2007-114 (November 2007), at p. 3 (reporting that water related energy use, including water movement, treatment and heating, annually accounts for approximately 20 percent of California's electricity consumption); Scoping Plan, Appendix C, at pp. C-158 to C-160.) The addition of these potential sources of energy reductions is consistent with the direction in section 21100(b)(3) to identify mitigation measures to reduce inefficient consumption of energy.

Grammar and Syntax

Finally, several minor revisions to Appendix F were made to improve grammar and syntax. Such revisions qualify as a "change without regulatory effect" pursuant to section 100(a)(4) of the Office of Administrative Law's regulations governing the rulemaking process. (Cal. Code Regs., tit. 1, § 100(a)(4).)

Necessity

The Legislature directed OPR and the Natural Resources Agency to develop guidelines on the analysis and mitigation of GHG emissions. (Pub. Resources Code, § 21083.05.) Since a significant source of GHG emissions results from energy use (consumption), these Amendments appropriately addressed energy use and conservation as a subject for CEQA analysis. Additionally, the legislature requires that lead agencies analyze energy use in their EIRs. (*Id*. at § 21100(b)(3).) The

amendments to Appendix F are, therefore, necessary to ensure that lead agencies implement these directives.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Natural Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Natural Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Natural Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

The Amendments interpret and make specific statutory CEQA provisions and/or case law interpreting CEQA's requirements for analysis and mitigation of energy use. Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California.

APPENDIX G. INITIAL STUDY CHECKLIST

Specific Purposes of the Amendment

The Amendments include revisions to several portions of Appendix G, which contains a sample environmental checklist that lead agencies may use to satisfy the requirement to prepare an initial study. The amendments and their necessity are described below.

Note Regarding Use of the Checklist

The amendments would add a note to the beginning of Appendix G to clarify the checklist contained therein is only a sample that may be modified as necessary to suit the lead agency and to address the particular circumstances of the project under consideration. The addition is necessary for two reasons. First, several lead agencies have expressed concern that the checklist does not reflect the circumstances existing in that particular agency. (See, e.g., Letter from Napa County – Department of Conservation, Development, and Planning to OPR, January 26, 2009; Letter from County of San Bernardino - Land Use Services Department to OPR, February 2, 2009.) Second, the Third District Court of Appeal recently issued an opinion that clarified that all substantial evidence regarding potential impacts of a project must be considered, even if the particular potential impact is not listed in Appendix G. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at 1109.) Thus, the note emphasizes that Appendix G does not mandate a particular form that must be used for an Initial Study; rather, it provides merely an example.

Forest Resources

The amendments would add several questions addressing forest resources in the section on Agricultural Resources. Forestry questions are appropriately addressed in the Appendix G checklist for several reasons. First, forests and forest resources are directly linked to both GHG emissions and efforts to reduce those emissions. For example, conversion of forests to non-forest uses may result in direct emissions of GHG emissions. (See, e.g., California Energy Commission Baseline GHG Emissions for Forest, Range, and Agricultural Lands in California (March, 2004) at p. 19.) Such conversion would also remove existing carbon stock (i.e., carbon stored in vegetation), as well as a significant carbon sink (i.e., rather than emitting GHGs, forests remove GHGs from the atmosphere). (Scoping Plan, Appendix C, at p. C-168.) Thus, such conversions are an indication of potential GHG emissions. Changes in forest land or timberland zoning may also ultimately lead to conversions, which could result in GHG emissions, aesthetic impacts, impacts to biological resources and water quality impacts, among others. Thus, these additions are reasonably necessary to ensure that lead agencies consider the full range of potential impacts in their initial studies. In the same way that an EIR must address conversion of prime agricultural land or wetlands as part of a project (addressing the whole of the action requires analyzing land clearance in advance of project development), so should it analyze forest removal.

During OPR's public involvement process, some commenters suggested that conversion of forest or timber lands to agricultural uses should not be addressed in the Initial Study checklist. (Letter from California Farm Bureau Federation to OPR, February 2, 2009; Letter from County of Napa, Conservation, Development and Planning Department, to OPR, January 26, 2009.) As explained above, the purpose of the Amendments is to implement the Legislative directive to develop Guidelines on the analysis and mitigation of GHG emissions. Although some agricultural uses also provide carbon sequestration values, most agricultural uses do not provide as much sequestration as forest resources. (Climate Action Team, *Carbon Sequestration* (2009), Chapter 3.3.8 at p. 3.21; California Energy Commission, *Baseline GHG Emissions for Forest, Range, and Agricultural Lands in California* (2004), at p. 2.) Therefore, such a project could result in a net increase in GHG emissions, among other potential impacts. Thus, such potential impacts are appropriately addressed in the Initial Study checklist. See the Thematic Responses, below, for additional discussion of this issue.

Greenhouse Gas Emissions

The additions also include two questions related to GHG emissions. These questions are necessary to satisfy the Legislative directive in section 21083.05 that the effects of GHG emissions be analyzed under CEQA. The questions are intended to provoke a full analysis of such emissions where appropriate. More detailed guidance on the context of such an analysis is provided in other sections throughout the Guidelines. Despite the detailed provisions in the Guidelines themselves, questions related to GHG emissions should also appear in the checklist because some lead agencies will not seriously consider an environmental issue unless it is specifically mentioned in the checklist. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal. App. 4th at 1110.)

Transportation

The Amendments make four primary changes to the questions involving transportation and traffic.

First, question (a) changes the focus from an increase in traffic at a given location to the effect of a project on the overall circulation system in the project area. This change is appropriate because an increase in traffic, by itself, is not necessarily an indicator of a potentially significant *environmental* impact. (Ronald Miliam, AICP, *Transportation Impact Analysis Gets a Failing Grade When it Comes to Climate Change and Smart Growth*; *see also* Land Use Subcommittee of the Climate Action Team LUSCAT Submission to CARB Scoping Plan on Local Government, Land Use, and Transportation Report (May, 2008) at pp. 31, 36.) Similarly, even if some projects may result in a deterioration of vehicular level of service – that is, delay experienced by drivers – the overall effectiveness of the circulation system as a whole may be improved. (*Ibid*.) Such projects could include restriping to provide bicycle lanes or creating dedicated bus lanes. Even in such cases, however, any potential adverse air

quality or other impacts would still have to be addressed as provided in other sections of the checklist. Finally, the change to question (a) also recognizes that the lead agency has discretion to choose its own metric of analysis of impacts to intersections, streets, highways and freeways. (Pub. Resources Code, § 21081.2(e); *Eureka Citizens for Responsible Gov't v. City of Eureka, supra,* 147 Cal.App.4th at 371-373 (lead agency has discretion to choose its methodology).) Thus, "level of service" may or may not be the applicable measure of effectiveness of the circulation system.

Second, the revision to question (b) clarifies the role of a congestion management program in a CEQA analysis. Specifically, it clarifies that a congestion management program contains many elements in addition to a level of service designation. (Gov. Code § 65088 et seq.) The clarification is also necessary to address any projects within an "in-fill opportunity zone" that may be exempted from level of service requirements. (*Id*. at § 65088.4.)

Third, the amendments eliminate the existing question (f) regarding parking capacity. Case law recognizes that parking impacts are not necessarily environmental impacts. (*San Franciscans Upholding the Downtown Plan v. City and County of San Francisco, supra,* 102 Cal.App.4th at 697.) The focus of the Initial Study checklist should be on direct impacts of a project. Therefore, the question related to parking is not relevant in the initial study checklist. As noted above, however, if there is substantial evidence indicating adverse indirect environmental impacts from a project related to parking capacity, the lead agency must address such potential impacts regardless of whether the checklist contains parking questions. (*Ibid*.) Additional discussion of this issue is included in the Thematic Responses, below.

Finally, the amendments revise existing question (g), now question (f), to address the performance and safety of certain modes of alternative transportation. These revisions were made in response to comments received on the Amendments. While the primary objective of the Amendments is to provide guidance on the analysis and mitigation of greenhouse gas emissions, this revision was determined to be necessary to support the use of alternative transportation.

Necessity

The Legislature directed OPR and the Resources Agency to develop guidelines on the analysis of GHG emissions. (Pub. Resources Code, § 21083.05.) An initial study may be used to assist in the determination of whether a project may have a significant effect on the environment. (*Protect the Historic Amador Waterways*, *supra*, 116 Cal. App. 4th at 1110.) Appendix G of the State CEQA Guidelines is intended to provide a sample of an initial study that lead agencies may use. (*Ibid*.) Amendment of Appendix G to include questions that will assist a lead agency in determining whether a project may result in significant impacts related to GHG emissions is, therefore, necessary to carry out the Legislature's directive in section 21083.05 of the Public Resources Code.

Reasonable Alternatives to the Regulation, Including Alternatives that Would Lessen Any Adverse Impact on Small Business, and the Resources Agency's Reasons for Rejecting Those Alternatives

The Natural Resources Agency considered reasonable alternatives to the Amendments and determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less burdensome to affected private persons than, the Amendments. This conclusion is based on the Natural Resources Agency's determination that the Amendments are necessary to implement the Legislature's directive in SB97 in a manner consistent with existing statutes and case law, and the Amendments add no new substantive requirements. The Natural Resources Agency rejected the no action alternative because it would not achieve the objectives of the Amendments. There are no alternatives available that would lessen any adverse impacts on small businesses, as any impacts would result from the implementation of existing law.

Evidence Supporting an Initial Determination That the Action Will Not Have a Significant Adverse Economic Impact on Business

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Because the Amendments do not add any substantive requirements, they will not result in an adverse impact on businesses in California. On the contrary, the

amendments to Appendix G are intended to reduce the costs of environmental review on lead agencies and project applicants by assisting lead agencies in determining which topics should be addressed in an Initial Study.

NON-SUBSTANTIAL CHANGES

On October 23, 2009, the Natural Resources Agency made available for public review certain changes to its originally proposed amendments. Those changes were described in the Notice of Proposed Changes. In response to comments on those changes, the Natural Resources Agency has made two non-substantial changes. Because those changes clarify the text that was made available for public review, and do not alter the requirements, rights, responsibilities, conditions, or prescriptions contained in the originally proposed text, the revisions are nonsubstantial and need not be circulated for additional public review. (Government Code, § 11346.8(c); Cal. Code Regs., tit. 1, § 40.) Those revisions are described below.

Section 15126.2(a)

As explained in the Notice of Proposed Changes, the revisions to the proposed text included a clarifying sentence in section 15126.2 indicating that an environmental impact report should analyze the effect of placing a project in areas susceptible to hazardous conditions. That revision specifically lists types of areas (including floodplains, coastlines and wildfire risk areas) that may be most impacted by the effects of a changing climate. The revision would also clarify that analysis of such hazards is appropriate where such areas are specified in authoritative hazard maps, risk assessments or land use plans.

The Natural Resources Agency further revised section 15126.2(a) in response to comments. That section was revised as follows:

> Similarly, the EIR should evaluate ~~the~~ **<u>any potentially significant</u>** impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.

This change does not alter the rights, responsibilities, conditions, or prescriptions contained in the originally proposed text because the Public Resources Code already provides that an EIR is only required for those impacts that are potentially significant. (Public Resources Code, § 21002.1(a).) Because this revision clarifies the last sentence in section 15126.2(a), consistent with the Public Resources Code, this revision is nonsubstantial and need not be circulated for additional public review. (Government Code, § 11346.8(c); Cal. Code Regs., tit. 1, § 40.)

Section 15126.4(c)

The Natural Resources Agency also further revised text related to mitigation that was made publicly available as described in the October 23, 2009, Notice of Proposed Changes in response to comments on that text. The revision clarifies that the qualification that measures to mitigate greenhouse gas emissions must not otherwise be required applies in the context of offsets and is not intended to contradict case law recognizing that changes in a project that are required to comply with existing environmental standards may qualify as mitigation. Thus, section 15126.4(c) was revised as follows:

> (c) Mitigation Measures Related to Greenhouse Gas Emissions.
>
> Consistent with section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions**.** ~~**Reductions in emissions that are not otherwise required may constitute mitigation pursuant to this subdivision.**~~ Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:
>
> (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;
>
> (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in Appendix F;
>
> (3) Off-site measures, including offsets **that are not otherwise required**, to mitigate a project's emissions;
>
> (4) Measures that sequester greenhouse gases;
>
> (5) In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.

This change does not alter the rights, responsibilities, conditions, or prescriptions contained in the originally proposed text because the Public Resources Code already provides that to be considered mitigation, a measure must be tied to impacts resulting from the project. Section 21002 of the Public Resources Code, the source of the

requirement to mitigate, states that "public agencies should not approve projects as proposed if there are … feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" Similarly, section 21081(a)(1) specifies a finding by the lead agency in adopting a project that "[c]hanges or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment." Both statutory provisions expressly link the changes to be made (i.e., the "mitigation measures") to the significant effects of the project. Because this revision clarifies section 15126.4(c), consistent with the Public Resources Code, this revision is nonsubstantial and need not be circulated for additional public review. (Government Code, § 11346.8(c); Cal. Code Regs., tit. 1, § 40.)

THEMATIC RESPONSES

Several themes emerged in the comments submitted on the Natural Resources Agency's proposed amendments to the CEQA Guidelines addressing greenhouse gas emissions. While the Natural Resources Agency has responded individually to each comment it received, the following provides general responses to several issues that were raised repeated in the comments.

Quantitative versus Qualitative Analysis

Many comments focused on section 15064.4's recognition of lead agency discretion in determining whether to analyze a project's greenhouse gas emissions using either qualitative or quantitative methods, or both. Some comments suggested that a qualitative analysis would not satisfy CEQA's informational mandates. Other comments indicated that qualitative analysis is consistent with CEQA, and may be particularly appropriate in the context of a negative declaration. Other comments asked for examples of how performance standards could be used in such an analysis. As explained in the Initial Statement of Reasons, the Natural Resources Agency finds that CEQA leaves to lead agencies the choice of the most appropriate methodology to analyze a project's impacts, and that rule should continue to apply in the context of greenhouse gas emissions. The reasoning supporting this determination is set forth below.

First, nothing in CEQA prohibits use of a qualitative analysis or requires the use of a quantitative analysis. As explained in the Initial Statement of Reasons, CEQA directs lead agencies to consider qualitative factors. (Initial Statement of Reasons, at p. 19; Public Resources Code, § 21001(f).) Further, the existing CEQA Guidelines recognize that thresholds of significance, which are used in the determination of significance, may be expressed as quantitative, qualitative or performance-based standards. (State CEQA Guidelines, § 15064.7.) Moreover, even where quantification is technically or theoretically possible, "CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors." (State CEQA Guidelines, § 15204(a); see also *Ass'n of*

Irritated Residents v. County of Madera (2003) 107 Cal.App.4th 1383, 1396-1398; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 27 Cal.App.4th 713, 728.)[12]

Second, the comments do not appropriately distinguish between the determination of significance and the informational standards governing the preparation of environmental documents. The purpose of section 15064.4 is to assist the lead agency in determining whether a project's greenhouse gas emissions may be significant, which would require preparation of an EIR, and if an EIR is prepared, to determine whether such emissions are significant, which would require the imposition of feasible mitigation or alternatives. The existing CEQA Guidelines contain several provisions governing the informational standards that apply to various environmental documents. Conclusions in an initial study, for example, must be "briefly explained to indicate that there is <u>some evidence</u> to support" the conclusion. (State CEQA Guidelines, § 15063(d) (emphasis added).) Similarly, if an EIR is prepared, a determination that an impact is not significant must be explained in a "statement <u>briefly</u> indicating the reasons that various possible significant effects of a project" are in fact not significant. (State CEQA Guidelines, § 15128 (emphasis added).) If the impact is determined to be significant, the impact "should be discussed with emphasis in proportion to their severity and probability of occurrence." (State CEQA Guidelines, § 15143.) The explanation of significance in an EIR must be "prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences" and must demonstrate "adequacy, completeness, and a good faith effort at full disclosure." (State CEQA Guidelines, § 15151.) In sum, while proposed section 15064.4(a) reflects the requirement that a lead agency base its significance determination on substantial evidence, whether quantitative, qualitative or both, it does not, as some comments appear to fear, alter the rules governing the sufficiency of information in an environmental document.

Third, the discretion recognized in section 15064.4 is not unfettered. A lead agency's analysis, whether quantitative or qualitative, would be governed by the standards in the first portion of section 15064.4. The first sentence applies to the context of greenhouse gas emissions the general CEQA rule that the determination of significance calls for a careful judgment by the lead agency. (Proposed § 15064.4(a) ("[t]he determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064").) The second sentence sets forth the requirement that the lead agency make a good-faith effort to describe, calculate or estimate the amount of greenhouse gas emissions

[12] Notably, as administrative regulations, the development of the proposed regulations is governed by the Administrative Procedures Act. Government Code section 11340.1(a) states the Legislature's intent that administrative regulations substitute "performance standards for prescriptive standards wherever performance standards can be reasonably expected to be as effective and less burdensome, and that this substitution shall be considered during the course of the agency rulemaking process." Thus, absent authority in CEQA that would prohibit a qualitative analysis, section 15064.4 appropriately recognizes a lead agency's discretion to determine what type of analysis is most appropriate to determine the significance of a project's greenhouse gas emissions.

resulting from a project. That sentence has been further revised, as explained in greater detail below, to provide that the description, calculation or estimation is to be based "to the extent possible on scientific and factual data." The third sentence advises that the exercise of discretion must be made "in the context of a particular project." Thus, as provided in existing section 15146, the degree of specificity required in the analysis will correspond to the degree of specificity involved in the underlying project. In other words, even a qualitative analysis must demonstrate a good-faith effort to disclose the amount and significance of greenhouse gas emissions resulting from a project.

Fourth, the discretion recognized in proposed section 15064.4 would not enable a lead agency to ignore evidence submitted to it as part of the environmental review process. For example, if a lead agency proposes to adopt a negative declaration based on a qualitative analysis of the project's greenhouse gas emissions, and a quantitative analysis is submitted to that lead agency supporting a fair argument that the project's emissions may be significant, an EIR would have to be prepared. The same holds true if a lead agency proposes to adopt a negative declaration based on a quantitative analysis, and qualitative evidence supports a fair argument that the project's emissions may be significant. (*Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm*. (2001) 91 Cal.App.4th 1344, 1382; *Oro Fino Gold Mining Corp. v. County of El Dorado* (1990) 225 Cal. App. 3d 872, 881-882 (citizens' personal observations about the significance of noise impacts on their community constituted substantial evidence that the impact may be significant and should be assessed in an EIR, even though the noise levels did not exceed general planning standards).) Similarly, even if an EIR is prepared, a lead agency would have to consider and resolve conflicts in the evidence in the record. (State CEQA Guidelines, § 15151 ("EIR should summarize the main points of disagreement among the experts"); *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109.)

Finally, regarding performance standards, several examples exist of the types of performance standards that might appropriately be used in determining the significance of greenhouse gas emissions. Proposed section 15183.5(b)(1)(D), for example, contemplates that a plan for the reduction of greenhouse gas emissions may contain performance based standards. Where such standards are developed as part of such a plan, a lead agency would have evidence indicating that compliance with such standards would indicate that the impact of greenhouse gas emissions would be less than significant. Further, in adopting SB375, the Legislature acknowledged that regional transportation plans, and the environmental impact reports prepared to analyze those plans, may contain performance standards that would apply to transit priority projects. (See, e.g., Public Resources Code, § 21155.2.) Other potential examples[13] include the Bay Area Air Quality Management District's proposed Best Management Practices for Construction Greenhouse Gas Emissions (calling for use of alternative fuels, local building materials and recycling), and the California Public Utilities Commission's Performance Standard for Power Plans (requiring emissions no greater

[13] The Natural Resources Agency does not necessarily endorse the use of these performance standards. Lead agencies must determine whether a particular standard is appropriate based on the substantial evidence supporting it and the context of the particular project.

than a combined cycle gas turbine plant). As with either a qualitative or quantitative analysis, reliance on performance standards must be supported with "scientific or factual data" indicating that compliance with the standard will ensure that impacts of greenhouse gas emissions are less than significant.

In sum, the proposed section 15064.4(a) appropriately reflects the standards in CEQA governing the determination of significance and the discretion CEQA leaves to lead agencies to determine how to analyze impacts. Mandating that lead agencies must quantify emissions whenever quantification is possible would be a departure from the CEQA statute.

Existing Environmental Setting

Several comments focused on the phrase "existing environmental setting" in section 15064.4(b)(1). Some comments urged, for example, that only "net" emissions should be considered. Comments from energy producers suggested that the phrase "existing environmental system" should encompass the entire energy system, which extends beyond California's borders. Some comments suggested that section 15064.4 should include a lifecycle analysis.

Section 15064.4(b)(1) advises lead agencies to consider the extent to which a project would increase or decrease greenhouse gas emissions compared to the existing environmental setting. In performing this analysis, a lead agency must account for all project phases, including construction and operation, as well as indirect and cumulative impacts. (State CEQA Guidelines, §§ 15063(a) ("[a]ll phases of project planning, implementation, and operation must be considered in the initial study…"), 15064(h) (addressing cumulative impacts), 15126 ("[a]ll phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation"), 15358(a)(2) (defining "effects" to include indirect effects), 15378.) The "setting" to be described varies depending on the project and the potential environmental resources that it may affect. In *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal. App. 4th 859, for example, the lead agency failed to adequately describe the environmental setting by limiting its discussion primarily to the southern portions of its water system. Framing the setting narrowly resulted in impacts to the northern portion of the water system being ignored. Finding that section 15125 is to be construed broadly to ensure the fullest protection to the environment, the court in that case held that the lead agency was required to disclose that increased use of the southern portion of the water system would require greater diversions from the northern portion, and to analyze the impacts on species in the northern portion of the system. (*Id*. at pp. 873-875.) In the context of power generation, to the extent that a project may cause changes in greenhouse gas emissions in an existing power system, and substantial evidence substantiates such changes, those changes may be considered pursuant to section 15064.4(b)(1).

Similarly, if an agency has performed an analysis that demonstrates that a particular process for waste treatment does not result in an increase in greenhouse gas emissions compared to biogenic emissions that already occurs in the atmosphere, that evidence may support a conclusion that the project would not cause an increase in greenhouse gas emissions. Thus, to the extent a lead agency does not consider biogenic emissions to be new emissions, and its analysis is supported with substantial evidence, the text in section 15064.4(b)(1) would be broad enough to encompass those emissions, subject to the limitation that such analysis could not be used in a way that would mask the effects of emissions associated with the project. For example, if the emissions occurring in the short-term will have impacts that differ from emissions occurring in the future, those differences may need to be analyzed.

Finally, some comments suggested that the Guidelines should authorize a "net" or "lifecycle" analysis for projects that operate within a closed system. Nothing in section 15064.4 precludes such analysis where such analysis complies with the provision of section 15064, and where substantial evidence supports the ultimate conclusions and findings. However, since a "net" analysis may only be appropriate or possible in limited cases, the Natural Resources Agency deliberately chose to draft section 15064.4 broadly. Additionally, in some situations, a true "net" analysis may not be technically feasible or scientifically possible, and determination of an appropriate baseline for determining a "net" effect may be difficult.

As explained below, the Natural Resources Agency has deliberately avoided the term "lifecycle," however, to the extent an agency equates "lifecycle" with what occurs in the existing environmental setting, section 15064.4 authorizes lead agencies to consider such evidence.

Thresholds of Significance

Some comments expressed concern that the proposed amendments did not establish a statewide threshold of significance. Others suggested that most lead agencies are not qualified to establish their own thresholds, and if they do adopt thresholds, they should be required to adopt the most stringent threshold possible.

The CEQA Guidelines do not establish thresholds of significance for other potential environmental impacts, and SB97 did not authorize the development of a statewide threshold as part of this CEQA Guidelines update. Rather, the proposed amendments recognize a lead agency's existing authority to develop, adopt and apply their own thresholds of significance or those developed by other agencies or experts. As set forth in the existing section 15064.7, a threshold is "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant." Because a threshold would be used in the determination of significance,

the threshold would need to be supported with substantial evidence. (State CEQA Guidelines, § 15064.7(b).)

As explained in a recent decision of the Third District Court of Appeal, "[p]ublic agencies are … encouraged to develop thresholds of significance for use in determining whether a project may have significant environmental effects." (*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1108.) Nothing in CEQA requires that thresholds be developed by experts or expert agencies; however, "thresholds can be drawn from existing environmental standards, such as other statutes or regulations." (*Id*. at p. 1107.) Regardless of who develops the threshold, if an agency adopts a threshold, it must be supported with substantial evidence. (State CEQA Guidelines, § 15064.7(b).) Additionally, "thresholds cannot be used to determine automatically whether a given effect will or will not be significant[;]" "[i]nstead, thresholds of significance can be used only as a measure of whether a certain environmental effect "will *normally* be determined to be significant" or "*normally* will be determined to be less than significant" by the agency. (Guidelines, § 15064.7, subd. (a), italics added.)" (*Protect the Historic Amador Waterways*, *supra*, 116 Cal.App.4th at pp. 1108-1109.) Proposed subdivision (c) of section 15064.7 recognizes the principles described above by expressly recognizing that experts and expert agencies may be developing thresholds that other public agencies may find useful in their own CEQA analyses, but requiring, as a safeguard, that any such threshold be supported with substantial evidence.

Notably, nothing in either AB32 or SB97 requires a finding of significance for any particular level of increase in greenhouse gas emissions. AB32, and regulations implementing that statute, will require reductions in emissions from certain sectors in the economy, but do not preclude new emissions. Moreover, as explained in the Initial Statement of Reasons, the proposed amendments do not establish a zero emissions threshold of significance because "there is no 'one molecule rule' in CEQA. (*CBE*, *supra*, 103 Cal.App.4th at 120.)" (Initial Statement of Reasons, at p. 20.)

Some comments suggested that any numeric thresholds that are developed should not be set at such a low level that adverse economic impacts would result. While economic issues are appropriate in the determination of feasibility of mitigation and alternatives, it is not appropriate in the determination of significance (see, e.g., Public Resources Code, § 21002), so a threshold should not be designed with economic impacts in mind. Moreover, even a "high" threshold would not relieve agencies of the requirement to consider any evidence indicating that a project may have a significant effect despite falling below a threshold. (*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109; *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 342.)

Mitigation Hierarchy

CEQA's substantive mandate requires that "public agencies should not approve projects as proposed if there are … feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" (Public Resources Code, § 21002.) The statute defines feasible to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Public Resources Code, § 21061.1.) The Legislature further provided that a lead agency may use its lawful discretion to mitigate significant impacts to the extent provided by other laws:

> In mitigating or avoiding a significant effect of a project on the environment, a public agency may exercise only those express or implied powers provided by law other than this division. However, a public agency may use discretionary powers provided by such other law for the purpose of mitigating or avoiding a significant effect on the environment subject to the express or implied constraints or limitations that may be provided by law.

(Public Resources Code, § 21004.) Cities and counties may rely on their constitutional police powers, for example, while the ability of other agencies to require mitigation may be limited by the scope of their statutory authority. Mitigation is also subject to constitutional limitations; i.e., there must be a nexus between the mitigation measure and the impact it addresses, and the mitigation must be roughly proportional to the impact of the project. (*Nollan v. California Coastal Comm'n* (1987) 483 U.S. 825; *Dolan v. City of Tigard* (1994) 512 U.S. 374; State CEQA Guidelines, § 15126.4(a)(4).)

CEQA itself imposes very few limitations on a lead agency's discretion to impose mitigation. For example, agencies may not mitigate the effects of a housing project by reducing the proposed number of units if other feasible mitigation measures are available. (Public Resources Code, § 21159.26.) Similarly, the Legislature has prescribed specific types of mitigation in only very limited circumstances; i.e., impacts to archeological resources and oak woodlands. (Public Resources Code, §§ 21083.2, 21083.4.)

SB 97 specifically called for guidelines addressing the mitigation of greenhouse gas emissions. In doing so, however, the Legislature did not alter a lead agency's discretion, authority or limitations on the imposition of mitigation where the impacts of a project's greenhouse gas emissions are significant. Thus, as explained in the Initial Statement of Reasons, the existing CEQA rules apply to the mitigation of greenhouse gas emissions.

Within the scope of a lead agency's existing authority, the CEQA Guidelines already contain provisions that recognize a lead agency's obligation to balance various factors in determining how or whether to carry out a project. (State CEQA Guidelines, § 15021(d).) Further, the Guidelines already require that "[w]here several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified." (State CEQA Guidelines, § 15126.4(a)(1)(B).)

Additionally, public agencies are directed to adopt their own implementing procedures, consistent with CEQA and the State CEQA Guidelines, which could set forth the types of mitigation that a particular agency finds to be most appropriate for projects subject to its approval. (State CEQA Guidelines, § 15022.) The Natural Resources Agency cannot, however, state in the State CEQA Guidelines that all lead agencies have the authority to prioritize types of mitigation measures, or to establish any particular priority order for them. Each lead agency must determine the scope of its own authority based on its own statutory or constitutional authorization.

Reliability and Effectiveness of Mitigation

Some comments expressed concern about the reliability and efficacy of some mitigation strategies. In response to such comments, the Natural Resources Agency further revised section 15126.4(c) to expressly require that any measures, in addition to being feasible, must be supported with substantial evidence and be capable of monitoring or reporting. (See Revised Section 15126.4(c) (October 23, 2009).) This addition reflects the requirements in Public Resources Code section 21081.5 that findings regarding mitigation be supported with substantial evidence and the monitoring or reporting requirement in section 21081.6.

The text of proposed section 15126.4(c), addressing mitigation of greenhouse gas emissions, also requires that mitigation measures be effective. The first sentence of that section requires that mitigation be "feasible." Further, the statue defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Public Resources Code, § 21061.1 (emphasis added); see also State CEQA Guidelines § 15364 (adding "legal" factors to the definition of feasibility.) A recent decision of the Third District Court of Appeal confronting questions regarding the effectiveness of a mitigation measure explained: "concerns about whether a specific mitigation measure 'will actually work as advertised,' whether it 'can … be carried out,' and whether its 'success … is uncertain' go to the feasibility of the mitigation measure[.]" (*California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal. App. 4th 603, 622-623.) Thus, by requiring that lead agencies consider feasible mitigation of greenhouse gas emissions, section 15126.4(c) already requires that such measures be effective.

Off-site Mitigation and Offsets

Relatively little authority addresses the question of how close of a causal connection must exist between off-site emissions reductions and project implementation in order to be adequate mitigation under CEQA. CEQA requires lead agencies to mitigate or avoid the significant effects of proposed projects where it is feasible to do so. While the CEQA statute does not define mitigation, the State CEQA Guidelines define mitigation to include:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

(State CEQA Guidelines, § 15370.) As subdivision (e) implies, off-site measures may constitute mitigation under CEQA, and such measures have been upheld as adequate mitigation in CEQA case law. (See, e.g., *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal. App. 4th 603, 619-626.)

Whether on-site or off-site, to be considered mitigation, the measure must be tied to impacts resulting from the project. Section 21002 of the Public Resources Code, the source of the requirement to mitigate, states that "public agencies should not approve projects as proposed if there are … feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" Similarly, section 21081(a)(1) specifies a finding by the lead agency in adopting a project that "[c]hanges or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment." Both statutory provisions expressly link the changes to be made (i.e., the "mitigation measures") to the significant effects of the project. Courts have similarly required a link between the mitigation measure and the adverse impacts of the project. (*Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal. App. 4th 99, 128-131 (EIR must discuss "the history of water pumping on [the off-site mitigation] property and its feasibility for providing an actual offset for increased pumping on the [project] property").) The text of sections 21002 and 21081, and case law requiring a "nexus" between a measure and a project impact, together indicate that "but for" causation is a necessary element of mitigation. In other words, mitigation should normally be an activity that occurs in order to minimize a particular significant effect. Or, stated another way and in the context of greenhouse gas emissions, emissions reductions that would occur without a project would not normally qualify as mitigation.

Notably, this interpretation of the CEQA statute and case law is consistent with the Legislature's directive in AB32 that reductions relied on as part of a market-based compliance mechanism must be "in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission

reduction that otherwise would occur." (Health and Safety Code, § 38562(d)(2).) While AB32 and CEQA are separate statutes, the additionality concept may be applied analytically in the latter as follows: greenhouse gas emission reductions that are otherwise required by law or regulation would appropriately be considered part of the existing baseline. Pursuant to section 15064.4(b)(1), a new project's emissions should be compared against that existing baseline.

Thus, in light of the above, and in response to concerns raised in the comments, the Natural Resources Agency has revised section 15126.4(c)(3) to state that mitigation includes: "Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions[.]" This provision is intended to be read in conjunction with the statutory mandate in Public Resources Code sections 21002 and 21081 that mitigation be tied to the effects of a project.

This provision would not limit the ability of a lead agency to create, or rely on the creation of, a mechanism, such as an offset bank, created prospectively in anticipation of future projects that will later rely on offsets created by those emissions reductions. The Initial Statement of Reasons referred, for example, to community energy conservation projects. (Initial Statement of Reasons, at p. 38.) Such a program could, for example, identify voluntary energy efficiency retrofits that would not occur absent implementation of the program, and then fund the retrofits through the sale of offsets that would occur as a result of the retrofit. Emissions reductions that occur as a result of a regulation requiring such reduction, on the other hand, would not constitute mitigation.

Some comments opined that offsets are highly uncertain and of questionable legitimacy. The Initial Statement of Reasons, however, cites several sources discussing examples of offsets being used in a CEQA context. Further, the ARB Scoping Plan describes offsets as way to "provide regulated entities a source of low-cost emission reductions, and … encourage the spread of clean, efficient technology within and outside California." (Scoping Plan, Appendix C, at p. C-21.) The Natural Resources Agency finds that the offset concept is consistent with the existing CEQA Guidelines' definition of "mitigation," which includes "[r]ectifying the impact by repairing, rehabilitating, or restoring the impacted environment" and "[c]ompensating for the impact by replacing or providing substitute resources or environments." (State CEQA Guidelines, §§ 15370(c), (e).)

While the proposed amendments recognize offsets as a potential mitigation strategy, they do not imply that offsets are appropriate in every instance. The efficacy of any proposed mitigation measure is a matter for the lead agency to determine based on the substantial evidence before it. Use of the word "feasible" in proposed Section 15126.4(c) requires the lead agency to find that any measure, including offsets, would be "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (State CEQA Guidelines, § 15364.)

Thus, the Natural Resources Agency finds that by expressly requiring that any mitigation measure be feasible, supported with substantial evidence, and capable of monitoring or reporting, section 15126.4(c) adequately addresses the concern stated in the comment that offsets may be of questionable legitimacy.

Use of Plans for the Reduction of Greenhouse Gas Emissions in a Cumulative Impacts Analysis

Section 15183.5 was developed to address tiering and streamlining the analysis of greenhouse gas emissions. Subdivision (a) highlights existing tiering and streamlining mechanisms in CEQA that may be used to address the analysis and mitigation of greenhouse gas emissions. Those mechanisms are often used for general plans and other long range planning documents. Subdivision (a) therefore recognizes that lead agencies may choose to include a programmatic analysis of greenhouse gas emissions in those long range plans. That subdivision did not create any new tiering or streamlining provisions; rather, it cross-references existing mechanisms. Each mechanism has its own benefits and drawbacks, and the use of any analysis of greenhouse gas emissions contained in such a document would be governed by the specific provisions cited in subdivision (a).

Subdivision (b), on the other hand, acknowledges that, in addition to the long range documents mentioned in subdivision (a), some agencies are voluntarily developing stand-alone plans focused specifically on the reduction of greenhouse gas emissions. Subdivision (b) is not a tiering mechanism. Tiering is governed by section 15152 of the existing CEQA Guidelines. The purpose of section 15183.5(b) is much narrower. Because climate action plans and greenhouse gas reduction plans are voluntary, and not subject to any legislative criteria or requirements, subdivision (b) was developed "to assist lead agencies in determining whether an existing greenhouse gas reduction plan is an appropriate document to use in a cumulative impacts analysis under CEQA." (Initial Statement of Reasons, at p. 54.) Specifically, a project that is consistent with a plan that satisfies the criteria in subdivision (b) may benefit from the presumption created in sections 15064(h)(3) and 15130(d) that the project's cumulative impacts are less than significant due to compliance with the plan. Subdivision (b) does not create or authorize any plans; rather, it provides a tool to determine whether a plan for the reduction of greenhouse gas emissions may be used in a cumulative impacts analysis as provided in section 15064(h)(3) or 15130(d). Section 15183.5(b) does not require that public agencies develop plans for the reduction of greenhouse gas emissions, nor does it prohibit public agencies from developing individual ordinances and regulations to address individual sources of greenhouse gas emissions.

As an example, if a general plan EIR analyzed and mitigated greenhouse gas emissions, a lead agency would likely use the specific streamlining provision applicable to general plan EIRs in section 15183, and not the more general provision in 15183.5(b). A stand alone "climate action plan" that was not analyzed in a program EIR, master EIR, or other mechanism identified in 15183.5(a) may still be used in a

cumulative impacts analysis pursuant to sections 15064(h)(3) or 15130(d), but only if that climate action plan contains the elements listed in section 15183.5(b)(1).

Some comments suggested that section 15183.5(b) should identify specific types of plans to which it would apply. That section was developed precisely because plans for the reduction of greenhouse gas emissions are not specified in law and are so varied. They have been variously titled “climate action plans”, “sustainability plans”, “greenhouse gas reduction plans”, etc. Contents of such plans also vary widely. Thus, the Natural Resources Agency cannot specifically identify which plans satisfy the criteria in subdivision (b). That determination must be made by the individual lead agency based on whether the specific plan under consideration satisfies each of the criteria in subdivision (b)(1).

Notably, public agencies are required to develop their own procedures to implement CEQA. (State CEQA Guidelines, § 15022.) If a lead agency determines that it does not have a plan for the reduction of greenhouse gas emissions that contains the criteria set forth in section 15183.5(b), but its collective policies, ordinances and other requirements nevertheless ensure that the incremental contribution of individual projects is not cumulatively considerable, and substantial evidence supports that determination, it could include such an explanation and support in its own implementing procedures.

Some comments questioned how a Sustainable Communities Strategy or Alternative Planning Strategy should be treated in light of section 15183.5. SB375 encourages programmatic analysis and planning for greenhouse gas emissions from cars and light-duty trucks, and provides specific CEQA streamlining benefits for certain types of projects that are consistent with a Sustainable Communities Strategy (SCS) or an Alternative Planning Strategy (APS). Given the specificity of those statutory provisions, sections 21155 through 21155.3 and 21159.28 of the Public Resources Code in particular, the Office of Planning and Research and the Natural Resources Agency did not find that additional guidance on those provisions was necessary at this time. Proposed section 15183.5(c), however, clarifies that while certain projects consistent with an SCS or APS may not need to analyze greenhouse gas emissions from cars and light-duty trucks, emissions from other sources still may require analysis and mitigation. As SB97 requires the CEQA Guidelines to be updated every two years to incorporate new information, additional guidance regarding the relationship between CEQA and SB375 may be developed as necessary. (See also the discussion of AB32, SB375 and CEQA, above.)

Definition of Greenhouse Gas Emissions

Several comments objected to the definition of greenhouse gas emissions in the Guidelines. Some suggested that it should be strictly limited to the gases identified in AB32. Other thought it should include all potential greenhouse gas emissions. Still others wanted to exclude biogenic emissions from the definition.

As explained in the Initial Statement of Reasons, the definition of greenhouse gases in AB32 states that GHG "includes all of the following…." (Health and Safety Code, § 38505(g).) The Legislature thus implied that other gases may also be considered GHGs. Further, the ARB Scoping Plan also acknowledged that other gases contribute to climate change. (Scoping Plan, at p. 11.) Consistent with the definition in the Health and Safety Code, the proposed definition in the Proposed Amendments is not exclusive to the six primary GHGs. The purpose of a more expansive definition is to ensure that lead agencies do not exclude from consideration GHGs that are not listed, so long as substantial evidence indicates that such non-listed gases may result in significant adverse effects. This approach is consistent with the Supreme Court's directive that CEQA be interpreted to provide the fullest possible protection to the environment. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 390.)

While the definition could not be strictly limited to the six gases identified in AB32, the Natural Resources Agency concluded that specific mention of other potential greenhouse gases was also not appropriate. Notably, the federal Environmental Protection Agency limited its proposed endangerment finding to those same six listed gases. It did so because the six gases are well studied, and have been the focus of climate change research. (Federal Register, v. 74, 18886, 18895 (April 24, 2009).) It is not necessary to list each of the known potential greenhouse gases because the proposed definition in section 15364.5 is written broadly, stating that the greenhouse gas emissions "are not limited to" the listed examples. As further explained in the Initial Statement of Reasons, the "purpose of a more expansive definition is to ensure that lead agencies do not exclude from consideration GHGs that are not listed, so long as substantial evidence indicates that such non-listed gases may result in significant adverse effects." (Initial Statement of Reasons, at p. 58.) Because the CEQA Guidelines must be updated periodically to reflect developments relating to greenhouse gas emissions, the Natural Resources Agency may expand the definition of greenhouse gas emissions if necessary to reflect the most current science and practice.

The Natural Resources Agency also concluded that the definition of greenhouse gas emissions should not differentiate between biogenic and anthropogenic emissions. SB97 does not distinguish between the sources of greenhouse gas emissions. Notably, neither AB32 nor the Air Resources Board's Scoping Plan distinguishes between biogenic and anthropogenic sources of greenhouse gas emissions. On the contrary, the Scoping Plan identifies methane from, among other sources, organic wastes decomposing in landfills as a source of emissions that should be controlled. (Scoping Plan, at pp. 62-63.)

Forestry

Some comments objected to the inclusion of questions related to forest resources in the Appendix G questions in the section on agricultural resources.

SB97 called for guidance on the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions. (Public Resources Code, § 21083.05.) As explained in the Initial Statement of Reasons, forest conversions may result in direct greenhouse gas emissions. Further, such conversions remove existing forest stock and the potential for further carbon sequestration. (Initial Statement of Reasons, at p. 63.) Sequestration is recognized as a key mitigation strategy in the Air Resources Board's Scoping Plan. (Scoping Plan, Appendix C, at p. C-168.)

The addition of questions related to forestry does not target the establishment of agricultural operations. The questions ask about *any* conversion of forests, not just conversions to other agricultural operations. Moreover, analysis of impacts to forestry resources is already required. The Legislature has declared that "forest resources and timberlands of the state are among the most valuable of the natural resources of the state" and that such resources "furnish high-quality timber, recreational opportunities, and aesthetic enjoyment while providing watershed protection and maintaining fisheries and wildlife." (Public Resources Code, § 4512(a)-(b).) Because CEQA defines "environment" to include "land, air, water, minerals, flora, fauna, noise, [and] objects of historic or aesthetic significance" (Public Resources Code, section 21060.5), and because forest resources have been declared to be "the most valuable of the natural resources of the state," projects affecting such resources must be analyzed, whether or not specific questions relating to forestry resources appear in Appendix G. (*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109.) In effect, suggestions that the Appendix G questions be limited to conversions to "non-agricultural uses" ask the Natural Resources Agency to adopt changes that are inconsistent with CEQA, which it cannot do.

Questions related to greenhouse gas emissions in Appendix G are not sufficient to address impacts related to forestry resources. As explained in the Initial Statement of Reasons, not only do forest conversions result in greenhouse gas emissions, but may also "remove existing carbon stock (i.e., carbon stored in vegetation), as well as a significant carbon sink (i.e., rather than emitting GHGs, forests remove GHGs from the atmosphere)." (Initial Statement of Reasons, at p. 63.) Further, conversions may lead to "aesthetic impacts, impacts to biological resources and water quality impacts, among others." The questions related to greenhouse gas emissions would not address such impacts. Thus, the addition of forestry questions to Appendix G is appropriate both pursuant to SB97 and the Natural Resources Agency's general authority to update the CEQA Guidelines pursuant to Public Resources Code section 21083(f).

"Level of Service" and Transportation Impact Analysis

The Natural Resources Agency acknowledges the concern expressed by some comments that the use of level of service metrics in CEQA analysis has led to an auto-centric focus. The Office of Planning and Research and the Natural Resources Agency have participated in extensive outreach with stakeholder groups to revise question (a) in the transportation section of Appendix G to accomplish the following goals:

- Assess traffic impacts on intersections, streets, highways and freeways as well as impacts to pedestrian, non-vehicular and mass-transit circulation
- Recognize a lead agency's discretion to choose methodology, including LOS, to assess traffic impacts
- Harmonize existing requirements in congestion management programs, general plans, ordinances, and elsewhere

In response to public comments submitted on proposed amendments, the Natural Resources Agency further refined question (a) to shift the focus from the capacity of the circulation system to consistency with applicable plans, policies that establish objective measures of effectiveness.

Some comments advocated leaving the existing text in question (a) of the transportation section of Appendix G intact. As explained in the Initial Statement of Reasons,

> [Q]uestion (a) changes the focus from an increase in traffic at a given location to the effect of a project on the overall circulation system in the project area. This change is appropriate because an increase in traffic, by itself, is not necessarily an indicator of a potentially significant environmental impact. (Ronald Miliam, AICP, Transportation Impact Analysis Gets a Failing Grade When it Comes to Climate Change and Smart Growth; see also Land Use Subcommittee of the Climate Action Team LUSCAT Submission to CARB Scoping Plan on Local Government, Land Use, and Transportation Report (May, 2008) at pp. 31, 36.) Similarly, even if some projects may result in a deterioration of vehicular level of service – that is, delay experienced by drivers – the overall effectiveness of the circulation system as a whole may be improved. (*Ibid*.) Such projects could include restriping to provide bicycle lanes or creating dedicated bus lanes. Even in such cases, however, any potential adverse air quality or other impacts would still have to be addressed as provided in other sections of the checklist. Finally, the change to question (a) also recognizes that the lead agency has discretion to choose its own metric of analysis of impacts to intersections, streets, highways and freeways. (Pub. Resources Code, § 21081.2(e); *Eureka Citizens for Responsible Gov't v. City of Eureka*, *supra*, 147 Cal.App.4th at 371-373 (lead agency has discretion to choose its methodology).) Thus, "level of service" may or may not be the applicable measure of effectiveness of the circulation system.

(Initial Statement of Reasons, at pp. 64-65.) Further, evidence presented to the Natural Resources Agency indicates that "mitigation" of traffic congestion may lead to even greater environmental impacts than might result from congestion itself. (See, e.g.,

Cervero, Robert. (July, 2001). *Road Expansion, Urban Growth, and Induced Travel: A Path Analysis*. Journal of the American Planning Association, Vol. 69 No. 2. American Planning Association (confirming "induced demand" phenomenon associated with capacity improvements).)

While the terms "volume to capacity ratio" and "congestion at intersections" no longer appear in question (a), nothing precludes a lead agency from including such measures of effectiveness in its own general plan or policies addressing its circulation system. Though the Office of Planning and Research originally recommended specifying "vehicle miles traveled" as a question in Appendix G, it later revised its recommendation to allow lead agencies to choose their own measures of effectiveness. (Letter from OPR Director, Cynthia Bryant, to Secretary for the Natural Resources Agency, Mike Chrisman, April 13, 2009.) Thus, as revised, question (a) accommodates lead agency selection of methodology, including, as appropriate, vehicle miles traveled, levels of service, or other measures of effectiveness.

Other comments objected to any mention of the phrase "level of service" in question (b) of the transportation section of the Appendix G checklist. That question, as revised, would ask whether a project would conflict with the provisions of a congestion management program. The Government Code, beginning at section 65088, requires Congestion Management Agencies, in urbanized areas, to adopt Congestion Management Programs covering that agency's cities and county, and in consultation with local governments, transportation planning agencies, and air quality management districts. A CMP must, pursuant to statute, contain level of service standards for certain designated roadways. A CMP must also include a land use analysis program to assess the impact of land use decisions on the regional transportation system. A CMA may require that land use analysis to occur through the CEQA process. Thus, level of service standards cannot be deleted from the Appendix G checklist altogether. The proposed amendments did, however, amend question (b) to put level of service standards in the broader context of the entire CMP, which should also contain travel demand measures and other standards affecting the circulation system as a whole. Beyond this amendment, however, the Natural Resources Agency cannot remove level of service standards entirely from the Appendix G checklist.

Notably, the primary purpose of the proposed amendments is to update the CEQA Guidelines on the analysis and mitigation of greenhouse gas emissions. While certain changes to Appendix G were proposed pursuant to the Natural Resources Agency's general authority to update the CEQA Guidelines, those changes were modest and were intended to address certain misapplications of CEQA in a way that hinders the type of development necessary to reduction of greenhouse gas emissions. Transportation planning and impact analysis continues to evolve, as new multimodal methods of analysis and guidelines on the integration of all modes of transportation and users into the circulation system are being developed. Additional updates to Appendix G may be appropriate in the future to address those developments.

Parking

As explained in the Initial Statement of Reasons, the Natural Resources Agency concluded that the question related to parking adequacy should be deleted from the Appendix G checklist in part as a result of the decision in *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656. The court in that case distinguished the social impact of inadequate parking from actual adverse environmental impacts. In particular, that court explained:

> [T]here is no statutory or case authority requiring an EIR to identify specific measures to provide additional parking spaces in order to meet an anticipated shortfall in parking availability. The social inconvenience of having to hunt for scarce parking spaces is not an environmental impact; the secondary effect of scarce parking on traffic and air quality *is*. Under CEQA, a project's social impacts need not be treated as significant impacts on the environment. An EIR need only address the *secondary physical* impacts that could be triggered by a social impact.

(*Id*. at p. 698 (emphasis in original).) The Natural Resources Agency is aware of no authority requiring an analysis of parking adequacy as part of a project's environmental review. Rather, the Agency concurs with the court in the *San Franciscans* case that inadequate parking is a social impact that may, depending on the project and its setting, result in secondary effects. Consistent with existing CEQA Guidelines section 15131(a), deletion of the parking adequacy question from Appendix G checklist will ensure that the "focus of the analysis shall be on the physical changes." Specifically, the Appendix G checklist contains questions asking about possible project impacts to air quality and traffic.

Some comments pointed to examples of potential adverse impacts that could result from parking shortages, such as double-parking and slower circulation speeds, and referred specifically to a study of "cruising" behavior by Donald Shoup that noted that cruising could result in emissions of carbon dioxide. The relationship between parking adequacy and air quality is not as clear or direct as some comments imply. Mr. Shoup, for example, submitted comments to the Natural Resources Agency supporting the deletion of the parking question. (See, Letter from Donald Shoup, Professor of Urban Planning, University of California, Los Angeles, October 26, 2009.) In those comments, Mr. Shoup opines that cruising results not from the number of parking spaces associated with a project, but rather from the price associated with those parking spaces. (*Ibid*.) The Natural Resources Agency also has evidence before it demonstrating that providing parking actually causes greater emissions due to induced demand. The California Air Pollution Control Officers Association CEQA White Paper, for example, suggests reducing available parking as a way to reduce greenhouse gas emissions. (Greg Tholen, et al. (January, 2008). CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. California Air Pollution Control Officers Association, at Appendix B, pp. 8-9.)

Moreover, parking analyses do not typically address either air quality or traffic impacts; rather, such analyses often focus on the number of parking spaces necessary to satisfy peak demand, which is often established by a local agency as a parking ratio (i.e., one space per 250 square feet of office space). (See, e.g., Shoup, Donald. (1999). In Lieu of Required Parking. Journal of Planning Education and Research, Vol. 18 No. 4. Association of Collegiate Schools of Planning, at p. 309.) Thus, the question in Appendix G related to parking adequacy does not necessarily lead to the development of information addressing actual environmental impacts.

In sum, nothing in the CEQA statute, or cases interpreting that statute, require an analysis of parking demand. Further, parking supply is not a reasonable proxy for direct physical impacts associated with a project because parking supply may in some circumstances adversely affect air quality and traffic while in other circumstances, it may create air quality and traffic benefits. Thus, maintaining the parking question in the general Appendix G checklist is not necessary to effectuate the purposes of the CEQA statute.

The Natural Resources Agency acknowledges, however, that parking supply may lead to social impacts that agencies may wish to regulate. Cities and counties can, and do, include parking related policies in their municipal ordinances and general plans. (See, e.g., Office of Planning and Research, General Plan Guidelines, at pp. 59-60.) To the extent an agency has developed parking related policies in a general plan, zoning ordinance, or other regulation, consistency with those policies could be analyzed as a potential land use impact. Public agencies must, moreover, develop their own procedures to implement CEQA, and so may include parking-related questions in their own checklist if appropriate in their own circumstances. (State CEQA Guidelines, §§ 15022, 15063(f).)

AB32, SB375 and CEQA

Many comments suggested various links between CEQA, AB32 and SB375. While there is some overlap between the statutes, each contains its own requirements and serves its own purposes. While recognizing the role of regulatory programs in addressing cumulative impacts analysis in CEQA, the Proposed Amendments deliberately avoided linking the determination of significance under CEQA to compliance with AB32. The following addresses the CEQA effect of compliance with AB32 and SB375.

<u>The Effect of Consistency with the Scoping Plan and the Regulations Implementing AB32</u>

The Initial Statement of Reasons explained that the Scoping Plan “may not be appropriate for use in determining the significance of individual projects … because it is conceptual at this stage and relies on the future development of regulations to

implement the strategies identified in the Scoping Plan." (Initial Statement of Reasons, at p. 14.) Compliance with the regulations implementing the Scoping Plan, on the other hand, might be relevant in determining the significance of a project's emissions, if the particular regulation or regulations specifically addresses the emissions from the project. (*Ibid*.) Compliance with regulations is specifically addressed in section 15064(h)(3) and 15064.4(b)(3).

Specifically, both sections provide that a lead agency may consider compliance with such regulations, and if relying on regulations to determine that an impact is less than significant, the lead agency must explain how that particular regulation addresses the impact of the project. Both sections also recognize that a lead agency must still consider whether any evidence supports a fair argument that a project may still have a significant impact despite compliance with the regulation.

<u>The Effect of Consistency with Plans for the Reduction of Greenhouse Gas Emissions, Sustainable Communities Strategies and Alternative Planning Strategies.</u>

Several comments questioned whether the references in the Proposed Amendments to "greenhouse gas reduction plans" were intended to include a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS).

SB375 created both the SCS and APS as strategies to be adopted by metropolitan planning organizations for the purpose of achieving greenhouse gas emissions reductions targets established by the California Air Resources Board. SB375 inserted specific provisions into CEQA governing the review of projects that are consistent with an APS or SCS. (See, e.g., Public Resources Code, §§ 21155-21155.3, 21159.28.) Because of the specificity of those provisions, the Office of Planning and Research and the Natural Resources Agency determined that no further guidance was needed in the Proposed Amendments to address the use of an SCS or APS.

As explained in the Initial Statement of Reasons, however, OPR and the Natural Resources Agency observed that many jurisdictions were adopting plans specifically for the purpose of addressing and reducing greenhouse gas emissions. (Initial Statement of Reasons, at pp. 12-13.) Those plans may be titled Climate Action Plans, Greenhouse Gas Reduction Plans, Sustainability Plans, etc. While recognizing the great variety of such plans, as well as the lack of legislative or other direction regarding the content of such plans, OPR and the Natural Resources Agency proposed the addition of a new Guidelines section 15183.5(b) to establish criteria for those plans if they are to be used in a CEQA cumulative impacts analysis as provided in sections 15064(h)(3) and 15130(d). The proposed amendments to section 15064(h)(3) and addition of section 15183.5(b) were not intended to limit or affect the use of an APS or SCS as provided in the Public Resources Code.

SB375 included provisions that would exempt certain types of projects from CEQA, and would apply the substantial evidence standard of review to other types of projects reviewed under a Sustainable Communities Environmental Assessment. Some

comments raised concerns that the proposed amendments, and section 15064(h)(3) in particular, may conflict with those provisions of SB375. The last sentence of Section 15064(h)(3), which acknowledges the application of the fair argument standard in the determination of whether to prepare an EIR, complies with existing law. (*CBE*, *supra*, 103 Cal.App.4th at 115-116.) SB375's specific statutory provisions, and not section 15064(h)(3), would control for a project that satisfies the conditions in those provisions. Thus, there is no conflict between the existing language in Section 15064(h)(3) and SB375.

Comments were also raised about the application of section 15125(d), which requires a discussion of a project's consistency with applicable regional plans, to an APS or SCS. One comment suggested that, for CEQA purposes, an SCS and APS are interchangeable. The Natural Resources Agency disagrees. An Alternative Planning Strategy is not a land use plan with which land use consistency should be analyzed under CEQA. (Government Code, § 65080(b)(2)(H)(v).) For that reason, the Natural Resources Agency deliberately did not propose to add "Alternative Planning Strategy" to the list of plans to be considered in an environmental setting pursuant to section 15125. There is no similar statement precluding analysis of consistency with a Sustainable Communities Strategy, however. Thus, the reference to a "regional transportation plan" in the existing section 15125(d) remains appropriate. As explained above, and the Initial Statement of Reasons, the reference to "plans for the reduction of greenhouse gas emissions" is intended to cover a broad range of plans that may be adopted by state and local agencies. The specific statutory provisions governing an Alternative Planning Strategy or Sustainable Communities Strategy would, however, control.

Similarly, some comments expressed concern regarding the application of the new Appendix G question asking about a project's consistency with applicable plans for the reduction of greenhouse gas emissions. That Appendix G question, as revised, asks whether a project would: "Conflict with <u>an applicable plan</u>, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?" (Emphasis added.) In response to comments, the Natural Resources Agency replaced the word "any" with the word "an" to clarify that only a plan determined to be applicable by the lead agency, and not any plan developed by any person or entity, should be considered in determining whether a project would result in a significant impact relating to greenhouse gas emissions. Government Code section 65080(b)(2)(H)(v) states: an "alternative planning strategy shall not constitute a land use plan, policy, or regulation, and the inconsistency of a project with an alternative planning strategy shall not be a consideration in determining whether a project may have an environmental effect" for CEQA purposes. By operation of that Government Code Section 65080(b)(2)(H)(v), an alternative planning strategy would not constitute "an applicable plan" for purposes of the Appendix G question. Notably, as explained in the Initial Statement of Reasons, the Appendix G checklist is meant to provide a sample checklist of questions designed to provoke thoughtful consideration of general environmental concerns. (Initial Statement of Reasons, at p. 63.) Because it is provided as a sample only, the Office of Planning and Research and the Natural Resources Agency found that it would not be possible to

identify with specificity each plan that or may not apply to a particular jurisdiction or project.

Lead agencies, however, have discretion to revise the checklist in a way that is most appropriate for their own jurisdiction. If an individual agency in a region where an APS was prepared finds it necessary or desirable to restate Government Code Section 65080(b)(2)(H)(v) in its own checklist, it may do so. Further, while inconsistency with an APS is not, by itself, an indication of a potentially significant impact, other project characteristics would need to be considered as indicated in Section 15064.4 and other provisions of the CEQA Guidelines. Because Government Code Section 65080(b)(2)(H)(v) already provides that an APS is not a land use plan for CEQA purposes, and the Appendix G question asks only about "an applicable plan," the question need not specify an exception for an APS.

The Effect of Compliance with Regulations Implementing AB32 or Other Laws Intended to Reduce Greenhouse Gas Emissions

Some comments urged that lead agencies should be able to rely on sector-wide reductions in emissions that may result from implementation of AB32 and other regulations in mitigating an individual project's impacts. Those comments appeared to conflate the requirement that a lead agency consider cumulative impacts (i.e., the impacts resulting from a project's emissions when added to other past, present and reasonably foreseeable future emissions) with the requirement that a lead agency mitigate the significant effects of a project. The proposed amendments contain several provisions addressing the analysis of greenhouse gas emissions as a cumulative effect. For example, Section 15064(h)(3) and 15130(d) would encourage lead agencies to use existing plans for the reduction of greenhouse gas emissions in cumulative impacts analysis. Additionally, Section 15130(b)(1)(B) is proposed for amendment to allow lead agencies to use projections of emissions contained in certain plans and models. Thus, the proposed amendments would allow a lead agency to consider a project in the context of other emissions resulting from the same or other sectors.

To the extent comments suggested that reductions in emissions resulting from implementation of AB32 elsewhere can mitigate the significant effects of a separate project under CEQA, the Natural Resources Agency disagrees. (See discussion below on off-site mitigation.)

A project's compliance with regulations or requirements implementing AB32 or other laws and policies is not irrelevant. Section 15064.4(b)(3) would allow a lead agency to consider compliance with requirements and regulations in the determination of significance of a project's greenhouse gas emissions. Lead agencies should note, however, that compliance with one requirement, affecting only one source of a project's emissions, may not necessarily support a conclusion that all of the project's emissions are less than significant.

Projects That Implement AB32 or Otherwise Assist in Achieving the State's Emissions Reductions Goals

Finally, some comments noted that projects implementing AB32, or that would somehow assist the State in achieving a low-carbon future, should not be considered significant under CEQA, and that requiring such projects to mitigate their emissions would frustrate implementation of AB32. CEQA requires analysis and mitigation of a project's significant adverse environmental impacts, even if that project may be considered environmentally beneficial overall. As the Third District Court of Appeal recently explained:

> "[I]t cannot be assumed that activities intended to protect or preserve the environment are immune from environmental review. [Citations.]" …. There may be environmental costs to an environmentally beneficial project, which must be considered and assessed.

(*Cal. Farm Bureau Fed. v. Cal. Wildlife Cons. Bd.* (2006) 143 Cal. App. 4th 173, 196.) Nothing in SB97 altered this rule. Thus, lead agencies must consider whether the greenhouse gas emissions resulting from beneficial projects may be significant, and if so, whether any feasible measures exist to mitigate those emissions. If such emissions are found to be significant and unavoidable, proposed amendments to section 15093 would expressly allow lead agencies to consider the region-wide and statewide environmental benefits of a project in determining whether project benefits outweigh its adverse environmental impacts.

"Adaptation" and Analysis of the Effects of Climate Change on a Project

Several comments submitted as part of the Natural Resources Agency's SB97 rulemaking process urged it to incorporate the California Climate Adaptation Strategy (Adaptation Strategy) into the CEQA Guidelines. In considering such comments, it is important to understand several key differences between the Adaptation Strategy and the California Environmental Quality Act. First, the Adaptation Strategy is a policy statement that contains recommendations; it is not a binding regulatory document. Second, the Adaptation Strategy focuses on how the State can plan for the effects of climate change. CEQA's focus, on the other hand, is the analysis of a particular project's greenhouse gas emissions on the environment, and mitigation of those emissions if impacts from those emissions are significant. Given these differences, CEQA should not be viewed as the tool to implement the Adaptation Strategy; rather, as indicated in the Strategy's key recommendations, advanced programmatic planning is the primary method to implement the Adaptation Strategies.

There is some overlap between CEQA and the Adaptation Strategy, however. As explained in both the Initial Statement of Reasons and in the Adaptation Strategy, section 15126.2 may require the analysis of the effects of a changing climate under certain circumstances. (Initial Statement of Reasons, at pp. 68-69.) In particular,

Section 15126.2 already requires an analysis of placing a project in a potentially hazardous location. Further, several questions in the Appendix G checklist already ask about wildfire and flooding risks. Many comments on the proposed amendments asked for additional guidance, however.

Having reviewed all of the comments addressing the effects of climate change, the Natural Resources Agency revised the proposed amendments to include a new sentence in Section 15126.2 clarifying the type of analysis that would be required. Existing section 15126.2(a) provides an example of a potential hazard requiring analysis: placing a subdivision on a fault line. The new sentence adds further examples, as follows:

> Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.

According to the Office of Planning and Research, at least sixty lead agencies already require this type of analysis. (California Governor's Office of Planning and Research, State Clearinghouse, The California Planners' Book of Lists (January, 2009), at p. 109.) This addition is reasonably necessary to guide lead agencies as to the scope of analysis of a changing climate that is appropriate under CEQA.

As revised, section 15126.2 would provide that a lead agency should analyze the effects of bringing development to an area that is susceptible to hazards such as flooding and wildfire, both as such hazards currently exist or may occur in the future. Several limitations apply to the analysis of future hazards, however. For example, such an analysis may not be relevant if the potential hazard would likely occur sometime after the projected life of the project (i.e., if sea-level projections only project changes 50 years in the future, a five-year project may not be affected by such changes). Additionally, the degree of analysis should correspond to the probability of the potential hazard. (State CEQA Guidelines, § 15143 ("significant effects should be discussed with emphasis in proportion to their severity and probability of occurrence").) Thus, for example, where there is a great degree of certainty that sea-levels may rise between 3 and 6 feet at a specific location within 30 years, and the project would involve placing a wastewater treatment plant with a 50 year life at 2 feet above current sea level, the potential effects that may result from inundation of that plant should be addressed. On the other extreme, while there may be consensus that temperatures may rise, but the magnitude of the increase is not known with any degree of certainty, effects associated with temperature rise would not need to be examined. (State CEQA Guidelines, § 15145 ("If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate the discussion of the impact").) Lead agencies are not required to generate their own original research on potential future changes; however, where specific information is currently available, the analysis should address that information. (State CEQA

Guidelines, § 15144 (environmental analysis "necessarily involves some degree of forecasting. While seeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can").)

The decision in *Baird v. County of Contra Costa* (1995) 32 Cal.App.4th 1464, does not preclude this analysis. In that case, the First District Court of Appeal held that a county was not required to prepare an EIR due solely to pre-existing soil contamination that the project would not change in any way. (*Id*. at 1468.) No evidence supported the petitioner's claim that the project would "expose or exacerbate" the pre-existing contamination, which was located several hundred to several thousand feet from the project site. (*Id*. at n. 1.) Moreover, the project would have no other significant effects on the environment, and other statutes exist to protect residents from contaminated soils. Thus, the question confronting that court was whether pre-existing contamination near the project was, by itself, enough to require preparation of an EIR. It held that, in those circumstances, an EIR was not required. That court also acknowledged, however, that where there is a potential for ultimately changing the environment, an EIR could be required. (*Id*. at p. 1469.) Thus, unlike the circumstances in the *Baird* case, the analysis required in section 15126.2(a) would occur if an EIR was otherwise required. Similarly, the addition to that section contemplates hazards which the presence of a project could exacerbate (i.e., potential upset of hazardous materials in a flood, increased need for firefighting services, etc.).

Finally, while the revision in section 15126.2 is consistent with the general objective of the Adaptation Strategy and is consistent with the limits of CEQA, not all issues addressed in the Adaptation Strategy are necessarily appropriate in a CEQA analysis. Thus, the revision in section 15126.2 should not be read as implementation of the entire Adaptation Strategy. Unlike hazards that can be mapped, other issues in the Adaptation Strategy, such as the health risks associated with higher temperatures, are not capable of an analysis that links a project to an ultimate impact. Habitat modification and changes in agriculture and forestry resulting from climate change similarly do not appear to be issues that can be addressed on a project-by-project basis in CEQA documents. Water supply variability is an issue that has already been addressed in depth in recent CEQA cases. (*See*, *e.g.*, *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 434-435 ("If the uncertainties inherent in long-term land use and water planning make it impossible to confidently identify the future water sources, an EIR may satisfy CEQA if it acknowledges the degree of uncertainty involved, discusses the reasonably foreseeable alternatives—including alternative water sources and the option of curtailing the development if sufficient water is not available for later phases—and discloses the significant foreseeable environmental effects of each alternative, as well as mitigation measures to minimize each adverse impact.").) Further, legislation has been developed to ensure that lead agencies identify adequate water supplies to serve projects many years in the future under variable water conditions. (See, e.g., Water Code, § 10910 *et seq*.; Government Code, § 66473.7.) Thus, the analysis called for in section 15126.2(a) should be directed primarily at hazards, and not all aspects of the Adaptation Strategy.

Additional Changes

Several comments suggested revisions or requested clarification of issues that were not addressed in this rulemaking package. The Initial Statement of Reasons explained:

> [T]he Proposed Amendments suggest relatively modest changes to various portions of the existing CEQA Guidelines. Modifications address those issues where analysis of GHG emissions may differ in some respects from more traditional CEQA analysis. Other modifications are suggested to clarify existing law that may apply both to analysis of GHG emissions as well as more traditional CEQA analyses. The incremental approach in the Proposed Amendments is consistent with Public Resources Code section 21083(f), which directs OPR and the Resources Agency to regularly review the Guidelines and propose amendments as necessary.

(Initial Statement of Reasons, at p. 9.) Additionally, Public Resources Code section 21083.05(c) requires that the CEQA Guidelines be updated periodically "to incorporate new information or criteria established by the State Air Resources Board pursuant to" AB32. Therefore, the CEQA Guidelines will continually be updated to reflect evolving information and practice and to address developments regarding analysis of greenhouse gas emissions in the courts.

Determination Regarding Impacts on Local Government and School Districts

The Natural Resources Agency has determined that the Amendments to the State CEQA Guidelines do not impose additional requirements or costs on local government or school districts. Among other things, Public Resources Code section 21083.05 (reflected in amendments to State CEQA Guidelines sections 15064.4, 15064.7(c), 15126.4(c), 15130, 15183.5, 15364.5, and Appendix G) clarifies that CEQA requires analysis of a project's greenhouse gas emissions. Public Resources Code sections 21002 and 21004 (reflected in State CEQA Guidelines section 15126.4) require a lead agency to impose feasible mitigation where a project will cause significant adverse environmental impacts. Public Resources Code sections 21003 and 21093 (reflected in the amendments to State CEQA Guidelines sections 15064, 15125, 15130, 15150 and 15183, and new State CEQA Guidelines sections 15064.4 and 15183.5) encourage lead agencies to tier environmental impact reports wherever possible and to use existing analyses to reduce duplication and expense. The decision in Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm. (2001) 91 Cal.App.4th 1344, 1370, 1382 (reflected in proposed State CEQA Guidelines section 15064.4), requires that potential adverse impacts be quantified where it is possible to do so and quantification will assist in the determination of significance of the impact.

The Amendments to the State CEQA Guidelines described above merely reflect existing legislative requirements and judicial decision interpreting those requirements. Therefore, this rulemaking activity does not itself impose any costs on local government or school districts.

Determination Regarding Potential Economic Impacts Directly Affecting Business

The Natural Resources Agency has determined that the Amendments will not have a significant, statewide adverse economic impact directly affecting business. The guidelines required by sections 21083 and 21083.05 of the Public Resources Code are promulgated in the California Code of Regulations, title 14, sections 15000-15387 (the "State CEQA Guidelines"). The Natural Resources Agency has determined that most of the amendments will have no impacts on business.

CEQA applies to activities of public agencies, including projects that are funded, proposed, or approved by public agencies. Thus, the amendments to the State CEQA Guidelines would apply to public agencies, and not directly to businesses. The Natural Resources Agency is aware, however, that certain requirements reflected in the amendments that have been enacted by the Legislature and developed in case law interpreting CEQA could have an indirect economic impact on business. Among other things, project proponents could incur additional costs in assisting lead agencies to comply with the requirement to quantify greenhouse gas emissions, if possible, as part of an analysis of the effects of such emissions. Project proponents may also incur costs in implementing mitigation measures to reduce such emissions. However, the amendments to the Guidelines merely reflect existing requirements. (See, e.g., Pub. Resources Code, §§ 21004 ("a public agency may use discretionary powers … for the purpose of mitigating or avoiding a significant effect on the environment"), 21083.05 (requiring the development of guidelines on the analysis and mitigation of greenhouse gas emissions "as required by this division"); *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm*. (2001) 91 Cal.App.4th 1344, 1370, 1382 (potential hazardous emissions and noise impacts must be quantified where it is possible to do so and quantification will assist in the determination of significance of the impact).)

Many lead agencies, and some trial courts, have already determined that CEQA requires analysis and mitigation of GHG emissions independent of the SB97 CEQA Guidelines amendments. The Office of Planning and Research, for example, has cataloged over 1,000 examples of CEQA documents, prepared between July 2006 and June 2009, analyzing and mitigating greenhouse gas emissions. (Office of Planning and Research, Environmental Assessment Documents Containing a Discussion of Climate Change (Revised June 1, 2009).) Further, several trial courts have found that existing CEQA law requires analysis and mitigation of GHG emissions. (See, e.g., *Muriettans for Smart Growth v. City of Murrieta et al., Riverside Co*. Sup. Ct. Case No. RIC463320 (November 21, 2007); *Env. Council of Sac. et al v. Cal. Dept. of Trans.*, Sacramento Sup. Ct. Case No. 07CS00967 (July 15, 2008) (citing *Berkeley Keep Jets Over the Bay Committee v. Board of Commissions* (2001) 91 Cal.App. 4th 1344, 1370-

1371 and State CEQA Guidelines section 15144 as requiring a lead agency to "meaningfully attempt to quantify the Project's potential impacts on GHG emissions and determine their significance" or at least to explain what steps were undertaken to investigate the issue before concluding that the impact would be speculative).) Finally, federal courts have interpreted the National Environmental Policy Act ("NEPA") to require an analysis of potential impacts of GHG emissions. (See, e.g., *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Ad.*, 538 F.3d 1172, 1215-1217 (9th Cir. 2008).) Thus, the amendments to the CEQA Guidelines developed pursuant to SB97 do not create new requirements; rather, they interpret and clarify existing CEQA law.

Additionally, some of amendments included in this rulemaking activity may tend to reduce costs associated with environmental analysis of greenhouse gas emissions. For example, the amendments to the Guidelines encourage tiering and streamlining of existing environmental analyses to the extent possible in order to reduce duplication. Such tiering and streamlining mechanisms are also consistent with existing law. (See, e.g., Pub. Resources Code, § 21093 (lead agencies shall tier environmental impact reports wherever possible).)

The amendments update the State CEQA Guidelines to be consistent with legislative enactments and judicial decisions that have modified CEQA, but do not themselves impose any new requirements. Therefore, the amendments do not have a significant, adverse economic impact directly affecting business.

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CAPCOA

CALIFORNIA AIR POLLUTION CONTROL OFFICERS ASSOCIATION

CEQA & Climate Change

Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act

January 2008

Disclaimer

The California Air Pollution Control Officers Association (CAPCOA) has prepared this white paper consideration of evaluating and addressing greenhouse gas emissions under the California Environmental Quality Act (CEQA) to provide a common platform of information and tools to support local governments.

This paper is intended as a resource, not a guidance document. It is not intended, and should not be interpreted, to dictate the manner in which an air district or lead agency chooses to address greenhouse gas emissions in the context of its review of projects under CEQA.

This paper has been prepared at a time when California law has been recently amended by the Global Warming Solutions Act of 2006 (AB 32), and the full programmatic implications of this new law are not yet fully understood. There is also pending litigation in various state and federal courts pertaining to the issue of greenhouse gas emissions. Further, there is active federal legislation on the subject of climate change, and international agreements are being negotiated. Many legal and policy questions remain unsettled, including the requirements of CEQA in the context of greenhouse gas emissions. This paper is provided as a resource for local policy and decision makers to enable them to make the best decisions they can in the face of incomplete information during a period of change.

Finally, this white paper reviews requirements and discusses policy options, but it is not intended to provide legal advice and should not be construed as such. Questions of legal interpretation, particularly in the context of CEQA and other laws, or requests for advice should be directed to the agency's legal counsel.

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List of Acronyms and Abbreviations

Acronym/ Abbreviation	Meaning
AB 32	Assembly Bill 32 Global Warming Solutions Act of 2006
AG	Attorney General
ARB	Air Resources Board
ASTM	American Society of Testing and Material
BAAQMD	Bay Area Air Quality Management District
BAU	Business as Usual
BEES	Building for Environmental and Economic Sustainability
Calfire	California Fire
Caltrans	California Department of Transportation
CAP	Criteria Air Pollutants
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CAT	Climate Action Team
CCAP	Center for Clean Air Policy
CCAR	California Climate Action Registry
CDFA	California Department of Food and Agriculture
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF	Connectivity Factor
CH_4	Methane
CIWMB	California Integrated Waste Management Board
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CNG	Compressed Natural Gas
CPUC	California Public Utilities Commission
CUFR	California Urban Forestry
DGS	Department of General Services
DOE	U.S. Department of Energy
DOF	Department of Finance
DPF	Diesel Particulate Filter
DWR	Department of Water Resources
E85	85% Ethanol
EEA	Massachusetts Executive Office of Energy and Environmental Affairs
EERE	Energy Efficiency and Renewable Energy
EIR	Environmental Impact Report
EOE	Encyclopedia of Earth
EPA	U.S. Environmental Protection Agency
ETC	Edmonton Trolley Coalition
EV	Electric Vehicles
FAR	Floor Area Ratio

GHG	Greenhouse Gas
GGEP	Greenhouse Gas Emissions Policy
GGRP	Greenhouse Gas Reduction Plan
GP	General Plan
GWP	Global Warming Potential
IGCC	Integrated Gasification Combined Cycle
IOU	Investor Owned Utility
IPCC	International Panel on Climate Change
IT	Information Technology
ITE	Institute of Transportation Engineers
J&S	Jones & Stokes
km	Kilometer
LandGem	Landfill Gas Emissions Model
LEED	Leadership in Energy and Environmental Design
LNG	Liquefied Natural Gas
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MEPA	Massachusetts Environmental Policy Act
MND	Mitigated Negative Declaration
MMT CO_2e	Million Metric Tons Carbon Dioxide Equivalent
MW	Megawatts
N_2O	Nitrous Oxide
NACAA	National Association Clean Air Agencies
ND	Negative Declaration
NEV	Neighborhood Electric Vehicle
NIST	National Institute of Standards and Technology
NO_X	Oxides of Nitrogen
NREL	National Renewable Energy Laboratory
NSCAPCD	Northern Sonoma County Air Pollution Control District
NSR	New Source Review
OPR	State Office of Planning and Research
PFC	Perfluorocarbon
PG&E	Pacific Gas & Electric
POU	Publicly Owned Utility
PM	Particulate Mater
RoadMod	Road Construction Emissions Model
ROG	Reactive Organic Gas
RPS	Renewable Portfolio Standards
RTP	Regional Transportation Plan
S-3-05	Executive Order S-3-05
SB	Senate Bill
SBCAPCD	Santa Barbara County Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SCM	Sustainable Communities Model
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Unified Air Pollution Control District
SLOCAPCD	San Luis Obispo County Air Pollution Control District

SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utilities District
SO_X	Sulfur Oxides
SP	Service Population
SRI	Solar Reflectance Index
SWP	State Water Project
TAC	Toxic Air Contaminants
TBD	To Be Determined
TDM	Transportation Demand Management
TMA	Transportation Management Association
THC	Total Hydrocarbon
UC	University of California
ULEV	Ultra Low Emission Vehicle
UNFCCC	United Nations Framework Convention on Climate Change
URBEMIS	Urban Emissions Model
USGBC	U.S. Green Building Council
VMT	Vehicle Miles Traveled
VTPI	Victoria Transit Policy
YSAQMD	Yolo-Solano Air Quality Management District

Introduction

The California Environmental Quality Act (CEQA) requires that public agencies refrain from approving projects with significant adverse environmental impacts if there are feasible alternatives or mitigation measures that can substantially reduce or avoid those impacts. There is growing concern about greenhouse gas emissions[1] (GHG) and recognition of their significant adverse impacts on the world's climate and on our environment. In its most recent reports, the International Panel on Climate Change (IPCC) has called the evidence for this "unequivocal." In California, the passage of the Global Warming Solutions Act of 2006 (AB 32) recognizes the serious threat to the "economic well-being, public health, natural resources, and the environment of California" resulting from global warming. In light of our current understanding of these impacts, public agencies approving projects subject to the CEQA are facing increasing pressure to identify and address potential significant impacts due to GHG emissions. Entities acting as lead agencies in the CEQA process are looking for guidance on how to adequately address the potential climate change impacts in meeting their CEQA obligations.

Air districts have traditionally provided guidance to local lead agencies on evaluating and addressing air pollution impacts from projects subject to CEQA. Recognizing the need for a common platform of information and tools to support decision makers as they establish policies and programs for GHG and CEQA, the California Air Pollution Control Officers Association has prepared a white paper reviewing policy choices, analytical tools, and mitigation strategies.

This paper is intended to serve as a resource for public agencies as they establish agency procedures for reviewing GHG emissions from projects under CEQA. It considers the application of thresholds and offers three alternative programmatic approaches toward

[1] Throughout this paper GHG, CO_2, CO_2e, are used interchangeably and refer generally to greenhouse gases but do not necessarily include all greenhouse gases unless otherwise specified.

determining whether GHG emissions are significant. The paper also evaluates tools and methodologies for estimating impacts, and summarizes mitigation measures. It has been prepared with the understanding that the programs, regulations, policies, and procedures established by the California Air Resources Board (CARB) and other agencies to reduce GHG emissions may ultimately result in a different approach under CEQA than the strategies considered here. The paper is intended to provide a common platform for public agencies to ensure that GHG emissions are appropriately considered and addressed under CEQA while those programs are being developed.

Examples of Other Approaches

Many states, counties, and cities have developed policies and regulations concerning greenhouse gas emissions that seek to require or promote reductions in GHG emissions through standards for vehicle emissions, fuels, electricity production/renewables, building efficiency, and other means. A few have developed guidance and are currently considering formally requiring or recommending the analysis of greenhouse gas emissions for development projects during their associated environmental processes. Key work in this area includes:

- Massachusetts Office of Energy and Environmental Affairs Greenhouse Gas Emissions Policy;
- King County, Washington, Executive Order on the Evaluation of Climate Change Impacts through the State Environmental Policy Act;
- Sacramento AQMD interim policy on addressing climate change in CEQA documents; and
- Mendocino AQMD updated guidelines for use during preparation of air quality impacts in Environmental Impact Reports (EIRs) or mitigated negative declarations.

The following paper evaluates options for lead agencies to ensure that GHG emissions are appropriately addressed as part of analyses under CEQA. It considers the use of significance thresholds, tools and methodologies for analyzing GHG emissions, and measures and strategies to avoid, reduce, or mitigate impacts.

Greenhouse Gas Significance Criteria

This white paper discusses three basic options air districts and lead agencies can pursue when contemplating the issues of CEQA thresholds for greenhouse gas emissions. This paper explores each path and discusses the benefits and disbenefits of each. The three basic paths are:

- No significance threshold for GHG emissions;

- GHG emissions threshold set at zero; or
- GHG threshold set at a non-zero level.

Each has inherent advantages and disadvantages. Air districts and lead agencies may believe the state or national government should take the lead in identifying significance thresholds to address this global impact. Alternatively, the agency may believe it is premature or speculative to determine a clear level at which a threshold should be set. On the other hand, air districts or lead agencies may believe that every GHG emission should be scrutinized and mitigated or offset due to the cumulative nature of this impact. Setting the threshold at zero will place all discretionary projects under the CEQA microscope. Finally, an air district or lead agency may believe that some projects will not benefit from a full environmental impact report (EIR), and may believe a threshold at some level above zero is needed.

This paper explores the basis and implications of setting no threshold, setting a threshold at zero and two primary approaches for those who may choose to consider a non-zero threshold. The first approach is grounded in statute (AB 32) and executive order (EO S-3-05) and explores four possible options under this scenario. The options under this approach are variations of ways to achieve the 2020 goals of AB 32 from new development, which is estimated to be about a 30 percent reduction from business as usual.

The second approach explores a tiered threshold option. Within this option, seven variations are discussed. The concepts explored here offer both quantitative and qualitative approaches to setting a threshold as well as different metrics by which tier cut-points can be set. Variations range from setting the first tier cut-point at zero to second-tier cut-points set at defined emission levels or based on the size of a project. It should be noted that some applications of the tiered threshold approach may require inclusion in a General Plan or adoption of enabling regulations or ordinances to render them fully effective and enforceable.

Greenhouse Gas Analytical Methodologies

The white paper evaluates various analytical methods and modeling tools that can be applied to estimate the greenhouse gas emissions from different project types subject to CEQA. In addition, the suitability of the methods and tools to characterize accurately a project's emissions is discussed and the paper provides recommendations for the most appropriate methodologies and tools currently available.

The suggested methodologies are applied to residential, commercial, specific plan and general plan scenarios where GHG emissions are estimated for each example. This chapter also discusses estimating emissions from solid waste facilities, a wastewater treatment plant, construction, and air district rules and plans.

Another methodology, a service population metric, that would measure a project's overall GHG efficiency to determine if a project is more efficient than the existing statewide average for per capita GHG emissions is explored. This methodology may be more directly correlated to a project's ability to help achieve objectives outlined in AB 32, although it relies on establishment of an efficiency-based significance threshold. The subcommittee believes this methodology may eventually be appropriate to evaluate the long-term GHG emissions from a project in the context of meeting AB 32 goals. However, this methodology will need further work and is not considered viable for the interim guidance presented in this white paper.

Greenhouse Gas Mitigation Measures

Common practice in environmental protection is first to avoid, then to minimize, and finally to compensate for impacts. When an impact cannot be mitigated on-site, off-site mitigation can be effectively implemented in several resource areas, either in the form of offsetting the same impact or preserving the resource elsewhere in the region.

This white paper describes and evaluates currently available mitigation measures based on their economic, technological and logistical feasibility, and emission reduction effectiveness. The potential for secondary impacts to air quality are also identified for each measure. A summary of current rules and regulations affecting greenhouse gas emissions and climate change is also provided.

Reductions from transportation related measures (e.g., bicycle, pedestrian, transit, and parking) are explored as a single comprehensive approach to land use. Design measures that focus on enhancing alternative transportation are discussed. Mitigation measures are identified for transportation, land use/building design, mixed-use development, energy efficiency, education/social awareness and construction.

Purpose

CEQA requires the avoidance or mitigation of significant adverse environmental impacts where there are feasible alternatives available. The contribution of GHG to climate change has been documented in the scientific community. The California Global Warming Solutions Act of 2006 (AB 32) mandates significant reductions in greenhouse gases (GHG); passage of that law has highlighted the need to consider the impacts of GHG emissions from projects that fall under the jurisdiction of the California Environmental Quality Act (CEQA). Because we have only recently come to fully recognize the potential for significant environmental impacts from GHG, most public agencies have not yet established policies and procedures to consider them under CEQA. As a result, there is great need for information and other resources to assist public agencies as they develop their programs.

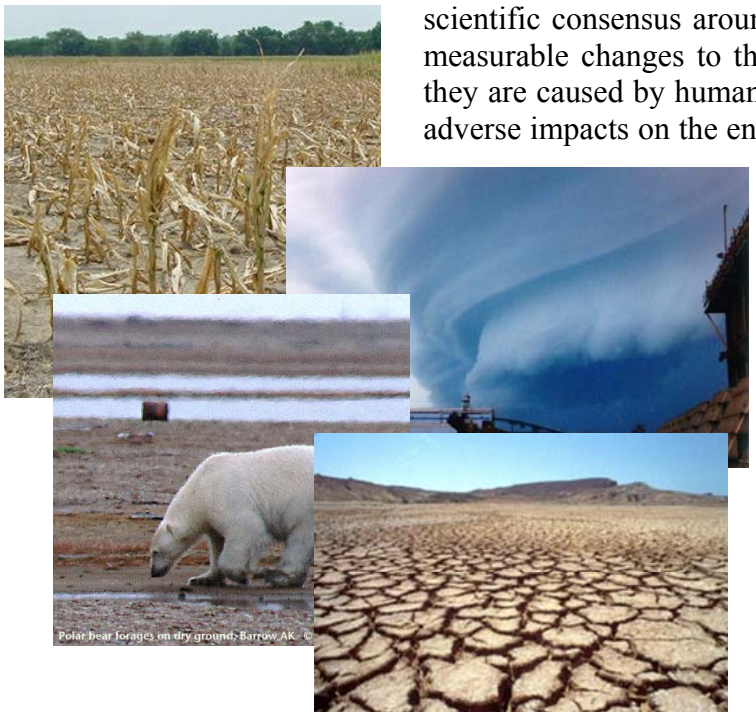
Air districts have historically provided guidance to local governments on the evaluation of air pollutants under CEQA. As local concern about climate change and GHG has increased, local governments have requested guidance on incorporating analysis of these impacts into local CEQA review. The California Air Pollution Control Officers Association (CAPCOA), in coordination with the CARB, the Governor's Office of Planning and Research (OPR) and two environmental consulting firms, has harnessed the collective expertise to evaluate approaches to analyzing GHG in CEQA. The purpose of this white paper is to provide a common platform of information and tools to address climate change in CEQA analyses, including the evaluation and mitigation of GHG emissions from proposed projects and identifying significance threshold options.

CEQA requires public agencies to ensure that potentially significant adverse environmental effects of discretionary projects are fully characterized, and avoided or mitigated where there are feasible alternatives to do so. Lead agencies have struggled with how best to identify and characterize the magnitude of the adverse effects that individual projects have on the global-scale phenomenon of climate change, even more so since Governor Schwarzenegger signed Executive Order S-3-05 and the state Legislature enacted The Global Warming Solutions Act of 2006 (AB 32). There is now a resounding call to establish procedures to analyze and mitigate greenhouse gas (GHG) emissions. The lack of established thresholds does not relieve lead agencies of their responsibility to analyze and mitigate significant impacts, so many of these agencies are seeking guidance from state and local air quality agencies. This white paper addresses issues inherent in establishing CEQA thresholds, evaluates tools, catalogues mitigation measures and provides air districts and lead agencies with options for incorporating climate change into their programs.

Background

National and International Efforts

International and Federal legislation have been enacted to deal with climate change issues. The Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus around the evidence that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.



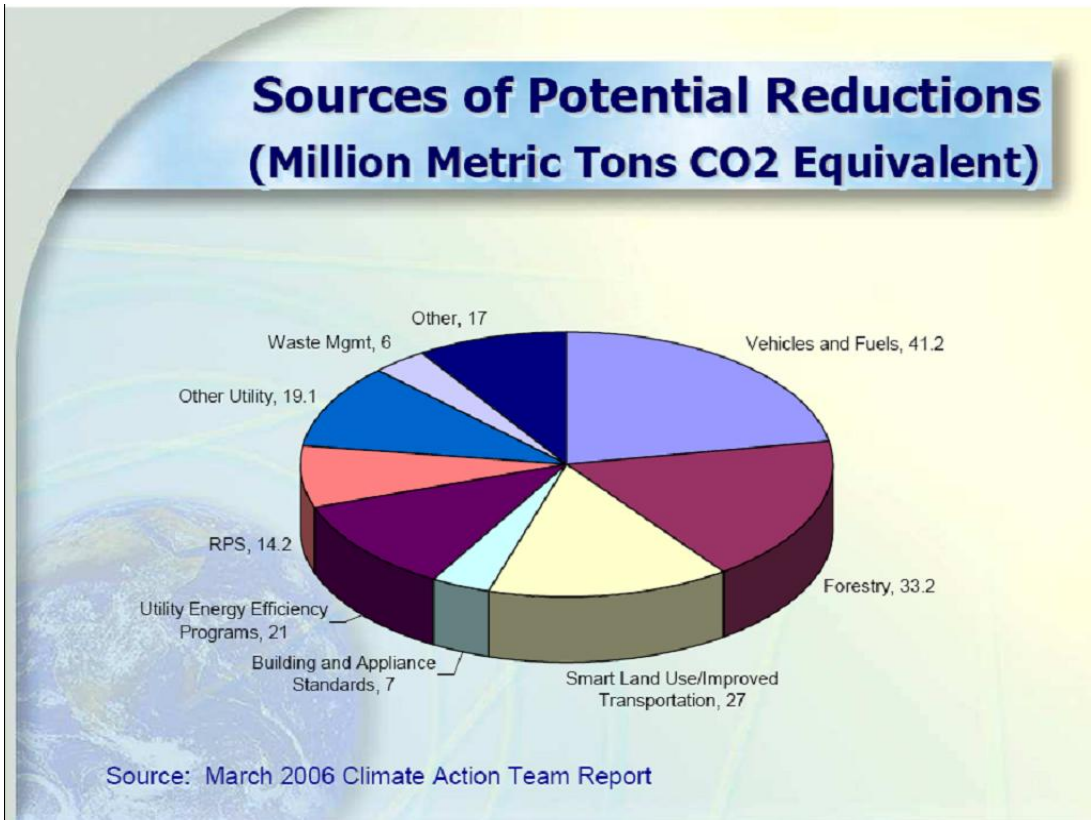
In October 1993, President Clinton announced his Climate Change Action Plan, which had a goal to return greenhouse gas emissions to 1990 levels by the year 2000. This was to be accomplished through 50 initiatives that relied on innovative voluntary partnerships between the private sector and government aimed at producing cost-effective reductions in greenhouse gas emissions. On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

These efforts have been largely policy oriented. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs. However, thus far little has been done to assess the significance of the affects new development projects may have on climate change.

Executive Order S-3-05

On June 1, 2005, Governor Schwarzenegger issued Executive Order S-3-05 (S-3-05). It included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed the Secretary of the California Environmental Protection Agency to coordinate with the Secretary of the Business, Transportation and Housing Agency, Secretary of the Department of Food and Agriculture, Secretary of the Resources Agency, Chairperson of the CARB, Chairperson of the Energy Commission and President of the Public Utilities Commission on development of a Climate Action Plan.

The Secretary of CalEPA leads a Climate Action Team (CAT) made up of representatives from the agencies listed above to implement global warming emission reduction programs identified in the Climate Action Plan and report on the progress made toward meeting the statewide greenhouse gas targets that were established in the Executive Order.



SOURCE: ARB 2007

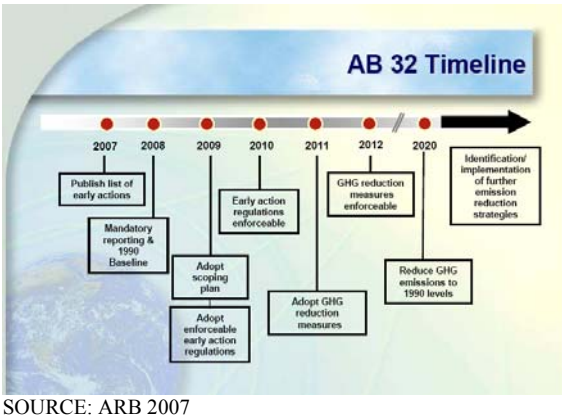
In accord with the requirements of the Executive Order, the first report to the Governor and the Legislature was released in March 2006 and will be issued bi-annually thereafter. The CAT Report to the Governor contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met.

California Global Warming Solutions Act of 2006 (AB 32)

In 2006, the California State Legislature adopted the California Global Warming Solutions Act of 2006. AB 32 establishes a cap on statewide greenhouse gas emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emissions levels. AB 32 charges the California Air Resources Board (CARB), the state agency charged with regulating statewide air quality, with implementation of the act. Under AB 32, greenhouse gases are defined as: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

The regulatory steps laid out in AB 32 require CARB to: adopt early action measures to reduce GHGs; to establish a statewide greenhouse gas emissions cap for 2020 based on 1990 emissions; to adopt mandatory reporting rules for significant source of greenhouse gases; and to adopt a scoping plan indicating how emission reductions will be achieved via regulations, market mechanisms and other actions; and to adopt the regulations needed to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gases.

AB 32 requires that by January 1, 2008, the State Board shall determine what the statewide greenhouse gas emissions inventory was in 1990, and approve a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. While the level of 1990 GHG emissions has not yet been approved, CARB's most recent emission inventory indicates that California had annual emissions of 436 million metric tons of carbon dioxide equivalent (MMT CO_2e) in 1990 and 497 MMT CO_2e in 2004.



SOURCE: ARB 2007

The regulatory timeline laid out in AB 32 requires that by July 1, 2007, CARB adopt a list of discrete early action measures, or regulations, to be adopted and implemented by January 1, 2010. These actions will form part of the State's comprehensive plan for achieving greenhouse gas emission reductions. In June 2007, CARB adopted three discrete early action measures. These three new proposed regulations meet the definition of "discrete early action greenhouse gas reduction measures," which include the following: a low carbon fuel standard; reduction of HFC-134a emissions from non-professional servicing of motor vehicle air conditioning systems; and improved landfill methane capture. CARB estimates that by 2020, the reductions from those three discrete early action measures would be approximately 13-26 MMT CO_2e.

CARB evaluated over 100 possible measures identified by the CAT for inclusion in the list of discrete early action measures. On October 25, 2007 CARB gave final approval to the list of Early Action Measures, which includes nine discrete measures and 35

additional measures, all of which are to be enforceable by January 1, 2010. AB 32 requires that by January 1, 2009, CARB adopt a scoping plan indicating how emission reductions will be achieved via regulations, market mechanisms and other actions.

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an important environmental issue that requires analysis under CEQA. This bill directs the OPR to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, by July 1, 2009. The Resources Agency is required to certify or adopt those guidelines by January 1, 2010. This bill also protects projects funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1B or 1E) from claims of inadequate analysis of GHG as a legitimate cause of action. This latter provision will be repealed on January 1, 2010. Thus, this "protection" is highly limited to a handful of projects and for a short time period.

The Role of Air Districts in the CEQA Process

Air districts assume one of three roles in the CEQA process. They may be lead agencies when they are adopting regulations and air quality plans. In some instances, they can also be a lead agency when approving permits to construct or operate for applicants subject to district rules. However, in many cases where an air district permit is involved, another agency has broader permitting authority over the project and assumes the role of lead agency. In these situations, the air district becomes what is referred to as a responsible agency under CEQA. When CEQA documents are prepared for projects that do not involve discretionary approval of a district regulation, plan or permit, the air district may assume the role of a concerned or commenting agency. In this role, it is typical for air districts to comment on CEQA documents where there may be air quality-related adverse impacts, such as projects that may create significant contributions to existing violations of ambient standards, cause a violation of an ambient standard or create an exposure to toxic air contaminants or odors. In some cases, the air district may also act in an "advisory" capacity to a lead agency early on in its review of an application for a proposed development project.

A few air districts in California began developing significance thresholds for use in CEQA analyses in the late 1980's and early 1990's. By the mid-1990's most air districts had developed CEQA thresholds for air quality analyses. Many of the districts have included in their guidance the analysis of rule development and permits that may be subject to CEQA.

What is Not Addressed in this Paper

Impacts of Climate Change to a Project

The focus of this paper is addressing adverse impacts to climate change and the ability to meet statewide GHG reduction goals caused by proposed new land development projects. CEQA also requires an assessment of significant adverse impacts a project might cause by bringing development and people into an area affected by climate change (CEQA Guidelines §15126.2). For example, an area that experiences higher average temperatures due to climate change may expose new development to more frequent exceedances and higher levels of ozone concentrations. Alternatively, a rise in sea level brought on by climate change may inundate new development locating in a low-lying area. The methodologies, mitigation and threshold approaches discussed in this paper do not specifically address the potential adverse impacts resulting from climate change that may affect a project.

Impacts from Construction Activity

Although construction activity has been addressed in the analytical methodologies and mitigation chapters, this paper does not discuss whether any of the threshold approaches adequately addresses impacts from construction activity. More study is needed to make this assessment or to develop separate thresholds for construction activity. The focus of this paper is the long-term adverse operational impacts of land use development.

Introduction

Any analysis of environmental impacts under CEQA includes an assessment of the nature and extent of each impact expected to result from the project to determine whether the impact will be treated as significant or less than significant. CEQA gives lead agencies discretion whether to classify a particular environmental impact as significant. "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved," ref: CEQA Guidelines §15064(b) ("Guidelines"). Ultimately, formulation of a standard of significance requires the lead agency to make a policy judgment about where the line should be drawn distinguishing adverse impacts it considers significant from those that are not deemed significant. This judgment must, however, be based on scientific information and other factual data to the extent possible (Guidelines §15064(b)).

CEQA does not require that agencies establish thresholds of significance. Guidelines §15064.7(a) encourages each public agency "…to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which normally means the effect will be determined to be less than significant."

Once such thresholds are established, an impact that complies with the applicable threshold will "normally" be found insignificant and an impact that does not comply with the applicable threshold will "normally" be found significant.

Additionally, Guidelines §15064.7(b) requires that if thresholds of significance are adopted for general use as part of the lead agency's environmental review process they must be adopted by ordinance, resolution, rule or regulation, and developed through a public review process and be supported by substantial evidence.

While many public agencies adopt regulatory standards as thresholds, the standards do not substitute for a public agency's use of careful judgment in determining significance. They also do not replace the legal standard for significance (i.e., if there is a fair argument, based on substantial evidence in light of the whole record that the project may have a significant effect, the effect should be considered significant) (Guidelines §15064(f)(1). Also see *Communities for a Better Environment v. California Resource Agency* 103 Cal. App. 4th 98 (2002)). In other words, the adoption of a regulatory standard does not create an irrebuttable presumption that impacts below the regulatory standard are less than significant.

Summary of CEQA Thresholds at Air Districts

This section briefly summarizes the evolution of air district CEQA significance thresholds. Ventura County APCD, in 1980, was the first air district in California that formally adopted CEQA significance thresholds. Their first CEQA assessment document contained impact thresholds based on project type: residential, nonresidential, and government. Then, as now, the District's primary CEQA thresholds applied only to ROG and NO_x. The 1980 Guidelines did not address other air pollutants.

Santa Barbara County APCD and the Bay Area AQMD adopted thresholds in 1985. The South Coast AQMD recommended regional air quality thresholds in 1987 for CO, SO_2, NO_2, particulates, ROG, and lead. Most of the other California air districts adopted CEQA guidance and thresholds during the 1990's. Air districts have updated their thresholds and guidelines several times since they were first published.

Originally, most districts that established CEQA thresholds focused on criteria pollutants for which the district was nonattainment and the thresholds only addressed project level impacts. Updates during the 1990's began to add additional air quality impacts such as odors, toxic air contaminants and construction. Several air districts also developed thresholds for General Plans that relied on an assessment of the plan consistency with the district's air quality plans. A consistency analysis involves comparing the project's land use to that of the general plan and the population and employment increase to the forecasts underlying the assumptions used to develop the air quality plan.

Most air district thresholds for CEQA are based on the threshold for review under the New Source Review (NSR). The NSR threshold level is set by district rule and is different depending on the nonattainment classification of the air district. Areas with a less severe classification have a higher NSR trigger level while the most polluted areas have the lowest NSR trigger level. Some districts, such as Ventura County APCD, have significantly lower CEQA thresholds that are not tied to the NSR requirements. In Ventura, one set of CEQA thresholds is 25 pounds per day for all regions of Ventura County, except the Ojai Valley. The second set of CEQA thresholds was set at 5 pounds per day for the Ojai Valley.

The Sacramento Metropolitan AQMD bases its thresholds for ozone precursors on the projected land use share of emission reductions needed for attainment. The emission reductions needed to reach attainment are based on commitments made in the state implementation plan (SIP) prepared for the federal clean air act.

CEQA Considerations in Setting Thresholds

Public agencies use significance thresholds to disclose to their constituents how they plan on evaluating and characterizing the severity of various environmental impacts that could be associated with discretionary projects that they review. Significance thresholds are also used to help identify the level of mitigation needed to reduce a potentially significant impact to a less than significant level and to determine what type of an environmental document should be prepared for a project; primarily a negative declaration, mitigated negative declaration or an environmental impact report.

While public agencies are not required to develop significance thresholds, if they decide to develop them, they are required to adopt them by ordinance, resolution, rule or regulation through a public process. A lead agency is not restrained from adopting any significance threshold it sees as appropriate, as long as it is based on substantial evidence. CEQA Guidelines §15064.7 encourages public agencies to develop and publish significance thresholds that are identifiable, quantitative, qualitative or performance level that the agency uses in the determination of the significance of environmental effects. The courts have ruled that a "threshold of significance" for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant.

Before an agency determines its course with regard to climate change and CEQA, it must be made clear that a threshold, or the absence of one, will not relieve a lead agency from having to prepare an EIR or legal challenges to the adequacy of an analysis leading to a conclusion, or lack of a conclusion, of significance under CEQA. CEQA has generally favored the preparation of an EIR where there is any substantial evidence to support a fair argument that a significant adverse environmental impact may occur due to a proposed project. This paper explores three alternative approaches to thresholds, including a no threshold option, a zero threshold option and a non-zero threshold option.

<u>Fair Argument Considerations</u>

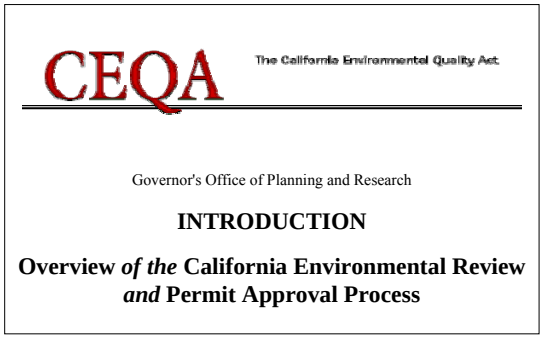
Under the CEQA fair argument standard, an EIR must be prepared whenever it can be fairly argued, based on substantial evidence in the administrative record, that a project may have a significant adverse effect on the environment. "Substantial evidence" comprises "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (Guidelines §15384) This means that if factual information is presented to the public agency that there is a reasonable possibility the project could have

a significant effect on the environment, an EIR is required even if the public agency has information to the contrary (Guidelines §15064 (f)).

The courts have held that the fair argument standard "establishes a low threshold for initial preparation of an EIR, which reflects a preference for resolving doubts in favor of environmental review." (*Santa Teresa Citizen Action Group v. City of San Jose* [2003] 114 Cal.App.4th 689) Although the determination of whether a fair argument exists is made by the public agency, that determination is subject to judicial scrutiny when challenged in litigation. When the question is whether an EIR should have been prepared, the court will review the administrative record for factual evidence supporting a fair argument.

The fair argument standard essentially empowers project opponents to force preparation of an EIR by introducing factual evidence into the record that asserts that the project may have a significant effect on the environment. This evidence does not need to be conclusive regarding the potential significant effect.

In 1998, the Resources Agency amended the State CEQA Guidelines to encourage the use of thresholds of significance. Guidelines §15064 (h) provided that when a project's impacts did not exceed adopted standards, the impacts were to be considered less than significant. The section went on to describe the types of adopted standards that were to be considered thresholds. Guidelines § 15064.7 provided that agencies may adopt thresholds of significance to guide their determinations of significance. Both of these sections were challenged when environmental groups sued the Resources Agency in 2000 over the amendments. The trial court concluded that §15064.7 was proper, if it was applied in the context of the fair argument standard.



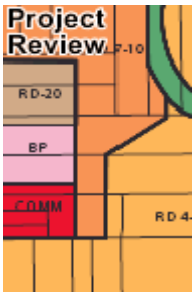
At the appellate court level, §15064(h) was invalidated.[2] Establishing a presumption that meeting an adopted standard would avoid significant impacts was "inconsistent with controlling CEQA law governing the fair argument approach." The Court of Appeal explained that requiring agencies to comply with a regulatory standard "relieves the agency of a duty it would have under the fair argument approach to look at evidence beyond the regulatory standard, or in contravention of the standard, in deciding whether an EIR must be prepared. Under the fair argument approach, any substantial evidence supporting a fair argument that a project may have a significant environmental effect would trigger the preparation of an EIR." (*Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal.App.4th 98)

[2] Prior §15064(h) has been removed from the State CEQA Guidelines. Current §15064(h) discusses cumulative impacts.

In summary, CEQA law does not require a lead agency to establish significance thresholds for GHG. CEQA guidelines encourage the development of thresholds, but the absence of an adopted threshold does not relieve the agency from the obligation to determine significance.

Defensibility of CEQA Analyses

The basic purposes of CEQA, as set out in the State CEQA Guidelines, include: (1) informing decision makers and the public about the significant environmental effects of proposed projects; (2) identifying ways to reduce or avoid those impacts; (3) requiring the implementation of feasible mitigation measures or alternatives that would reduce or avoid those impacts; and (4) requiring public agencies to disclose their reasons for approving any project that would have significant and unavoidable impacts (Guidelines §15002). CEQA is enforced through civil litigation over procedure (i.e., did the public agency follow the correct CEQA procedures?) and adequacy (i.e., has the potential for impacts been disclosed, analyzed, and mitigated to the extent feasible?).



The California Supreme Court has held that CEQA is "to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Friends of Mammoth v. Board of Supervisors* [1972] 8 Cal.3d 247, 259) Within that context, the role of the courts is to weigh the facts in each case and apply their judgment. Although the court may rule on the adequacy of the CEQA work, the court is not empowered to act in the place of the public agency to approve or deny the project for which the CEQA document was prepared. Further, the court's review is limited to the evidence contained in the administrative record that was before the public agency when it acted on the project.

Putting aside the issue of CEQA procedure, the defensibility of a CEQA analysis rests on the following concerns:

- whether the public agency has sufficiently analyzed the environmental consequences to enable decision makers to make an intelligent decision;
- whether the conclusions of the public agency are supported by substantial evidence in the administrative record; and
- whether the agency has made a good faith effort at the full disclosure of significant effects.

CEQA analyses need not be perfect or exhaustive -- the depth and breadth of the analysis is limited to what is "reasonably feasible." (Guidelines §15151) At the same time, the analysis "must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed

project." (Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376)

By itself, establishment of a GHG threshold will not insulate individual CEQA analyses from challenge. Defensibility depends upon the adequacy of the analysis prepared by the lead agency and the process followed. However, the threshold can help to define the boundaries of what is a reasonable analysis by establishing when an analysis will be required and the basic scope of that analysis. The threshold would attempt to define the point at which an analysis will be required and when a level of impact becomes significant, requiring preparation of an EIR. If the threshold includes recommendations for the method or methods of analysis, it can establish the minimum level of analysis to address this issue.

Considerations in Setting Thresholds for Stationary Source Projects

In many respects, the analysis of GHG emissions from stationary sources is much more straightforward than the analysis of land use patterns, forecasted energy consumption, and emissions from mobile sources. The reason is that, for the most part, the latter analyses depend largely on predictive models with myriad inputs and have a wider range of error. Emissions from stationary sources involve a greater reliance on mass and energy balance calculations and direct measurements of emissions from the same or similar sources. Energy demand is more directly tied to production, and even associated mobile source emissions will likely fall within narrower predictive windows.

Implementing CEQA Without a Threshold

A lead agency is not required to establish significance thresholds for GHG emissions from stationary sources. The lead agency may find that it needs more information or experience evaluating GHG from these types of projects to determine an appropriate significance threshold. As with other project types, the lead agency could conduct a project specific analysis to determine whether an environmental impact report is needed and to determine the level of mitigation that is appropriate. The agency might also rely on thresholds established for criteria pollutants as a screening method, and analyze GHG emissions (and require mitigation) from projects with emissions above the criteria pollutant thresholds. Over time, the agency could amass information and experience with specific project categories that would support establishing explicit thresholds. The lead agency may also choose to base local CEQA thresholds on state guidelines or on the category-specific reduction targets established by ARB in its scoping plan for implementing AB32. Resource constraints and other considerations associated with implementing CEQA without GHG thresholds for stationary sources would be similar to those outlined for other types of projects (see Chapter 5 – No Threshold Option).

Implementing CEQA with Threshold of Zero

A lead agency may find that any increase in GHG emissions is potentially significant under CEQA. The resources and other considerations for implementing a threshold of zero for stationary sources are the same as those outlined for other types of projects (see Chapter 6 – Zero Threshold Option).

Implementing CEQA with a Non-Zero Threshold

A lead agency may identify one or more non-zero thresholds for significance of emissions of GHG from stationary sources. The agency could elect to rely on existing thresholds for reviewing new or modified stationary sources of GHG, if the state or local air district has established any. The agency could also apply the threshold(s) established for non-stationary sources to GHG emissions from stationary sources. Significance thresholds could also be established by ordinance, rule, or policy for a given category of stationary sources; this approach is especially conducive to a tiered threshold approach. For example, the agency could establish significance and mitigation tiers for stationary compression-ignition diesel-fueled generators. Under such an approach, the project proponent could be first required to use a lower GHG-emitting power source if feasible, and if not, to apply mitigation based on the size of the generator and other defined considerations, such as hours of operation. Certain classes of generators could be found to be insignificant under CEQA (e.g., those used for emergency stand-by power only, with a limit on the annual hours of use). As with non-stationary projects, the goal of establishing non-zero thresholds is to maximize environmental protection, while minimizing resources used. Resource and other considerations outlined for non-stationary projects are applicable here (see Chapter 7 – Non-Zero Threshold Options).

Implementing CEQA with Different Thresholds for Stationary and Non-stationary Projects

Although a lead agency may apply the same thresholds to stationary and non-stationary projects, it is not required to do so. There are, in fact, some important distinctions between the two types of projects that could support applying different thresholds. The lead agency should consider the methods used to estimate emissions. Are the estimates a "best/worst reasonable scenario" or are they based on theoretical maximum operation? How accurate are the estimates (are they based on models, simulations, emission factors, source test data, manufacturer specifications, etc.)? To what extent could emissions be reduced through regulations after the project is constructed if they were found to be greater than originally expected (i.e., is it possible to retrofit emissions control technology onto the source(s) of GHG at a later date, how long is the expected project life, etc.)? Are there emission limits or emissions control regulations (such as New Source Review) that provide certainty that emissions will be mitigated? Generally, stationary source emissions are based on maximum emissions (theoretical or allowed under law or regulation), are more accurate, and are more amenable to retrofit at a later time than non-stationary source emissions. It is also more likely that category specific

rules or some form of NSR will apply to stationary sources than non-stationary projects. Notwithstanding, it is almost always more effective and cost-efficient to apply emission reduction technology at the design phase of a project. There are, therefore, a number of considerations that need to be evaluated and weighed before establishing thresholds – and which may support different thresholds for stationary and non-stationary projects. Furthermore, the considerations may change over time as new regulations are established and as emissions estimation techniques and control technology evolves.

Direct GHG Emissions from Stationary Sources

The main focus of this paper has been the consideration of projects that do not, in the main, involve stationary sources of air pollution, because stationary source projects are generally a smaller percentage of the projects seen by most local land use agencies. That said, some discussion of stationary sources is warranted. As the broader program for regulating GHG from these sources is developed, the strategies for addressing them under CEQA will likely become more refined.

The primary focus of analysis of stationary source emissions has traditionally been those pollutants that are directly emitted by the source, whether through a stack or as fugitive releases (such as leaks). CAPCOA conducted a simplified analysis of permitting activity to estimate the number of stationary source projects with potentially significant emissions of greenhouse gases that might be seen over the course of a year. This analysis looked only at stationary combustion sources (such as boilers and generators), and only considered direct emissions. A lead agency under CEQA may see a different profile of projects than the data provided here suggest, depending on what other resources are affected by projects. In addition, air districts review like-kind replacements of equipment to ensure the new equipment meets current standards, but such actions might not constitute a project for many land use agencies or other media regulators. The data does provide a useful benchmark, however, for lead agencies to assess the order of magnitude of potential stationary source projects. A similar analysis is included for non-stationary projects in Chapter 7.

Table 1: Analysis of GHG Emissions from Stationary Combustion Equipment Permits[3]

	BAAQMD	SMAQMD	SJVUAPCD	SCAQMD
Total Applications for Year	1499	778	1535	1179
Affected at threshold of:				
900 metric tons/year	26	43	63	108
10,000 metric tons/year	7	5	26	8
25,000 metric tons/year	3	1	11	4

[3] District data varies based on specific local regulations and methodologies.

Emissions from Energy Use

In addition to the direct emissions of GHG from stationary projects, CEQA will likely need to consider the project's projected energy use. This could include an analysis of opportunities for energy efficiency, onsite clean power generation (e.g., heat/energy recovery, co-generation, geothermal, solar, or wind), and the use of dedicated power contracts as compared to the portfolio of generally available power. In some industries, water use and conservation may provide substantial GHG emissions reductions, so the CEQA analysis should consider alternatives that reduce water consumption and wastewater discharge. The stationary project may also have the opportunity to use raw or feedstock materials that have a smaller GHG footprint; material substitution should be evaluated where information is available to do so.

Emissions from Associated Mobile Sources

The stationary project will also include emissions from associated mobile sources. These will include three basic components: emissions from employee trips, emissions from delivery of raw or feedstock materials, and emissions from product transport. Employee trips can be evaluated using trip estimation as is done for non-stationary projects, and mitigations would include such measures as providing access to and incentives for use of public transportation, accessibility for bicycle and pedestrian modes of transport, employer supported car or vanpools (including policies such as guaranteed rides home, etc). Upstream and downstream emissions related to goods movement can also be estimated with available models. The evaluation will need to determine the extent of the transport chain that should be included (to ensure that all emissions in the chain have been evaluated and mitigated, but to avoid double counting). Mitigations could include direct actions by operators who own their own fleet, or could be implemented through contractual arrangements with independent carriers; again, the evaluation will need to consider how far up and down the chain mitigation is feasible and can be reasonably required.

Comparing Emissions Changes Across Pollutant Categories

The potential exists for certain GHG reduction measures to increase emissions of criteria and toxic pollutants known to cause or aggravate respiratory, cardiovascular, and other health problems. For instance, GHG reduction efforts such as alternative fuels and methane digesters may create significant levels of increased pollutants that are detrimental to the health of the nearby population (e.g.; particulate matter, ozone precursors, toxic air contaminants). Such considerations should be included in any CEQA analysis of a project's environmental impacts. While there are many win-win

strategies that can reduce both GHG and criteria/toxic pollutant emissions, when faced with situations that involve tradeoffs between the two, the more immediate public health concerns that may arise from an increase in criteria or toxic pollutant emissions should take precedence. GHG emission reductions could be achieved offsite through other mitigation programs.

Introduction

Under state law, it is the purview of each lead agency to determine what, if any, significance thresholds will be established to guide its review of projects under CEQA. While the state does provide guidelines for implementing CEQA, the guidelines have left the decision of whether to establish thresholds (and if so, at what level) to individual lead agencies. Frequently, lead agencies consult with resource-specific agencies (such as air districts) for assistance in determining what constitutes a significant impact on that specific resource.

With the passage of AB 32, the ARB has broad authority to regulate GHG emissions as necessary to meet the emission reduction goals of the statute. This may include authority to establish emission reduction requirements for new land use projects, and may also enable them to recommend statewide thresholds for GHG under CEQA.

In developing this white paper, CAPCOA recognizes that, as the GHG reduction program evolves over time, GHG thresholds and other policies and procedures for CEQA may undergo significant revision, and that uniform statewide thresholds and procedures may be established. This paper is intended to serve as a resource for public agencies until such time that statewide guidance is established, recognizing that decisions will need to be made about GHG emissions from projects before such guidance is available. This paper is not, however, uniform statewide guidance. As stated before, it outlines several possible approaches without endorsing any one over the others.

Some air districts may choose to use this paper to support their establishment of guidance for GHG under CEQA, including thresholds. This paper does not, nor should it be construed to require a district to implement any of the approaches evaluated here. Decisions about whether to provide formal local guidance on CEQA for projects with GHG emissions, including the question of thresholds, will be made by individual district boards.

Each of the 35 air districts operates independently and has its own set of regulations and programs to address the emissions from stationary, area and mobile sources, consistent with state and federal laws, regulations, and guidelines. The independence of the districts allows specific air quality problems to be addressed on a local level. In addition, districts have also established local CEQA thresholds of significance for criteria pollutants – also to address the specific air quality problems relative to that particular district.

The overall goal of air district thresholds is to achieve and maintain health based air quality standards within their respective air basins and to reduce transport of emissions to other air basins. In establishing recommended thresholds, air districts consider the existing emission inventory of criteria pollutants and the amount of emission reductions needed to attain and maintain ambient air quality standards.

However, unlike criteria pollutants where individual districts are characterized by varying levels of pollutant concentrations and source types, greenhouse gases (GHG) and their attendant climate change ramifications are a global problem and, therefore, may suggest a uniform approach to solutions that ensure both progress and equity.

Under SB97, the Office of Planning and Research is directed to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions through CEQA by July 1, 2009. Those guidelines may recommend thresholds. As stated, this paper is intended to provide a common platform of information and tools to support local decision makers until such time that statewide guidance or requirements are promulgated.

Local Ability to Promulgate District-Specific GHG Thresholds

One of the primary reasons behind the creation of air districts in California is the recognition that some regions within the state face more critical air pollution problems than others and, as has often been pointed out – one size does not fit all. For example, a "Serious" federal nonattainment district would need greater emission reductions than a district already in attainment – and, therefore, the more "serious" district would set its criteria pollutant CEQA thresholds of significance much lower than the air district already in attainment.

The action of GHGs is global in nature, rather than local or regional (or even statewide or national). Ultimately there may be a program that is global, or at least national in scope. That said, actions taken by a state, region, or local government can contribute to the solution of the global problem. Local governments are not barred from developing and implementing programs to address GHGs. In the context of California and CEQA, lead agencies have the primary responsibility and authority to determine the significance of a project's impacts.

Further, air districts have primary authority under state law for "control of air pollution from all sources, other than emissions from motor vehicles." (H&SC §40000) The term air contaminant or "air pollutant" is defined extremely broadly, to mean "any discharge, release, or other propagation into the atmosphere" and includes, but is not limited to, soot, carbon, fumes, gases, particulate matter, etc. Greenhouse gases and other global warming pollutants such as black carbon would certainly be included in this definition, just as the U.S. Supreme Court held in Massachusetts v. EPA that greenhouse gases were air pollutants under the federal Clean Air Act. Therefore, air districts have the primary authority to regulate global warming pollutants from nonvehicular sources. AB 32 does not change this result. Although it gives wide responsibility to CARB to regulate greenhouse gases from all sources, including nonvehicular sources, it does not preempt the districts. AB 32 specifically states That "nothing in this division shall limit or expand the existing authority of any district..."(H&SC § 38594). Thus, districts and CARB retain concurrent authority over nonvehicular source greenhouse gas emissions.

Introduction

The CEQA statutes do not require an air district or any lead agency to establish significance thresholds under CEQA for any pollutant. While there are considerations that support the establishment of thresholds (which are discussed in other sections of this document), there is no obligation to do so.

An air district or other lead agency may elect not to establish significance thresholds for a number of reasons. The agency may believe that the global nature of the climate change problem necessitates a statewide or national framework for consideration of environmental impacts. SB 97 directs OPR to develop "guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions by July 1, 2009," and directs the California Resources Agency to certify and adopt the guidelines by June 30, 2010.

An agency may also believe there is insufficient information to support selecting one specific threshold over another. As described earlier, air districts have historically set CEQA thresholds for air pollutants in the context of the local clean air plan, or (in the case of toxic air pollutants) within the framework of a rule or policy that manages risks and exposures due to toxic pollutants. There is no current framework that would similarly manage impacts of greenhouse gas pollutants, although the CARB is directed to establish one by June 30, 2009, pursuant to AB 32. A local agency may decide to defer any consideration of thresholds until this framework is in place.

Finally, an agency may believe that the significance of a given project should be assessed on a case-by-case basis in the context of the project at the time it comes forward.

Implementing CEQA Without Significance Thresholds for GHG

The absence of a threshold does not in any way relieve agencies of their obligations to address GHG emissions from projects under CEQA. The implications of not having a threshold are different depending on the role the agency has under CEQA – whether it is acting in an advisory capacity, as a responsible agency, or as a lead agency.

<u>Implications of No Thresholds for an Agency Acting in an Advisory Capacity</u>

Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to assess emissions and impacts, and mitigations for potentially significant impacts. Although districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues that

are program wide, and these are advisory (unless they have been established by regulation).

An air district that has not established significance thresholds for GHG will not provide guidance to local governments on this issue. This does not prevent the local government from establishing thresholds under its own authority. One possible result of this would be the establishment of different thresholds by cities and counties within the air district. Alternatively, the air district could advise local governments not to set thresholds and those jurisdictions may follow the air district's guidance.

It is important to note here (as has been clearly stated by the Attorney General in comments and filings) that lack of a threshold does *not* mean lack of significance. An agency may argue lack of significance for any project, but that argument would have to be carried forth on a case-by-case, project specific basis. By extension then, a decision not to establish thresholds for GHG is likely to result in a greater workload for responsible and lead agencies as they consider individual projects under CEQA.

Implications of No Thresholds for a Responsible Agency

If there are no established thresholds of significance, the significance of each project will have to be determined during the course of review. The responsible agency (e.g., the air district) will review each project referred by the lead agency. The review may be qualitative or quantitative in nature. A qualitative review would discuss the nature of GHG emissions expected and their potential effect on climate change as the district understands it. It could also include a discussion of the relative merits of alternative scenarios. A quantitative analysis would evaluate, to the extent possible, the expected GHG emissions; it would also need to evaluate their potential effect on climate change and might include corresponding analysis of alternatives. The air district, as a responsible agency, may also identify mitigation measures for the project.

The lack of established thresholds will make the determination of significance more resource intensive for each project. The district may defer to the lead agency to make this determination, however the district may be obligated, as a responsible agency, to evaluate the analysis and determination.

Implications of No Thresholds for a Lead Agency

The main impact of not having significance thresholds will be on the primary evaluation of projects by the lead agency. Without significance thresholds, the agency will have to conduct some level of analysis of every project to determine whether an environmental impact report is needed. There are three fundamental approaches to the case-by-case analysis of significance, including presumptions of significance or insignificance, or no presumption:

1. The agency can begin with a presumption of significance and the analysis would be used to support a case-specific finding of no significance. This is similar to establishing a threshold of zero, except that here, the "threshold" is rebuttable. This approach may result in a large number of projects proceeding to preparation of an environmental impact report. Because of the attendant costs, project proponents may challenge the determination of significance, although formal challenge is less likely than attempts to influence the determination.

2. The agency can begin with a presumption of insignificance, and the analysis would be used to support a case-specific finding of significance. A presumption of insignificance could be based on the perspective that it would be speculative to attempt to identify the significance of GHG emissions from a project relative to climate change on a global scale. This approach might reduce the number of projects proceeding to preparation of environmental impact reports. It is likely to have greater success with smaller projects than larger ones, and a presumption of *insignificance* may be more likely to be challenged by project opponents.

3. It is not necessary for the lead agency to have any presumption either way. The agency could approach each project from a *tabula rasa* perspective, and have the determination of significance more broadly tied to the specific context of the project; this approach is likely to be resource intensive, and creates the greatest uncertainty for project proponents. To the extent that it results in a lead agency approving similar projects based on different determinations of significance for GHG emissions, it may be more vulnerable to challenge from either proponents or opponents of the project. Alternatively, in the absence of either thresholds or presumptions, the lead agency could use each determination of significance to build its approach in the same way that subsequent judgments define the law.

Relevant Citations

The full text of relevant citations is in Appendix A.

Public Resources Code – §21082.2, Significant Effect on Environment; Determination; Environmental Impact Report Preparation.

State CEQA Guidelines – §15064, Determining the Significance of the Environmental Effects Caused by a Project.

Introduction

If an air district or lead agency determines that any degree of project-related increase in GHG emissions would contribute considerably to climate change and therefore would be a significant impact, it could adopt a zero-emission threshold to identify projects that would need to reduce their emissions. A lead agency may determine that a zero-emission threshold is justified even if other experts may disagree. A lead agency is not prevented from adopting any significance threshold it sees as appropriate, as long as it is based on substantial evidence.

If the zero threshold option is chosen, all projects subject to CEQA would be required to quantify and mitigate their GHG emissions, regardless of the size of the project or the availability of GHG reduction measures available to reduce the project's emissions. Projects that could not meet the zero-emission threshold would be required to prepare environmental impact reports to disclose the unmitigable significant impact, and develop the justification for a statement of overriding consideration to be adopted by the lead agency.

Implementing CEQA With a Zero Threshold for GHG

The scientific community overwhelmingly agrees that the earth's climate is becoming warmer, and that human activity is playing a role in climate change. Unlike other environmental impacts, climate change is a global phenomenon in that all GHG emissions generated throughout the earth contribute to it. Consequently, both large and small GHG generators cause the impact. While it may be true that many GHG sources are individually too small to make any noticeable difference to climate change, it is also true that the countless small sources around the globe combine to produce a very substantial portion of total GHG emissions.

A zero threshold approach is based on a belief that, 1) all GHG emissions contribute to global climate change and could be considered significant, and 2) not controlling emissions from smaller sources would be neglecting a major portion of the GHG inventory.

CEQA explicitly gives lead agencies the authority to choose thresholds of significance. CEQA defers to lead agency discretion when choosing thresholds. Consequently, a zero-emission threshold has merits.

The CEQA review process for evaluating a project's impact on global climate change under the zero threshold option would involve several components. Air quality sections would be written by lead agencies to include discussions on climate change in CEQA documents, GHG emissions would be calculated, and a determination of significance would be made. The local air districts would review and comment on the climate change discussions in environmental documents. Lead agencies may then revise final EIRs to accommodate air district comments. More than likely, mitigation measures will be specified for the project, and a mitigation monitoring program will need to be put in place to ensure that these measures are being implemented.

Since CEQA requires mitigation to a less than significant level, it is conceivable that many projects subjected to a zero threshold could only be deemed less than significant with offsite reductions or the opportunity to purchase greenhouse gas emission reduction credits. GHG emission reduction credits are becoming more readily available however the quality of the credits varies considerably. High quality credits are generated by actions or projects that have clearly demonstrated emission reductions that are real, permanent, verifiable, enforceable, and not otherwise required by law or regulation. When the pre- or post-project emissions are not well quantified or cannot be independently confirmed, they are considered to be of lesser quality. Similarly, if the reductions are temporary in nature, they are also considered to be poor quality. Adoption of a zero threshold should consider the near-term availability and the quality of potential offsets.

There are also environmental justice concerns about the effects of using offsite mitigations or emission reduction credits to offset, or mitigate, the impacts of a new project. Although GHGs are global pollutants, some of them are emitted with co-pollutants that have significant near-source or regional impacts. Any time that increases in emissions at a specific site will be mitigated at a remote location or using emission reduction credits, the agency evaluating the project should ensure that it does not create disproportionate impacts.

Administrative Considerations

If electing to pursue a zero threshold, an air district or lead agency should consider the administrative costs and the environmental review system capacity. Some projects that previously would have qualified for an exemption could require further substantial analysis, including preparation of a Negative Declaration (ND), a Mitigated Negative Declaration (MND) or an EIR. Moreover, the trade-offs between the volume of projects requiring review and the quality of consideration given to reviews should be considered. It may also be useful to consider whether meaningful mitigation can be achieved from smaller projects.

Consideration of Exemptions from CEQA

A practical concern about identifying GHG emissions as a broad cumulative impact is whether the zero threshold option will preclude a lead agency from approving a large set of otherwise qualified projects utilizing a Categorical Exemption, ND, or MND. The results could be a substantial increase in the number of EIR's. This is a valid and challenging concern, particularly for any threshold approach that is based on a zero threshold for net GHG emission increases.

CEQA has specified exceptions to the use of a categorical exception. Specifically, CEQA Guidelines §15300.2 includes the following exceptions:

"(b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant."

(c) Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances."

These CEQA Guidelines sections could be argued to mean that any net increase in GHG emissions would preclude the use of a categorical exemption. However, as described below, if the following can be shown, then the exceptions above could be argued not to apply:

(1) Cumulative local, regional and/or state GHG emissions are being reduced or will be reduced by adopted, funded, and feasible measures in order to meet broader state targets.

(2) Mandatory state or local GHG reduction measures would apply to the project's emissions such that broader GHG reduction goals would still be met and the project contributions would not be cumulatively considerable.

(3) Project GHG emissions are below an adopted significance threshold designed to take into account the cumulative nature of GHG emissions.

A similar argument could be made relative to the use of a ND (provided no additional mitigation (beyond existing mandates) is required to control GHG emissions) and to the use of a MND instead of an EIR. However, due to the "fair argument" standard, which is discussed in Chapter 3, caution is recommended in use of a ND or MND unless all three elements above can be fully supported through substantial evidence and there is no substantial evidence to the contrary. Establishing a significance threshold of zero is likely to preclude the use of a categorical exemption.

Relevant Citations

The full text of relevant citations is in Appendix A.

Public Resources Code – §21004, Mitigating or Avoiding a Significant Effect; Powers of Public Agency.

State CEQA Guidelines – §15064, Determining the Significance of the Environmental Effects Caused by a Project.

State CEQA Guidelines – §15130, Discussion of Cumulative Impacts.

State CEQA Guidelines – §15064.7, Thresholds of Significance.

Introduction

A non-zero threshold could minimize the resources spent reviewing environmental analyses that do not result in real GHG reductions or to prevent the environmental review system from being overwhelmed. The practical advantages of considering non-zero thresholds for GHG significance determinations can fit into the concept regarding whether the project's GHG emissions represent a "considerable contribution to the cumulative impact" and therefore warrant analysis.

Specifying a non-zero threshold could be construed as setting a *de minimis* value for a cumulative impact. In effect, this would be indicating that there are certain GHG emission sources that are so small that they would not contribute substantially to the global GHG budget. This could be interpreted as allowing public agencies to approve certain projects without requiring any mitigation of their GHG. Any threshold framework should include a proper context to address the *de minimis* issue. However, the CEQA Guidelines recognize that there may be a point where a project's contribution, although above zero, would not be a *considerable contribution* to the cumulative impact and, therefore, not trigger the need for a significance determination.

GHG emissions from all sources are under the purview of CARB and as such may eventually be "regulated" no matter how small. Virtually all projects will result in some direct or indirect release of GHG. However, a decision by CARB to regulate a class of sources does not necessarily mean that an individual source in that class would constitute a project with significant GHG impacts under CEQA. For example, CARB has established criteria pollutant emission standards for automobiles, but the purchase and use of a single new car is not considered a project with significant impacts under CEQA. At the same time, it is important to note that it is likely that all meaningful sources of emissions, no matter how small are likely to be considered for regulation under AB 32. It is expected that projects will have to achieve some level of GHG reduction to comply with CARB's regulations meant to implement AB 32. As such all projects will have to play a part in reducing our GHG emissions budget and no project, however small, is truly being considered *de minimis* under CARB's regulations.

This chapter evaluates a range of conceptual approaches toward developing GHG significance criteria. The air districts retained the services of J&S an environmental consulting, firm to assist with the development of a Statute and Executive Order-based threshold (Approach 1) and a tiered threshold (Approach 2) based on a prescribed list of tasks and deliverables. Time and financial constraints limited the scope and depth of this analysis, however, the work presented here may be useful in developing interim guidance while AB 32 is being implemented. J&S recognized that approaches other than those described here could be used.

As directed, J&S explored some overarching issues, such as:

- what constitutes "new" emissions?

- how should "baseline emissions" be established?
- what is cumulatively "considerable" under CEQA?
- what is "business as usual" ? and
- should an analysis include "life-cycle" emissions?

The answers to these issues were key to evaluating each of the threshold concepts.

Approach 1 – Statute and Executive Order Approach

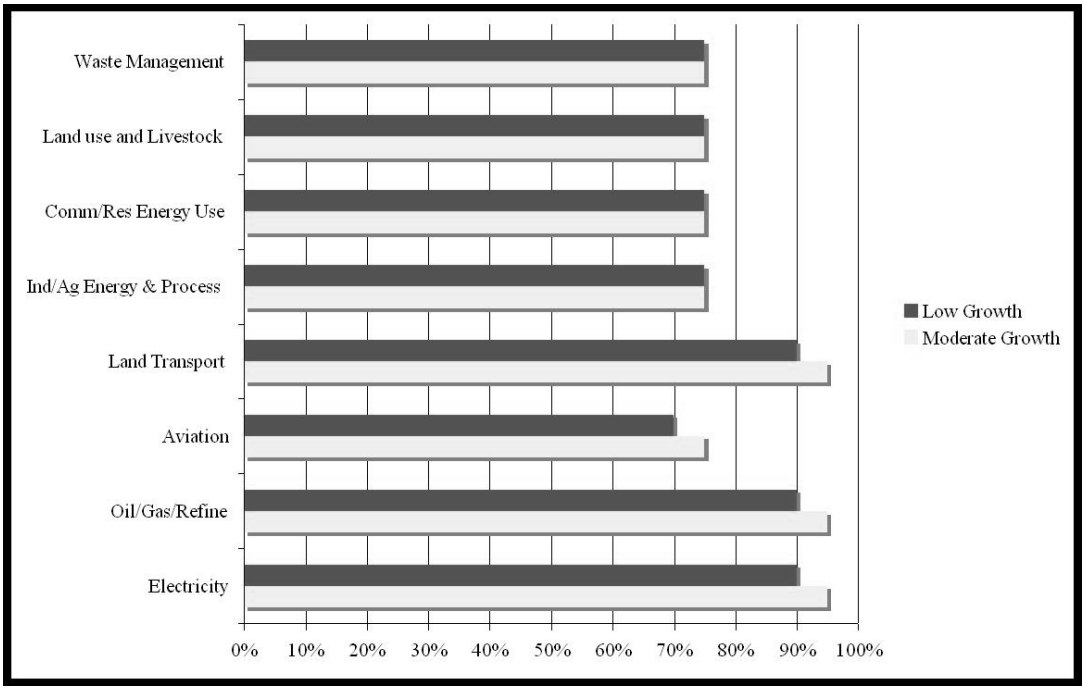
Thresholds could be grounded in existing mandates and their associated GHG emission reduction targets. A project would be required to meet the targets, or reduce GHG emissions to the targets, to be considered less than significant.

AB 32 and S-3-05 target the reduction of statewide emissions. It should be made clear that AB 32 and S-3-05 do not specify that the emissions reductions should be achieved through uniform reduction by geographic location or by emission source characteristics. For example, it is conceivable, although unlikely, that AB 32 goals could be achieved by new regulations that only apply to urban areas or that only apply to the transportation and/or energy sector. However, this approach to evaluating GHG under CEQA is based on the presumption that a new project must at least be consistent with AB 32 GHG emission reduction mandates.

The goal of AB 32 and S-3-05 is the significant reduction of future GHG emissions in a state that is expected to rapidly grow in both population and economic output. As such, there will have to be a significant reduction in the per capita GHG output for these goals to be met. CEQA is generally used to slow or zero the impact of new emissions, leaving the reduction of existing emission sources to be addressed by other regulatory means. With these concepts in mind, four options were identified for statute/executive order-based GHG significance thresholds and are described below.

<u>Threshold 1.1: AB 32/S-3-05 Derived Uniform Percentage-Based Reduction.</u> AB 32 requires the state to reduce California-wide GHG emissions to 1990 levels by 2020. Reducing greenhouse gas emission levels from 2020 to 1990 levels could require a 28 to 33 percent reduction of business-as-usual GHG emissions depending on the methodology used to determine the future emission inventories. The exact percent reduction may change slightly once CARB finalizes its 1990 and 2020 inventory estimates. In this context, business-as-usual means the emissions that would have occurred in the absence of the mandated reductions. The details of the business-as-usual scenario are established by CARB in the assumptions it uses to project what the state's GHG emissions would have been in 2020, and the difference between that level and the level that existed in 1990 constitutes the reductions that must be achieved if the mandated goals are to be met.

This threshold approach would require a project to meet a percent reduction target based on the average reductions needed from the business-as-usual emission from all GHG sources. Using the 2020 target, this approach would require all discretionary projects to achieve a 33 percent reduction from projected business-as-usual emissions in order to be considered less than significant. A more restrictive approach would use the 2050 targets. S-3-05 seeks to reduce GHG emissions to 80 percent below 1990 levels by 2050. To reach the 2050 milestone would require an estimated 90 percent reduction (effective immediately) of business-as-usual emissions. Using this goal as the basis for a significance threshold may be more appropriate to address the long-term adverse impacts associated with global climate change. Note that AB 32 and S-3-05 set emission inventory goals at milestone years; it is unclear how California will progress to these goals in non-milestone years.



SOURCE: ARB 2007

<u>Threshold 1.2: Uniform Percentage-Based (e.g.50%) Reduction for New Development</u>. This threshold is based on a presumption that new development should contribute a greater percent reduction from business-as-usual because greater reductions can be achieved at lower cost from new projects than can be achieved from existing sources. This approach would establish that new development emit 50 percent less GHG emissions than business-as-usual development. This reduction rate is greater than the recommended reduction rate for meeting the Threshold 1.1 2020 target (33 percent) but is significantly less restrictive than the Threshold 1.1 2050 target reduction rate (90 percent). If a 50 percent GHG reduction were achieved from new development, existing emissions would have to be reduced by 25 to 30 percent in order to meet the 2020 emissions goal depending on the year used to determine the baseline inventory. Although this reduction goal is reasonable for achieving the 2020 goal, it would not be possible to

reach the 2050 emissions target with this approach even if existing emissions were 100 percent controlled.

Threshold 1.3: Uniform Percentage-Based Reduction by Economic Sector. This threshold would use a discrete GHG reduction goal specific to the economic sector associated with the project. There would be specific reduction goals for each economic sector, such as residential, commercial, and industrial development. Specifying different reduction thresholds for each market sector allows selection of the best regulatory goal for each sector taking into account available control technology and costs. This approach would avoid over-regulating projects (i.e. requiring emissions to be controlled in excess of existing technology) or under-regulating projects (i.e. discouraging the use of available technology to control emissions in excess of regulations). This approach requires extensive information on the emission inventories and best available control technology for each economic sector. This data will be compiled as CARB develops its scoping plan under AB 32 and its implementing regulations; as a result, this approach will be more viable in the long term.

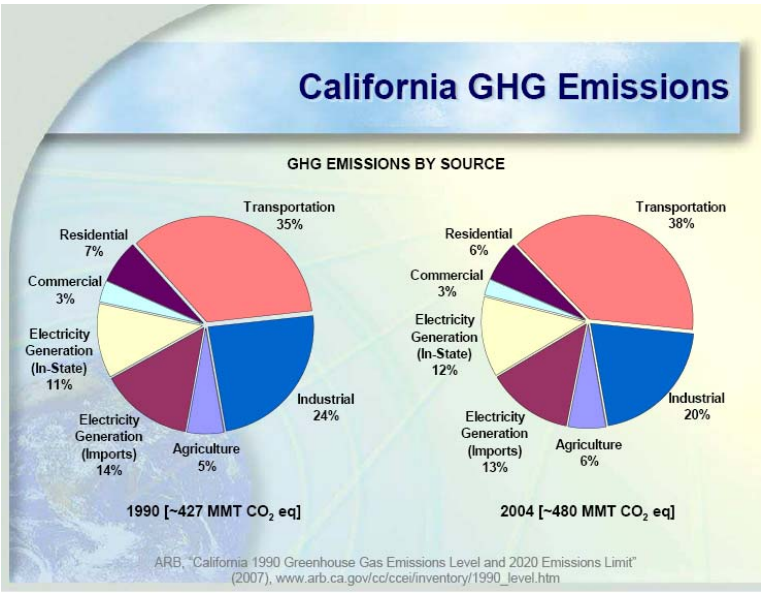
Threshold 1.4: Uniform Percentage-Based Reduction by Region. AB 32 and S-3-05 are written such that they apply to a geographic region (i.e. the entire state of California) rather than on a project or sector level. One could specify regions of the state such as the South Coast Air Basin, Sacramento Valley, or Bay Area which are required to plan (plans could be developed by regional governments, such as councils of governments) and demonstrate compliance with AB 32 and S-3-05 reduction goals at a regional level. To demonstrate that a project has less than significant emissions, one would have to show compliance with the appropriate regional GHG plan. Effectively this approach allows for analysis of GHG emissions at a landscape scale smaller than the state as a whole. Specifying regions in rough correlation to existing air basins or jurisdictional control allows for regional control of emissions and integration with regional emission reduction strategies for criteria and toxic air pollutants. Although differing GHG reduction controls for each region are possible, it is likely that all regions would be

required to achieve 1990 emission inventories by the year 2020 and 80 percent less emissions by 2050. Threshold 1.4 is considered viable long-term significance criteria that is unlikely to be used in the short term.

Implementing CEQA Thresholds Based on Emission Reduction Targets

Characterizing Baseline and Project Emissions

While the population and economy of California is expanding, all new projects can be considered to contribute new emissions. Furthermore, GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. "Business-as-usual" is the projection of GHG emissions at a future date based on current technologies and regulatory requirements in absence of other reductions. For example to determine the future emissions from a power plant for "business-as-usual" one would multiply the projected energy throughput by the current emission factor for that throughput. If adopted regulations (such as those that may be promulgated by CARB for AB 32) dictate that power plant emissions must be reduced at some time in the future, it is appropriate to consider these regulation standards as the new business-as-usual for a future date. In effect, business-as-usual will continue to evolve as regulations manifest. Note that "business-as-usual" defines the CEQA No Project conditions, but does not necessarily form the baseline under CEQA. For instance, it is common to subtract the future traffic with and without a project to determine the future cumulative contribution of a project on traffic conditions. However, existing conditions at the time of issuance of the notice of preparation is normally the baseline.



SOURCE: ARB 2007

Establishing Emission Reduction Targets

One of the obvious drawbacks to using a uniform percent reduction approach to GHG control is that it is difficult to allow for changes in the 1990 and future emission inventories estimates. To determine what emission reductions are required for new projects one would have to know accurately the 1990 budget and efficacy of other GHG promulgated regulations as a function of time. Since CARB will not outline its

regulation strategy for several more years, it is difficult to determine accurately what the new project reductions should be in the short term. Future updates to the 1990 inventory could necessitate changes in thresholds that are based on that inventory. It is important to note that it is difficult to create near term guidance for a uniform reduction threshold strategy since it would require considerable speculation regarding the implementation and effectiveness of forthcoming CARB regulations.

Of greater importance are the assumptions used to make the projected 2020 emission inventories. Projecting future inventories over the next 15-50 years involves substantial uncertainty. Furthermore, there are likely to be federal climate change regulations and possibly additional international GHG emission treaties in the near future. To avoid such speculation, this paper defines all future emission inventories as hypothetical business-as-usual projections.

This white paper is intended to support local decisions about CEQA and GHG in the near term. During this period, it is unlikely that a threshold based on emission reduction targets would need to be changed. However, it is possible that future inventory updates will show that targets developed on the current inventory were not stringent enough, or were more stringent than was actually needed.

Approach 2 – Tiered Approach

The goal of a tiered threshold is to maximize reduction predictability while minimizing administrative burden and costs. This would be accomplished by prescribing feasible mitigation measures based on project size and type, and reserving the detailed review of an EIR for those projects of greater size and complexity. This approach may require inclusion in a General Plan, or adoption of specific rules or ordinances in order to fully and effectively implement it.

A tiered CEQA significance threshold could establish different levels at which to determine if a project would have a significant impact. The tiers could be established based on the gross GHG emission estimates for a project or could be based on the physical size and characteristics of the project. This approach would then prescribe a set of GHG mitigation strategies that would have to be incorporated into the project in order for the project to be considered less than significant.

The framework for a tiered threshold would include the following:

- disclosure of GHG emissions for all projects;
- support for city/county/regional GHG emissions reduction planning;
- creation and use of a “green list” to promote the construction of projects that have desirable GHG emission characteristics;
- a list of mitigation measures;

- a decision tree approach to tiering; and
- quantitative or qualitative thresholds.

Decision-Tree Approach to Tiering

CEQA guidance that allows multiple methodologies to demonstrate GHG significance will facilitate the determination of significance for a broad range of projects/plans that would otherwise be difficult to address with a single non-compound methodology. Even though there could be multiple ways that a project can determine GHG significance using a decision-tree approach, only one methodology need be included in any single CEQA document prepared by the applicant. The presence of multiple methodologies to determine significance is designed to promote flexibility rather than create additional analysis overhead. Figure 1 shows a conceptual approach to significance determination using a tiered approach that shows the multiple routes to significance determination.

Figure 1 Detail Description

Figure 1 pictorially represents how an agency can determine a project's or plan's significance for CEQA analysis using the non-zero threshold methodology. The emissions associated with a project/plan are assumed to have a significant impact unless one can arrive at a less-than-significant finding by at least one of the methodologies below.

1. Demonstrate that a General Plan (GP) or Regional Plan is in Compliance with AB32

   - For most GPs or RPs this will require demonstration that projected 2020 emissions will be equal to or less than 1990 emissions.
   - GPs or RPs are expected to fully document 1990 and 2020 GHG emission inventories.
   - Projection of 2020 emissions is complicated by the fact that CARB is expected to promulgate emission reductions in the short term. Until explicit CARB regulations are in place, unmitigated GP 2020 emission inventories represent business-as-usual scenarios.
   - EIRs for GPs or RPs which demonstrate 2020 mitigated emissions are less than or equal to 1990 emissions are considered less than significant.

2. Demonstrate the Project is Exempt Based on SB 97

   - As specified in SB 97, projects that are funded under November 2006 Proposition 1B (Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act) and 1C (Disaster Preparedness and Flood Prevention Bond Act) may be exempt from analysis until January 1, 2010.

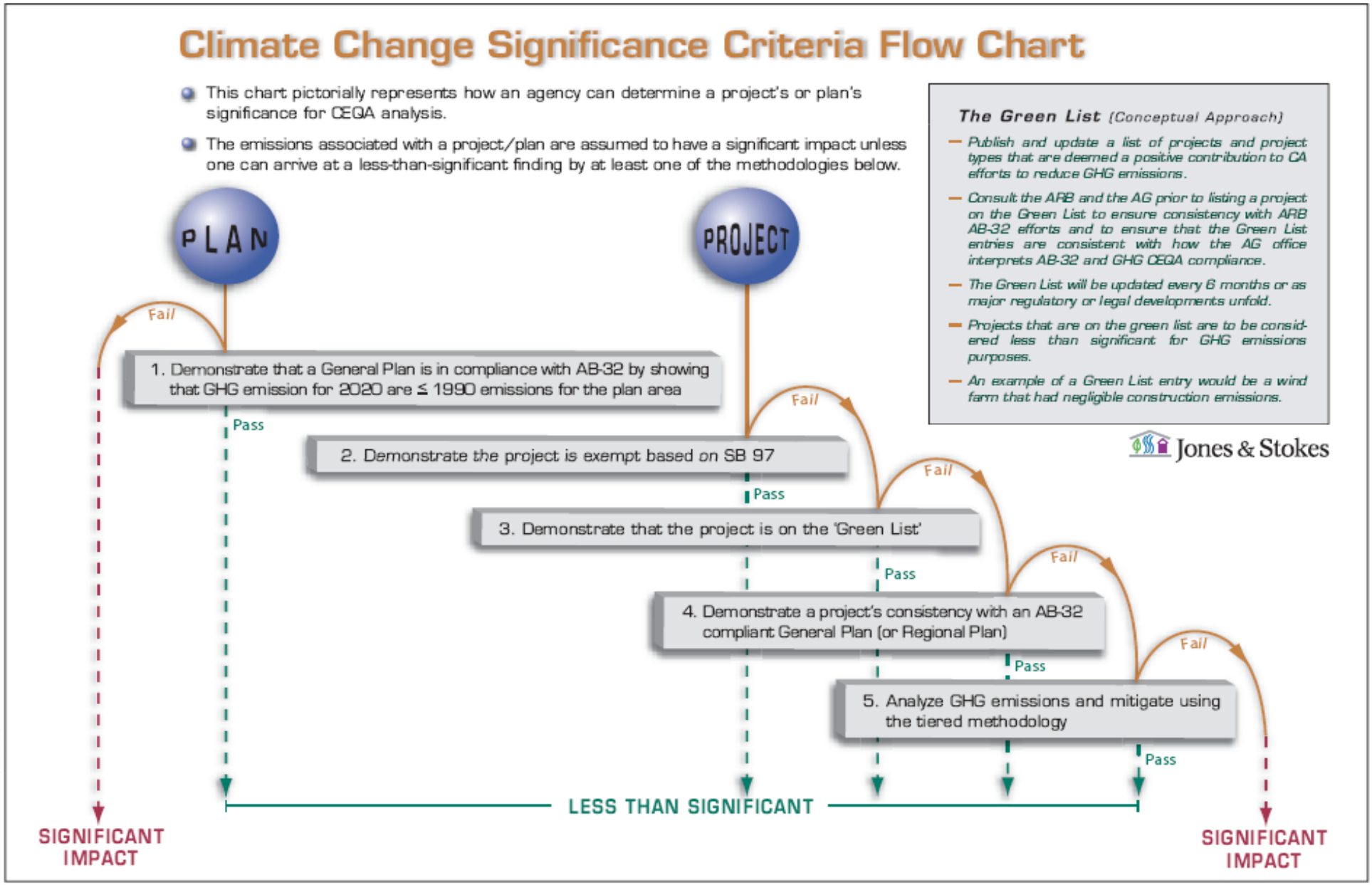


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Figure 1
Climate Change Significance Criteria Flow Chart

- An exemption can be used in an ND, MND, or EIR to support a less than significant finding for GHG impacts.

3. Demonstrate that the Project is on the 'Green List'

- This list would include projects that are deemed a positive contribution to California efforts to reduce GHG emissions. If the project is of the type described on the Green List it is considered less than significant.
- If the Green List entry description requires mitigation for impacts other than GHG, this methodology can be used in MNDs or EIRs; if the Green List entry does not require mitigation this methodology can be used in NDs, MNDs, or EIRs.

4. Demonstrate a Project's Compliance with a General Plan

- If a project is consistent with an appropriate General Plan's Greenhouse Gas Reduction Plan (GGRP), a project can be declared less than significant.
- Note that at this time there are no known jurisdictions that have a GGRP that has been fully subject to CEQA review. While Marin County has adopted a forward-thinking GGRP and it is described in the most recent GP update, the associated EIR does not analyze the secondary environmental impacts of some of the GGRP measures such as tidal energy. While one can reference GGRPs that have not been reviewed fully in CEQA, to attempt to show a project's compliance with such a plan as evidence that the project's GHG emission contributions are less than significant may not be supported by substantial evidence that cumulative emissions are being fully addressed in the particular jurisdiction.
- Compliance with a CEQA-vetted GGRP can be cited as evidence for all CEQA documents (Categorical Exemption, ND, MND, and EIR).

5. Analyze GHG Emissions and Mitigate using the Tiered Methodology

- Guidance and mitigation methodology for various development projects (residential, commercial, industrial) are listed in the form of tiered thresholds. If a project incorporates the mitigation measures specified in the tiered threshold tables the project is considered less than significant.
- All project emissions are considered less than significant if they are less than the threshold(s).
- If the tiered approach requires mitigation, this methodology can be used in MNDs or EIRs; if the tiered approach does not require mitigation this methodology can be used in NDs, MNDs, or EIRs.

The Green List

- The Green List would be a list of projects and project types that are deemed a positive contribution to California's efforts to reduce GHG emissions.
- If this approach is followed, it is suggested that CARB and the Attorney General (AG) are consulted prior to listing a project on the Green List to ensure consistency with CARB AB 32 efforts and to ensure that the Green List entries are consistent with how the AG office interprets AB 32 and GHG CEQA compliance.
- The Green List should be updated every 6 months or as major regulatory or legal developments unfold.
- Projects that are on the Green List are to be considered less than significant for GHG emissions purposes.
- A tentative list of potential Green List entries is presented below. Actual Green List entries should be far more specific and cover a broad range of project types and mitigation approaches. The list below is merely a proof-of-concept for the actual Green List.

    1. Wind farm for the generation of wind-powered electricity
    2. Extension of transit lines to currently developed but underserved communities
    3. Development of high-density infill projects with easily accessible mass transit
    4. Small hydroelectric power plants at existing facilities that generate 5 mw or less (as defined in Class 28 Categorical Exemption)
    5. Cogeneration plants with a capacity of 50 mw or less at existing facilities (as defined in Class 29 Cat Exemption)
    6. Increase in bus service or conversion to bus rapid transit service along an existing bus line
    7. Projects with LEED "Platinum" rating
    8. Expansion of recycling facilities within existing urban areas
    9. Recycled water projects that reduce energy consumption related to water supplies that services existing development
    10. Development of bicycle, pedestrian, or zero emission transportation infrastructure to serve existing regions

There are also several options for tiering and thresholds, as shown in Table 2 below. One could establish strictly numeric emissions thresholds and require mitigation to below the specific threshold to make a finding of less than significant. One could establish narrative emissions threshold that are based on a broader context of multiple approaches to GHG reductions and a presumption that projects of sufficiently low GHG intensity are less than significant.

In Concept 2A, a zero threshold would be applied to projects and thus only projects that result in a reduction of GHG emissions compared to baseline emissions would be less than significant absent mitigation. All projects would require quantified inventories. All projects that result in a net increase of GHG emissions would be required to mitigate their emissions to zero through direct mitigation or through fees or offsets or the impacts

Table 2: Approach 2 Tiering Options

	Concept 2A Zero	Concept 2B Quantitative	Concept 2C Qualitative
Tier 1	Project results in a net reduction of GHG emissions *Less than Significant*	Project in compliance with an AB 32-compliant General/Regional Plan, on the Green List, or below Tier 2 threshold. Level 1 Reductions (Could include such measures as: bike parking, transit stops for planned route, Energy Star roofs, Energy Star appliances, Title 24, water use efficiency, etc.) *Less than Significant*	Project in compliance with an AB 32-compliant General/Regional Plan, on the Green List, or below Tier 2 threshold. Level 1 Reductions (See measures under 2B) *Less than Significant*
Tier 2	Project results in net increase of GHG emissions Mitigation to zero (including offsets) *Mitigated to Less than Significant*	Above Tier 2 threshold Level 2 Mitigation (Could include such measures as: Parking reduction beyond code, solar roofs, LEED Silver or Gold Certification, exceed Title 24 by 20%, TDM measures, etc.) *Mitigated to Less than Significant*	Above Tier 2 threshold Level 2 Mitigation (See measures under 2B) *Mitigated to Less than Significant*
Tier 3	Mitigation infeasible to reduce emissions to zero (e.g., cost of offsets infeasible for project or offsets not available) *Significant and Unavoidable*	Above Tier 2 threshold With Level 1, 2 Mitigation Level 3 Mitigation: (Could include such measures as: On-site renewable energy systems, LEED Platinum certification, Exceed Title 24 by 40%, required recycled water use for irrigation, zero waste/high recycling requirements, mandatory transit passes, offsets/carbon impact fees) *Mitigated to Less than Significant*	Above Tier 3 thresholds Quantify Emissions, Level 3 Mitigation (see measures under 2B), and Offsets for 90% of remainder *Significance and Unavoidable*

would be identified as significant and unavoidable. This could be highly problematic and could eliminate the ability to use categorical exemptions and negative declarations for a wide range of projects.

In Concepts 2B and 2C, the first tier of a tiered threshold includes projects that are within a jurisdiction with an adopted greenhouse gas reduction plan (GGRP) and General Plan/Regional Plan that is consistent with AB 32 (and in line with S-3-05), or are on the Green List, or are below the Tier 2 threshold. All Tier 1 projects would be required to implement mandatory reductions required due to other legal authority (Level 1 reductions) such as AB 32, Title 24, or local policies and ordinances. With Level 1

reduction measures, qualifying Tier 1 projects would be considered less than significant without being required to demonstrate mitigation to zero.

In Concept 2B, the Tier 2 threshold would be quantitative, and quantified inventories would be required. Several quantitative threshold options are discussed below. A more comprehensive set of Level 2 mitigation would be required. If the project's emissions still exceed the Tier 2 threshold, an even more aggressive set of Level 3 mitigation measures would be required including offsets (when feasible) to reduce emissions below the Tier 2 threshold.

In Concept 2C, there would be two thresholds, a lower Tier 2 threshold (the "low bar") and a higher Tier 3 threshold (the "high bar"). The Tier 2 threshold would be the significance threshold for the purposes of CEQA and would be qualitative in terms of units (number of dwelling units, square feet of commercial space, etc.) or a per capita ratio. Projects above the Tier 2 threshold would be required to implement the comprehensive set of Level 2 mitigation. Projects below the Tier 2 threshold would not be required to quantify emissions or reductions. The Tier 3 threshold would be a threshold to distinguish the larger set of projects for which quantification of emissions would be required. Level 3 mitigation would be required and the project would be required to purchase offsets (when feasible) in the amount of 90 percent of the net emissions after application of Level 1 reductions and Level 2 and 3 mitigation. A variant on Concept 2C would be to require mandatory Level 3 mitigation without quantification and offsets.

Approach 2 Threshold Options

Seven threshold options were developed for this approach. The set of options are framed to capture different levels of new development in the CEQA process and thus allow different levels of mitigation. Options range from a zero first-tier threshold (Threshold 2.1) up to a threshold for GHG that would be equivalent to the capture level (i.e., number of units) of the current criteria pollutant thresholds used by some air districts (Threshold 2.4). The decision-based implementation approach discussed above could be used for any of these options. Table 3 below compares the results of each of the approaches discussed here.

Threshold 2.1: Zero First Tier Tiered Threshold.

This option would employ the decision tree concept and set the first tier cut-point at zero. The second tier cut-point could be one of the qualitative or quantitative thresholds discussed below. First-tier projects would be required to implement a list of very feasible and readily available mitigation measures.

Threshold 2.2: Quantitative Threshold Based on Market Capture

A single quantitative threshold was developed in order to ensure capture of 90 percent or more of likely future discretionary developments. The objective was to set the emission

threshold low enough to capture a substantial fraction of future residential and non-residential development that will be constructed to accommodate future statewide population and job growth, while setting the emission threshold high enough to exclude small development projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions.

The quantitative threshold was created by using the following steps:

- Reviewing data from four diverse cities (Los Angeles in southern California and Pleasanton, Dublin, and Livermore in northern California) on pending applications for development.

- Determining the unit (dwelling unit or square feet) threshold that would capture approximately 90 percent of the residential units or office space in the pending application lists.

- Based on the data from the four cities, the thresholds selected were 50 residential units and 30,000 square feet of commercial space.

- The GHG emissions associated with 50 single-family residential units and 30,000 square feet of office were estimated and were found to be 900 metric tons and 800 metric tons, respectively. Given the variance on individual projects, a single threshold of 900 metric tons was selected for residential and office projects.

- A 900 metric ton threshold was also selected for non-office commercial projects and industrial projects to provide equivalency for different projects in other economic sectors.

- If this threshold is preferred, it is suggested that a more robust data set be examined to increase the representativeness of the selected thresholds. At a minimum, a diverse set of at least 20 cities and/or counties from throughout the state should be examined in order to support the market capture goals of this threshold. Further, an investigation of market capture may need to be conducted for different commercial project types and for industrial projects in order to examine whether multiple quantitative emissions thresholds or different thresholds should be developed.

The 900-ton threshold corresponds to 50 residential units, which corresponds to the 84th percentile of projects in the City of Los Angeles, the 79th percentile in the City of Pleasanton, the 50th percentile in the City of Livermore and the 4th percentile in the City of Dublin. This is suggestive that the GHG reduction burden will fall on larger projects that will be a relatively small portion of overall projects within more developed central cities (Los Angeles) and suburban areas of slow growth (Pleasanton) but would be the higher portion of projects within moderately (Livermore) or more rapidly developing areas (Dublin). These conclusions are suggestive but not conclusive due to the small sample size. The proposed threshold would exclude the smallest proposed developments

from potentially burdensome requirements to quantify and mitigate GHG emissions under CEQA. While this would exclude perhaps 10 percent of new residential development, the capture of 90 percent of new residential development would establish a strong basis for demonstrating that cumulative reductions are being achieved across the state. It can certainly serve as an interim measure and could be revised if subsequent regulatory action by CARB shows that a different level or different approach altogether is called for.

The 900-ton threshold would correspond to office projects of approximately 35,000 square feet, retail projects of approximately 11,000 square feet, or supermarket space of approximately 6,300 square feet. 35,000 square feet would correspond to the 46th percentile of commercial projects in the City of Los Angeles, the 54th percentile in the City of Livermore, and the 35th percentile in the City of Dublin. However, the commercial data was not separated into office, retail, supermarket or other types, and thus the amount of capture for different commercial project types is not known. The proposed threshold would exclude smaller offices, small retail (like auto-parts stores), and small supermarkets (like convenience stores) from potentially burdensome requirements to quantify and mitigate GHG emissions under CEQA but would include many medium-scale retail and supermarket projects.

The industrial sector is less amenable to a unit-based approach given the diversity of projects within this sector. One option would be to adopt a quantitative GHG emissions threshold (900 tons) for industrial projects equivalent to that for the residential/commercial thresholds described above. Industrial emissions can result from both stationary and mobile sources. CARB estimates that their suggested reporting threshold for stationary sources of 25,000 metric tons accounts for more than 90 percent of the industrial sector GHG emissions (see Threshold 2.3 for 25,000 metric ton discussion). If the CARB rationale holds, then a 900 metric ton threshold would likely capture at least 90 percent (and likely more) of new industrial and manufacturing sources. If this approach is advanced, we suggest further examination of industrial project data to determine market capture.

This threshold would require the vast majority of new development emission sources to quantify their GHG emissions, apportion the forecast emissions to relevant source categories, and develop GHG mitigation measures to reduce their emissions.

<u>Threshold 2.3: CARB Reporting Threshold</u>

CARB has recently proposed to require mandatory reporting from cement plants, oil refineries, hydrogen plants, electric generating facilities and electric retail providers, cogeneration facilities, and stationary combustion sources emitting $\geq$ 25,000 MT CO_2e/yr. AB 32 requires CARB to adopt a regulation to require the mandatory reporting and verification of emissions. CARB issued a preliminary draft version of its proposed reporting requirements in August 2007 and estimates that it would capture 94 percent of the GHG emissions associated with stationary sources.

This threshold would use 25,000 metric tons per year of GHG as the CEQA significance level. CARB proposed to use the 25,000 metric tons/year value as a reporting threshold, not as a CEQA significance threshold that would be used to define mitigation requirements. CARB is proposing the reporting threshold to begin to compile a statewide emission inventory, applicable only for a limited category of sources (large industrial facilities using fossil fuel combustion).

A 25,000 metric ton significance threshold would correspond to the GHG emissions of approximately 1,400 residential units, 1 million square feet of office space, 300,000 square feet of retail, and 175,000 square feet of supermarket space. This threshold would capture far less than half of new residential or commercial development.

As noted above, CARB estimates the industrial-based criteria would account for greater than 90 percent of GHG emissions emanating from stationary sources. However, industrial and manufacturing projects can also include substantial GHG emissions from mobile sources that are associated with the transportation of materials and delivery of products. When all transportation-related emissions are included, it is unknown what portion of new industrial or manufacturing projects a 25,000-ton threshold would actually capture.

An alternative would be to use a potential threshold of 10,000 metric tons considered by the Market Advisory Committee for inclusion in a Greenhouse Gas Cap and Trade System in California. A 10,000 metric ton significance threshold would correspond to the GHG emissions of approximately 550 residential units, 400,000 square feet of office space, 120,000 square feet of retail, and 70,000 square feet of supermarket space. This threshold would capture roughly half of new residential or commercial development.

Threshold 2.4: Regulated Emissions Inventory Capture

Most California air districts have developed CEQA significance thresholds for NOx and ROG emissions to try to reduce emissions of ozone precursors from proposed sources that are not subject to NSR pre-construction air quality permitting. The historical management of ozone nonattainment issues in urbanized air districts is somewhat analogous to today's concerns with greenhouse gas emissions in that regional ozone concentrations are a cumulative air quality problem caused by relatively small amounts of NOx and ROG emissions from thousands of individual sources, none of which emits enough by themselves to cause elevated ozone concentrations. Those same conditions apply to global climate change where the environmental problem is caused by emissions from a countless number of individual sources, none of which is large enough by itself to cause the problem. Because establishment of NOx/ROG emissions CEQA significance thresholds has been a well-tested mechanism to ensure that individual projects address cumulative impacts and to force individual projects to reduce emissions under CEQA, this threshold presumes the analogy of NOx/ROG emission thresholds could be used to develop similar GHG thresholds.

The steps to develop a GHG emission threshold based on the NOx/ROG analogy were as follows:

- For each agency, define its NOx/ROG CEQA thresholds.
- For each agency, define the regional NOx/ROG emission inventory the agency is trying to regulate with its NOx/ROG thresholds.
- For each agency, calculate the percentage of the total emission inventory for NOx represented by that agency's CEQA emission threshold. That value represents the "minimum percentage of regulated inventory" for NOx.
- The current (2004) California-wide GHG emission inventory is 499 million metric tons per year of CO_2 equivalent (MMT CO_2e). Apply the typical "minimum percentage of regulated inventory" value to the statewide GHG inventory, to develop a range of analogous GHG CEQA thresholds.

The preceding methodology was applied to two different air quality districts: the Bay Area Air Quality Management District (BAAQMD), a mostly-urbanized agency within which most emissions are generated from urban areas; and the San Joaquin Valley Air Pollution Control District (SJVAPCD), which oversees emissions emanating in part from rural areas that are generated at dispersed agricultural sources and area sources. For example, in the Bay Area the NOx threshold is 15 tons/year. The total NOx inventory for 2006 was 192,000 tons/year (525 tons/day). The threshold represents 0.008 percent of the total NOx inventory. Applying that ratio to the total statewide GHG emissions inventory of 499 MMT CO_2e (2004) yields an equivalent GHG threshold of 39,000 MMT CO_2e.

The range of analogous CEQA GHG thresholds derived from those two agencies is tightly clustered, ranging from 39,000 to 46,000 tons/year. A 39,000 to 46,000 metric ton threshold would correspond to the GHG emissions of approximately 2,200 to 2,600 residential units, 1.5 to 1.8 million square feet of office space, 470,000 to 560,000 square feet of retail, and 275,000 to 320,000 square feet of supermarket space. This threshold would capture far less than half of new residential or commercial development. Similarly, this threshold would capture less of new industrial/manufacturing GHG emissions inventory than Thresholds 2.2 or 2.3.

<u>Threshold 2.5: Unit-Based Thresholds Based on Market Capture</u>

Unit thresholds were developed for residential and commercial developments in order to capture approximately 90 percent of future development. The objective was to set the unit thresholds low enough to capture a substantial fraction of future housing and commercial developments that will be constructed to accommodate future statewide population and job growth, while setting the unit thresholds high enough to exclude small development projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions. Sector-based thresholds were created by using the same steps

and data used to create Threshold 2.2- Quantitative Threshold Based on Market Capture above.

The distribution of pending application data suggests that the GHG reduction burden will fall on larger projects that will be a relatively small portion of overall projects within more developed central cities and suburban areas of slow growth but would be the higher portion of projects within moderately or rapidly developing areas. The proposed threshold would exclude the smallest proposed developments from potentially burdensome requirements to quantify and mitigate GHG emissions under CEQA. While this would exclude perhaps 10 percent of new residential development, the capture of 90 percent of new residential development would establish a strong basis for demonstrating that cumulative reductions are being achieved across the state. It can certainly serve as an interim measure and could be revised if subsequent regulatory action by CARB shows that a different level or different approach altogether is called for.

A similar rationale can be applied to the development of a commercial threshold. Threshold 2.5 would exclude many smaller businesses from potentially burdensome requirements to quantify and mitigate GHG emissions under CEQA. It should be noted that the GHG emissions of commercial projects vary substantially. For example, the carbon dioxide emissions associated with different commercial types were estimated as follows:

- 30,000 square-foot (SF) office = 800 metric tons/year CO_2
- 30,000 SF retail = 2,500 metric tons/year CO_2
- 30,000 SF supermarket = 4,300 metric tons/year CO_2

Thus, in order to assure appropriate market capture on an emissions inventory basis, it will be important to examine commercial project size by type, instead of in the aggregate (which has been done in this paper).

The industrial sector is less amenable to a unit-based approach given the diversity of projects within this sector. One option would be to use a quantitative threshold of 900 tons for industrial projects in order to provide for rough equivalency between different sectors. Industrial emissions can result from both stationary and mobile sources. However, if the CARB rationale for > 90 percent stationary source capture with a threshold of 25,000 metric tons holds, then a 900 metric ton threshold would likely capture at least 90 percent (and likely more) of new industrial sources. Further examination of unit-based industrial thresholds, such as the number of employees or manufacturing floor space or facility size, may provide support for a unit-based threshold based on market capture.

This threshold would require the vast majority of new development emission sources to quantify their GHG emissions, apportion the forecast emissions to relevant source categories, and develop GHG mitigation measures to reduce their emissions.

Threshold 2.6. Projects of Statewide, Regional, or Areawide Significance

For this threshold, a set of qualitative, tiered CEQA thresholds would be adopted based on the definitions of "projects with statewide, regional or areawide significance" under the Guidelines for California Environmental Quality Act, CCR Title 14, Division 6, Section 15206(b).

Project sizes defined under this guideline include the following:

- Proposed residential development of more than 500 dwelling units.
- Proposed shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space.
- Proposed commercial office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space.
- Proposed hotel/motel development of more than 500 rooms.
- Proposed industrial, manufacturing or processing plant or industrial park planned to house more than 1,000 persons, or encompassing more than 600,000 square feet of floor space.

These thresholds would correspond to the GHG emissions of approximately 9,000 metric tons for residential projects, 13,000 metric tons for office projects, and 41,000 metric tons for retail projects. These thresholds would capture approximately half of new residential development and substantially less than half of new commercial development. It is unknown what portion of the new industrial or manufacturing GHG inventory would be captured by this approach.

Threshold 2.7 Efficiency-Based Thresholds

For this approach, thresholds would be based on measurements of efficiency. For planning efforts, the metric could be GHG emissions per capita or per job or some combination thereof. For projects, the metric could be GHG emission per housing unit or per square foot of commercial space. In theory, one could also develop metrics for GHG emissions per dollar of gross product to measure the efficiency of the economy.

This approach is attractive because it seeks to benchmark project GHG intensity against target levels of efficiency. The thresholds would need to be set such that there is reasonably foreseeable and sufficient reductions compared to business as usual to support meeting AB 32 and S-3-05 goals in time (in combination with command and control regulations). Because this approach would require substantial data and modeling to fully develop, this is a concept considered as a potential future threshold and not appropriate

for interim guidance in the short term. Thus, it is not evaluated in the screening evaluation in the next section.

Table 3 compares the results for each of the approaches.

Table 3: Comparison of Approach 2 Tiered Threshold Options

Threshold	GHG Emission Threshold (metric tons/year)	Future Development Captured by GHG Threshold
2.1: Zero Threshold	0 tons/year	All
2.2: Quantitative Threshold Based on Market Capture	~900 tons/year	Residential development > 50 dwelling units Office space > 36,000 ft^2 Retail space >11,000 ft^2 Supermarkets >6.300 ft^2 small, medium, large industrial
2.3: CARB GHG Mandatory Reporting Threshold OR Potential Cap and Trade Entry Level	25,000 metric tons/year OR 10,000 metric tons/year	Residential development >1,400 dwelling units OR 550 dwelling units Office space >1 million ft^2 OR 400,000 ft^2 Retail space >300,000 ft^2 OR 120,000 ft^2 Supermarkets >175,000 ft^2 OR 70,000 ft^2 medium/larger industrial
2.4: Regulated Inventory Capture	40,000 – 50,000 metric tons/year	Residential development >2,200 to 2,600 dwelling units Office space >1.5 to 1.8 million ft^2 Retail space >470,000 to 560,000 ft^2 Supermarkets >270,000 to 320,000 ft^2 medium/larger industrial
2.5: Unit-Based Threshold Based on Market Capture	Not applicable.	Residential development >50 dwelling units Commercial space >50,000 ft^2 > small, medium, large industrial (with GHG emissions > 900 tonsCO2e)
2.6: Projects of Statewide, Regional, or Areawide Significance	Not applicable.	Residential development >500 dwelling units Office space >250,000 ft^2 Retail space >500,000 ft^2 Hotels >500 units Industrial project >1,000 employees Industrial project >40 acre or 650,000 ft^2
2.7: Efficiency-Based Thresholds	TBD tons/year/person TBD tons/year/unit	Depends on the efficiency measure selected.

Implementing CEQA With Tiered Thresholds

Several issues related to Approach 2 are addressed below:

1. *Some applications of this approach may need to be embodied in a duly approved General Plan, or in some other formal regulation or ordinance to be fully enforceable.* Because CEQA does not expressly provide that projects may be deemed insignificant based on implementation of a set of mitigations, this approach may need to be supported with specific and enforceable mechanisms adopted with due public process.

2. *How would this concept affect adoption of air district rules and regulations?* Proposed air district rules and regulations may be subject to CEQA like other projects and plans. Thus, if significance thresholds were adopted by an APCD or AQMD, then they could also apply to air district discretionary actions. If GHG emissions would be increased by a rule or regulation for another regulated pollutant, that would be a potential issue for review under CEQA.

3. *Mitigation measures may not be all-inclusive; better measures now or new future technology would make these measures obsolete.* The mandatory mitigation measures could be periodically updated to reflect current technology, feasibility, and efficiency.

4. *Total reduction may not be quantified or difficult to quantify.* CEQA only requires the adoption of feasible mitigation and thus the reduction effectiveness of required mitigation should not be in question. However, the precise reduction effectiveness may indeed be difficult to identify. As described above, if a quantitative threshold is selected as the measure of how much mitigation is mandated, then best available evidence will need to be used to estimate resultant GHG emissions with mitigation adoption. If a qualitative threshold is selected, then it may not be necessary to quantify reductions.

5. *Difficult to measure progress toward legislative program goals.* One could require reporting of project inventories to the Climate Action Registry, air district, or regional council of governments, or other suitable body. Collection of such data would allow estimates of the GHG intensity of new development over time, which could be used by CARB to monitor progress toward AB 32 goals.

6. *Measures may have adverse impacts on other programs.* The identification of mandatory mitigation will need to consider secondary environmental impacts, including those to air quality.

7. *Consideration of life-cycle emissions.* In many cases, only direct and indirect emissions may be addressed, rather than life-cycle emissions. A project applicant has traditionally been expected to only address emissions that are closely related and within the capacity of the project to control and/or influence. The long chain

8. of economic production resulting in materials manufacture, for example, involves numerous parties, each of which in turn is responsible for the GHG emissions associated with their particular activity. However, there are situations where a lead agency could reasonably determine that a larger set of upstream and downstream emissions should be considered because they are being caused by the project and feasible alternatives and mitigation measures may exist to lessen this impact.

Approach 2 Tiered Threshold with Mandatory Mitigation

As shown in Table 2, due to the cumulative nature of GHG emissions and climate change impacts, there could be a level of mandatory reductions and/or mitigation for all projects integrated into a tiered threshold approach. In order to meet AB 32 mandates by 2020 and S-3-05 goals, there will need to be adoption of GHG reduction measures across a large portion of the existing economy and new development. As such, in an effort to support a determination under CEQA that a project has a less than considerable contribution to significant cumulative GHG emissions, mitigation could be required on a progressively more comprehensive basis depending on the level of emissions.

- Level 1 Reductions – These reduction measures would apply to all projects and would only consist of AB 32 and other local/state mandates. They would be applied to a project from other legal authority (not CEQA). Level 1 reductions could include such measures as bike parking, transit stops for planned routes, Energy Star roofs, Energy Star appliances, Title 24 compliance, water use efficiency, and other measures. All measures would have to be mandated by CARB or local regulations and ordinances.

- Level 2 Mitigation – Projects that exceed the determined threshold would be required to first implement readily available technologies and methodologies with widespread availability. Level 2 Mitigation could include such measures as: parking reduction below code minimum levels, solar roofs, LEED Silver or Gold Certification, exceed Title 24 building standards by 20 percent, Traffic Demand Management (TDM) measures, and other requirements.

- Level 3 Mitigation - If necessary to reduce emissions to the thresholds, more extensive mitigation measures that represent the top tier of feasible efficiency design would also be required. Level 3 Mitigation could include such measures as: on-site renewable energy systems, LEED Platinum certification, exceed Title 24 building requirements by 40 percent, required recycled water use for irrigation, zero waste/high recycling requirements, mandatory transit pass provision, and other measures.

- Offset Mitigation – If, after adoption of all feasible on-site mitigation, the project is still found to exceed a Tier 2 quantitative threshold, or exceed a Tier 3 qualitative threshold, or if a project cannot feasibly implement the mandatory on-site mitigation, then purchases of offsets could be used for mitigation. In the case

of a quantitative threshold, the amount of purchase would be to offset below the Tier 2 significance threshold. In the case of a qualitative threshold, the amount of purchase could be to offset GHG emissions overall to below the lowest equivalent GHG emissions among the Tier 2 qualitative thresholds. With Threshold 2.5, this would be approximately 900 tons of GHG emissions (corresponding to 50 residential units). With Threshold 2.6, this would be approximately 9,000 tons (corresponding to 500 residential units). Alternatively, one could require purchase of offsets in the amount of a set percentage (such as 90% or 50% for example) of the residual GHG emissions (after other mitigation). As discussed earlier, any decision to include or require the use of emission reduction credits (or offsets) must consider issues of availability, quality, and environmental justice.

Substantial Evidence Supporting Different Thresholds

If a project can be shown by substantial evidence not to increase GHG emissions relative to baseline emissions, then no fair argument will be available that the project contributes considerably to a significant cumulative climate change impact.

It is more challenging to show that a project that increases GHG emissions above baseline emissions does not contribute considerably to a significant cumulative climate change impact. It is critical therefore, to establish an appropriate cumulative context, in which, although an individual project may increase GHG emissions, broader efforts will result in net GHG reductions.

Approach 1-based thresholds that by default will require an equal level of GHG reductions from the existing economy (Thresholds 1.1, 1.3, and 1.4) may be less supportable in the short run (especially before 2012) than Approach 1.2 (which requires new development to be relatively more efficient than a retrofitted existing economy). This is because, prior to 2012, there will only be limited mandatory regulations implementing AB 32 that could address the existing economy in a truly systematic way that can be relied upon to demonstrate that overall GHG reduction goals can be achieved by 2020. Approach 1.2 will still rely on substantial reductions in the existing economy but to a lesser degree.

Approach 1-based thresholds that would spread the mitigation burden across a sector (Threshold 1.3) or across a region (Threshold 1.4) will allow for tradeoffs between projects or even between municipalities. In order to demonstrate that a sector or a region is achieving net reductions overall, there would need to be feasible, funded, and mandatory requirements in place promoting an overall reduction scheme, in order for a project to result in nominal net increased GHG emissions.

Approach 2-based thresholds that capture larger portions of the new development GHG inventory (Thresholds 2.2 and 2.5) would promote growth that results in a smaller increase in GHG emissions; they may therefore be more supportable than thresholds that do not and that have a greater reliance on reductions in the existing economy (Thresholds

2.3, 2.4, and 2.6), especially in the next three to five years. With an established cumulative context that demonstrates overall net reductions, all threshold approaches could be effective in ensuring growth and development that significantly mitigates GHG emissions growth in a manner that will allow the CARB to achieve the emission reductions necessary to meet AB 32 targets. In that respect, all of these thresholds are supported by substantial evidence.

Evaluation of Non-Zero Threshold Options

Overarching issues concerning threshold development are reviewed below. Where appropriate, different features or application of the two conceptual approaches and the various options for thresholds under each conceptual approach described above are analyzed. The screening evaluation is summarized in Tables 4 (Approach 1) and 5 (Approach 2). The summary tables rate each threshold for the issues discussed below based on the level of confidence (low, medium or high) ascribed by J&S. The confidence levels relate to whether a threshold could achieve a particular attribute, such as emission reduction effectiveness. For example, a low emission reduction effectiveness rating means the threshold is not expected to capture a relatively large portion of the new development inventory.

As described above, Threshold 2.7 is not included in this evaluation because the data to develop an efficiency-based threshold has not been reviewed at this time and because this threshold is not considered feasible as an interim approach until more detailed inventory information is available across the California economy.

<u>What is the GHG Emissions Effectiveness of Different Thresholds?</u>

Effectiveness was evaluated in terms of whether a threshold would capture a large portion of the GHG emissions inventory and thus require mitigation under CEQA to control such emissions within the larger framework of AB 32. In addition, effectiveness was also evaluated in terms of whether a threshold would require relatively more or less GHG emissions reductions from the existing economy verses new development. This is presumptive that gains from the existing economy (through retrofits, etc.) will be more difficult and inefficient relative to requirements for new development.

Approach 1-based thresholds that require equivalent reductions relative to business-as-usual (Thresholds 1.1, 1.3, and 1.4) for both the existing and new economy will be less effective than thresholds that support lower-GHG intensity new development (Approach 1.2). However, since Approach 1-based thresholds do not establish a quantitative threshold below which projects do not have to mitigate, the market capture for new development is complete.

Approach 2-based thresholds can be more or less effective at capturing substantial portions of the GHG inventory associated with new development depending on where the quantitative or qualitative thresholds are set. Lower thresholds will capture a broader range of projects and result in greater mitigation. Based on the review of project data for

the select municipalities described in the Approach 2 section above, thresholds based on the CARB Reporting Threshold/Cap and Trade Entry Level (Threshold 2.4) or CEQA definitions of "Statewide, Regional or Areawide" projects (Threshold 2.6) will result in a limited capture of the GHG inventory. Lower quantitative or qualitative thresholds (Thresholds 2.1, 2.2 and 2.5) could result in capture of greater than 90 percent of new development.

Are the Different Thresholds Consistent with AB 32 and S-3-05?

Thresholds that require reductions compared to business-as-usual for all projects or for a large portion of new development would be consistent with regulatory mandates. In time, the required reductions will need to be adjusted from 2020 (AB 32) to 2050 (S-3-05) horizons, but conceptually broad identification of significance for projects would be consistent with both of these mandates. Thresholds that exclude a substantial portion of new development would likely not be consistent, unless it could be shown that other more effective means of GHG reductions have already been, or will be adopted, within a defined timeframe.

All Approach 1-based thresholds would be consistent with AB 32 and S-3-05 if it can be demonstrated that other regulations and programs are effective in achieving the necessary GHG reduction from the existing economy to meet the overall state goals.

Approach 2-based thresholds that include substantive parts of the new development GHG inventory (Thresholds 2.1, 2.2 and 2.5) will be more consistent with AB 32 and S-3-05 than those that do not (Thresholds 2.3, 2.4, and 2.6) unless it can be demonstrated that other regulations and programs are effective in achieving the necessary GHG reduction from the existing economy to meet the overall state goals.

What are the Uncertainties Associated with Different Thresholds?

All thresholds have medium to high uncertainties associated with them due to the uncertainty associated with the effectiveness of AB 32 implementation overall, the new character of GHG reduction strategies on a project basis, the immaturity of GHG reduction technologies or infrastructure (such as widespread biodiesel availability), and the uncertainty of GHG reduction effectiveness of certain technologies (such as scientific debate concerning the relative lifecycle GHG emissions of certain biofuels, for example).

In general, Approach 1-based thresholds have higher uncertainties than Approach 2 thresholds because they rely on a constantly changing definition of business-as-usual. Threshold 1.2, with its relatively smaller reliance on the existing economy for GHG reductions has relatively less uncertainty than other Approach 1 thresholds. Thresholds that spread mitigation more broadly (Thresholds 1.3 and 1.4) have less uncertainty by avoiding the need for every project to mitigate equally.

Approach 2 thresholds with lower quantitative (2.1 and 2.2) or qualitative (2.5) thresholds will have uncertainties associated with the ability to achieve GHG reductions

from small to medium projects. Approach 2 thresholds with higher quantitative (2.3, 2.4) or qualitative (2.6) thresholds will have uncertainties associated with the ability to achieve relatively larger GHG reductions from the existing economy.

What are Other Advantages/Disadvantages of the Different Thresholds?

Thresholds with a single project metric (Thresholds 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 2.5, and 2.6) will be easier to apply to individual projects and more easily understood by project applicants and lead agencies broadly. Thresholds that spread mitigation across sectors (1.3) or regions (1.4), while simple in concept, will require adoption of more complicated cross-jurisdictional reduction plans or evaluation of broad sector-based trends in GHG intensity reduction over time. Approach 1 options would require all projects to quantify emissions in order to determine needed reductions relative to business-as-usual (which will change over time as described above). Concepts that are unit-based (Threshold 2.5 and 2.6) will not result in thresholds that have equal amount of GHG emissions, and thus equity issues may arise.

Table 4: Non-Zero Threshold Evaluation Matrix – Approach 1

Approach 1	**1.1**	**1.2**	**1.3**	**1.4**
	28% - 33% Reduction from BAU by 2020 by Project	**50% Reduction from BAU by 2020 by Project**	**28% - 33% Reduction by 2020 by Sector**	**28% - 33% Reduction by 2020 by Region**
GHG Emissions Reduction Effectiveness	**Low** - Captures all new projects but relies on a high level of reductions from the existing economy.	**Medium** - Captures all new projects and has a more realistic level of reductions from the existing economy.	**Low** - Captures all new projects but relies on a high level of reductions from the existing economy.	**Low** - Captures all new projects but relies on a high level of reductions from the existing economy.
Economic Feasibility	**Low** - Some projects will not be able to afford this level of reduction without effective market-based mechanisms like offsets.	**Low** - Some projects will not be able to afford this level of reduction without effective market-based mechanisms like offsets.	**Medium** - Sectors as a whole will be better able to achieve reductions than individual projects.	**Low** - Some regions and newly developed areas may not be able to afford this level of reduction without effective market-based mechanisms like offsets.
Technical Feasibility	**Medium** - Some projects will not be able to achieve this level of reduction without effective market-based mechanisms like offsets	**Low** - Relatively larger set of projects will not be able to achieve this level of reduction without effective market-based mechanisms like offsets	**High** - Some projects will not be able to achieve this level of reduction without effective market-based mechanisms like offsets	**Medium** - Some regions and newly developed areas may not be able to afford this level of reduction without effective market-based mechanisms like offsets.
Logistical Feasibility	**Low** - Absent broader reductions strategies, each project may reinvent the wheel each time to achieve mandated reductions.	**Low** - Absent broader reductions strategies, each project may reinvent the wheel each time to achieve mandated reductions.	**Low** - Absent broader reductions strategies, each project may reinvent the wheel each time to achieve mandated reductions.	**Low** - Absent broader reductions strategies, each project may reinvent the wheel each time to achieve mandated reductions.
Consistency with AB-32 and S-03-05	**Medium** - Would require heavy reliance on command and control gains.	**High**	**Medium-High** - Would rely on command and control gains, but would allow sectoral flexibility.	**Medium-High** - Would rely on command and control gains, but would allow regional flexibility.
Cost Effectiveness	**Low** - Will require all types of projects to reduce the same regardless of the cost/ton of GHG reductions.	**Low** - Will require all types of projects to reduce the same regardless of the cost/ton of GHG reductions.	**Low/Medium** - Allows tradeoffs within sector between high and low cost reduction possibilities but not between sectors.	**Low/Medium** - Allows tradeoffs within region between high and low cost reduction possibilities, but not between regions.
Uncertainties	**High** - BAU changes over time. Ability to reduce GHG emissions from existing economy will take years to demonstrate. Ability to limit GHG emissions from other new development will take years to demonstrate.	**Medium/High** - BAU changes over time. Ability to limit GHG emissions from other new development will take years to demonstrate.	**High** - BAU changes over time. Ability to reduce GHG emissions from existing economy will take years to demonstrate. Ability to limit GHG emissions from other new development will take years to demonstrate.	**High** - BAU changes over time. Ability to reduce GHG emissions from existing economy will take years to demonstrate. Ability to limit GHG emissions from other new development will take years to demonstrate.
Other Advantages	Simple/easy to explain.	Simple/easy to explain.	Spreads mitigation broadly	Spreads mitigation broadly
Other Disadvantages	Requires all projects to quantify emissions.	Requires all projects to quantify emissions.	Requires all projects to quantify emissions.	Requires all projects to quantify emissions.

Table 5: Non-Zero Threshold Evaluation Matrix – Approach 2

Approach 2	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**
	Zero Threshold	**Quantitative (900 tons)**	**Quantitative CARB Reporting Threshold/Cap and Trade (25,000 tons/ 10,000 tons)**	**Quantitative Regulated Inventory Capture (~40,000 - 50,000 tons)**	**Qualitative Unit-Based Thresholds**	**Statewide, Regional or Areawide (CEQA Guidelines 15206(b)).**
GHG Emissions Reduction Effectiveness	**High** - Captures all sources.	**High** - Market capture at >90%. Captures diverse sources.	**Medium** - Moderate market capture.	**Low** - Low market capture.	**High** - Market capture at ~90%. Captures diverse sources; excl. smallest proj.	**Medium** - Moderate market capture. Excludes small and med. projects.
Economic Feasibility	**Low** - Early phases will be substantial change in BAU, esp. for smaller projects; may be infeasible to mitigate.	**Medium** - Early phases will be substantial change in BAU, esp. for smaller projects; may be infeasible to mitigate.	**High** - Large projects have greater ability to absorb cost.	**High** - Large projects have greater ability to absorb cost.	**Medium** - Early phases will be substantial change in BAU, esp. for smaller projects; may be infeasible to mitigate.	**High** - Large projects have greater ability to absorb cost.
Technical Feasibility	**Low** - Early phases will be substantial change in BAU, esp. for smaller projects; may be infeasible to mitigate.	**Medium** - Early phases will be substantial change in BAU, esp. for smaller projects; may be inefficient to mitigate.	**High** - Greater opportunities for multiple reduction approaches.	**High** - Greater opportunities for multiple reduction approaches.	**Medium** - Early phases will be substantial change in BAU, particularly for smaller projects may be inefficient to mitigate.	**High** - Greater opportunities for multiple reduction approaches.
Logistical Feasibility	**Low** - Unless fee or offset basis,very difficult to mitigate all projects.	**Medium** - BMPs broadly written to allow diversity; new req. will take time to integrate into new dev.	**High** - Less mitigation.	**High** - Less mitigation.	**Medium** - BMPs broadly written to allow diversity; new req. will take time to integrate into new dev.	**High** - Less mitigation.
Consistency with AB-32 and S-03-05	**High** - Market capture.	**High** - Market capture at >90%.	**Low** - Would rely on command and control success heavily.	**Low** - Would rely on command and control success heavily.	**Medium** - Need to demonstrate adequate market capture over time.	**Low** - Would rely on command and control success heavily.
Cost Effectiveness	**Low** - Will result in inefficient mitigation approaches. Efficiency will improve in time.	**Medium** - Emphasis is on new dev., req. for mitigation will result in inefficient mitigation approaches in early phases. Efficiency will improve in time.	**Medium** - Relies on command and control reductions for existing economy more heavily. With focus on larger projects, eff. of mitigation for new dev. high.	**Medium** - Relies on command and control reductions for existing economy more heavily. With focus on larger projects, eff. of mitigation for new dev. high.	**Medium** - Emphasis is on new dev.; req. for mitigation will result in inefficient mitigation approaches in early phases. Efficiency will improve in time.	**Medium** - Relies on command and control reductions for existing economy more heavily. With focus on larger projects, eff. of mitigation for new dev. high.
Uncertainties	**High** - Time to adapt for res. and comm.. sectors. Ability to mitigate without market-based mechanism for smaller projects unlikely.	**Medium/High** - Time to adapt for res. and comm.. sectors. Ability to mitigate without market-based mechanism for smaller projects uncertain.	**High** - Gains from command and control likely longer to be realized.	**High** - Gains from command and control likely longer to be realized.	**Medium/High** - Time to adapt for res. and comm.. sectors. Ability to mitigate without market-based mechanism for smaller projects uncertain.	**High** - Gains from command and control likely longer to be realized.
Other Advantages	Single threshold.	Single threshold. BMPs can be updated. Greenlist can be updated.	Single threshold. Does not change CEQA processing for most projects. CARB inventory = project inv.. All projects treated same.	Single threshold. Does not change CEQA processing for most projects. Follows established SIP practice.	BMPs can be updated. Greenlist can be updated. Unit-Based thresholds can be updated.	Existing guideline. Does not change CEQA processing for most projects. Endorsed by Cal. Chapter of the APA.
Other Disadvantages	Requires all projects to quantify emissions.	Requires nearly all projects to quantify emissions.			Sectoral projects have different GHG emis. Only largest projects to quantify emis.	Sectoral projects have different GHG emissions.

Introduction

This chapter evaluates the availability of various analytical methods and modeling tools that can be applied to estimate the greenhouse gas emissions from different project types subject to CEQA. This chapter will also provide comments on the suitability of the methods and tools to accurately characterize a projects emissions and offer recommendations for the most favorable methodologies and tools available. Some sample projects will be run through the methodologies and modeling tools to demonstrate what a typical GHG analysis might look like for a lead agency to meet its CEQA obligations. The air districts retained the services of EDAW environmental consultants to assist with this effort.

Methodologies/Modeling Tools

There are wide varieties of discretionary projects that fall under the purview of CEQA. Projects can range from simple residential developments to complex expansions of petroleum refineries to land use or transportation planning documents. It is more probably than not, that a number of different methodologies would be required by any one project to estimate its direct and indirect GHG emissions. Table 10 contains a summary of numerous modeling tools that can be used to estimate GHG emissions associated with various emission sources for numerous types of project's subject to CEQA. The table also contains information about the models availability for public use, applicability, scope, data requirements and its advantages and disadvantages for estimating GHG emissions.

In general, there is currently not one model that is capable of estimating all of a project's direct and indirect GHG emissions. However, one of the models identified in Table 9 would probably be the most consistently used model to estimate a projects direct GHG emissions based on the majority of projects reviewed in the CEQA process. The Urban Emissions Model (URBEMIS) is designed to model emissions associated with development of urban land uses. URBEMIS attempts to summarize criteria air pollutants and CO_2 emissions that would occur during construction and operation of new development. URBEMIS is publicly available and already widely used by CEQA practitioners and air districts to evaluate criteria air pollutants emissions against air district-adopted significance thresholds. URBEMIS is developed and approved for statewide use by CARB. The administrative reasons for using URBEMIS are less important than the fact that this model would ensure consistency statewide in how CO_2 emissions are modeled and reported from various project types.

One of the shortfalls of URBEMIS is that the model does not contain emission factors for GHGs other than CO_2, except for methane (CH_4) from mobile-sources, which is converted to CO_2e. This may not be a major problem since CO_2 is the most important GHG from land development projects. Although the other GHGs have a higher global warming potential, a metric used to normalize other GHGs to CO_2e, they are emitted in far fewer quantities. URBEMIS does not calculate other GHG emissions associated with

off-site waste disposal, wastewater treatment, emissions associated with goods and services consumed by the residents and workers supported by a project. Nor does URBEMIS calculate GHGs associated with consumption of energy produced off-site. (For that matter, URBEMIS does not report criteria air pollutant emissions from these sources either).

Importantly, URBEMIS does not fully account for interaction between land uses in its estimation of mobile source operational emissions. Vehicle trip rates are defaults derived from the Institute of Transportation Engineers trip generation manuals. The trip rates are widely used and are generally considered worst-case or conservative. URBEMIS does not reflect "internalization" of trips between land uses, or in other words, the concept that a residential trip and a commercial trip are quite possibly the same trip, and, thus, URBEMIS counts the trips separately. There are some internal correction settings that the modeler can select in URBEMIS to correct for "double counting"; however, a project-specific "double-counting correction" is often not available. URBEMIS does allow the user to overwrite the default trip rates and characteristics with more project-specific data from a traffic study prepared for a project.

Residential, Commercial, Mixed-Use Type Projects/ Specific Plans

Direct Emissions

URBEMIS can be used to conduct a project-specific model run and obtain CO_2e emissions for area and mobile sources from the project, and convert to metric tons CO_2e. When a project-specific traffic study is not available, the user should consult with their local air district for guidance. Many air district staff are experienced practitioners of URBEMIS and can advise the lead agency or the modeler on how to best tailor URBEMIS default input parameters to conduct a project-specific model run. When a traffic study has been prepared for the project, the user must overwrite default trip length and trip rates in URBEMIS to match the total number of trips and vehicle miles traveled (VMT) contained in the traffic study to successfully conduct a project-specific model run. URBEMIS is recommended as a calculation tool to combine the transportation study (if available) and EMFAC emission factors for mobile-sources. Use of a project-specific traffic study gets around the main shortfall of URBEMIS: the lack of trip internalization. URBEMIS also provides the added feature of quantifying direct area-source GHG emissions.

Important steps for running URBEMIS

1. Without a traffic study prepared for the project, the user should consult with the local air district for direction on which default options should be used in the modeling exercise. Some air districts have recommendations in the CEQA guidelines.

2. If a traffic study was prepared specifically for the project, the following information must be provided:

a. Total number of average daily vehicle trips *or* trip-generation rates by land use type per number of units; and,

b. Average VMT per residential *and* nonresidential trip.

c. The user overwrites the "Trip Rate (per day)" fields for each land use in URBEMIS such that the resultant "Total Trips" and the "Total VMT" match the number of total trips and total VMT contained in the traffic study.

d. Overwrite "Trip Length" fields for residential and nonresidential trips in UBEMIS with the project-specific lengths obtained form the traffic study.

3. Calculate results and obtain the CO_2 emissions from the URBEMIS output file (units of tons per year [TPY]).

Indirect Emissions

URBEMIS does estimate indirect emissions from landscape maintenance equipment, hot water heaters, etc. URBEMIS does not however, provide modeled emissions from indirect sources of emissions, such as those emissions that would occur off-site at utility providers associated with the project's energy demands. The California Climate Action Registry (CCAR) Protocol v.2.2 includes methodology, which could be used to quantify and disclose a project's increase in indirect GHG emissions from energy use. Some assumptions must be made for electrical demand per household or per square foot of commercial space, and would vary based on size, orientation, and various attributes of a given structure. An average rate of electrical consumption for residential uses is 7,000 kilowatt hours per year per household and 16,750 kilowatt hours per thousand square feet of commercial floor space. Commercial floor space includes offices, retail uses, warehouses, and schools. These values have been increasing steadily over the last 20 years. Energy consumption from residential uses has increased due to factors such as construction and occupation of larger homes, prices of electricity and natural gas, and increased personal income allowing residents to purchase more electronic appliances. Commercial energy consumption is linked to factors such as vacancy rates, population, and sales.

The modeler will look up the estimated energy consumption for the project's proposed land uses under year of project buildout, or use the values given in the previous paragraph for a general estimate. The CCAR Protocol contains emission factors for CO_2, CH_4, and nitrous oxide. The "CALI" region grid serves most of the State of California. If a user has information about a specific utility provider's contribution from renewable sources, the protocol contains methodology to reflect that, rather than relying on the statewide average grid. The incremental increase in energy production associated with project operation should be accounted for in the project's total GHG emissions for inclusion in the environmental document.

The incremental increase in energy production associated with project operation should be accounted for in the project's total GHG emissions, but it should be noted that these emissions would be closely controlled by stationary-source control-based regulations and additional regulations are expected under AB 32. However, in the interest of disclosing project-generated GHG emissions and mitigating to the extent feasible, the indirect emissions from off-site electricity generation can be easily calculated for inclusion in the environmental document.

Example Project Estimates for GHG Emissions

Residential Project

Project Attributes:

- 68 detached dwelling units
- 15.9 acres
- 179 residents
- 0 jobs
- Located in unincorporated Placer County (PCAPCD jurisdiction)
- Analysis year 2009

As shown in Table 6, the project's direct GHG emissions per service population (SP) would be approximately 8 metric tons CO_2e/SP/year.

Table 6: Residential Project Example GHG Emissions Estimates

URBEMIS Output (Project Specific)	Metric Tons/Year CO_2e	Demographic Data	
Area-source emissions	251	Residents	179
Mobile-source emissions	1,044	Jobs	0
Indirect emissions (from CCAR Protocol)	174		
Total operational emissions	**1,469**	Service population	179
Operational emissions/SP	**8.2**		

Notes:
CO_2e = carbon dioxide equivalent; CCAR = California Climate Action Registry; SP = service population(see definition of service population below in discussion of Normalization/Service Population Metric).

Sources: EDAW 2007, ARB 2007b, CCAR 2007, CEC 2000

Commercial Project

Project Attributes:

- Free Standing Discount Superstore: 241 thousand square feet (ksf)
- 0 residents

- 400 jobs
- Located in the San Joaquin Valley Air Pollution Control District's (SJVAPCD) jurisdiction
- Analysis year 2009

Table 7: Commercial Project Example GHG Emissions Estimates

URBEMIS Output (Project Specific)	Metric Tons/Year CO_2e	Demographic Data	
Area-source emissions	464	Residents	0
Mobile-source emissions	13,889	Jobs	400
Indirect emissions (from CCAR Protocol)	1,477		
Total operational emissions	**15,830**	Service population	400
Operational emissions/SP	**39.6**		

Notes:
CO_2e = carbon dioxide equivalent; CCAR = California Climate Action Registry; SP = service population (see definition of service population below in discussion of Normalization/Service Population Metric).

Sources: EDAW 2007, ARB 2007b, CCAR 2007, CEC 2000

Specific Plan

If used traditionally with default trip rates and lengths, rather than project-specific (Traffic Analysis Zone-specific) trip rates and lengths, URBEMIS does not work well for specific plan or general plan-sized projects with multiple land use types proposed. However, in all instances, projects of these sizes (several hundred or thousand acres) would be accompanied by a traffic study. Thus, for large planning-level projects, URBEMIS can be used as a calculation tool to easily obtain project-specific mobile-source emissions. The user should follow the steps discussed above; wherein he/she overwrites the default ITE trip rates for each land use type with that needed to make total VMT match that contained in the traffic study. The URBEMIS interface is a simple calculator to combine the traffic study and EMFAC emissions factors for mobile-source CO_2.

Project Attributes:

- 985 acres
- Total dwelling units: 5,634
- Commercial/Mixed Use: 429 ksf
- Educational: 2,565 ksf
- 14,648 residents
- 3,743 jobs
- Located in Sacramento County (SMAQMD jurisdiction)
- Analysis year 2009

Table 8: Specific Plan Example GHG Emissions Estimates

URBEMIS Output (Project Specific)	Metric Tons/Year CO_2e	Demographic Data	
Area-source emissions	23,273	Residents	14,648
Mobile-source emissions	73,691	Jobs	3,743
Indirect emissions (from CCAR Protocol)	32,744		
Total operational emissions	**129,708**	Service population	18,391
Operational emissions/SP	**7.1**		

Notes:
CO_2e = carbon dioxide equivalent; CCAR = California Climate Action Registry; SP = service population (see definition of service population below in discussion of Normalization/Service Population Metric).

Sources: EDAW 2007, ARB 2007b, CCAR 2007, CEC 2000

The specific plan example, when compared to the residential or commercial examples, illustrates the benefit of a mixed-use development when you look at CO_2e emissions per resident or job (service population) metric (see definition of service population below in discussion of Normalization/Service Population Metric). Though this particular specific plan is not an example of a true jobs/housing balance, the trend is clear: accommodating residents and jobs in a project is more efficient than residents or jobs alone.

Stationary- and Area-Source Project Types

GHG emissions from stationary or area sources that require a permit to operate from the air district also contain both direct and indirect sources of emissions. Examples of these types of sources would be fossil fuel power plants, cement plants, landfills, wastewater treatment plants, gas stations, dry cleaners and industrial boilers. All air districts have established procedures and methodologies for projects subject to air district permits to calculate their regulated pollutants. It is anticipated that these same procedures and methodologies could be extended to estimate a permitted facility's GHG calculations. For stationary and area sources that do not require air district permits, the same methodologies used for permitted sources could be used in addition to URBEMIS and CCAR GRP to calculate GHG emissions from these facilities.

Wastewater Treatment Facilities

Direct GHG emissions associated with a proposed waste water treatment plant can be calculated using AP-42 emission factors from Chapter 4.3.5 Evaporative Loss Sources: Waste Water-Greenhouse Gases and the CCAR methodology. In general, most wastewater operations recover CH_4 for energy, or use a flare to convert the CH_4 to CO_2. There are many types of wastewater treatment processes and the potential for GHG emissions from different types of plants varies substantially. There is not one standard set of emission factors that could be used to quantify GHG emissions for a state

"average" treatment plant. Thus, research will need to be conducted on a case-by-case basis to determine the "Fraction Anaerobically Digested" which is a function of the type of treatment process. Indirect emissions from these facilities can be calculated using the CCAR energy use protocols and URBEMIS model for transportation emissions.

Solid Waste Disposal Facilities

Air districts will have emission estimate methodologies established for methane emissions at permitted landfills. In addition, EPA's Landfill Gas Emissions Model (LandGem) and the CCAR methodology could also be used to quantify GHG emissions from landfill off gassing; however, this model requires substantial detail be input. The model uses a decomposition rate equation, where the rate of decay is dependent on the quantity of waste in place and the rate of change over time. This modeling tool is free to the public, but substantial project detail about the operation of the landfill is needed to run the model. Indirect emissions from these facilities can be calculated using the CCAR energy use protocols and URBEMIS model for transportation emissions.

Construction Emissions

GHG emissions would occur during project construction, over a finite time. In addition, a project could result in the loss of GHG sequestration opportunity due primarily to the vegetation removed for construction. URBEMIS should be used to quantify the mass of CO_2 that would occur during the construction of a project for land development projects. Some construction projects would occur over an extended period (up to 20–30 years on a planning horizon for general plan buildout, or 5–10 years to construct a dam, for example). OFFROAD emission factors are contained in URBEMIS for CO_2 emissions from construction equipment. For other types of construction projects, such as roadway construction projects or levee improvement projects, SMAQMD's spreadsheet modeling tool, the Road Construction Emissions Model (RoadMod), should be used. This tool is currently being updated to include CO_2 emissions factors from OFFROAD.

The full life-cycle of GHG emissions from construction activities is not accounted for in the modeling tools available, and the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level. The emissions disclosed will be from construction equipment and worker commutes during the duration of construction activities. Thus, the mass emissions in units of metric tons CO_2e/year should be reported in the environmental document as new emissions.

General Plans

In the short-term, URBEMIS can be used as a calculation tool to model GHG emissions from proposed general plans, but only if data from the traffic study is incorporated into model input. The same methodology applied above in the specific plan example applies to general plans. The CCAR GRP can be used to approximate indirect emissions from

increased energy consumption associated with the proposed plan area. The same models and methodologies discussed previously for wastewater, water supply and solid waste would be used to estimate indirect emissions resulting from buildout of the general plan.

In the longer-term, more complex modeling tools are needed, which would integrate GHG emission sources from land use interaction, such as I-PLACE^{3}S or CTG Energetics' Sustainable Communities Custom Model attempt to do. These models are not currently available to the public and only have applicability in certain areas of the state. It is important that a tool with statewide applicability be used to allow for consistency in project treatment, consideration, and approval under CEQA.

Scenarios

At the general plan level, the baseline used for analyzing most environmental impacts of a general plan update is typically no different from the baseline for other projects. The baseline for most impacts represents the existing conditions, normally on the date the Notice of Preparation is released. Several comparative scenarios could be relevant, depending on the exact methodological approach and significance criteria used for GHG assessment:

- Existing Conditions. The GHG emissions associated with the existing, on-the-ground conditions within the planning area.

- 1990 conditions. The GHG emissions associated with the general plan area in 1990. This is relevant due to the state's AB 32 GHG emission reduction goals' benchmark year of 1990. The GHG-efficiency of 1990 development patterns could be compared to that of the general plan buildout.

- Buildout of the Existing General Plan. The GHG emissions associated with buildout of the existing general plan (without the subject update). This is the no project alternative for the purposes of general plan CEQA analysis.

- Buildout of the Updated General Plan. The GHG emissions associated with buildout of the general plan, as proposed as a part of the subject update. This would include analysis of any changes included as a part of the general plan update for the existing developed portions of the planning area. Many communities include redevelopment and revitalization strategies as a part of the general plan update. The general plan EIR can include assumptions regarding what level and type of land use change could be facilitated by infill and redevelopment. Many jurisdictions wish to provide future projects consistent with these land use change assumptions with some environmental review streamlining. In addition, many communities include transit expansions, pedestrian/bicycle pathway improvements, multi-modal facility construction, travel demand policies, energy efficiency policies, or other measures that could apply to the existing developed area, just as they may apply to any new growth

areas. Such policies could affect the overall GHG emissions of the built out general plan area.

- Increment between Buildout of Updated General Plan and Existing General Plan Area. There are many important considerations associated with the characterization of the impact of the General Plan update. The actual GHG emissions impact could be described as the difference between buildout under the existing and proposed land use plan (No-Build Alternative). However, the courts have held that an EIR should also analyze the difference between the proposed General Plan and the existing environment (*Environmental Planning & Information Council v. County of El Dorado* (EPIC) (1982) 131 Cal.App.3d 350). At the General Plan level, over the course of buildout, some new land uses are introduced, which could potentially add operational GHG emissions and potentially remove existing sequestration potential. Some properties become vacant and are not redeveloped. Other properties become vacant and then are redeveloped. Communities cannot pretend to understand fully in advance each component of land use change. The programmatic document is the preferred method of environmental analysis. Through this programmatic framework, communities develop buildout assumptions as a part of the General Plan that are normally used as a basis of environmental analysis. For certain aspects of the impact analysis, it becomes important not just to understand how much "new stuff" could be accommodated under the updated General Plan, but also the altered interactions between both "new" and "existing" land uses within the planning area. As addressed elsewhere, there are tools available for use in understanding land use/transportation interactions at the General Plan level. Without the GHG targets established by AB 32, a simple mass comparison of existing conditions to General Plan buildout might be appropriate.

However, within the current legal context, the GHG efficiency of the updated General Plan becomes the focus of analysis. Some options in this regard include:

- Estimate the GHG emissions associated with all the land uses included within the planning area upon buildout of the General Plan using no project specific information (regional, countywide, or statewide defaults). Estimate GHG emissions using project specific information from the transportation engineer, transportation demand policies, community design elements, energy efficiency requirements, wastewater treatment and other public infrastructure design changes, and other components. Compare these two calculations. Is the second calculation reduced by the percent needed to meet AB 32 goals compared to the first calculation?

- Estimate the GHG emissions associated with the 1990 planning area and the per-capita or per-service population GHG associated with the 1990 planning area. (Many communities are establishing GHG inventories using different tools). Estimate the GHG emissions associated with buildout of the proposed General Plan update and the resulting per-capita or per-service population GHG

emissions. Compare the two calculations. Is the General Plan buildout per-capita or per-service population level greater than the 1990 estimate?

Example General Plan Update: Proposed new growth area

Project Attributes:

- 10,050 single family dwelling units
- 652 multi-family dwelling units
- 136 acres parks
- 2,047 ksf commercial (regional shopping center)
- 2,113 ksf office
- 383 acres industrial park
- 31,293 new residents
- 4,945 new jobs
- Located in Stanislaus County (SJVAPCD jurisdiction)
- Analysis year 2025

Table 9: General Plan Example GHG Emissions Estimates

URBEMIS Output (Project Specific)	Metric CO_2e Tons/Year	Demographic Data	
Construction emissions	12,083*	Residents	31,293
Area-source emissions	45,708		
Mobile-source emissions	263,954	Jobs	4,945
Indirect emissions (from CCAR Protocol)	78,385		
Total operational emissions	**388,046**	Service population	36,238
Operational emissions/SP	**10.7**		

* Approximately 241,656 metric tons CO_2e total at general plan buildout (assumes 20-year buildout period). Construction emissions were not included in total operational emissions.
Notes:
CO_2e = carbon dioxide equivalent; CCAR = California Climate Action Registry; SP = service population (see definition of service population below in discussion of Normalization/Service Population Metric).
Sources: EDAW 2007, ARB 2007b, CCAR 2007, CEC 2000

Due to the programmatic level of analysis that often occurs at the general plan level, and potential for many relevant GHG emission quantities, it could be preferable to use a qualitative approach. Such an analysis could address the presence of GHG-reducing policy language in the general plan.

Three possible tiers of approaches to addressing GHG mitigation strategies, either as general plan policy, general plan EIR mitigation measures, or both, include:

- Forward planning
- Project toolbox
- Defer to GHG reductions plan

The three basic approaches are described below.

1. Bring reduction strategies into the plan itself. The most effective way for local jurisdictions to achieve GHG emissions reductions in the medium- and long-term is through land use and transportation policies that are built directly into the community planning document. This involves creating land use diagrams and circulation diagrams, along with corresponding descriptive standards, that enable and encourage alternatives to travel and goods movement via cars and trucks. The land use and circulation diagrams provide a general framework for a community where people can conduct their everyday business without necessarily using their cars. The overall community layout expressed as a part of the land use and circulation diagrams is accompanied by a policy and regulatory scheme designed to achieve this community layout. Impact fees, public agency spending, regulations, administrative procedures, incentives, and other techniques are designed to facilitate land use change consistent with the communities' overall vision, as expressed in policy and in the land use diagram. There are many widely used design principles that can be depicted in land use and circulation diagrams and implemented according to narrative objectives, standards, and policies:

- Connectivity. A finely-connected transportation network shortens trip lengths and creates the framework for a community where homes and destinations can be placed close in proximity and along direct routes. A hierarchical or circuitous transportation network can increase trip lengths and create obstacles for walking, bicycling, and transit access. This policy language would likely be found in the Circulation Element.

- Compactness. Compact development, by its nature, can increase the efficiency of infrastructure provision and enable travel modes other than the car. If communities can place the same level of activity in a smaller space, GHG emissions would be reduced concurrently with VMT and avoid unnecessary conversion of open space. This policy language would likely be found in the Land Use Element.

- Diversity. Multiple land use types mixed in proximity around central "nodes" of higher-activity land uses can accommodate travel through means other than a car. The character and overall design of this land use mix is, of course, different from community to community. This policy language would likely be found in the Land Use Element.

- Facilities. Pedestrian, bicycle, and public transportation improvements, planning, and programming are sometimes an afterthought. To get a more GHG-efficient mode share, safe and convenient bike lanes, pedestrian pathways, transit shelters, and other facilities are required to be planned along with the vehicular travel network. This policy language would likely be found in the Circulation Element.

- Redevelopment. One way to avoid GHG emissions is to facilitate more efficient and economic use of the lands in already-developed portions of a community. Reinvestment in existing neighborhoods and retrofit of existing buildings is appreciably more GHG efficient than greenfield development, and can even result in a net reduction in GHG emissions. This policy language would likely be found in the Conservation or Land Use Element.

- Housing and Employment. Most communities assess current and future economic prospects along with long-range land use planning. Part of the objective for many communities is to encourage the coalescence of a labor force with locally available and appropriate job opportunities. This concept is best known as "jobs-housing balance." This policy language would likely be found in the Housing Element.

- Planning Level Versus Project Level. For transportation-related GHG emissions that local governments can mitigate through land use entitlement authority, the overall community land use strategy and the overall transportation network are the most fruitful areas of focus. The reduction capacity of project-specific mitigation measures is greatly limited if supportive land use and transportation policies are lacking at the community planning level. The regional economic context, of course, provides an important backdrop for land use and transportation policy to address GHG emissions. Within this context, the general plan is the readily available tool for local governments to establish such land use and transportation strategies. This policy language would likely be found in the Land Use and Circulation Elements.

- Shipping Mode Shift. Locate shipping-intensive land uses in areas with rail access. Some modes of shipping are more GHG-intensive than others. Rail, for example, requires only about 15 to 25 percent of the energy used by trucks to ship freight equivalent distances and involves reduced transportation-related GHG emissions. Cities and counties have little direct control over the method of shipment that any business may choose. Nevertheless, as a part of the general planning process, cities and counties can address constraints on the use of rail for transporting goods. This policy language would likely be found in the Land Use and Circulation Elements.

2. Provide a "toolbox" of strategies after the project site has been selected. In addition to the examples of design principles that are built into the community planning process, communities can offer project applicants a range of tools to reduce GHG emissions. Mitigation strategies are elaborated in detail in Chapter 9.

3. Defer to General Plan implementation measure. Develop and implement a GHG Emissions Reduction Plan. Another option for local governments would be development of an implementation measure as a part of the general plan that outlines an enforceable GHG reduction program. Perhaps the most well known example of this approach is the result of California's Attorney General settlement of the lawsuit brought against San

Bernardino County. The County has agreed to create a 1990 GHG inventory and develop measures to reduce such emissions according to the state's overall goals. Other communities have pursued similar programs (i.e., the City of San Diego, Marin County). Along with the inventories, targets, and example reduction measures, these programs would include quantitative standards for new development; targets for reductions from retrofitting existing development; targets for government operations; fee and spending program for GHG reduction programs; monitoring and reporting; and other elements. The local government itself should serve as a model for GHG reduction plan implementation, by inventorying emissions from government operations and achieving emission reductions in accordance with the plan's standards. An optional climate change element could be added to contain goals, policies, and this implementation strategy, or this could belong in an optional air quality element.

Other Project Types

Air District Rules, Regulations and Air Quality Plans

Air district air quality plans, rules and regulations could have the potential to increase or decrease GHG emissions within their respective jurisdiction. In general, air district air quality plans, rules and regulations act to reduce ozone precursors, criteria air pollutant and toxic air contaminant emissions, which would almost always act to reduce GHG emissions simultaneously. However, this may not always be the case.

Air Quality Plans

Air districts will have to include GHG emissions analysis as part of their criteria air pollutant and toxic air contaminant air pollutant analysis when considering the adoption of air quality plans and their subsequent rules and regulations needed to implement the plans. Multiple models and methodologies will be needed to accomplish this analysis.

Regional Transportation Plans

Regional transportation plans would also need to be evaluated on a case-by-case basis to determine if a net increase or decrease in GHG emissions would occur. Complex interactions between the roadway network, operating conditions, alternative transportation availability (such as public transit, bicycle pathways, and pedestrian infrastructure), and many other independent parameters specific to a region should be considered. Regional transportation models exist to estimate vehicular emissions associated with regional transportation plans, which includes the ability to estimate GHG emissions.

Normalization/Service Population Metric

The above methodology would provide an estimate of the mass GHG emissions generated by a proposed project, which could be compared to a mass emission threshold. EDAW developed a methodology that would measure a project's overall GHG efficiency

in order to determine if a project is more efficient than the existing statewide average for per capita GHG emissions. The following steps could be employed to estimate the GHG-"efficiency," which may be more directly correlated to the project's ability to help obtain objectives outlined in AB 32, although it relies on establishment of an efficiency-based significance threshold. The subcommittee believes this methodology may eventually be appropriate to evaluate the long-term GHG emissions from a project in the context of meeting AB 32 goals. However, this methodology will need substantially more work and is not considered viable for the interim guidance presented in this white paper.

- Divide the total operational GHG emissions by the Service Population (SP) supported by the project (where SP is defined as the sum of the number of residents and the number of jobs supported by the project). This value should be compared to that of the projected statewide GHG emissions inventory from the applicable end-use sectors (electricity generation, residential, commercial/institutional, and mobile-source) in 1990 divided by the projected statewide SP for the year 2020 (i.e., AB 32 requirements), to determine if the project would conflict with legislative goals.

    - If the project's operational GHG/SP falls below AB 32 requirements, then the project's GHG emissions are less than cumulatively considerable.

    - If the project's operational GHG/SP exceed AB 32 requirements (a substantial contribution), then the project's GHG emissions would conflict with legislative requirements, and the impact would be cumulatively considerable and mitigation would be required where feasible.

- New stationary and area sources/facilities: calculate GHG emissions using the CCAR GRP. All GHG emissions associated with new stationary or area sources should be treated as a net increase in emissions, and if deemed significant, should be mitigated where feasible.

- Road or levee construction projects or other construction-only projects: calculate GHG emissions using the RoadMod, which will be updated to contain GHG emission factors from EMFAC and OFFROAD. All construction-generated GHG emissions should be treated as a net increase, and if deemed significant, should be mitigated to the extent feasible.

- Air District rulemaking or air quality management plan-type projects should be evaluated on a case-by-case basis for secondary impacts of increased GHG emissions generation. In most cases, the types of projects that act to reduce regional air pollution simultaneously act to reduce GHG emissions, and would be beneficial, but should be evaluated for secondary effects from GHG emissions.

- Regional transportation plans should also be evaluated on a case-by-case basis for potential to either reduce or increase GHG emissions from the transportation sector. EMFAC can be utilized to determine the net change in GHG emissions

associated with projected vehicle VMT and from operating speed changes associated with additional or alleviated congestion.

To achieve the goals of AB 32, which are tied to GHG emission rates of specific benchmark years (i.e., 1990), California would have to achieve a lower rate of emissions per unit of population and per unit of economic activity than it has now. Further, in order to accommodate future population and economic growth, the state would have to achieve an even lower rate of emissions per unit than was generated in 1990. (The goal to achieve 1990 quantities of GHG emissions by 2020 means that this will need to be accomplished in light of 30 years of population and economic growth in place beyond 1990.) Thus, future planning efforts that would not encourage new development to achieve its fair share of reductions in GHG emissions would conflict with the spirit of the policy decisions contained in AB 32, thus impeding California's ability to comply with the mandate.

Thus, if a statewide context for GHG emissions were pursued, any net increase in GHG emissions within state boundaries would be considered "new" emissions. For example, a land development project, such as a specific plan, does not necessarily create "new" emitters of GHG, but would theoretically accommodate a greater number of residents in the state. Some of the residents that move to the project could already be California residents, while some may be from out of state (or would 'take the place' of in-state residents who 'vacate' their current residences to move to the new project). Some may also be associated with new births over deaths (net population growth) in the state. The out-of-state residents would be contributing new emissions in a statewide context, but would not necessarily be generating new emissions in a global context. Given the California context established by AB 32, the project would need to accommodate an increase in population in a manner that would not inhibit the state's ability to achieve the goals of lower total mass of emissions.

The average net influx of new residents to California is approximately 1.4 percent per year (this value represents the net increase in population, including the net contribution from births and deaths). With population growth, California also anticipates economic growth. Average statewide employment has grown by approximately 1.1 percent over the last 15 years. The average percentage of population employed over the last 15 years is 46 percent. Population is expected to continue growing at a projected rate of approximately 1.5 percent per year through 2050. Long-range employment projection data is not available from the California Department of Finance (DOF) and can be extrapolated in different ways (e.g., linear extrapolation by percentage rate of change, percentage of population employed, mathematical series expansion, more complex extrapolation based on further research of demographic projections such as age distribution). Further study would be needed to refine accurate employment projections from the present to 2050. For developing this framework, employment is assumed to have a constant proportionate relationship with the state's population. The projected number of jobs is assumed to be roughly 46 percent of the projected population.

In light of the statewide context established by California law, consistency is most important for evaluating GHG emissions from projects. Thus, URBEMIS and the CCAR GRP are the recommended tools for quantification of GHG emissions from most project types in the short term. Over the long term, more sophisticated models that integrate the relationship between GHG emissions and land use, transportation, energy, water, waste, and other resources, and have similar application statewide would have better application to the problem, but may not currently be as accessible or as easily operable. I-PLACE^{3}S and CTG Energetics' Sustainable Communities Model (SCM) are two examples of such models that contain emission factors for GHGs, which could be refined to have applicability statewide and made available to CEQA practitioners. Other models are likely to be developed, given the importance of this issue.

Short-Term and Long-Term Methodologies

The following tools can be used to quantify a project's GHG emissions until tools that are more comprehensive become available statewide:

1. Land development projects: URBEMIS 2007 v. 9.2 and the CCAR GRP v. 2.2 (short-term); further development of I-PLACE^{3}S or CTG's Sustainable Communities Model (long-term).
2. New stationary and area sources/facilities: AP-42 Chapter 4.3, LandGem v. 3.02, and/or CCAR GRP v. 2.2.
3. Road or levee construction projects or other construction-only projects: RoadMod/OFFROAD 2007.

Ideally, I-PLACE^{3}S or CTG's Sustainable Communities Model would be expanded to apply to all regions of the state. These types of models use an integrated approach, which is the best approach for reasonably approximating the emissions that result from interaction between land uses, but neither is available to the public and would create consistency problems in reporting emissions from projects across the state if these were used today. However, a similar model with statewide applicability will likely be developed due to the importance of the issue.Table 10 Summary of Modeling Tools for Estimating GHG Emissions and Project Applicability

Table 10: Summary of Modeling Tools for GHG Emissions

Method/Tool Description	Availability	Applicability	Scope	Ease of Use	Data Input (Requirements and Guidance)	Data Output	Recommendation Comments	Advantages/ Disadvantages
URBEMIS 2007	*Public domain -Download (www.urbemis.com) free of charge*	*Land development and construction projects (construction, mobile- and area-source emissions)*	*Local*	*Fairly Easy*	*Land use information, construction and operational data and assumptions (e.g., jurisdiction, acres of land use type, year of operation, etc.)*	*Mobile-source Construction & Operational CO_2 (lb/day or tons/year)*	*-Recommended for land use development and construction projects -Also recommended for net change in land use (zoning changes)*	*-Does not quantify indirect emissions from energy consumption or other GHGs (except methane from mobile-sources) -Free, available to public, and applicable statewide -Widely used for assessment of other air quality impacts*
California Climate Action Registry General Reporting Protocol v. 2.2	*Public guidance document*	*Indirect emissions from land development projects, stationary- and area-source facilities regulated under AB 32*	*State*	*Easy*	*Energy consumption*	*CO_2e (Metric tons/year)*	*-Recommended for indirect emissions from energy consumption for land use development projects, and for new stationary- or area- sources to be regulated*	*-Contains emission factors for CH_4 and N_2O in addition to CO_2 -Does not contain emission factors broken down by utility provider (statewide average grid only)*
Clean Air and Climate Projection (CACP) Software	*Public agencies (members of ICLEI, NACAA, or similar)*	*Local governments used for emissions inventories*	*Local*	*N/A*	*Energy usage, waste generation/disposal transportation*	*CO_2e (tons/year)*	*-Recommended for inventories of local government entities activities (must be a member of affiliated agency or group)*	*-Not available to public*
CTG Sustainable Communities Model	*Custom model*	*Land development*	*Regional, scalable*	*N/A*	*Land use information, operational (mobile, energy, economic, infrastructure) assumptions*	*CO_2e (tons/year)*	*-An integrated and comprehensive modeling tool, but cannot obtain*	*-Not available to public*

Method/Tool Description	Availability	Applicability	Scope	Ease of Use	Data Input (Requirements and Guidance)	Data Output	Recommendation Comments	Advantages/ Disadvantages
I-PLACE^{3}S	*Access fee through local COG* *Only available for eight California counties*	*Land use change*	*Regional, scalable*	*Fairly Easy*	*Parcel information*	*CO_2 (lb/day or tons/year)*	*-Recommended for land use development projects and land use changes* *-Especially good for general plans*	*-Not freely available to public* *-Not applicable statewide* *-Actually provides insight into land use interaction* *-Can include very specific project attributes* *-Trip rates are from behavioral survey data, instead of ITE*
EMFAC 2007	*Public domain*	*On-road mobile-sources*	*Statewide, regional*	*Fairly Easy*	*Vehicle fleet information*	*CO_2 (grams/mile)*	*-Not recommended for most projects (URBEMIS preferred)* *-Could be used for certain Air District Rulemaking applications*	*-Can compare emissions based on speed-distribution* *-Emission factors contained in URBEMIS* *-Not a stand-alone model*
OFFROAD 2007	*Public domain*	*Off-road mobile sources (construction equipment)*	*Statewide, regional*	*Fairly Easy*	*Construction fleet information*	*CO_2 (lb/day)*	*-Not recommended (URBEMIS preferred)* *-could be used for certain Air District Rulemaking applications (re: construction equipment)*	*-Emission factors contained in URBEMIS*
RoadMod (to be updated to include CO_2)	*Public domain*	*Off-road and on-road mobile sources (construction equipment and material haul trucks)*	*Statewide*	*Easy*	*Construction information*	*CO_2 (lb/day or tons/project)*	*-Recommended for construction-only projects (linear in nature; i.e., levees, roads, pipelines)*	*-To be updated to support emissions factors from OFFROAD 2007*

Method/Tool Description	Availability	Applicability	Scope	Ease of Use	Data Input (Requirements and Guidance)	Data Output	Recommendation Comments	Advantages/ Disadvantages
DTIM	*Public domain*	*On-road mobile-sources*	*Statewide, regional*	*Difficult (consists of a series of three programs and requires input files from traffic and emissions modeling)*	*-EMFAC files* *-Traffic model output files (e.g., link, interzonal, and trip end data)* *-User options file* *-Optional files*	*CO_2 (tons/year)*	*-Not recommended*	*-Not updated to support EMFAC 2007 emission factors* *-Input files include output files from regional transportation models which more accurately reflect VMT*
Southeast Climate Change Partnership Spreadsheet Model (UK)	*Public domain http://www.climatesoutheast.org.uk/*	*UK Local government/ agencies/ organizations used for emissions inventories*	*Local, county, regional*	*Fairly easy*	*Energy usage, waste generation/disposal, transportation*	*CO_2 (tonnes/year)*	*-Not recommended for use in California, but could be a valuable source for building an applicable spreadsheet model*	*-Applicability for UK, but could be updated with CA-specific emission factors*
EPA AP-42; Evaporation Loss Sources Chapter 4.3.5	*Public reference document*	*GHG emissions from waste water treatment facilities*	*Facility level*	*Easy equation; substantial research needed to use*	*Biochemical oxygen demand (BOD) loading, Fraction anaerobically digested*	*CH4 (lb/year)*	*-Recommended for Publicly owned treatment works (POTW) projects*	*-Substantial research needed to determine the "fraction anaerobically digested" parameter, which is dependent on the type of treatment plant/process*
LandGem v. 3.02	*Public domain http://www.epa.gov/ttn/catc/dir1/landgem-v302.xls*	*GHG emissions from anaerobic decomposition associated with landfills*	*Facility Level*	*Moderate*	*Solid waste processing, year of analysis, lifetime of waste in place*	*CO_2, CH_4 (Mega grams/year)*	*-Recommended for landfill emissions*	*-Emission rates change dependent on years of decomposition, waste in place rates of change.* *-Complex decomposition rate equation, but good first approximation*

Method/Tool Description	Availability	Applicability	Scope	Ease of Use	Data Input (Requirements and Guidance)	Data Output	Recommendation Comments	Advantages/ Disadvantages
CARROT	*Registry members*	*Stationary source emissions, vehicle fleet mobile sources*	*Facility level*	*Moderate*	*Facility-specific information*	*All GHGs*	*-Recommended for reporting facilities under AB 32 and for indirect emissions from energy consumption (CCAR Protocol)*	*-Estimates all GHGs and normalizes to CO_2e* *-Not publicly available*

Notes:

GHG = greenhouse gas; AB = assembly bill; CO_2e = carbon dioxide equivalent; CH_4 = methane; N_2O = nitrous oxide; COG = council of governments ; ITE = Institute of Transportation Engineers; CCAR = California Climate Action Registry

Source: Data compiled by EDAW and the California Air Pollution Control Officers Association in 2007

Introduction

This chapter (and Appendix B) identifies existing and potential mitigation measures that could be applied to projects during the CEQA process to reduce a project's GHG emissions that would be identified using the analytical methodologies included in this white paper. The Subcommittee retained the services of EDAW to assist with this effort. EDAW performed a global search of mitigation measures currently in practice and under study that would reduce GHG emissions.

Table 16 (Appendix B) provides a brief description of each measure along with an assessment of their feasibility (from a standpoint of economical, technological, and logistical feasibility, and emission reduction effectiveness), and identifies their potential for secondary impacts to air quality. During the global search performed, EDAW also took note of GHG reduction strategies being implemented as rules and regulation (e.g., early action items under AB 32), which are summarized in Table 18 (Appendix C). It is important to note that though compliance with such would be required by regulation for some sources, such strategies may be applicable to other project and source types.

The recurring theme that echoes throughout a majority of these measures is the shift toward New Urbanism, and research has consistently shown that implementation of Neotraditional Development techniques reduces VMT and associated emissions. The material reviewed assessed reductions from transportation-related measures (e.g., bicycle, pedestrian, transit, and parking) as a single comprehensive approach to land use. This comprehensive approach focuses on development design criteria conducive to enhancing alternate modes of transportation, including transit, walking, and bicycling. Transportation Demand Management (TDM) programs are viewed as a mechanism to implement specific measures. TDM responsibilities may include offering incentives to potential users of alternative modes of transportation and monitoring and reporting mode split changes.

The comprehensive approach makes it more difficult to assess reductions attributable to each measure. Nevertheless, there is a strong interrelationship between many of the measures, which justifies a combined approach. Consider the relationship between bike parking nonresidential, bike parking residential, endtrip facilities, and proximity to bike path/bike lane measures. In reality, these measures combined act as incentives for one individual to bike to work, while implementation of a single measure without the others reduces effectiveness.

The global nature of GHG emissions is an important feature that enables unique mitigation: abatement. When designing a project subject to CEQA, the preferred practice is first to avoid, then to minimize, and finally to compensate for impacts. Where the impact cannot be mitigated on-site, off-site mitigation is often and effectively implemented in several resource areas, either in the form of offsetting the same impact or preserving the resource elsewhere in the region. Frequently, mitigation fee programs or funds are established, where the proponent pays into the program and fees collected

throughout the region or state are used to implement projects that, in turn, proportionately offset the impacts of the projects to the given resource. It may be more cost-effective to reduce as much GHG on-site as feasible (economically and technologically). Then the proponent would pay into a "GHG retrofit fund" to reduce equivalent GHG emissions off-site. In contrast to regional air pollutant offset programs such as the Carl Moyer Program, it matters greatly where reductions of ozone precursors occur, as ozone affects regional air quality. The GHG retrofit fund could be used to provide incentives to upgrade older buildings and make them more energy efficient. This would reduce demand on the energy sector and reduce stationary source emissions associated with utilities. This program has been successfully implemented in the United Kingdom where developments advertise "carbon neutrality." Of course, some GHG emissions occur associated with operation of the development, but the development would offset the remainder of emissions through off-site retrofit. Avoiding emissions that would otherwise continue to occur at existing development would be a unique opportunity for mitigation of GHG emissions. Reduction of GHG emissions also may have important side benefits including reduction of other forms of pollution.

Depending on the significance threshold concept adopted, projects subject to the CEQA process would either qualitatively or quantitatively identify the amount of GHG emissions associated with their project using the analytical methodologies identified in the previous chapter. The analysis would then apply the appropriate number of mitigation measures listed in Appendix B to their project to reduce their GHG emissions below the significance level. Calculating the amount of GHG emission reductions attributable to a given mitigation measure would require additional research. The examples below illustrate how a project would be mitigated using this approach.

Residential Project Example

Project Attributes:

- 68 detached dwelling units
- 15.9 acres
- Located in unincorporated Placer County PCAPCD jurisdiction)
- Assume URBEMIS defaults for a rural project in Placer County, in absence of a traffic study (This is contrary to the recommendations contained under Task 1; a traffic study is necessary to asses project-specific GHG emissions).
- Analysis year 2009

Table 11: Residential Project Example GHG Emissions Estimates with Mitigation

URBEMIS Output (Unmitigated)	Metric Tons/Year CO_2e	URBEMIS Output (Mitigated)	Metric Tons/Year CO_2e	Percent Reduction
Area-source emissions	252	Area-source emissions	215	14.6
Mobile-source emissions	1,047	Mobile-source emissions	916	12.5
Total direct operational emissions (area + mobile)	1,299	Total operational emissions (area + mobile)	1,131	12.9

Notes:
CO_2e = carbon dioxide equivalent

Sources: Data compiled by EDAW in 2007

Using URBEMIS 2007 and assuming the project would implement the mitigation measures listed below, yearly project-generated emissions of CO_2e would be reduced by approximately 13 percent. Implementation of the following mitigation measures is assumed:

- 100 housing units within one-half-mile radius of project's center, including this project's 68 residential units;
- provision of 80 jobs in the study area;
- retail uses present with one-half-mile radius of project's center;
- 10 intersections per square mile;
- 100% of streets with sidewalks on one side;
- 50% of streets with sidewalks on both sides;
- 30% of collectors and arterials with bike lanes, or where suitable, direct parallel routes exist;
- 15% of housing units deed restricted below market rate;
- 20% energy efficiency increase beyond Title 24; and
- 100% of landscape maintenance equipment electrically powered and electrical outlets in front and rear of units.

Example Project Methodology and Mitigation

Table 12 –Residential Projects Example Methodology and Mitigation

Source	Methodology	Mitigation
Direct Emissions		
Construction	URBEMIS (OFFROAD emission factors)	MM C-1→MM C-4
Mobile Sources	URBEMIS (EMFAC emission factors)	MM T-3→MM T-8, MM T-10→ MM T-14, MM T-16, MM T-19→ MM T-21 MM D-2→MM D-8, MM D-10→ MM D-15, MM D-17 MM S-1→MM S-2 MM M-1→MM M-2
Area Sources	URBEMIS	MM D-13→MM D-15, MM D-17 MM E-1→MM E-8, MM E-10, MM E-12→MM E-23 MM S-1→MM S-2 MM M-1→MM M-2
Indirect Emissions		
Energy Consumption	CCAR GRP & CEC	

Table 13 –Commercial Projects Example Methodology and Mitigation

Source	Methodology	Mitigation
Direct Emissions		
Construction	URBEMIS (OFFROAD emission factors)	MM C-1→MM C-4
Mobile Sources	URBEMIS (EMFAC emission factors)	MM T-1→MM T-2, MM T-4→ MM T-15, MM T-17→MM T-21 MM D-1→MM D-3, MM D-5→ MM D-6, MM D-10, MM D-12, MM D-14→MM D-17 MM E-24 MM S-1→MM S-2 MM M-1→MM M-2
Area Sources	URBEMIS	MM D-14→MM D-17 MM E-1, MM E-4→MM E-13, MM E-16→MM E-24 MM S-1→MM S-2 MM M-1→MM M-2
Indirect Emissions		
Energy Consumption	CCAR GRP & CEC	

Table 14 –Specific Plans Example Methodology and Mitigation

Source	Methodology	Mitigation
Direct Emissions		
Construction	URBEMIS (OFFROAD emission factors)	MM C-1→MM C-4
Mobile Sources	Short-term: URBEMIS (EMFAC emission factors). Long-term: I-PLACE^{3}S/CTG SCM	MM T-1→MM T-21 MM D-1→MM D-12, MM D-18→ MM D-19 MM E-24 MM S-1→MM S-2 MM M-1→MM M-2
Area Sources	Short-term: URBEMIS (EMFAC emission factors). Long-term: I-PLACE^{3}S/CTG SCM	MM D-13→MM D-19 MM E-1→MM E-24 MM S-1→MM S-2 MM M-1→MM M-2
Indirect Emissions		
Energy Consumption	Short-term: CCAR GRP & CEC. Long-term: I-PLACE^{3}S/CTG SCM	

General Plans

- Include a general plan policy to reduce emissions within planning area to a level consistent with legislative requirements.
- Implementation strategies include preparation of a GHG reduction plan.
- Projects consistent with a general plan could be responsible for complying with such a policy.

Table 15 –General Plans Example Methodology and Mitigation

Source	Methodology	Mitigation
Direct Emissions		
Construction	URBEMIS (OFFROAD emission factors).	MS G-1 MM G-15
Mobile Sources	Short-term: URBEMIS (EMFAC emission factors). Long-term: I-PLACE^{3}S/CTG SCM	MS G-1 MS G-2→MS C-7, MS G-9, MS G-12, MS-13→MS-14, MS-16→MS-23
Area Sources	Short-term: URBEMIS (EMFAC emission factors). Long-term: I-PLACE^{3}S/CTG SCM	MS G-1 MS G-8→MS C-11, MS G-134, MS G-12, MS-15, MS-17, MS-22
Indirect Emissions		
Energy Consumption	Short-term: CCAR GRP & CEC. Long-term: I-PLACE^{3}S/CTG SCM	

Other Project Types

Air District Rules and Regulations

Air district rules and regulations could have the potential to increase or decrease GHG emissions within the respective jurisdiction. In general, air district rules and regulations act to decrease criteria air pollutant or toxic air contaminant emissions, which would usually act to reduce GHG emissions simultaneously. However, this may not always be the case and air district rules and regulations could address emissions from a large variety of different source types. Reductions of GHG emissions associated with implementation of applicable mitigation, which could also vary greatly, would need to be evaluated on a case-by-case basis. However, once applicable mitigation measures are identified, percent reductions based on the best available research to date, such as those specified in Table 15, could be applied to determine mitigated emissions.

Air Quality Plans

Similarly to air district rules and regulations, air quality plans could have the potential to increase or decrease GHG emissions because of criteria air pollutant reduction strategies. In general, strategies implemented by air districts to reduce criteria air pollutants also act to reduce GHG emissions. However, this may not always be the case. Reductions of GHG emissions associated with implementation of applicable mitigation would need to be evaluated on a case-by-case basis. The methodology identified above for determining whether the strategies contained within the GHG reduction plan would adhere to the level specified in general plan policy could also be used to determine the reductions associated with CAP strategies.

Regional Transportation Plans

Regional transportation plans and reductions of GHG emissions associated with implementation of applicable mitigation would also need to be evaluated on a case-by-case basis to determine if a net increase or decrease in GHG emissions would occur. Complex interactions between the roadway network, operating conditions, alternative transportation availability (such as public transit, bicycle pathways, and pedestrian infrastructure), and many other independent parameters specific to a region should be considered. EMFAC 2007 can be used with VMT from the RTP to create an inventory of GHG emissions. Reductions associated with implementation of applicable measures contained in Table 16 could be accomplished by accounting for VMT reductions in the traffic model.

Many states, counties, and cities have developed policies and regulations concerning greenhouse gas emissions that seek to require or promote reductions in GHG emissions through standards for vehicle emissions, fuels, electricity production/renewables, building efficiency, and other means. However, we could only identify three public agencies in the United States that are considering formally requiring the analysis of greenhouse gas emissions and climate change for development projects during their associated environmental processes. There may be others, but they were not identified during research conducted during preparation of this paper.

The following is a summary of those three efforts.

Commonwealth of Massachusetts - MEPA Greenhouse Gas Emissions Policy and Protocol

The Massachusetts Executive Office of Energy and Environmental Affairs (EEA) has determined that the phrase "damage to the environment" as used in the Massachusetts Environmental Policy Act (MEPA) includes the emission of greenhouse gases caused by projects subjects to MEPA Review. EEA has published a Greenhouse Gas Emissions Policy (GGEP) to fulfill the statutory obligation to take all feasible measurers to avoid, minimize or mitigate damage to the environment.

The GGEP concerns the following projects only:

- The Commonwealth or a state agency is the proponent;
- The Commonwealth or a state agency is providing financial assistance;
- The project is privately funded, but requires an Air Quality Permit from the department of Environmental Protection;
- The project is privately funded, but will generate:
    - 3,000 or more new vehicle trips per day for office projects;
    - 6,000 or more new vehicle trips per day for mixed use projects that are 25% or more office space; or
    - 10,000 or more new vehicle trips per day for other projects.

As a comparison, the trip generation amounts correspond as follows:

- 3,000 vehicle trips per day = approximately 250,000 square foot office development;
- 6,000 or more new vehicle trips per day for mixed use projects that are 25% or more office space = if 25% office space, then equivalent to approximately 130,000 square feet of office and either 100,000 square feet of retail or 450 single-family residential units or some combination thereof.
- 10,000 or more new vehicle trips per day = approximately 1,000 single family residential units or 250,000 square feet retail.

The draft policy states it is not intended to create a numerical GHG emission limit or a numerical GHG emissions reduction target, but rather to ensure that project proponents and reviewers have considered the GHG emissions impacts of their projects and taken all feasible means and measure to reduce those impacts.

The draft policy notes that some projects within these categories will have little or no greenhouse gas emission and the policy will not apply to such projects. EEA intends to identify in the scoping certificate whether a project falls within this *de minimis* exception.

The GGEP requires qualifying projects to do the following:

- to quantify their GHG emissions;
- identify measures to minimize or mitigate such emissions;
- quantify the reduction in emissions and energy savings from mitigation.

Emissions inventories are intended to focus on carbon dioxide, but analysis of other GHGs may be required for certain projects. EEA will require analysis of direct GGH emissions and indirect (electricity and transportation) emissions. The GGEP references the protocols prepared by the World Resource Institute as guidance for inventory preparation.

The policy is still in draft form, but the comment period closed on August 10, 2007.

King County, Washington - Executive Order on the Evaluation of Climate Change Impacts through the State Environmental Policy Act (SEPA)

On June 27, 2007, the King County Executive Ron Sims directed all King County Departments, as follows:

> *"…effective September 1, 2007 to require that climate impacts, including, but not limited to those pertaining to greenhouse gases, be appropriately identified and evaluated when such Departments are acting as the lead agency in reviewing the environmental impacts of private or public proposals pursuant to the State Environmental Policy Act".*

The Executive Order does not define what a "climate impact" is. Based on statements of the County Deputy Chief of Staff[*]

- County agencies will ask project proponents to supply information on transportation, energy usage and other impacts of proposed projects using the County's existing SEPA checklist.

[*] Marten Law Group: Environmental News, August 1, 2007, "King County (WA) First in Nation to Require Climate Change Impacts to be Considered During Environmental Review of New Projects".

- There is no current plan to require project proponents to take action to mitigate the impacts identifies.
- Development of emissions thresholds and mitigation requirements will be undertaken in connection with the County's upcoming 2008 update of its Comprehensive Plan.

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District released an interim guidance on addressing climate change in CEQA documents on September 6, 2007. While very general in nature, the District recommends that CEQA environmental documents include a discussion of anticipated GHG emissions during both the construction and operation phases of the project. This includes assessing the GHG emissions from projects (using readily available models) to determine whether a project may have a significant impact. If so, then the District recommends addressing all of the District's GHG mitigation measures (drawn from comments made by the California Attorney General) – with explanations on how the mitigation will be implemented or providing rationale for why a measure would be considered infeasible. The District provides assistance to agencies in their analysis of GHG emissions and the applicability of specific mitigation measures. The District's guidance can be found at: http://64.143.64.21/climatechange/ClimateChangeCEQAguidance.pdf

Mendocino Air Quality Management District – CEQA Guidelines

The Mendocino AQMD updated its "Guidelines for Use During Preparation of Air Quality Impacts in EIRs or Mitigated Negative Declarations" in May 2007. The guidelines call for preparing estimates of the increased emissions of air contaminations (including GHG) for projects.

The guidelines state that GHG emissions should be presumed to have a significant impact if CO emissions from District-approved modeling exceed either of the following:

- 80% of the level defined as significant for stationary sources in Regulation1, Rule 130 (s2) of the District (which is 550 lbs/day for CO, meaning a threshold of 440 lbs/day for CO for stationary sources); or
- levels established in District Regulation 1 Rule 130 (i2) for indirect sources (which is 690 lbs/day for CO for indirect sources).

If an average passenger vehicle emits 22 grams of CO/mile and 0.8 lb/mile of CO_2, then the 690-lb/day threshold for CO corresponds to approximately 11,400 lb/day CO_2 threshold for passenger vehicle-related emissions. If one assumes that the average passenger vehicle goes 12,500 miles/year (about 35 miles/day), then this is a threshold equivalent to about 420 vehicles. Using an average in California of about 1.77 vehicles/household, this would correspond to about 250 households/dwelling units.

Appendix A

Relevant Citations

Citations from the Public Resources Code (Division 13, §21000 et seq.) as amended through January 1, 2005.

Public Resources Code – Section 21004, MITIGATING OR AVOIDING A SIGNIFICANT EFFECT; POWERS OF PUBLIC AGENCY:

"In mitigating or avoiding a significant effect of a project on the environment, a public agency may exercise only those express or implied powers provided by law other than this division. However, a public agency may use discretionary powers provided by such other law for the purpose of mitigating or avoiding a significant effect on the environment subject to the express or implied constraints or limitations that may be provided by law."

Public Resources Code – Section 21082.2, SIGNIFICANT EFFECT ON ENVIRONMENT; DETERMINATION; ENVIRONMENTAL IMPACT REPORT PREPARATION:

(a) The lead agency shall determine whether a project may have a significant effect on the environment based on substantial evidence in light of the whole record.
(b) The existence of public controversy over the environmental effects of a project shall not require preparation of an environmental impact report if there is no substantial evidence in light of the whole record before the lead agency that the project may have a significant effect on the environment.
(c) Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment, is not substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.
(d) If there is substantial evidence, in light of the whole record before the lead agency, that a project may have a significant effect on the environment, an environmental impact report shall be prepared.
(e) Statements in an environmental impact report and comments with respect to an environmental impact report shall not be deemed determinative of whether the project may have a significant effect on the environment.

Citations from the Guidelines for California Environmental Quality Act, CCR, Title 14, Division 6 (§15000 et seq.) as amended through July 27, 2007.

AG=Attorney General; ARB=California Air Resources Board; ASTM=American Society for Testing and Material; BAAQMD=Bay Area Air Quality Management District; BEES= Building for Environmental and Economic Sustainability; CA=California; Caltrans=California Department of Transportation; CAPs=Criteria Air Pollutants; CCAP=Center for Clean Air Policy; CF=Connectivity Factor; CIWMB=California Integrated Waste Management Board; CO= Carbon Monoxide; CO_2=Carbon Dioxide; DGS=Department of General Services; DOE=U.S. Department of Energy; DPF=Diesel particulate Filter; E85=85% Ethanol; EERE=Energy Efficiency and Renewable Energy; EOE=Encyclopedia of Earth; EPA=U.S. Environmental Protection Agency; ETC=Edmonton Trolley Coalition; EVs/CNG=Electric Vehicles/Compressed Natural Gas; FAR=Floor Area Ratio; GHG=Greenhouse Gas; ITE=Institute of Transportation Engineers; kg/m^2=kilogram per square meter; km=Kilometer; lb=pound; LEED=Leadership in Energy and Environmental Design; M=Million; NA=Not Available; NEV=Neighborhood Electric Vehicle; NIST=National Institute of Standards and Technology; NO_X=Oxides of Nitrogen; NREL=National Renewable Energy Laboratory; N/S=North/South; PG&E=Pacific Gas and Electric; PM=Particulate Matter; SJVAPCD=San Joaquin Valley Air Pollution Control District; SMAQMD=Sacramento Metropolitan Air Quality Management District; SMUD=Sacramento Municipal Utilities District; SO_x=Sulfur Oxides; SRI=Solar Reflectance Index; TACs=Toxic Air Contaminants; TDM=Transportation Demand Management; TMA=Transportation Management Association; THC=Total Hydrocarbon; ULEV=Ultra Low Emission Vehicle; USGBC=U.S. Green Building Council; and VTPI=Victoria Transit Policy.

State CEQA Guidelines – Section 15064, DETERMINING THE SIGNIFICANCE OF THE ENVIRONMENTAL EFFECTS CAUSED BY A PROJECT:

(a) Determining whether a project may have a significant effect plays a critical role in the CEQA process.

(1) If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, the agency shall prepare a draft EIR.

(2) When a final EIR identifies one or more significant effects, the Lead Agency and each Responsible Agency shall make a finding under Section 15091 for each significant effect and may need to make a statement of overriding considerations under Section 15093 for the project.

(b) The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.

(c) In determining whether an effect will be adverse or beneficial, the Lead Agency shall consider the views held by members of the public in all areas affected as expressed in the whole record before the lead agency. Before requiring the preparation of an EIR, the Lead Agency must still determine whether environmental change itself might be substantial.

(d) In evaluating the significance of the environmental effect of a project, the Lead Agency shall consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project.

(1) A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project. Examples of direct physical changes in the environment are the dust, noise, and traffic of heavy equipment that would result from construction of a sewage treatment plant and possible odors from operation of the plant.

(2) An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment. For example, the construction of a new sewage treatment plant may facilitate population growth in the service area due to the increase in sewage treatment capacity and may lead to an increase in air pollution.

(3) An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable.

(e) Economic and social changes resulting from a project shall not be treated as significant effects on the environment. Economic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment. Where a physical change is caused by economic or social effects of a

project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant. For example, if a project would cause overcrowding of a public facility and the overcrowding causes an adverse effect on people, the overcrowding would be regarded as a significant effect.
(f) The decision as to whether a project may have one or more significant effects shall be based on substantial evidence in the record of the lead agency.
(1) If the lead agency determines there is substantial evidence in the record that the project may have a significant effect on the environment, the lead agency shall prepare an EIR (Friends of B Street v. City of Hayward (1980) 106 Cal.App.3d 988). Said another way, if a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect (No Oil, Inc. v. City of Los Angeles (1974) 13 Cal.3d 68).
(2) If the lead agency determines there is substantial evidence in the record that the project may have a significant effect on the environment but the lead agency determines that revisions in the project plans or proposals made by, or agreed to by, the applicant would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur and there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment then a mitigated negative declaration shall be prepared.
(3) If the lead agency determines there is no substantial evidence that the project may have a significant effect on the environment, the lead agency shall prepare a negative declaration (Friends of B Street v. City of Hayward (1980) 106 Cal.App. 3d 988).
(4) The existence of public controversy over the environmental effects of a project will not require preparation of an EIR if there is no substantial evidence before the agency that the project may have a significant effect on the environment.
(5) Argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion support by facts.
(6) Evidence of economic and social impacts that do not contribute to or are not caused by physical changes in the environment is not substantial evidence that the project may have a significant effect on the environment.
(7) The provisions of sections 15162, 15163, and 15164 apply when the project being analyzed is a change to, or further approval for, a project for which an EIR or negative declaration was previously certified or adopted (e.g. a tentative subdivision, conditional use permit). Under case law, the fair argument standard does not apply to determinations of significance pursuant to sections 15162, 15163, and 15164.
(g) After application of the principles set forth above in Section 15064(f)(g), and in marginal cases where it is not clear whether there is substantial evidence that a project may have a significant effect on the environment, the lead agency shall be guided by the following principle: If there is disagreement among expert opinion supported by facts

over the significance of an effect on the environment, the Lead Agency shall treat the effect as significant and shall prepare an EIR.
(h)(1) When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
(2) A lead agency may determine in an initial study that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. When a project might contribute to a significant cumulative impact, but the contribution will be rendered less than cumulatively considerable through mitigation measures set forth in a mitigated negative declaration, the initial study shall briefly indicate and explain how the contribution has been rendered less than cumulatively considerable.
(3) A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding that the project complies with the specified plan or mitigation program addressing the cumulative problem, an EIR must be prepared for the project.
(4) The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

State CEQA Guidelines – Section 15130, DISCUSSION OF CUMULATIVE IMPACTS:
(a)(3). "An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.

State CEQA Guidelines – Section 15064.7, THRESHOLDS OF SIGNIFICANCE:
"Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level

of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant."

Appendix B

Mitigation Measure Summary

Table 16
Mitigation Measure Summary

Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
Transportation								
Bicycle/Pedestrian/Transit Measures								
MM T-1: Bike Parking	LD (C, M), I, SP, TP, AQP, RR, P/Mobile	1%-5%/High: CCAP presents combined % reductions for a range of mitigation measures (Dierkers et al. 2007). SMAQMD allocates combined reductions among individual measures (e.g., 2.5% reduction for all bicycle-related measures and one-quarter of 2.5% for each individual measure) (TIAX 2005, EDAW 2006, SMAQMD 2007). VTPI presents % reductions for showers and combined measures in the TDM encyclopedia (VTPI	Yes: Lockers ($1,200-$2,950, $700/bike on average), Racks ($70-$2,000, $70/bike on average).	Yes (Caltrans 2005, Dierkers et al. 2007, VTPI 2007)	Yes (Caltrans 2005, Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	Caltrans, Portland Bicycle Master Plan (City of Portland 1998), CCAP Transportation Emissions Guidebook (Dierkers et al. 2007), SMAQMD Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007), VTPI, CA air quality management and control districts, and cities/counties.	Nonresidential projects provide plentiful short- and long-term bicycle parking facilities to meet peak season maximum demand (e.g., one bike rack space per 20 vehicle/employee parking spaces.
MM T-2: End of Trip Facilities	LD (C, M), I, SP, TP, AQP, RR, P/Mobile		Yes	Yes (Caltrans 2005, Dierkers et al. 2007, VTPI 2007)	Yes (Caltrans 2005, Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs		Nonresidential projects provide "end-of-trip" facilities including showers, lockers, and changing space (e.g., four clothes lockers and one shower provided for every 80 employee parking spaces, separate facilities for each gender for projects with 160 or more employee parking spaces).
MM T-3: Bike-Parking at Multi-	LD (R, M), SP, AQP, RR,		Yes: Lockers ($1,200-	Yes (Caltrans 2005,	Yes (Caltrans	Adverse: No Beneficial:		Long-term bicycle parking is provided at apartment

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Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
Unit Residential	P/Mobile	2007). JSA bases estimates on CCAP information (JSA 2004).	$2,950, $700/bike on average), Racks ($70-$2,000, $70/bike on average).	Dierkers et al. 2007, VTPI 2007)	2005, Dierkers et al. 2007, VTPI 2007)	CAPs, TACs		complexes or condominiums without garages (e.g., one long-term bicycle parking space for each unit without a garage). Long-term facilities shall consist of one of the following: a bicycle locker, a locked room with standard racks and access limited to bicyclists only, or a standard rack in a location that is staffed and/or monitored by video surveillance 24 hours per day.
MM T-4: Proximity to Bike Path/Bike Lanes	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile		Yes	Yes (Caltrans 2005, Dierkers et al. 2007, VTPI 2007)	Yes (Caltrans 2005, Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs		Entire project is located within one-half mile of an existing/planned Class I or Class II bike lane and project design includes a comparable network that connects the project uses to the existing offsite facility. Project design includes a designated bicycle route connecting all units, on-site bicycle parking facilities, offsite bicycle facilities, site entrances, and primary building entrances to existing Class I or Class II bike lane(s) within one-half mile. Bicycle route connects to all streets contiguous with project site. Bicycle route has minimum conflicts with automobile parking and circulation

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								facilities. All streets internal to the project wider than 75 feet have Class II bicycle lanes on both sides.

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MM T-5: Pedestrian Network	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-10%/High: CCAP presents combined % reductions for a range of mitigation measures (Dierkers et al. 2007). SMAQMD allocates 1% for each individual measure (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	CCAP Transportation Emissions Guidebook (Dierkers et al. 2007), SMAQMD Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007), VTPI, CA air quality management and control districts, and cities/counties.	The project provides a pedestrian access network that internally links all uses and connects to all existing/planned external streets and pedestrian facilities contiguous with the project site. Project design includes a designated pedestrian route interconnecting all internal uses, site entrances, primary building entrances, public facilities, and adjacent uses to existing external pedestrian facilities and streets. Route has minimal conflict with parking and automobile circulation facilities. Streets (with the exception of alleys) within the project have sidewalks on both sides. All sidewalks internal and adjacent to project site are minimum of five feet wide. All sidewalks feature vertical curbs. Pedestrian facilities and improvements such as grade separation, wider sidewalks, and traffic calming are implemented wherever feasible to minimize pedestrian barriers. All site entrances provide pedestrian access.
MM T-6: Pedestrian	LD (R, C, M), I, SP, TP,		Yes	Yes (Dierkers et al. 2007,	Yes (Dierkers et	Adverse: No Beneficial:		Site design and building placement minimize barriers to

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Barriers Minimized	AQP, RR, P/Mobile			VTPI 2007)	al. 2007, VTPI 2007)	CAPs, TACs		pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and nonresidential uses that impede bicycle or pedestrian circulation are eliminated.
MM T-7: Bus Shelter for Existing/Planned Transit Service	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-2%/High: CCAP presents these % reductions (Dierkers et al., 2007). SMAQMD assigns from .25%-1%, depending on headway frequency (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes: $15,000-$70,000.	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	CCAP Transportation Emissions Guidebook (Dierkers et al. 2007), SMAQMD Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007), VTPI, City of Calgary (City of Calgary 2004), CA air quality management and control districts, and cities/counties.	Bus or streetcar service provides headways of one hour or less for stops within one-quarter mile; project provides safe and convenient bicycle/pedestrian access to transit stop(s) and provides essential transit stop improvements (i.e., shelters, route information, benches, and lighting).

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
MM T-8: Traffic Calming	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-10%/High: CCAP presents combined % reductions for a range of mitigation measures (Dierkers et al. 2007). SMAQMD allocates .25%-1.0% for each individual measure depending on percent of intersections and streets with improvements (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	CCAP Transportation Emissions Guidebook (Dierkers et al. 2007), SMAQMD Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007), VTPI, CA air quality management and control districts, and cities/counties.	Project design includes pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements. Roadways are designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips by featuring traffic calming features. All sidewalks internal and adjacent to project site are minimum of five feet wide. All sidewalks feature vertical curbs. Roadways that converge internally within the project are routed in such a way as to avoid "skewed intersections;" which are intersections that meet at acute, rather than right, angles. Intersections internal and adjacent to the project feature one or more of the following pedestrian safety/traffic calming design techniques: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, and roundabouts or mini-circles. Streets internal and adjacent to the project feature pedestrian safety/traffic calming measures such as on-street parking, planter strips with street trees,

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
								and chicanes/chokers (variations in road width to discourage high-speed travel).
Parking Measures								
MM T-9: Paid Parking (Parking Cash Out)	LD (C, M), I, SP, TP, AQP, RR, P/Mobile	1%-30%/High: CCAP presents a range of 15%-30% reduction for parking programs (Dierkers et al. 2007). SMAQMD presents a range of 1.0%-7.2%, depending on cost/day and distance to transit (TIAX 2005, EDAW 2006, SMAQMD 2007). Shoupe presents a 21% reduction [$5/day for commuters to downtown LA, with elasticity of -0.18 (e.g., if price increases 10%, then solo driving goes down by 1.8% more)] (Shoupe 2005). Urban Transit Institute	Yes: Vary by location and project size.	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	CCAP Transportation Emissions Guidebook (Dierkers et al. 2007), SMAQMD Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007), VTPI, CA air quality management and control districts, and cities/counties.	Project provides employee and/or customer paid parking system. Project must have a permanent and enforceable method of maintaining user fees for all parking facilities. The facility may not provide customer or employee validations. Daily charge for parking must be equal to or greater than the cost of a transit day/monthly pass plus 20%.

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
		presents a range of 1%-10% reduction in trips to central city sites, and 2%-4% in suburban sites (VTPI 2007).						
MM T-10: Minimum Parking	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-30%/High: CCAP presents a range of 15%-30% reduction for parking programs (Dierkers et al. 2007). SMAQMD presents a maximum of 6% (Nelson/Nygaard Consulting Associates, 2005, TIAX 2005, EDAW 2006).	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007), Note that in certain areas of the state, the minimum parking required by code is greater than the peak period parking demand for most land uses. Simply meeting minimum code requirements in these areas would not result in an emissions reduction.	Adverse: No Beneficial: CAPs, TACs	CCAP Transportation Emissions Guidebook (Dierkers et al. 2007), SMAQMD Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007), VTPI, Governor's Office of Smart Growth (Annapolis, Maryland) (Zimbler), CA air quality management and control districts, and cities/counties.	Provide minimum amount of parking required. Once land uses are determined, the trip reduction factor associated with this measure can be determined by utilizing the ITE parking generation publication. The reduction in trips can be computed as shown below by the ratio of the difference of minimum parking required by code and ITE peak parking demand to ITE peak parking demand for the land uses multiplied by 50%. Percent Trip Reduction = 50 * [(min parking required by code – ITE peak parking demand)/ (ITE peak parking demand)]

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MM T-11: Parking Reduction Beyond Code/Shared Parking	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-30%/High: CCAP presents a range of 15%-30% reduction for parking programs (Dierkers et al. 2007). SMAQMD presents a maximum of 12% (Nelson/Nygaard, 2005, TIAX 2005, EDAW 2006).	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs		Provide parking reduction less than code. This measure can be readily implemented through a shared parking strategy, wherein parking is utilized jointly among different land uses, buildings, and facilities in an area that experience peak parking needs at different times of day and day of the week.
MM T-12: Pedestrian Pathway Through Parking	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-4%/Moderate: CCAP presents combined % reductions for a range of mitigation measures (Dierkers et al. 2007). SMAQMD allocates 0.5% reduction for this measure (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs		Provide a parking lot design that includes clearly marked and shaded pedestrian pathways between transit facilities and building entrances.

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MM T-13: Off - Street Parking	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-4%/Moderate: CCAP presents combined % reductions for a range of mitigation measures (Dierkers et al. 2007). SMAQMD allocates a range of 0.1%-1.5% for this measure (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs		Parking facilities are not adjacent to street frontage.
MM T-14: Parking Area Tree Cover	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	Annual net CO_2 reduction of 3.1 kg/m^2 canopy cover/Moderate (McPherson 2001).	Yes: $19 per new tree for CA, cost varies for maintenance, removal and replacement (McPherson 2001).	Yes	Yes	Adverse: VOCs Beneficial: CAPs, TACs	AG, State of CA Department of Justice (Goldberg 2007) and cities/counties (e.g., parking lot ordinances in Sacramento, Davis, and Los Angeles, CA).	Provide parking lot areas with 50% tree cover within 10 years of construction, in particular low emitting, low maintenance, native drought resistant trees. Reduces urban heat island effect and requirement for air conditioning, effective when combined with other measures (e.g., electrical maintenance equipment and reflective paving material).
MM T-15: Valet Bicycle Parking	LD (C, M), SP, AQP, TP, RR, P/Mobile	NA/Low	Yes	Yes	Yes: Raley Field (Sacramento, CA)	Adverse: No Beneficial: CAPs, TACs	Raley Field (Sacramento, CA).	Provide spaces for the operation of valet bicycle parking at community event "centers" such as amphitheaters, theaters, and stadiums.
MM T-16: Garage Bicycle Storage	LD (R, M), SP, AQP, TP, RR, P/Mobile	NA/Low	Yes: Less than $200/multiple bike rack.	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	City of Fairview, OR	Provide storage space in one-car garages for bicycles and bicycle trailers.

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MM T-17: Preferential Parking for EVs/CNG Vehicles	LD (C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	USGBC, CA air quality management and control districts and cities/counties (e.g., BAAQMD).	Provide preferential parking space locations for EVs/CNG vehicles.
MM T-18: Reduced/No Parking Fee for EVs/CNG Vehicles	LD (C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	Hotels (e.g., Argonaut in San Francisco, CA)	Provide a reduced/no parking fee for EVs/CNG vehicles.

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Miscellaneous Measure								
MM T-19: TMA Membership	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	1%-28%/High: CCAP presents a range of 3%-25% for TDMs with complementary transit and land use measures (Dierkers et al. 2007). VTPI presents a range of 6%-7% in the TDM encyclopedia (VTPI 2007). URBEMIS offers a 2%-10% range in reductions for a TDM that has 5 elements that are pedestrian and transit friendly and 1%-5% for 3 elements. SMAQMD presents a reduction of 5% (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007, VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Include permanent TMA membership and funding requirement. Funding to be provided by Community Facilities District or County Service Area or other nonrevocable funding mechanism. TDMs have been shown to reduce employee vehicle trips up to 28% with the largest reductions achieved through parking pricing and transit passes. The impact depends on the travel alternatives.
MM T-20: ULEV	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes: Higher than corresponding gasoline models.	Yes	Yes: Fueling stations might not be readily available depending on location. More than 900 E85 fueling	Adverse: No Beneficial: CAPs, TACs	DGS, CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Use of and/or provide ULEV that are 50% cleaner than average new model cars (e.g., natural gas, ethanol, electric).

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
					stations in the U.S., 5 in CA. Vehicles available in select regions only			
MM T-21: Flex Fuel Vehicles	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	5466.97 lb GHG/year/Low (DOE Fuel Economy)	Yes: E85 costs less than gasoline per gallon, but results in lower fuel economy.	Yes	Yes: More than 900 E85 fueling stations in the U.S., 5 in CA. Vehicles available in select regions only	Adverse: Yes Issues with the energy intensive ethanol production process (e.g., wastewater treatment requirements). Beneficial: CAPs, TACs	DGS, CA air quality management and control districts and cities/counties (e.g., SJVAPCD).	Use of and/or provide vehicles that utilize gasoline/ethanol blends (e.g., E85).
Design								
Commercial & Residential Building Design Measures								
MM D-1: Office/Mixed Use Density	LD (C, M), SP, TP, AQP, RR, P/Mobile	0.05%-2%/Moderate: This range is from SMAQMD, depending	Yes	Yes (VTPI 2007)	Yes (VTPI 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties	Project provides high density office or mixed-use proximate to transit. Project must provide

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
		on FAR and headway frequencies (Nelson/Nygaard Consulting Associates 2005, EDAW 2006, SMAQMD 2007).					(e.g., SMAQMD).	safe and convenient pedestrian and bicycle access to all transit stops within one-quarter mile.
MM D-2: Orientation to Existing/Planned Transit, Bikeway, or Pedestrian Corridor	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	0.4%-1%/Moderate: CCAP attributes a 0.5% reduction per 1% improvement in transit frequency (Dierkers et al. 2007). SMAQMD presents a range of 0.25%-5% (JSA 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (Dierkers et al. 2007)	Yes (Dierkers et al. 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project is oriented towards existing transit, bicycle, or pedestrian corridor. Setback distance between project and existing or planned adjacent uses is minimized or nonexistent. Setback distance between different buildings on project site is minimized. Setbacks between project buildings and planned or existing sidewalks are minimized. Buildings are oriented towards existing or planned street frontage. Primary entrances to buildings are located along planned or existing public street frontage. Project provides bicycle access to any planned bicycle corridor(s). Project provides pedestrian access to any planned pedestrian corridor(s).
MM D-3: Services Operational	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	0.5%-5%/Moderate	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project provides on-site shops and services for employees.

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MM D-4: Residential Density (Employ Sufficient Density for New Residential Development to Support the Use of Public Transit)	LD (R, M), SP, TP, AQP, RR, P/Mobile	1%-40%/High: #7, EPA presents a range of 32%-40% (EPA 2006). SMAQMD presents a range of 1%-12% depending on density and headway frequencies (Nelson/Nygaard Consulting Associates 2005, JSA 2005, EDAW 2006, SMAQMD 2007). Nelson/Nygaard presents a trip reduction formula: Trip Reduction = 0.6*(1-(19749*((4.814+ households per residential acre)/(4.814+7.14))^-06.39)/25914).	Yes	Yes (VTPI 2007, Holtzclaw 2007)	Yes (VTPI 2007, Holtzclaw 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project provides high-density residential development. Transit facilities must be within one-quarter mile of project border. Project provides safe and convenient bicycle/pedestrian access to all transit stop(s) within one-quarter mile of project border.
MM D-5: Street Grid	LD (R, C, M), I, SP, TP, AQP, RR,	1%/Moderate: SMAQMD presents this % reduction (JSA	Yes	Yes (Dierkers et al. 2007, VTPI 2007)	Yes (Dierkers et al. 2007,	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties	Multiple and direct street routing (grid style). This measure only applies to projects

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	P/Mobile	2005, EDAW 2006, SMAQMD 2007).			VTPI 2007)		(e.g., SMAQMD).	with an internal CF >/= 0.80, and average of one-quarter mile or less between external connections along perimeter of project. [CF= # of intersections / (# of cul-de-sacs + intersections)]. Cul-de-sacs with bicycle/pedestrian through access may be considered "complete intersections" when calculating the project's internal connectivity factor. External connections are bike/pedestrian pathways and access points, or streets with safe and convenient bicycle and pedestrian access that connect the project to adjacent streets, sidewalks, and uses. If project site is adjacent to undeveloped land; streets, pathways, access points, and right-of-ways that provide for future access to adjacent uses may count for up to 50% of the external connections. Block perimeter (the sum of the measurement of the length of all block sides) is limited to no more than 1,350 feet. Streets internal to the project should connect to streets external to the project whenever possible.

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MM D-6: NEV Access	LD (R, C, M), SP, TP, AQP, RR, P/Mobile	0.5%-1.5%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (Litman 1999, Sperling 1994)	Yes (Litman 1999, Sperling 1994)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Make physical development consistent with requirements for neighborhood electric vehicles. Current studies show that for most trips, NEVs do not replace gas-fueled vehicles as the primary vehicle.
MM D-7: Affordable Housing Component	LD (R, M), SP, TP, AQP, RR, P/Mobile	0.4%-6%/Moderate: SMAQMD presents this % reduction (Nelson/Nygaard Consulting Associates 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Residential development projects of five or more dwelling units provide a deed-restricted low-income housing component on-site (or as defined in the code). Developers who pay into In-Lieu Fee Programs are not considered eligible to receive credit for this measure. The award of emission reduction credit shall be based only on the proportion of affordable housing developed on-site because in-lieu programs simply induce a net increase in development. Percentage reduction shall be calculated according to the following formula:

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
								% reduction = % units deed-restricted below market rate housing * 0.04
MM D-8: Recharging Area	LD (R, M), SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Provide residential buildings with a "utility" room or space for recharging batteries, whether for use in a car, electric lawnmower, other electric landscaping equipment, or even batteries for small items such as flashlights.
Mixed-Use Development Measures								
MM D-9: Urban Mixed-Use	LD (M), SP, TP, AQP, RR, P/Mobile	3%-9%/Moderate: SMAQMD presents this % reduction (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (EPA 2006)	Yes (EPA 2006)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Development of projects predominantly characterized by properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with functional interrelationships and a coherent physical design.
MM D-10: Suburban Mixed-Use	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	3%/Moderate: SMAQMD presents this % reduction (TIAX 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (EPA 2006)	Yes (EPA 2006)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Have at least three of the following on site and/or offsite within one-quarter mile: Residential Development, Retail Development, Park, Open Space, or Office.
MM D-11: Other Mixed-Use	LD (R, M), SP, TP, AQP, RR, P/Mobile	1%/Moderate: SMAQMD presents this % reduction (TIAX 2005, EDAW	Yes	Yes (EPA 2006)	Yes (EPA 2006)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	All residential units are within one-quarter mile of parks, schools or other civic uses.

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		2006, SMAQMD 2007).						
MM D-12: Infill Development	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	3%-30%/High: Infill development reduces vehicle trips and VMT by 3% and 20%, respectively (Fehr & Peers 2007). CCAP identifies a site level VMT reduction range of 20%-30% (Dierkers et al. 2007).	Yes	Yes (Dierkers et al. 2007)	Yes (Dierkers et al. 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project site is on a vacant infill site, redevelopment area, or brownfield or greyfield lot that is highly accessible to regional destinations, where the destinations rating of the development site (measured as the weighted average travel time to all other regional destinations) is improved by 100% when compared to an alternate greenfield site.
Miscellaneous Measures								
MM D-13: Electric Lawnmower	LD (R, M), SP, AQP, RR, P/Area	1%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Provide a complimentary electric lawnmower to each residential buyer.

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
MM D-14: Enhanced Recycling/Waste Reduction, Reuse, Composting	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	NA/Low	Yes	Yes	Yes: Association with social awareness.	Adverse: No Beneficial: CAPs, TACs	CIWMB	Provide infrastructure/education that promotes the avoidance of products with excessive packaging, recycle, buying of refills, separating of food and yard waste for composting, and using rechargeable batteries.
MM D-15: LEED Certification	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	NA/Moderate	Yes: Receive tax rebates, incentives (e.g., EDAW San Diego office interior remodel cost $1,700,000 for 32,500 square feet) (USGBC 2007)	Yes	Yes: More than 700 buildings of different certifications in CA (USGBC 2007).	Adverse: No Beneficial: CAPs, TACs	USGBC, CA air quality management and control districts and cities/counties (e.g., BAAQMD).	LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.
MM D-16: Retro-Commissioning	LD (C, M), I, SP, AQP, RR, P/Stationary & Area	8%-10% reduction in energy usage/Moderate: (Mills et al. 2004)	Yes: Average $0.28/square feet, varies with building size (Haasl and Sharp 1999).	Yes	Yes: 27 projects underway in CA, 21 more to be completed in 2007, mostly state buildings owned by DGS (DGS 2007).	Adverse: No Beneficial: CAPs, TACs	DGS, CA air quality management and control districts and cities/counties (e.g., BAAQMD).	The process ensures that all building systems perform interactively according to the contract documents, the design intent and the owner's operational needs to optimize energy performance.
MM D-17 Landscaping	LD (R, C, M), I, SP, AQP, RR,	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	Alliance for the Chesapeake Bay, EPA Green Landscaping	Project shall use drought resistant native trees, trees with low emissions and high carbon

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	P/Stationary & Area						Resources	sequestration potential. Evergreen trees on the north and west sides afford the best protection from the setting summer sun and cold winter winds. Additional considerations include the use of deciduous trees on the south side of the house that will admit summer sun; evergreen plantings on the north side will slow cold winter winds; constructing a natural planted channel to funnel summer cooling breezes into the house. Neighborhood CCR's not requiring that front and side yards of single family homes be planted with turf grass. Vegetable gardens, bunch grass, and low-water landscaping shall also be permitted, or even encouraged.
MM D-18: Local Farmers' Market	LD (M), SP/Mobile, Stationary, &	NA/Low	Yes	Yes	Yes: Associated with social	Adverse: No Beneficial: CAPs, TACs	Cities/counties (e.g., Davis, Sacramento)	Project shall dedicate space in a centralized, accessible location for a weekly farmers' market.

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	Area				choice and public awareness.			
MM D-19: Community Gardens	LD (M), SP/Mobile, Stationary, & Area	NA/Low	Yes	Yes	Yes: Associated with social choice and public awareness.	Adverse: No Beneficial: CAPs, TACs	Cities/counties (e.g., Davis)	Project shall dedicate space for community gardens.
Energy Efficiency/Building Component								
MM E-1: High-Efficiency Pumps	LD (R, C, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., BAAQMD).	Project shall use high-efficiency pumps.
MM E-2: Wood Burning Fireplaces/Stoves	LD (R, M), SP, AQP, RR, P/Stationary & Area	NA/Low: EDAW 2006	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project does not feature fireplaces or wood burning stoves.
MM E-3: Natural Gas Stove	LD (R, M), SP, AQP, RR, P/Stationary & Area	NA/Low: EDAW 2006	Yes: Cost of stove—$350 (gas) and $360 (electric) same brand, total yearly cost of $42.17 as opposed to $56.65 for electric (Saving Electricity 2006).	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project features only natural gas or electric stoves in residences.

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MM E-4: Energy Star Roof	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	0.5%-1%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes: 866 Energy Star labeled buildings in California (Energy Star 2007)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project installs Energy Star labeled roof materials.
MM E-5: On-site Renewable Energy System	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	1%-3%/Moderate: SMAQMD presents this % reduction (USGBC 2002 and 2005, EDAW 2006, SMAQMD 2007).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project provides onsite renewable energy system(s). Nonpolluting and renewable energy potential includes solar, wind, geothermal, low-impact hydro, biomass and bio-gas strategies. When applying these strategies, projects may take advantage of net metering with the local utility.

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
MM E-6: Exceed Title 24	LD (R, C, M), I, GSP, AQP, RR, P/Stationary & Area	1%/Moderate: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (PG&E 2002, SMUD 2006)	Yes (PG&E 2002, SMUD 2006)	Adverse: No Beneficial: CAPs, TACs	PG&E, SMUD, CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project exceeds title 24 requirements by 20%.
MM E-7: Solar Orientation	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	0.5%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project orients 75% or more of homes and/or buildings to face either north or south (within 30° of N/S). Building design includes roof overhangs that are sufficient to block the high summer sun, but not the lower winter sun, from penetrating south facing windows. Trees, other landscaping features and other buildings are sited in such a way as to maximize shade in the summer and maximize solar access to walls and windows in the winter.
MM E-8: Nonroof Surfaces	LD (R, C, M), I, GSP, AQP, RR, P/Stationary & Area	1.0%/Low: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Provide shade (within 5 years) and/or use light-colored/high-albedo materials (reflectance of at least 0.3) and/or open grid pavement for at least 30% of the site's nonroof impervious surfaces, including parking lots, walkways, plazas, etc.; OR place a minimum of 50% of parking spaces underground or covered by structured parking; OR use an open-grid pavement system (less than 50% impervious) for a minimum of

Table 16
Mitigation Measure Summary

Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
								50% of the parking lot area. The mitigation measure reduces heat islands (thermal gradient differences between developed and undeveloped areas to minimize impact on microclimate and human and wildlife habitats. This measure requires the use of patented or copyright protected methodologies created by the ASTM. The SRI is a measure of the constructed surface's ability to reflect solar heat, as shown by a small rise in temperature. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is "0" and a standard white (reflectance 0.80, emittance 0.90) is 100. To calculate SRI for a given material, obtain the reflectance value and emittance value for the material. SRI is calculated according to ASTM E 1980-01. Reflectance is measured

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Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
								according to ASTM E 903, ASTM E 1918, or ASTM C 1549. Emittance is measured according to ASTM E 408 or ASTM C 1371. Default values for some materials will be available in the LEED-NC v2.2 Reference Guide.
MM E-9: Low-Energy Cooling	LD (C, M), I, SP, AQP, RR, P/Stationary & Area	1%-10%/Low: EDAW presents this percent reduction range (EDAW 2006).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: No Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Project optimizes building's thermal distribution by separating ventilation and thermal conditioning systems.
MM E-10: Green Roof	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	1.0%/Moderate: SMAQMD presents this % reduction (EDAW 2006, SMAQMD 2007).	Yes	Yes (USGBC 2002 and 2005)	Yes (USGBC 2002 and 2005)	Adverse: Increased Water Consumption Beneficial: CAPs, TACs	CA air quality management and control districts and cities/counties (e.g., SMAQMD).	Install a vegetated roof that covers at least 50% of roof area. The reduction assumes that a vegetated roof is installed on a least 50% of the roof area or that a combination high albedo and vegetated roof surface is installed that meets the following standard: (Area of SRI Roof/0.75)+(Area of vegetated roof/0.5) >= Total Roof Area. Water consumption reduction measures shall be considered in the design of the green roof.
MM E-11: EV Charging Facilities	LD (C, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: $500-$5000/ vehicle site (PG&E 1999)	Yes	Yes: 381 facilities in CA (Clean Air Maps 2007).	Adverse: No Beneficial: CAPs, TACs	DOE, EERE, CA air quality management and control districts and cities/counties (e.g., BAAQMD).	Project installs EV charging facilities.
MM E-12:	LD (R, C, M),	NA/Low: Increasing	Yes: Light	Yes	Yes: Apply	Adverse: No		Project provides light-colored

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
Light-Colored Paving	I, SP, AQP, RR, P/Stationary & Area	the albedo of 1,250 km of pavement by 0.25 would save cooling energy worth $15M per year.	colored aggregates and white cement are more expensive than gray cement. Certain blended cements are very light in color and may reflect similarly to white cement at an equivalent cost to normal gray cement.		natural sand or gravel colored single surface treatments to asphalt (EOE 2007).	Beneficial: CAPs, TACs		paving (e.g., increased albedo pavement).
MM E-13: Cool Roofs	LD (R, C, M), I, SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: 0.75–1.5/square feet coating (EPA 2007a)	Yes	Yes: Over 90% of the roofs in the United States are dark colored	Adverse: No Beneficial: CAPs, TACs	CEC	Project provides cool roofs. Highly reflective, highly emissive roofing materials that stay 50-60°F cooler than a normal roof under a hot summer sun. CA's Cool Savings

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Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
					(EPA 2007a).			Program provided rebates to building owners for installing roofing materials with high solar reflectance and thermal emittance. The highest rebate went to roofs on air conditioned buildings, while buildings with rooftop ducts and other nonresidential buildings were eligible for slightly less. The program aimed to reduce peak summer electricity demand and was administered by the CEC.
MM E-14: Solar Water Heaters	LD (R, M), SP, AQP, RR, P/Stationary & Area	20%–70% reduction in cooling energy needs/Moderate	Yes: $1675/20 square feet, requires a 50 gallon tank, annual operating cost of $176 (DOE 2007).	Yes	Yes: Based on solar orientation, building codes, zoning ordinances.	Adverse: No Beneficial: CAPs, TACs	Europe	Project provides solar water heaters.
MM E-15: Electric Yard Equipment Compatibility	LD (R, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: $75–$250/outlet from existing circuit (Cost Helper 2007).	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Project provides electrical outlets at building exterior areas.
MM E-16: Energy Efficient Appliance Standards	LD (R, C, M), SP, AQP, RR, P/Stationary & Area	NA/Low	Yes: Varies for each appliance—higher capital costs, lower operating costs (Energy	Yes	Yes: Major retail stores.	Adverse: No Beneficial: CAPs, TACs		Project uses energy efficient appliances (e.g., Energy Star).

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
			Star 2007).					
MM E-17: Green Building Materials	LD (R, C, M), SP, AQP, RR, P/Stationary & Area	NA/Low: 25-30% more efficient on average.	Yes	Yes: BEES software allows users to balance the environmental and economic performance of building products; developed by NIST (NIST 2007).	Yes	Adverse: No Beneficial: CAPs, TACs		Project uses materials which are resource efficient, recycled, with long life cycles and manufactured in an environmentally friendly way.
MM E-18: Shading Mechanisms	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: Up to $450 annual energy savings (Energy Star 2007).	Yes: Higher capital costs, lower operating and maintenance costs (Energy Star 2007).	Yes	Yes: Major retail stores.	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing shading mechanisms for windows, porch, patio and walkway overhangs.

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Mitigation Measure	Applicable Project/Source Type[1]	Effective		Feasible (Yes/No)		Secondary Effects (Yes/No)	Agency/Organization/Other[6]	Description/Comments
		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
MM E-19: Ceiling/Whole-House Fans	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: 50% more efficient than conventional fans (Energy Star 2007).	Yes: $45-$200/fan, installation extra (Lowe's 2007).	Yes	Yes: Major retail stores.	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing ceiling/whole-house fans.
MM E-20: Programmable Thermostats	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: $100 annual savings in energy costs (Energy Star 2007).	Yes: $60/LCD display and 4 settings for typical residential use (Lowe's 2007).	Yes	Yes: Major retail stores.	Adverse: Yes, Mercury Beneficial: CAPs, TACs		Install energy-reducing programmable thermostats that automatically adjust temperature settings.
MM E-21: Passive Heating and Cooling Systems	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low	Yes: $800 (wall heaters) to $4,000+ (central systems)	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing passive heating and cooling systems (e.g., insulation and ventilation).
MM E-22: Day Lighting Systems	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low	Yes: $1,300 to $1,500 depending upon the kind of roof (Barrier 1995), installation extra.	Yes	Yes: Work well only for space near the roof of the building, little benefit in multi-floor buildings.	Adverse: No Beneficial: CAPs, TACs		Install energy-reducing day lighting systems (e.g., skylights, light shelves and interior transom windows).
MM E-23: Low-Water Use Appliances	LD (R, C, M), I, SP, AQP, RR, P/Stationary, & Area	NA/Low: Avoided water agency cost for using water-efficient kitchen pre-rinse spray valves of $65.18 per acre-foot.	Yes: Can return their cost through reduction in water consumption,	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Require the installation of low-water use appliances.

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			pumping, and treatment.					
MM E-24: Goods Transport by Rail	LD (C, M), I, SP, AQP, RR, P/Mobile	NA/Moderate	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs	ARB Goods Movement Plan (ARB 2007)	Provide a spur at nonresidential projects to use nearby rail for goods movement.
Social Awareness/Education								
MM S-1: GHG Emissions Reductions Education	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile, Stationary, & Mobile	NA/Low	Yes	Yes	Yes: Similar programs currently exist in CA.	Adverse: No Beneficial: CAPs, TACs		Provide local governments, businesses, and residents with guidance/protocols/information on how to reduce GHG emissions (e.g., energy saving, food miles).
MM S-2: School Curriculum	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile, Stationary, & Mobile	NA/Low	Yes	Yes	Yes: Similar programs currently exist in CA.	Adverse: No Beneficial: CAPs, TACs		Include how to reduce GHG emissions (e.g., energy saving, food miles) in the school curriculum.
Construction								
MM C-1: ARB-Certified Diesel Construction Equipment	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes: Oxidation Catalysts, $1,000-	Yes	Yes	Adverse: Yes, NO_x Beneficial: CAPs, TACs	AG, EPA, ARB, and CA air quality management and pollution control districts.	Use ARB-certified diesel construction equipment. Increases CO_2 emissions when trapped CO and carbon particles

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		Emissions Reduction/Score[2]	Cost (Yes/No)[3]	Technical[4]	Logistical[5]			
			$2,000. DPF, $5000-$10,000; installation extra (EPA 2007b).					are oxidized (Catalyst Products 2007, ETC 2007).
MM C-2: Alternative Fuel Construction Equipment	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: Yes, THC, NO_x Beneficial: CO, PM, SO_x	AG, EPA, ARB, and CA air quality management and pollution control districts.	Use alternative fuel types for construction equipment. At the tailpipe biodiesel emits 10% more CO_2 than petroleum diesel. Overall lifecycle emissions of CO_2 from 100% biodiesel are 78% lower than those of petroleum diesel (NREL 1998, EPA 2007b).
MM C-3: Local Building Materials	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes: Depends on location of building material manufacture sites.	Adverse: No Beneficial: CAPs, TACs		Use locally made building materials for construction of the project and associated infrastructure.
MM C-4: Recycle Demolished Construction Material	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile	NA/Low	Yes	Yes	Yes	Adverse: No Beneficial: CAPs, TACs		Recycle/Reuse demolished construction material. Use locally made building materials for construction of the project and associated infrastructure.

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Miscellaneous								
MM M-1: Off-Site Mitigation Fee Program	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile & Area	NA/Moderate-High: Though there is currently no program in place, the potential for real and quantifiable reductions of GHG emissions could be high if a defensible fee program were designed.	Yes	Yes	No: Program does not exist in CA, but similar programs currently exist (e.g., Carl Moyer Program, SJVAPCD Rule 9510, SMAQMD Off-Site Construction Mitigation Fee Program).	Adverse: No Beneficial: CAPs, TACs		Provide/Pay into an off-site mitigation fee program, which focuses primarily on reducing emissions from existing development and buildings through retro-fit (e.g., increased insulation).
MM M-2: Offset Purchase	LD (R, C, M), I, SP, TP, AQP, RR, P/Mobile, Stationary, & Area	NA/Low	Yes	Yes	No: ARB has not adopted official program, but similar programs	No		Provide/purchase offsets for additional emissions by acquiring carbon credits or engaging in other market "cap and trade" systems.

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					currently exist.			
Regional Transportation Plan Measures								
MM RTP-1: Dedicate High Occupancy Vehicle (HOV) lanes prior to adding capacity to existing highways.	RTP		Yes	Yes	Yes	Adverse: possible local CO Beneficial: regional CAPs, TACs	Caltrans, local government	Evaluate the trip reduction (and GHG reduction) potential of adding HOV lanes prior to adding standard lanes.
MM RTP-2: Implement toll/user fee programs prior to adding capacity to existing highways.	RTP		Yes	Yes	Yes	Adverse: possible local CO. Beneficial: regional CAPs, TACs	Caltrans	Evaluate price elasticity and associated trip reduction (and GHG reduction) potential with adding or increasing tolls prior to adding capacity to existing highways.

Note:
[1] Where LD (R, C, M) =Land Development (Residential, Commercial, Mixed-Use), I=Industrial, GP=General Plan, SP=Specific Plan, TP=Transportation Plans, AQP=Air Quality Plans, RR=Rules/Regulations, and P=Policy. It is important to note that listed project types may not be directly specific to the mitigation measure (e.g., TP, AQP, RR, and P) as such could apply to a variety of source types, especially RR and P.
[2] This score system entails ratings of high, moderate, and low that refer to the level of the measure to provide a substantive, reasonably certain (e.g., documented emission reductions with proven technologies), and long-term reduction of GHG emissions.
[3] Refers to whether the measure would provide a cost-effective reduction of GHG emissions based on available documentation.
[4] Refers to whether the measure is based on currently, readily available technology based on available documentation.
[5] Refers to whether the measure could be implemented without extraordinary effort based on available documentation.
[6] List is not meant to be all inclusive.
Source: Data complied by EDAW in 2007

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
MS G-1: Adopt a GHG reduction plan	GP/ Mobile, Stationary, & Area	City of San Bernardino	- Adopt GHG reduction targets for the planning area, based on the current legislation providing direction for state-wide targets, and update the plan as necessary. -The local government agency should serve as a model by inventorying its GHG emissions from agency operations, and implementing those reduction goals.
Circulation			
MS G-2: Provide for convenient and safe local travel	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	- Create a gridded street pattern with small block sizes. This promotes walkability through direct routing and ease of navigation. -Maintain a high level of connectivity of the roadway network. Minimize cul-de-sacs and incomplete roadway segments. -Plan and maintain an integrated, hierarchical and multi-modal system of roadways, pedestrian walks, and bicycle paths throughout the area. -Apply creative traffic management approaches to address congestion in areas with unique problems, particularly on roadways and intersections in the vicinity of schools in the morning and afternoon peak hours, and near churches, parks and community centers. -Work with adjacent jurisdictions to address the impacts of regional development patterns (e.g. residential development in surrounding communities, regional universities, employment centers, and commercial developments) on the circulation system. -Actively promote walking as a safe mode of local travel, particularly for children attending local schools. -Employ traffic calming methods such as median landscaping and provision of bike or transit lanes to slow traffic, improve roadway capacity, and address safety issues.
MS G-3: Enhance the regional transportation network and maintain effectiveness	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Encourage the transportation authority to reduce fees for short distance trips. -Ensure that improvements to the traffic corridors do not negatively impact the operation of local roadways and land uses.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
			-Cooperate with adjacent jurisdictions to maintain adequate service levels at shared intersections and to provide adequate capacity on regional routes for through traffic. -Support initiatives to provide better public transportation. Work actively to ensure that public transportation is part of every regional transportation corridor. - Coordinate the different modes of travel to enable users to transfer easily from one mode to another. -Work to provide a strong paratransit system that promotes the mobility of all residents and educate residents about local mobility choices. - Promote transit-oriented development to facilitate the use of the community's transit services.
MS G-4: Promote and support an efficient public transportation network connecting activity centers in the area to each other and the region.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Promote increased use of public transportation and support efforts to increase bus service range and frequency within the area as appropriate. -Enhance and encourage provision of attractive and appropriate transit amenities, including shaded bus stops, to encourage use of public transportation. -Encourage the school districts, private schools and other operators to coordinate local bussing and to expand ride-sharing programs. All bussing options should be fully considered before substantial roadway improvements are made in the vicinity of schools to ease congestion.
MS G-5: Establish and maintain a comprehensive system, which is safe and convenient, of pedestrian ways and bicycle routes that provide viable options to travel by automobile.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Improve area sidewalks and rights-of-way to make them efficient and appealing for walking and bicycling safely. Coordinate with adjacent jurisdictions and regional agencies to improve pedestrian and bicycle trails, facilities, signage, and amenities. -Provide safe and convenient pedestrian and bicycle connections to and from town centers, other commercial districts, office complexes, neighborhoods, schools, other major activity centers, and surrounding communities. -Work with neighboring jurisdictions to provide well-designed pedestrian and bicycle crossings of major roadways. -Promote walking throughout the community. Install sidewalks where missing and make improvements

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
			to existing sidewalks for accessibility purposes. Particular attention should be given to needed sidewalk improvement near schools and activity centers. -Encourage businesses or residents to sponsor street furniture and landscaped areas. - Strive to provide pedestrian pathways that are well shaded and pleasantly landscaped to encourage use. - Attract bicyclists from neighboring communities to ride their bicycles or to bring their bicycles on the train to enjoy bicycling around the community and to support local businesses. - Meet guidelines to become nationally recognized as a Bicycle-Friendly community. - Provide for an education program and stepped up code enforcement to address and minimize vegetation that degrades access along public rights-of-way. -Engage in discussions with transit providers to increase the number of bicycles that can be accommodated on buses
MS G-6: Achieve optimum use of regional rail transit.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Support regional rail and work with rail authority to expand services. - Achieve better integration of all transit options. -Work with regional transportation planning agencies to finance and provide incentives for multimodal transportation systems. - Promote activity centers and transit-oriented development projects around the transit station.
MS G-7: Expand and optimize use of local and regional bus and transit systems.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Encourage convenient public transit service between area and airports. -Support the establishment of a local shuttle to serve commercial centers. -Promote convenient, clean, efficient, and accessible public transit that serves transit-dependent riders and attracts discretionary riders as an alternative to reliance on single-occupant automobiles.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
			- Empower seniors and those with physical disabilities who desire maximum personal freedom and independence of lifestyle with unimpeded access to public transportation. -Integrate transit service and amenities with surrounding land uses and buildings.
Conservation, Open Space			
MS G-8: Emphasize the importance of water conservation and maximizing the use of native, low-water landscaping.	GP/Stationary & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces. -Encourage the production, distribution and use of recycled and reclaimed water for landscaping projects throughout the community, while maintaining urban runoff water quality objectives. -Promote water conservation measures, reduce urban runoff, and prevent groundwater pollution within development projects, property maintenance, area operations and all activities requiring approval. -Educate the public about the importance of water conservation and avoiding wasteful water habits. -Work with water provider in exploring water conservation programs, and encourage the water provider to offer incentives for water conservation.
MS G-9: Improve air quality within the region.	GP/ Mobile, Stationary, & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Integrate air quality planning with area land use, economic development and transportation planning efforts. -Support programs that reduce air quality emissions related to vehicular travel. -Support alternative transportation modes and technologies, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use. -Encourage the use of clean fuel vehicles. -Promote the use of fuel-efficient heating and cooling equipment and other appliances, such as water

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
			heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, and boiler units. - Promote the use of clean air technologies such as fuel cell technologies, renewable energy sources. UV coatings, and alternative, non-fossil fuels. -Require the planting of street trees along streets and inclusion of trees and landscaping for all development projects to help improve airshed and minimize urban heat island effects. - Encourage small businesses to utilize clean, innovative technologies to reduce air pollution. - Implement principles of green building. - Support jobs/housing balance within the community so more people can both live and work within the community. To reduce vehicle trips, encourage people to telecommute or work out of home or in local satellite offices.
MS G-10: Encourage and maximize energy conservation and identification of alternative energy sources.	GP/ Stationary & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Encourage green building designs for new construction and renovation projects within the area. -Coordinate with regional and local energy suppliers to ensure adequate supplies of energy to meet community needs, implement energy conservation and public education programs, and identify alternative energy sources where appropriate. -Encourage building orientations and landscaping that enhance natural lighting and sun exposure. -Encourage expansion of neighborhood-level products and services and public transit opportunities throughout the area to reduce automobile use. - Incorporate the use of energy conservation strategies in area projects. - Promote energy-efficient design features, including appropriate site orientation, use of light color roofing and building materials, and use of evergreen trees and wind-break trees to reduce fuel consumption for heating and cooling.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
			-Explore and consider the cost/benefits of alternative fuel vehicles including hybrid, natural gas, and hydrogen powered vehicles when purchasing new vehicles. -Continue to promote the use of solar power and other energy conservation measures. - Encourage residents to consider the cost/benefits of alternative fuel vehicles. - Promote the use of different technologies that reduce use of non-renewable energy resources. -Facilitate the use of green building standards and LEED in both private and public projects. -Promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code, and encourage energy-efficient design elements, as appropriate. -Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment. - Investigate the feasibility of using solar (photovoltaic) street lights instead of conventional street lights that are powered by electricity in an effort to conserve energy. - Encourage cooperation between neighboring development to facilitate on-site renewable energy supplies or combined heat and power co-generation facilities that can serve the energy demand of contiguous development.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
MS G-11: Preserve unique community forests, and provide for sustainable increase and maintenance of this valuable resource.	GP/Stationary & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	- Develop a tree planting policy that strives to accomplish specific % shading of constructed paved and concrete surfaces within five years of construction. -Provide adequate funding to manage and maintain the existing forest, including sufficient funds for tree planting, pest control, scheduled pruning, and removal and replacement of dead trees. -Coordinate with local and regional plant experts in selecting tree species that respect the natural region in which Claremont is located, to help create a healthier, more sustainable urban forest. - Continue to plant new trees (in particular native tree species where appropriate), and work to preserve mature native trees. -Increase the awareness of the benefits of street trees and the community forest through a area wide education effort. -Encourage residents to properly care for and preserve large and beautiful trees on their own private property.
Housing			
MS G-12: Provide affordability levels to meet the needs of community residents.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Encourage development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low and moderate income households near public transportation services. -Ensure a portion of future residential development is affordable to low and very low income households.
Land Use			
MS G-13: Promote a visually-cohesive urban form and establish connections between the urban core and outlying portions of the	GP/ Mobile, Stationary, & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Preserve the current pattern of development that encourages more intense and higher density development at the core of the community and less intense uses radiating from the central core. -Create and enhance landscaped greenway, trail and sidewalk connections between neighborhoods and to commercial areas, town centers, and parks.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
community.			-Identify ways to visually identify and physically connect all portions of the community, focusing on enhanced gateways and unifying isolated and/or outlying areas with the rest of the area. -Study and create a diverse plant identity with emphasis on drought-resistant native species.
MS G-14: Provide a diverse mix of land uses to meet the future needs of all residents and the business community.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Attract a broad range of additional retail, medical, and office uses providing employment at all income levels. -Support efforts to provide beneficial civic, religious, recreational, cultural and educational opportunities and public services to the entire community. -Coordinate with public and private organizations to maximize the availability and use of parks and recreational facilities in the community. -Support development of hotel and recreational commercial land uses to provide these amenities to local residents and businesses.
MS G-15: Collaborate with providers of solid waste collection, disposal and recycling services to ensure a level of service that promotes a clean community and environment.	GP/ Stationary, & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Require recycling, composting, source reduction and education efforts throughout the community, including residential, businesses, industries, and institutions, within the construction industry, and in all sponsored activities.
MS G-16: Promote construction, maintenance and active use of publicly- and privately-operated parks, recreation programs, and a community center.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Work to expand and improve community recreation amenities including parks, pedestrian trails and connections to regional trail facilities. -As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system. -Research options or opportunities to provide necessary or desired community facilities.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
MS G-17: Promote the application of sustainable development practices.	GP/ Mobile, Stationary, & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	- Encourage sustainable development that incorporates green building best practices and involves the reuse of previously developed property and/or vacant sites within a built-up area. - Encourage the conservation, maintenance, and rehabilitation of the existing housing stock. -Encourage development that incorporates green building practices to conserve natural resources as part of sustainable development practices. -Avoid development of isolated residential areas in the hillsides or other areas where such development would require significant infrastructure investment, adversely impact biotic resources. - Provide land area zoned for commercial and industrial uses to support a mix of retail, office, professional, service, and manufacturing businesses.
MS G-18: Create activity nodes as important destination areas, with an emphasis on public life within the community.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Provide pedestrian amenities, traffic-calming features, plazas and public areas, attractive streetscapes, shade trees, lighting, and retail stores at activity nodes. -Provide for a mixture of complementary retail uses to be located together to create activity nodes to serve adjacent neighborhoods and to draw visitors from other neighborhoods and from outside the area.
MS G-19: Make roads comfortable, safe, accessible, and attractive for use day and night.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Provide crosswalks and sidewalks along streets that are accessible for people with disabilities and people who are physically challenged. -Provide lighting for walking and nighttime activities, where appropriate. -Provide transit shelters that are comfortable, attractive, and accommodate transit riders.
MS G-20: Maintain and expand where possible the system of neighborhood connections that attach neighborhoods to larger roadways.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	- Provide sidewalks where they are missing, and provide wide sidewalks where appropriate with buffers and shade so that people can walk comfortably. -Make walking comfortable at intersections through traffic-calming, landscaping, and designated crosswalks.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
			-Look for opportunities for connections along easements & other areas where vehicles not permitted.
MS G-21: Create distinctive places throughout the area.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	-Provide benches, streetlights, public art, and other amenities in public areas to attract pedestrian activities. -Encourage new developments to incorporate drought tolerant and native landscaping that is pedestrian friendly, attractive, and consistent with the landscaped character of area. -Encourage all new development to preserve existing mature trees. -Encourage streetscape design programs for commercial frontages that create vibrant places which support walking, bicycling, transit, and sustainable economic development. -Encourage the design and placement of buildings on lots to provide opportunities for natural systems such as solar heating and passive cooling. - Ensure that all new industrial development projects are positive additions to the community setting, provide amenities for the comfort of the employees such as outdoor seating area for breaks or lunch, and have adequate landscape buffers.
MS G-22: Reinvest in existing neighborhoods and promote infill development as a preference over new, greenfield development	GP/ Mobile, Stationary, & Area	Cities/Counties (e.g., Aliso Viejo, Claremont)	- Identify all underused properties in the plan area and focus development in these opportunity sites prior to designating new growth areas for development. - Implement programs to retro-fit existing structures to make them more energy-efficient. -Encourage compact development, by placing the desired activity areas in smaller spaces.

Table 17 General Planning Level Mitigation Strategies Summary			
Strategy	Source Type[1]	Agency/Organization[2]	Description/Comments
Public Safety			
MS G-23: Promote a safe community in which residents can live, work, shop, and play.	GP/ Mobile	Cities/Counties (e.g., Aliso Viejo, Claremont)	- Foster an environment of trust by ensuring non-biased policing, and by adopting policies and encouraging collaboration that creates transparency. - Facilitate traffic safety for motorists and pedestrians through proper street design and traffic monitoring.

Note:
[1] Where GP=General Plan.
[2] List is not meant to be all inclusive.
Source: Data complied by EDAW in 2007

Appendix C

Rule and Regulation Summary

Table 18 Rule and Regulation Summary					
Rule/Regulation	Reduction	Implementation Date	Agency	Description	Comments
Low Carbon Fuel Standard	10-20 MMT CO_2e by 2020	January 1, 2010	ARB	This rule/regulation will require fuel providers (e.g., producers, importers, refiners and blenders) to ensure that the mix of fuels they sell in CA meets the statewide goal to reduce the carbon intensity of CA's transportation fuels by at least 10% by the 2020 target.	ARB Early Action Measure
Reduction of HFC-134a Emissions from Nonprofessional Servicing of Motor Vehicle Air Conditioning Systems	1-2 MMT CO_2e by 2020	January 1, 2010	ARB	This rule/regulation will restrict the use of high GWP refrigerants for nonprofessional recharging of leaky automotive air conditioning systems.	ARB Early Action Measure
Landfill Gas Recovery	2-4 MMT CO_2e by 2020	January 1, 2010	IWMB, ARB	This rule/regulation will require landfill gas recovery systems on small to medium landfills that do not have them and upgrade the requirements at landfills with existing systems to represent best capture and destruction efficiencies.	ARB Early Action Measure
Vehicle Climate Change Standards (AB 1493 Pavley, Chapter 200, Statutes of 2002)	30 MMT CO_2e by 2020	2009	ARB	This rule/regulation will require ARB to achieve the maximum feasible and cost effective reduction of GHG emissions from passenger vehicles and light-duty trucks.	ARB Early Action Measure
Reduction of PFCs from the Semiconductor Industry	0.5 MMT CO_2e by 2020	2007–2009	ARB	This rule/regulation will reduce GHG emissions by process improvements/source reduction, alternative chemicals capture and beneficial reuse, and destruction technologies	Underway or to be initiated by CAT members in 2007-2009 period

AB=Assembly Bill; ARB=California Air Resources Board; Calfire=California Fire; CA=California; Caltrans=California Department of Transportation; CAT=California Action Team; CEC=California Energy Commission; CDFA=California Department of Food and Agriculture; CH_4=Methane; CO_2=Carbon Dioxide; CPUC=California Public Utilities Commission; CUFR=California Urban Forestry; DGS=Department of General Services; DWR=Department of Water Resources; GHG=Greenhouse Gas; GWP=Global Warming Potential; IGCC= Integrated Gasification Combined Cycle; IOU= Investor-Owned Utility; IT=Information Technology; IWCB= Integrated Waste Management Board; LNG= Liquefied Natural Gas; MMT CO_2e=Million Metric Tons Carbon Dioxide Equivalent; MW=Megawatts; NA=Not Available; N_2O=Nitrous Oxide; PFC= Perfluorocompound; POU= Publicly Owned Utility; RPS= Renewable Portfolio Standards; RTP=Regional Transportation Plan SB=Senate Bill; SWP=State Water Project; TBD=To Be Determined; UC/CSU=University of California/California State University; ULEV=Ultra Low Emission Vehicle.

Table 18 Rule and Regulation Summary					
Rule/Regulation	Reduction	Implementation Date	Agency	Description	Comments
Restrictions on High GWP Refrigerants	9 MMT CO_2e by 2020	2010	ARB	This rule/regulation will expand and enforce the national ban on release of high GWP refrigerants during appliance lifetime.	ARB Early Action Measure
Cement Manufacture	<1 MMT CO_2e per year (based on 2004 production levels)	2010	Caltrans	This rule/regulation will allow 2.5% interground limestone concrete mix in cement use.	CAT Early Action Measure
Hydrogen Fuel Standards (SB 76 of 2005)	TBD	By 2008	CDFA	This rule/regulation will develop hydrogen fuel standards for use in combustion systems and fuel cells.	CAT Early Action Measure
Regulation of GHG from Load Serving Entities (SB 1368)	15 MMT CO_2e by 2020	May 23, 2007	CEC, CPUC	This rule/regulation will establish a GHG emission performance standard for baseload generation of local publicly owned electric utilities that is no higher than the rate of emissions of GHG for combined-cycle natural gas baseload generation.	CAT Early Action Measure
Energy Efficient Building Standards	TBD	In 2008	CEC	This rule/regulation will update of Title 24 standards.	CAT Early Action Measure
Energy Efficient Appliance Standards	TBD	January 1, 2010	CEC	This rule/regulation will regulate light bulb efficiency	CAT Early Action Measure
Tire Efficiency (Chapter 8.7 Division 15 of the Public Resources Code)	<1 MMT CO_2e by 2020	January 1, 2010	CEC & IWMB	This rule/regulation will ensure that replacement tires sold in CA are at least as energy efficient, on average, as tires sold in the state as original equipment on these vehicles.	CAT Early Action Measure
New Solar Homes Partnership	TBD	January 2007	CEC	Under this rule/regulation, approved solar systems will receive incentive funds based on system performance above building standards.	CAT Early Action Measure

Table 18 Rule and Regulation Summary					
Rule/Regulation	Reduction	Implementation Date	Agency	Description	Comments
Water Use Efficiency	1 MMT CO_2e by 2020	2010	DWR	This rule/regulation will adopt standards for projects and programs funded through water bonds that would require consideration of water use efficiency in construction and operation.	CAT Early Action Measure
State Water Project	TBD	2010	DWR	This rule/regulation will include feasible and cost effective renewable energy in the SWP's portfolio.	CAT Early Action Measure
Cleaner Energy for Water Supply	TBD	2010	DWR	Under this rule/regulation, energy supply contracts with conventional coal power plants will not be renewed.	CAT Early Action Measure
IOU Energy Efficiency Programs	4 MMT CO_2e by 2020	2010	CPUC	This rule/regulation will provide a risk/reward incentive mechanism for utilities to encourage additional investment in energy efficiency; evaluate new technologies and new measures like encouraging compact fluorescent lighting in residential and commercial buildings	CAT Early Action Measure
Solar Generation	TBD	2007–2009	DGS	3 MW of clean solar power generation implemented in CA last year, with another 1 MW coming up. The second round is anticipated to total additional 10 MW and may include UC/CSU campuses and state fairgrounds.	Underway or to be initiated by CAT members in 2007-2009 period

AB=Assembly Bill; ARB=California Air Resources Board; Calfire=California Fire; CA=California; Caltrans=California Department of Transportation; CAT=California Action Team; CEC=California Energy Commission; CDFA=California Department of Food and Agriculture; CH_4=Methane; CO_2=Carbon Dioxide; CPUC=California Public Utilities Commission; CUFR=California Urban Forestry; DGS=Department of General Services; DWR=Department of Water Resources; GHG=Greenhouse Gas; GWP=Global Warming Potential; IGCC= Integrated Gasification Combined Cycle; IOU= Investor-Owned Utility; IT=Information Technology; IWCB= Integrated Waste Management Board; LNG= Liquefied Natural Gas; MMT CO_2e=Million Metric Tons Carbon Dioxide Equivalent; MW=Megawatts; NA=Not Available; N_2O=Nitrous Oxide; PFC= Perfluorocompound; POU= Publicly Owned Utility; RPS= Renewable Portfolio Standards; RTP=Regional Transportation Plan SB=Senate Bill; SWP=State Water Project; TBD=To Be Determined; UC/CSU=University of California/California State University; ULEV=Ultra Low Emission Vehicle.

Table 18 Rule and Regulation Summary					
Rule/Regulation	Reduction	Implementation Date	Agency	Description	Comments
Transportation Efficiency	9 MMT CO_2e by 2020	2007–2009	Caltrans	This rule/regulation will reduce congestion, improve travel time in congested corridors, and promote coordinated, integrated land use.	Underway or to be initiated by CAT members in 2007-2009 period
Smart Land Use and Intelligent Transportation	10 MMT CO_2e by 2020	2007–2009	Caltrans	This rule/regulation will integrate consideration of GHG reduction measures and energy efficiency factors into RTPs, project development etc.	Underway or to be initiated by CAT members in 2007-2009 period
Cool Automobile Paints	1.2 to 2.0 MMT CO_2e by 2020	2009	ARB	Cool paints would reduce the solar heat gain in a vehicle and reduce air conditioning needs.	ARB Early Action Measure
Tire Inflation Program	TBD	2009	ARB	This rule/regulation will require tires to be checked and inflated at regular intervals to improve fuel economy.	ARB Early Action Measure
Electrification of Stationary Agricultural Engines	0.1 MMT CO_2e by 2020	2010	ARB	This rule/regulation will provide incentive funding opportunities for replacing diesel engines with electric motors.	ARB Early Action Measure
Desktop Power Management	Reduce energy use by 50%	2007–2009	DGS, ARB	This rule/regulation will provide software to reduce electricity use by desktop computers by up to 40%.	Currently deployed in DGS
Reducing CH_4 Venting/Leaking from Oil and Gas Systems (EJAC-3/ARB 2-12)	1 MMT CO_2e by 2020	2010	ARB	This rule/regulation will reduce fugitive CH_4 emissions from production, processing, transmission, and distribution of natural gas and oil.	ARB Early Action Measure
Replacement of High GWP Gases Used in Fire Protection Systems with Alternate Chemical (ARB 2-10)	0.1 MMT CO_2e by 2020	2011	ARB	This rule/regulation will require the use of lower GWP substances in fire protection systems.	ARB Early Action Measure
Contracting for Environmentally Preferable Products	NA	2007–2009	DGS	New state contracts have been or are being created for more energy and resource efficient IT goods, copiers, low mercury fluorescent lamps, the CA Gold Carpet Standard and office furniture.	Underway or to be initiated by CAT members in 2007-2009 period
Hydrogen Fuel Cells	NA	2007–2009	DGS	This rule/regulation will incorporate clean hydrogen fuel cells in stationary applications	Underway or to be initiated by CAT members in 2007-2009

Table 18 Rule and Regulation Summary					
Rule/Regulation	Reduction	Implementation Date	Agency	Description	Comments
				at State facilities and as back-up generation for emergency radio services.	period
High Performance Schools	NA	2007–2009	DGS	New guidelines adopted for energy and resource efficient schools; up to $100 million in bond money for construction of sustainable, high performance schools.	Underway or to be initiated by CAT members in 2007-2009 period
Urban Forestry	1 MMT CO_2e by 2020	2007–2009	Calfire, CUFR	This rule/regulation will provide five million additional trees in urban areas by 2020.	Underway or to be initiated by CAT members in 2007-2009 period
Fuels Management/Biomass	3 MMT CO_2e by 2020	2007–2009	Calfire	This rule/regulation will provide biomass from forest fuel treatments to existing biomass utilization facilities.	Underway or to be initiated by CAT members in 2007-2009 period
Forest Conservation and Forest Management	10 MMT CO_2e by 2020	2007–2009	Calfire, WCB	This rule/regulation will provide opportunities for carbon sequestration in Proposition 84 forest land conservation program to conserve an additional 75,000 acres of forest landscape by 2010.	Underway or to be initiated by CAT members in 2007-2009 period
Afforestation/Reforestation	2 MMT CO_2e by 2020	2007–2009	Calfire	This rule/regulation will subsidize tree planting.	Underway or to be initiated by CAT members in 2007-2009 period
Dairy Digesters	TBD	January 1, 2010	CDFA	This rule/regulation will develop a dairy digester protocol to document GHG emission reductions from these facilities.	ARB Early Action Measure

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Table 18 Rule and Regulation Summary					
Rule/Regulation	Reduction	Implementation Date	Agency	Description	Comments
Conservation Tillage and Enteric Fermentation	1 MMT CO_2e by 2020	2007–2009	CDFA	This rule/regulation will develop and implement actions to quantify and reduce enteric fermentation emissions from livestock and sequester soil carbon using cover crops and conservation tillage.	Underway or to be initiated by CAT members in 2007-2009 period
ULEV	TBD	2007–2009	DGS	A new long term commercial rental contract was released in March 2007 requiring a minimum ULEV standard for gasoline vehicles and requires alternative fuel and hybrid-electric vehicles.	Underway or to be initiated by CAT members in 2007-2009 period
Flex Fuel Vehicles	370 metric tons CO_2, 0.85 metric tons of CH_4, and 1.14 metric tons of N_2O	2007–2009	DGS	Under this rule/regulation, DGS is replacing 800 vehicles with new, more efficient vehicles.	Underway or to be initiated by CAT members in 2007-2009 period
Climate Registry	TBD	2007–2009	DGS	Benchmarking and reduction of GHG emissions for state owned buildings, leased buildings and light duty vehicles.	Underway or to be initiated by CAT members in 2007-2009 period
Municipal Utilities Electricity Sector Carbon Policy	Included in SB 1368 reductions	2007–2009	CEC, CPUC, ARB	Under this rule/regulation, GHG emissions cap policy guidelines for CA's electricity sector (IOUs and POUs).	Underway or to be initiated by CAT members in 2007-2009 period
Alternative Fuels: Nonpetroleum Fuels	TBD	2007–2009	CEC	State plan to increase the use of alternative fuels for transportation; full fuel cycle assessment.	Underway or to be initiated by CAT members in 2007-2009 period
Zero Waste/High Recycling Strategy	5 MMT CO_2e by 2020	2007–2009	IWMB	This rule/regulation will identify materials to focus on to achieve GHG reduction at the lowest possible cost; Builds on the success of 50% Statewide Recycling Goal.	Underway or to be initiated by CAT members in 2007-2009 period
Organic Materials Management	TBD	2007–2009	IWMB	This rule/regulation will develop a market incentive program to increase organics diversion to the agricultural industry.	Underway or to be initiated by CAT members in 2007-2009 period
Landfill Gas Energy	TBD	2007–2009	IWMB	Landfill Gas to Energy & LNG/biofuels	Underway or to be initiated by CAT members in 2007-2009 period

Table 18 Rule and Regulation Summary					
Rule/Regulation	Reduction	Implementation Date	Agency	Description	Comments
Target Recycling	TBD	2007–2009	IWMB	This rule/regulation will focus on industry/public sectors with high GHG components to implement targeted commodity recycling programs.	Underway or to be initiated by CAT members in 2007-2009 period
Accelerated Renewable Portfolio Standard	Included in SB 1368 reductions	2007–2009	CPUC	This rule/regulation will examine RPS long term planning and address the use of tradable renewable energy credits for RPS compliance.	Underway or to be initiated by CAT members in 2007-2009 period
CA Solar Initiative	1 MMT CO_2e by 2020	2007–2009	CPUC	Initiative to deliver 2000 MWs of clean, emissions free energy to the CA grid by 2016.	Underway or to be initiated by CAT members in 2007-2009 period
Carbon Capture and Sequestration	TBD	2007–2009	CPUC	Proposals for power plants with IGCC and/or carbon capture in the next 18 months.	Underway or to be initiated by CAT members in 2007-2009
Source: Data complied by EDAW in 2007					

AB=Assembly Bill; ARB=California Air Resources Board; Calfire=California Fire; CA=California; Caltrans=California Department of Transportation; CAT=California Action Team; CEC=California Energy Commission; CDFA=California Department of Food and Agriculture; CH_4=Methane; CO_2=Carbon Dioxide; CPUC=California Public Utilities Commission; CUFR=California Urban Forestry; DGS=Department of General Services; DWR=Department of Water Resources; GHG=Greenhouse Gas; GWP=Global Warming Potential; IGCC= Integrated Gasification Combined Cycle; IOU= Investor-Owned Utility; IT=Information Technology; IWCB= Integrated Waste Management Board; LNG= Liquefied Natural Gas; MMT CO_2e=Million Metric Tons Carbon Dioxide Equivalent; MW=Megawatts; NA=Not Available; N_2O=Nitrous Oxide; PFC= Perfluorocompound; POU= Publicly Owned Utility; RPS= Renewable Portfolio Standards; RTP=Regional Transportation Plan SB=Senate Bill; SWP=State Water Project; TBD=To Be Determined; UC/CSU=University of California/California State University; ULEV=Ultra Low Emission Vehicle.

DRAFT

COUNTY OF SAN DIEGO

INTERIM GUIDELINES FOR DETERMINING SIGNIFICANCE AND REPORT FORMAT AND CONTENT REQUIREMENTS

CLIMATE CHANGE

LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

Circulated for Public Review
October 23, 2008 to November 21, 2008

APPROVAL

I hereby certify that these **Interim Guidelines for Determining Significance and Report Format and Content Requirements for Climate Change** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and Technical Report Format and Content Requirements and were considered by the Director of Planning and Land Use, in coordination with the Director of Public Works on the __th day of _____, 2008.

_____
ERIC GIBSON
Director of Planning and Land Use

_____
JOHN SNYDER
Director of Public Works

I hereby certify that these **Interim Guidelines for Determining Significance and Report Format and Content Requirements for Climate Change** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and Technical Report Format and Content Requirements and have hereby been approved by the Deputy Chief Administrative Officer (DCAO) of the Land Use and Environment Group on the __th day of _____, 2008. The Director of Planning and Land Use is authorized to approve revisions to these Guidelines for Determining Significance and Report Format and Content Requirements for Climate Change, except any revisions to the Guidelines for Determining Significance presented in Chapter 4.0 must be approved by the Deputy CAO.

Approved, Month XX, 2008

_____
CHANDRA WALLAR
Deputy CAO

DRAFT

COUNTY OF SAN DIEGO

INTERIM GUIDELINES FOR DETERMINING SIGNIFICANCE

CLIMATE CHANGE

LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

Circulated for Public Review
October 23, 2008 to November 21, 2008

EXPLANATION

These Interim Guidelines for Determining Significance for Climate Change and the information presented herein shall be used by County staff for the review of discretionary projects and environmental documents pursuant to the California Environmental Quality Act (CEQA). These Guidelines present a range of quantitative, qualitative, and performance levels for particular environmental effects. Normally, (in the absence of substantial evidence to the contrary), an affirmative response to any one Guideline will mean the project will result in a significant effect, whereas effects that do not meet any of the Guidelines will normally be determined to be "less than significant." Section 15064(b) of the State CEQA Guidelines states:

> "The determination whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on factual and scientific data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

The purpose of these Guidelines is to provide for a consistent and objective evaluation of significant effects. These Guidelines are 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. The County reserves the right to modify these Guidelines in the event of scientific discovery or alterations in factual data that may alter the common application of a Guideline.

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List of Acronyms

APCD	Air Pollution Control District
AB 32	Assembly Bill 32 Global Warming Solutions Act of 2006
AG	Attorney General
ARB	Air Resources Board
ASTM	American Society of Testing and Material
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CAT	Climate Action Team
CCAP	Center for Clean Air Policy
CCAR	California Climate Action Registry
CDFA	California Department of Food and Agriculture
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF	Connectivity Factor
CH4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CNG	Compressed Natural Gas
CPUC	California Public Utilities Commission
CUFR	California Urban Forestry
DGS	Department of General Services
DOE	U.S. Department of Energy
DOF	Department of Finance
DPF	Diesel Particulate Filter
DWR	Department of Water Resources
E85	85% Ethanol
EEA	Massachusetts Executive Office of Energy and Environmental Affairs
EERE	Energy Efficiency and Renewable Energy
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EV	Electric Vehicles
FAR	Floor Area Ratio
GHG	Greenhouse Gas
GGEP	Greenhouse Gas Emissions Policy
GGRP	Greenhouse Gas Reduction Plan
GP	General Plan
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
IT	Information Technology
ITE	Institute of Transportation Engineers
LEED	Leadership in Energy and Environmental Design
LNG	Liquefied Natural Gas
MMT	Million Metric Tons
MW	Megawatts

N_2O	Nitrous Oxide
NO_X	Oxides of Nitrogen
NREL	National Renewable Energy Laboratory
OPR	State Office of Planning and Research
PFC	Perfluorocarbon
PM	Particulate Mater
ROG	Reactive Organic Gas
RPS	Renewable Portfolio Standards
RTP	Regional Transportation Plan
S-3-05	Executive Order S-3-05
SB	Senate Bill
SDCGHGI	San Diego County Greenhouse Gas Inventory
SO_x	Sulfur Oxides
SP	Service Population
SRI	Solar Reflectance Index
SWP	State Water Project
TAC	Toxic Air Contaminants
THC	Total Hydrocarbon
ULEV	Ultra Low Emission Vehicle
UNFCCC	United Nations Framework Convention on Climate Change
URBEMIS	Urban Emissions Model
USGBC	U.S. Green Building Council
VMT	Vehicle Miles Traveled

INTRODUCTION

This document provides guidance for evaluating the adverse environmental effects that a proposed land development project may have on global climate change (GCC) due to its emissions of greenhouse gases (GHGs). Most scientists believe that GCC is caused by GHGs, or gases that trap heat in the atmosphere. New development typically results in increased emissions of GHGs due to additional vehicular use, energy use, and other resource use. To help reduce GHG emissions in California, the California Global Warming Solutions Act of 2006 (AB 32) mandates significant reductions in GHGs. Senate Bill 97, enacted in 2007, amends the CEQA statute and clearly establishes that GHG emissions and the effects of GCC are appropriate subjects for CEQA analysis. It directs the State Office of Planning and Research (OPR) to develop draft CEQA Guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions" by July 1, 2009 and directs the Resources Agency to certify and adopt the revised CEQA Guidelines by January 1, 2010. As additional guidance from the State is provided, these Guidelines will be updates as needed.

Although most projects have some potential to generate GHGs, these guidelines present screening criteria to identify the types of projects that will be required to prepare a Climate Change Analysis. Projects that would generate 900 metric tons or more of GHGs will be required to prepare a Climate Change Analysis and demonstrate that the project would not conflict with the goals and strategies established in AB 32 to reduce GHG emissions to 1990 levels by the year 2020. This screening criterion is based on the California Air Pollution Control Officers Association (CAPCOA) white paper which considered various methods of evaluating and addressing greenhouse gas emissions under CEQA to assist local governments in creating significance thresholds. According to the CAPCOA white paper, 900 metric tons of GHG emissions are generally produced by a 50 unit subdivision, a 35,000 square foot commercial or office center, or 11,000 square feet of retail.

In addition to analyzing project level GHG emissions, CEQA also requires that decision makers consider the potential impacts of Climate Change on a project. For example, a project located in a low lying coastal area may be inundated if the ocean levels continue to rise. However, due to the project specific nature of the potential effects of climate change on proposed projects, this document does not create a guideline for determining significance for the potential impact of Climate Change on a project. The Climate Change Report Format and Content Requirements require that the climate change analysis include a discussion of the potential impacts of Climate Change on the project.

1.0 GENERAL PRINCIPLES AND EXISTING CONDITIONS

GHGs have been at the center of a widely contested political, economic, and scientific debate surrounding GCC. Although the conceptual existence of GCC is generally accepted, the extent to which GHGs contribute to it remains a source of debate. The State of California has been at the forefront of developing solutions to address GCC. GCC refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of the land. The accumulation of GHG emissions in the atmosphere has been associated with global warming, or an average increase in the temperature of the atmosphere near the Earth's surface. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon), in conjunction with other human activities, appears to be closely associated with global warming.

State law defines GHG as being any of the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) (Health and Safety Code, section 38505(g).) Carbon dioxide, followed by methane and nitrous oxide, are the most common GHGs that result from human activity.

1.1 <u>Sources and Global Warming Potentials of GHG</u>

The State of California GHG Inventory performed by the California Air Resources Board (CARB), compiled statewide anthropogenic GHG emissions and sinks. It includes estimates for CO_2, CH_4, N_2O, SF_6, HFCs, and PFCs. The current inventory covers the years 1990 to 2004 (Table 1 and 2). Data sources used to calculate this GHG inventory include California and federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the Intergovernmental Panel on Climate Change (IPCC). The 1990 emissions level is the sum total of emissions and removals from all sectors and categories in the inventory. The inventory is divided into seven broad sectors of economic activity within California. These sectors include: Agriculture; Commercial; Electricity Generation; Forestry; Industrial; Residential; and, Transportation.

Table 1 – State of California GHG Emissions by Sectors in 1990* (433 $MMTCO_2e$ Gross Emissions)

Sector	Total Emissions ($MMTCO_2e$)	Percent of Total Emissions
Agriculture	23.4	5%
Commercial	14.4	3%
Electricity Generation	110.6	26%
Forestry (excluding sinks)	0.2	<1%
Industrial	103.0	24%
Residential	29.7	7%
Transportation	150.7	35%
Forestry Sinks	-6.7	--

* The remaining 1.3 $MMTCO_2e$ are from unspecified fuel combustion which could not be attributed to an individual sector. Percents may not total 100 due to rounding.

Table 2 – State of California GHG Emissions by Sectors in 2004* (484 $MMTCO_2e$ Gross Emissions)

Sector	Total Emissions ($MMTCO_2e$)	Percent of Total Emissions
Agriculture	27.9	6%
Commercial	12.8	3%
Electricity Generation	119.8	25%
Forestry (excluding sinks)	0.2	<1%
Industrial	96.2	20
Residential	29.1	6%
Transportation	182.4	38%
Forestry Sinks	-4.7	--

* The remaining 16.0 $MMTCO_2e$ are from unspecified fuel combustion which could not be attributed to an individual sector. Percents may not total 100 due to rounding.

When accounting for GHGs, all types of GHGs emissions are expressed in CO_2 equivalents (CO_2e) and are typically quantified in metric tons (MT) or millions of metric tons (MMT). Each GHG has variable Global Warming Potential (GWP) and atmospheric lifetime. GWP is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming over a specific time interval. The time interval is defined by the atmospheric lifetime of the GHG, or the average time the

molecule stays stable in the atmosphere. The GWP is based on the atmospheric lifetime and the CO_2e which compares the gas in question to that of the same mass of carbon dioxide, which as a GWP of 1. The GWP and atmospheric lifetimes of common GHGs is provided in Table 3.

Table 3 - Global Warming Potentials and Atmospheric Lifetimes of Basic GHGs

GHG	Formula	100-year global warming potential*	Atmospheric lifetime (yrs)
Carbon dioxide	CO_2	1	Variable
Methane	CH_4	21	12 ± 3
Nitrous oxide	N_2O	310	120
Sulphur hexafluoride	SF_6	23,900	3 200

* The warming effects over a 100-year time frame relative to other greenhouse gases. (USEPA 2006)

In addition to the State of California GHG Inventory, a more specific regional GHG inventory was prepared by the University of San Diego School of Law Energy Policy Initiative Center[2]. This San Diego County Greenhouse Gas Inventory (SDCGHGI) is a detailed inventory that takes into account the unique characteristics of the region in calculating emissions. The GHG inventory calculated GHG emissions for 1990, 2006 and projected out for 2020. Based on this inventory and the emissions projections for the region, the study found that emissions of GHGs must be reduced by 33 percent below business as usual in order for San Diego County to achieve 1990 emissions levels by the year 2020. Businesses as usual, or forecasted emissions, are defined as the emissions that would have occurred in the absence of AB 32's mandated reductions. Construction of buildings using only Title 24 building standards (or simply relying on the 2006 version of the County Building Code) would create GHG emissions as forecasted.

Areas where feasible reductions can occur and the strategies for achieving these reductions are outlined in the SDCGHGI study and are used as the basis for determining whether a project would conflict with the goals of AB 32 in accordance with the interim guideline for determining significance established in this document. A summary of the various sectors that contribute to GHGs in San Diego County, total emissions, and the percent contribution for each sector is provided in Table 4.

[2] The document is titled, "San Diego County Greenhouse Gas Inventory: An Analysis of Regional Emissions and Strategies to Achieve AB 32 Targets" and is available online at http://www.sandiego.edu/epic/ghginventory/.

Table 4 – San Diego County GHG Emissions by Category (2006)*

Sector	Total Emissions (MMTCO2e)	Percent of Total Emissions
On-Road Transportation	16	46%
Electricity	9	25%
Natural Gas Consumption	3	9%
Civil Aviation	1.7	5%
Industrial Processes & Products	1.6	5%
Other Fuels / Other	1.1	4%
Off-Road Equipment & Vehicles	1.3	4%
Waste	0.7	2%
Agriculture/Forestry/Land Use	0.7	2%
Rail	0.3	1%
Water-Borne Navigation	127,000 metric tons	0.4%

* Energy Policy Initiative Center, University of San Diego School of Law

The sources of GHG emissions, GWP, and atmospheric lifetime of GHGs are all important variables to be considered in the process of calculating CO_2e for discretionary land use projects that require a climate change analysis.

2.0 EXISTING REGULATIONS AND POLICIES

All levels of government have some responsibility for the protection of air quality, and each level (Federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

2.1 National and International Efforts

International and Federal legislation have been enacted to deal with climate change issues. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

In October 1993, President Clinton announced his Climate Change Action Plan, which had a goal of returning GHG emissions to 1990 levels by the year 2000. This was to be accomplished through 50 initiatives that relied on innovative voluntary partnerships between the private sector and government aimed at producing cost-effective reductions in GHG emissions. On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change. Recently, the United States Supreme Court declared in the court case of Massachusetts et al. v. Environmental Protection Agency et al., 549 C.S. 497 (2007) that the EPA does have the ability to regulate GHG emissions. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs.

2.2 State Regulations and Standards

Assembly Bill 32, the California Climate Solutions Act of 2006[3]

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006, into law. In general, AB 32 directs the CARB to do the following:

- Make publicly available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit;
- Make publicly available a GHG inventory for the year 1990 and determine target levels for 2020;
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources that CARB finds necessary to achieve the statewide GHG emissions limit; and
- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

Regarding the first two bullets, CARB has already made available a list of discrete early action GHG emission reduction measures. CARB has also published a staff report titled

[3] Health and Safety Code Section 38500 *et seq*.

California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit that determined the statewide levels of GHG emissions in 1990. CARB identified 427 million metric tons of CO2 as the total statewide aggregated greenhouse gas 1990 emissions level and 2020 emissions limit.

Senate Bill 97

Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs OPR to develop draft CEQA Guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions" by July 1, 2009 and directs the Resources Agency to certify and adopt the CEQA Guidelines by January 1, 2010.

Executive Order #S-3-05

Executive Order #S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions by 2050. Executive Order #S-3-05 also calls for the California EPA (CalEPA) to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy. The first of these reports, "Our Changing Climate: Assessing Risks to California", and its supporting document, "Scenarios of Climate Change in California: An Overview" (herein referred to as the Climate Scenarios report), was published by the California Climate Change Center in 2006.

State Standards Addressing Vehicular Emissions

Regulations aimed at on-road transportation emissions will be the primary source of emission reductions of GHGs by the year 2020. To this end, AB 1493, or the Pavley Bill, set the standard for new light-duty passenger vehicles. Once implemented, emissions from these vehicles are expected to be reduced in San Diego County by 21 percent by 2020. The federal Corporate Average Fuel Economy (CAFE) standard determines the fuel efficiency of certain vehicle classes in the United States. The current standard has remained largely unchanged since 1990. In 2007, as part of the Energy and Security Act of 2007, CAFE standards were increased for new light-duty vehicles to 35 miles per gallon by 2020. These increases in fuel efficiency translate into reductions of GHG emissions. In addition, the Low Carbon Fuel Standard (LCFS) was included in a California Governor's Executive Order that was promulgated in January 2007. This strategy addresses the type of fuel used in vehicles. Efficiency standards affect the total amount of fuel used, whereas the low-carbon fuel standard seeks to reduce the carbon content of the fuel, therefore reducing GHG emissions even if total fuel consumption is not reduced. The Low-Carbon Fuel Standard has been approved by CARB as a discrete early action item under AB 32 and implementing regulations are currently under development. It is assumed that the effects of the Low-Carbon Fuel Standard would be a 10% reduction in GHG emissions from fuel use by 2020.

2.3 Local Regulations and Standards

The County is working to develop a comprehensive strategy that will enhance the sustainability of County business operations and communities, building on the many energy efficient and environmentally sound practices already in place in County departments. Additionally, the County is working on a General Plan Update. The update is based on smart growth and land planning principles that will reduce Vehicle Miles Traveled (VMT), and thus result in a reduction of GHGs. This will be accomplished by locating future development within and near existing infrastructure. The General Plan Update will result in an implementation plan, with respect to the reduction of GHGs, which will include the following actions:

- Prepare a climate change action plan with a baseline inventory and emissions reduction targets for greenhouse gas emissions from all sources;

- Develop regulations and procedures to encourage the design and construction of new buildings in accordance with "green building" programs; and

- Develop regulations that encourage the use of energy recovery, as well as photovoltaic and wind energy in appropriate areas;

Currently, the County has a number of aggressive outreach and small business assistance programs that promote ways to reduce air and water pollution. This includes a Green Building Program which is designed to educate builders and provide incentives for the incorporation of green building standards (http://www.sdcounty.ca.gov/dplu/greenbuildings.html). Additionally, there are outreach programs that focus on the importance of reducing air quality impacts (lawn mower trade-in program) and reducing solid waste by recycling (compost bin give always and transfer station events).

The County is also making its own effort to reduce its carbon footprint. The County has various internal policies in place to reduce GHG emissions from County operations. The County Board of Supervisor's Policy B-67 requires that preference be given to products which conform to the Minimum Recycled Content Standards. This includes purchases and is used by the County of San Diego, its contractors, and its grantees in its procurement practices. Similarly, the County has established design standards (Board Policy G-15) for County facilities that set forth appropriate techniques, materials, and technology to improve public accessibility, energy performance, resource utilization, and the work environment. In the recent past, several county facilities have either been built to LEED standards or have incorporated renewable energy resources such as photovoltaics.

3.0. TYPICAL ADVERSE EFFECTS AND CLIMATE CHANGE ANALYSIS SCREENING CRITERIA

3.1 Typical Adverse Effects

The Climate Scenarios report, published in 2006 by the California Climate Change Center, uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century. Three warming ranges are identified: lower warming range [3.0 to 5.5 degrees Fahrenheit (^{o}F)]; medium warming range (5.5 to 8.0^{o}F); and higher warming range (8.0 to 10.5^{o}F). The Climate Scenarios report then presents an analysis of the future projected climate changes in California under each warming range scenario.

According to the report, substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California. These impacts would result from a projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. These impacts are described below.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to O_3 formation are projected to increase by 25 to 35 percent under the lower warming range and 75 to 85 percent under the medium warming range. In addition, if global background O_3 levels increase as is predicted in some scenarios, it may become impossible to meet local air quality standards. An increase in wildfires could also occur, and the corresponding increase in the release of PM2.5 (which can travel long distances depending on wind conditions) could further compromise air quality. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, Los Angeles and Sacramento, by the year 2100, could experience as many as 100 more days per year with temperatures above90^{o}F and95^{o}F respectively. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If GHG emissions continue unabated, more precipitation may fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming scenario, snowpack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snowpack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack would pose challenges to water managers, hamper hydropower generation, and could eliminate all skiing and other snow-related recreational activities.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality of water within the southern edge of the Sacramento/San Joaquin River Delta. The Delta accounts for a portion of San Diego County's water supply and is a major source of water for the State as a whole.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry, reducing the quantity and quality of agricultural products statewide. Significant reductions in available water supply to support agriculture will impact production. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development will change, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate O_3 pollution, which will in turn make plants more susceptible to disease and pests and interfere with plant growth.

Plant growth tends to be slow at low temperatures and increase up to a certain point with rising temperatures. Faster growth, however, can result in less-than-optimal development for many crops, thus decreasing the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Ecosystems/Habitats

Continued global warming will likely shift the ranges of existing invasive plants and weeds, thus altering competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new weed species will fill the emerging gaps. Continued global warming is also likely to increase the populations of many pests, lead to the emergence of new types of pests, and increase pathogen growth rates amongst these pests. The effects of these changes on ecosystems are largely unknown. The potential exists, however, for these changes to have significant impacts on the health of the various ecosystems located in the County and the State.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Wildland Fires

Global warming is expected to increase the risk of wildfire and alter the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State. For example, an increase in precipitation (a potential result of a rise in temperatures) could lead to a 30 percent increase in southern California wildfires by the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by as much as 90 percent.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

3.2 Climate Change Analysis Screening Criteria

Discretionary (non-industrial) projects that are greater than or equal to the project sizes listed in Table 5 must perform a climate change analysis. The project sizes shown below represent the project sizes that are estimated to emit approximately 900 metric tons of GHGs. These emissions levels are based on the amount of vehicle trips each project type would generate, the typical energy and water use associated with these projects, and other factors. The need for a climate change analysis for project types not listed in Table 5 will be evaluated on a case-by-case basis, using the 900 metric ton figure as a general gauge for determining which projects will require an analysis.

The 900 metric ton screening threshold for determining when an air quality analysis is required was chosen based on available guidance from the CAPCOA white paper (http://www.capcoa.org/) on addressing greenhouse gas emissions under CEQA. The CAPCOA white paper references a 900 metric ton guideline as a conservative threshold for requiring further analysis and mitigation.

This approach ensures that new development with the potential to make cumulatively considerable contributions to climate change, will incorporate appropriate mitigation measures and not result in a conflict with the goals of AB 32.

Table 5 – Project Type Examples* that Require Climate Change Analysis and Mitigation Measures

Project Type	Project Size that Generates Approximately 900 metric Tons of GHGs per Year
Single Family Residential	50 units
Apartments / Condominiums	70 units
General Commercial Office Space	35,000 square feet
Retail Space	11,000 square feet
Supermarket / Grocery Space	6,300 square feet

* A determination on the need for a climate change analysis for project types that do not fit the categories in this table (mixed use/industrial) will be made on a case-by-case basis, based on whether a project could generate 900 metric tons or more of GHGs.

4.0 GUIDELINE FOR DETERMINING SIGNIFICANCE

The guideline for determining significance discussed below has been developed from AB 32. This guideline addresses the potential cumulative impacts that a project's GHG emissions could have on Climate Change. Since Climate Change is a global phenomenon, no direct impact would be indentified for an individual land development project. For projects that exceed the screening criteria detailed in Section 3.2, an affirmative response to the following Guideline will generally be considered a significant impact to climate change as a result of project implementation, in the absence of scientific evidence to the contrary:

- ***The project will conflict with the goals and strategies of AB 32 to reduce GHGs to 1990 levels by 2020.***

Projects that meet the criteria for conducting a climate change analysis will be required to perform a GHG inventory to determine GHG emissions associated with project implementation and operation under business as usual conditions. As stated earlier, business as usual is defined as the emissions that would have occurred in the absence of the mandated reductions. Based on the significance guideline, applicable projects will have to demonstrate how project design measures and/or mitigation measures will reduce GHG emissions to enable the region to reduce GHG emissions to 1990 levels by the year 2020. The SDCGHGI has prepared the most comprehensive assessment of the regions GHG emissions and has outlined an approach that will allow the region to achieve the 1990 levels by the year 2020.

According to the SDCGHGI, the region must reduce its GHG emissions by 33 percent from business as usual to achieve 1990 emissions levels by the year 2020. In order for projects to demonstrate that they do not conflict with the goals and policies of AB 32, those that exceed the screening criteria will need to prepare a climate change inventory

and demonstrate that the construction, operational, and vehicular emissions associated with the project will be reduced by 33 percent from business as usual emissions levels. According to the SDCGHGI, a majority of the region's emissions are attributable to on-road transportation. Similarly, a majority of emissions resulting from land development projects will often be attributable to on-road transportation emissions. According to the SDCHGHI study, the emissions reductions for on-road transportation will be achieved in a variety of ways, including through regulations aimed at increasing fuel efficiency standards and decreasing vehicle emissions.

5.0 STANDARD MITIGATION AND PROJECT DESIGN CONSIDERATIONS

In order to meet emissions reduction targets, the region will need to reduce VMT by 10 percent. Therefore, individual development projects will be required to demonstrate that project emissions associated with VMT will meet the 10 percent reduction while operational and construction emissions would need to be reduced by 33 percent below business as usual. Table 6 provides a summary of these general emissions reductions requirements for individual projects.

Table 6 – Required Emissions Reductions for Projects that Require Preparation of a Climate Change Analysis

	Construction and Operational Emissions	***On-road vehicular emissions***
Required Emissions Reductions	33 Percent of total Construction and Operational Emissions	10 Percent of total VMT

The Climate Change Report Format and Content Requirements further detail the methodologies, modeling and other requirements for a climate change analysis.

The following project design or mitigation measures are examples that may be applied to a project to reduce GHG emissions to at least 33% below BAU. Project mitigation or design measures will vary depending on the type project, the type of GHG emissions, and various other factors that would be detailed in the climate change analysis. It is not intended that each mitigation measure identified in this section be applied to every project or that the mitigation be written exactly as presented herein. Similarly, a project may require mitigation that is not specifically identified in this document. Table 16 in Appendix B of the CAPCOA white paper is devoted to mitigation measures[4] and is an excellent resource for additional mitigation measures. A non-exclusive list of mitigation measures are described below.

[4] See http://www.capcoa.org/ceqa/CAPCOA%20White%20Paper%20-%20CEQA%20and%20Climate%20Change.pdf for the CAPCOA White Paper and refer to Appendix B, Mitigation Measure Summary.

5.1 Generally Applicable Measures

Energy Efficiency

- Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.
- Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.
- Install light colored “cool” roofs, cool pavements, and strategically placed shade trees.
- Provide information on energy management services for large energy users.
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems.
- Install light emitting diodes (LEDs) for traffic, street and other outdoor lighting.
- Limit the hours of operation of outdoor lighting.
- Use solar heating, automatic covers, and efficient pumps and motors for pools and spas.
- Provide education on energy efficiency.

Renewable Energy

- Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.
- Install solar panels on carports and over parking areas.
- Use combined heat and power in appropriate applications.

Water Conservation and Efficiency

- Create water-efficient landscapes.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water.
- Design buildings to be water-efficient. Install water-efficient fixtures and appliances.
- Use greywater. (Greywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines.) For example, install dual plumbing in all new development allowing greywater to be used for landscape irrigation.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.
- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the

environment. (Retaining storm water runoff on- site can drastically reduce the need for energy-intensive imported water at the site.)

- Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.
- Provide education about water conservation and available programs and incentives.

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.

Land Use Measures

- Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.
- Incorporate public transit into project design.
- Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.
- Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.

Transportation and Motor Vehicles

- Use low or zero-emission vehicles, including construction vehicles.
- Promote ride sharing programs e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides.
- Create car sharing programs. Accommodations for such programs include providing parking spaces for the car share vehicles at convenient locations accessible by public transportation.
- Create local “light vehicle” networks, such as neighborhood electric vehicle (NEV) systems.
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations
- Build or fund a transportation center where various public transportation modes intersect.
- Provide shuttle service to public transit.
- Provide public transit incentives such as free or low-cost monthly transit passes.
- Promote “least polluting” ways to connect people and goods to their destinations.

- Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.
- Incorporate bicycle-friendly intersections into street design.
- For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.
- Work with the school district to restore or expand school bus services.

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United States Environmental Protection Agency. National Emission Standards For Hazardous Air Pollutants. Code of Federal Regulations. Title 40; Chapter 1; Part 6

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COUNTY OF SAN DIEGO

GUIDELINES FOR DETERMINING SIGNIFICANCE

CLIMATE CHANGE

LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

June 20, 2012

APPROVAL

I hereby certify that these **Guidelines for Determining Significance and Report Format and Content Requirements for Climate Change** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and Technical Report Format and Content Requirements and were considered by the Director of Planning and Land Use, in coordination with the Director of Public Works on the 20th day of June, 2012.

_____
ERIC GIBSON
Director of Planning and Land Use

_____
RICHARD CROMPTON
Director of Public Works

I hereby certify that these **Guidelines for Determining Significance and Report Format and Content Requirements for Climate Change** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and Technical Report Format and Content Requirements and have hereby been approved by the Deputy Chief Administrative Officer (DCAO) of the Land Use and Environment Group on the 20th day of June, 2012. The Director of Planning and Land Use is authorized to approve revisions to these Guidelines for Determining Significance and Report Format and Content Requirements for Climate Change, except revisions to the Guidelines for Determining Significance presented in Chapter 4.0 must be approved by the Deputy CAO.

Approved, June 20, 2012

_____
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COUNTY OF SAN DIEGO

GUIDELINES FOR DETERMINING SIGNIFICANCE

CLIMATE CHANGE

LAND USE AND ENVIRONMENT GROUP

Department of Planning and Land Use
Department of Public Works

June 20, 2012

EXPLANATION

These Guidelines for Determining Significance for Climate Change (Significance Guidelines) and the information presented herein shall be used by County staff for the review of discretionary projects and environmental documents pursuant to the California Environmental Quality Act (CEQA). These Significance Guidelines present a range of quantitative, qualitative, and performance levels for particular environmental effects. Normally (in the absence of substantial evidence to the contrary), an affirmative response will mean the project will result in a significant effect, whereas effects that do not meet any of the Significance Guidelines will normally be determined to be "less than significant." Section 15064(b) of the State CEQA Guidelines states:

> *"The determination whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on factual and scientific data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."*

The purpose of these Significance Guidelines is to provide for a consistent and objective evaluation of significant effects. These Significance Guidelines are 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. The County reserves the right to modify these Significance Guidelines in the event of scientific discovery or new factual data that may alter the common application of a significance threshold.

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List of Acronyms

APCD	Air Pollution Control District
AB 32	Assembly Bill 32, The Global Warming Solutions Act of 2006
APS	Alternative Planning Strategy
ARB	Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BACM	Best Available Control Measure
BOS	County of San Diego Board of Supervisors
CalEEMod	California Emissions Estimator Model
CAP	Climate action plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH_4	Methane
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
EIR	Environmental Impact Report
EPIC	Univ. of San Diego School of Law Energy Policy Initiative Center
GHG	Greenhouse Gas
GWP	Global Warming Potential
HFC	Hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
MPO	Metropolitan Planning Organization
MT	Metric tons
MMT	Million metric tons
N_2O	Nitrous Oxide
NF_3	Nitrogen triflouride
OPR	Governor's Office of Planning and Research
PFC	Perfluorocarbon
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SCS	Sustainable Communities Strategy
S-3-05	Executive Order S-3-05
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SF_6	Sulfur hexafluoride
UNFCCC	United Nations Framework Convention on Climate Change
URBEMIS	Urban Emissions Model
VMT	Vehicle miles traveled
VOC	Volatile organic compound

INTRODUCTION

Based on the serious risk that climate change poses to the economic well-being, public health, natural resources, and the environment of California, the State of California enacted legislation intended to reduce greenhouse gas (GHG) emissions. The Global Warming Solutions Act of 2006, also known as Assembly Bill 32 (AB 32) establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions.

AB 32 requires reduction of statewide GHG emissions to 1990 levels by 2020. The Air Resources Board (ARB) adopted its Climate Change Scoping Plan to identify the main strategies California will implement to achieve GHG emissions reductions from each emissions sector of the state's GHG inventory, consistent with the provisions of AB 32.

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 GHG emissions, consistent with Legislature's directive in Public Resources Code section 21083.05 (enacted as part of SB97 [Chapter 185, Statutes 2007]).[1,2] These changes took effect in 2010.

Local governments throughout California have enacted plans, programs, policies, and standards intended to reduce GHG emissions, including the County of San Diego (the County) and cities within San Diego County. Local governments throughout California are taking advantage of the various co-benefits of GHG-efficient planning. Even if reducing GHG emissions is not a priority, there are many local co-benefits of GHG-efficient planning.[3] Land use and transportation policies that reduce vehicle miles traveled (VMT) and promote alternatives to automobile travel also can reduce household and business transportation costs, reduce harmful air pollution (other than GHGs), enhance mobility, and reduce time spent commuting. Compact development (which reduces GHGs) can also be more efficient to serve with public infrastructure and services. GHG-reducing measures and policies that promote energy efficiency reduce GHGs and can also save on household and business utility costs. Encouraging reinvestment and revitalization of existing developed areas can reduce VMT and GHGs, but also helps to conserve important open space functions elsewhere, such as agriculture, recreation, watershed protection, and others, by accommodating population and employment growth in already developed areas.[4]

Local lead agencies have taken a variety of approaches to addressing GHG emissions impacts in the context of local CEQA documents. This document provides a viable and

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[1] The CEQA Guidelines are found in the California Code of Regulations, title 14, sections 15000-15387.

[2] The Natural Resources Agency, in consultation with the Office of Planning and Research (OPR), is required to certify, adopt, and amend the Guidelines at least once every two years.

[3] Bollen, J. et al. "Co-Benefits of Climate Change Mitigation Policies: Literature Review and New Results", OECD Economics Department Working Papers, No. 693, OECD Publishing. 2009.

[4] A sampling of co-benefits was outlined in Governor Schwarzenegger's Executive Order S-3-05.

substantiated approach to assessing significance for use by the County. The foundation of this document is regional data – inclusive of San Diego County cities, as well as the unincorporated areas. While this document was created for use by the County, it offers an approach that may be used by other lead agencies in the San Diego region, which have substantial discretion in analytical approaches and assessing significance under CEQA.

This report summarizes the County's approach for developing Significance Guidelines to address GHG emissions impacts; guidance in determining the appropriate threshold for projects, assessing significance, and mitigating impacts; and updating the Significance Guidelines over time. An Appendix includes additional information related to analysis methods, assumptions, and background documentation related to the development of these Significance Guidelines. In addition, the County's "*Report Format and Content Requirements*" document, under separate cover, provides instructions for analyzing and reporting GHG emissions for projects and plans.

In addition to GHG emissions, another important component of climate change for local governments is adapting to the future effects of a changing climate. Changing climate conditions are expected to have serious repercussions for public health, biodiversity, water supply and flooding, agriculture and forestry, wildfire risk, public infrastructure and facilities, and other issues. Communities prone to these effects will need to analyze and mitigate the impacts of climate change on projects, identify areas most vulnerable to these impacts, and develop risk reduction strategies. The State of California intends to work collaboratively to address these impacts, as noted in the 2009 California Climate Adaptation Strategy.[5]

Climate change analysis should include a discussion of the potential impacts of climate change on a project. Due to the specific nature of these potential effects on proposed projects, such impacts would typically be addressed in the other associated CEQA issue areas (water supply, water quality, habitat, wildfire risk, etc.), and only cross-referenced in the GHG section of the CEQA document.

1.0 GENERAL PRINCIPLES AND EXISTING CONDITIONS

GHGs play a critical role in determining the earth's surface temperature. Outgoing infrared radiation is absorbed by GHGs, resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth. Some human activities have increased atmospheric GHG levels in excess of natural ambient concentrations. This has led to a trend of unnatural warming of the earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate.[6]

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[5] California Natural Resources Agency. (2009). California Climate Adaptation Strategy. Available online at: http://www.climatechange.ca.gov/adaptation/. Accessed July 16, 2011.

[6] Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC. Geneva, Switzerland. Available: http://www.ipcc.ch/ipccreports/ar4-wg1.htm.

Although there are dozens of GHGs, State law defines GHG as being any of the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen triflouride (NF_3).[7,8] CO_2 equivalent (CO_2e) is a measurement used to account for the fact that different GHGs have different global warming potentials based on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, 1 ton of CH_4 has the same contribution to the greenhouse effect as approximately 21 tons of CO_2 on a 100-year timescale, making CH_4 a much more potent GHG than CO_2.[9]

1.1 Sources of GHG Emissions

It is important to consider the main sources of GHG emissions when lead agencies conduct analysis and assess GHG emissions related impacts attributable to discretionary projects.

ARB maintains a statewide GHG emissions inventory. The ARB inventory includes estimates of the amount of GHGs emitted to and removed from the atmosphere. ARB's current inventory covers the seven compounds defined as GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3) for the years 2000 through 2008 (Table 1). Emissions estimates are presented by "Scoping Plan categories" which represent the major sectors identified for emissions reductions strategies in the ARB Scoping Plan. These include: transportation, electric power, commercial and residential, industrial, recycling and waste, high global warming potential, agriculture, and forestry.[10] ARB's GHG inventory and forecast 2020 emissions are used as important metrics in implementing AB 32. The Scoping Plan identifies the main GHG emission sectors that account for the majority of GHG emissions generated within California. A brief description of each of the GHG emission sectors is provided below:

- **Transportation**: This sector represents the GHG emissions associated with motor vehicles, recreational vehicles, aviation, ships, and rail.

- **Electric Power**: This sector represents the GHG emissions associated with use and production of electrical energy. GHG emissions associated with out-of-state electricity production are also included as part of this sector.

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[7] California Health and Safety Code Section 38505(g).

[8] The first six compounds listed here were also highlighted in the 2009 U.S. EPA Proposed Endangerment and Cause or Contribute Findings for GHGs under the Clean Air Act (Endangerment Finding) in the Federal Register. The Endangerment Finding is based on Section 202(a) of the CAA, which states that the EPA Administrator should regulate and develop standards for "emission[s] of air pollution from any class of classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare."

[9] California Climate Action Registry. 2009 (January). California Climate Action Registry General Reporting Protocol, Version 3.1. Los Angeles, CA. Available: http://www.climateregistry.org/resources/docs/protocols/grp/GRP_3.1_January2009.pdf. Last updated January 2009. Accessed July 12, 2011. See Appendix C, "Calculation References."

[10] California Air Resources Board. Greenhouse Gas Inventory Data - 2000 to 2008. Available: http://www.arb.ca.gov/cc/inventory/data/data.htm. Accessed July 12, 2011.

- **Commercial and Residential**: Commercial and residential GHG emission sources include area sources, such as landscape maintenance equipment, fireplaces, and natural gas consumption for space and water heating.

- **Industrial**: This sector represents the GHG emissions associated with industrial land uses (e.g., manufacturing plants, refineries). Industrial sources are predominately comprised of stationary sources (e.g., boilers, engines) associated with process emissions.

- **Recycling and Waste**: This sector represents the GHG emissions associated with waste management facilities and landfills.

- **High Global Warming Potential**: This sector represents the generation of high global warming potential GHGs. Examples of high global warming potential GHG sources include refrigerants (e.g., HFCs), industrial gases (i.e. PFCs and NF_3), and electrical insulation (e.g., SF_6). Although these GHGs are typically generated in much smaller quantities than CO_2, their high global warming potential results in considerable CO_2e.

- **Agriculture**: This sector represents the GHG emissions associated with agricultural processes. Agricultural sources of GHG emissions include off-road farm equipment, irrigation pumps, residue burning, livestock, and fertilizer volatilization.

- **Forestry**: This sector includes emissions from forest and rangeland fires; disturbances, such as pest damage; development of rangelands; timber harvest slash; fuel wood; wood waste; and other sources. ARB also tracks sinks, or sequestration, associated with forestry.

The University of San Diego School of Law Energy Policy Initiative Center (EPIC) prepared a regional GHG inventory to examine specific emissions sources and levels in San Diego County, inclusive of the cities (Table 2).[11]

Transportation is the most important emissions sector for the state and for the San Diego region. Transportation accounts for a higher proportion of GHG emissions in San Diego compared to the state, while electricity-related emissions represent the same proportion relative to the state as a whole. Industrial and agricultural emissions are substantially less represented in San Diego County compared to the state.

[11] The document is titled, "San Diego County Greenhouse Gas Inventory: An Analysis of Regional Emissions and Strategies to Achieve AB 32 Targets" and is available online at http://www.sandiego.edu/epic/ghginventory/.

Table 1 – State of California GHG Emissions by Sector in 2008

Sector	Total Emissions (MMT CO_2e)	Percent of Total Emissions
Transportation	174.99	37%
Electric Power	116.35	24%
Commercial and Residential	43.13	9%
Industrial	92.66	19%
Recycling and Waste	6.71	1%
High Global Warming Potential	15.65	3%
Agriculture	28.06	6%
Forestry	0.19	0%
Total	477.74	100%

Note: Table above does not include estimated carbon sinks from forestry of 3.98 million metric tons.
Source: ARB 2011.

Table 2 – San Diego County GHG Inventory (2005)

Sector	Total Emissions (MMT CO_2e)	Percent of Total Emissions
Transportation	19.7	58%
Electricity	8.3	24%
Natural Gas End Uses	2.9	9%
Industrial Processes and Products	1.6	5%
Waste	0.4	1%
Other/Other Fuels	1.3	4%
Agriculture (Livestock)	0.1	0%
Wildfires	0.3	1%
Development (Loss of Vegetation)	0.2	1%
Sequestration from Land Cover	-0.7	-2%
Total	34	100%

Source: EPIC 2011.

2.0 EXISTING REGULATIONS AND POLICIES

International, federal, state, regional, local, and governmental efforts have addressed GHG emissions and climate change. The following is a brief summary of these efforts.

2.1 Federal and International Efforts

A variety of international and federal actions have sought to address climate change. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change (IPCC). IPCC reports provide scientific consensus on measurable changes to the climate; establish that these changes are caused by human activity; and identify that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.[12] In October 1993, President Clinton introduced the Climate Change Action Plan, with the goal of returning GHG emissions to 1990 levels by the year 2000.[13] In 1994, the United States joined countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). The U.S Supreme Court ruled on April 2nd, 2007 that CO_2 is an air pollutant as defined under the CAA, and that the Environmental Protection Agency (EPA) has the authority to regulate GHG emissions.[14]

2.2 State Regulations and Standards

Assembly Bill 32, The California Global Warming Solutions Act of 2006[15]

The California Global Warming Solutions Act of 2006 (AB 32) enacted Sections 38500–38599 of the California Health and Safety Code. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires reduction of statewide GHG emissions to 1990 levels by 2020. In 2008, ARB adopted the Climate Change Scoping Plan, which identifies the main strategies California will implement to achieve the required reductions. The Scoping Plan states that land use planning and urban growth decisions will play an important role in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions.

Senate Bill 97

SB 97 (Chapter 185, Statutes of 2007; Public Resources Code, Sections 21083.05 and 21097) acknowledges that climate change is a prominent environmental issue that

[12] Intergovernmental Panel on Climate Change. Available: http://www.ipcc.ch/. Accessed: July 13, 2011.
[13] President William J. Clinton and Vice President Albert Gore, Jr. 1993 (October). The Climate Change Action Plan.
[14] United States Environmental Protection Agency (U.S. EPA). 2011. Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. Available: http://www.epa.gov/climatechange/endangerment.html. Accessed: July 21, 2011.
[15] Health and Safety Code Section 38500 *et seq*.

requires analysis under CEQA. The California Natural Resources Agency adopted amendments to the CEQA Guidelines (California Code of Regulations, title 14, sections 15000-15387) to address 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.

Senate Bill 375

SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan (RTP).[16] City or County land use policies (including General Plans) are not required to be consistent with the RTP (and associated SCS or APS).[17] The ARB targets for the San Diego Association of Governments (SANDAG) region call for a 7% reduction in GHG emissions per capita from automobiles and light duty trucks compared to 2005 levels by 2020, and a 13% reduction by 2035.[18]

Executive Order S-3-05

Executive Order S-3-05 proclaims that California is vulnerable to the impacts of climate change, including increased temperatures that could reduce the Sierra Nevada's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the executive order established targets for emissions reductions to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

Executive Order S-13-08

Executive Order S-13-08 directs state agencies to address sea level rise in assessment, coordination, and planning based on scenarios for the years 2050 and 2100.

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[16] This bill also extends the minimum time period for the Regional Housing Needs Allocation (RNHA) cycle to create a closer match with the timelines for revising RTPs (for the Metropolitan Planning Organizations affected by the bill). The RHNA is used to guide the amount of housing to be accommodated for the full range of household incomes in mandatory local housing plans (Housing Elements).

[17] Provisions of CEQA directed under this legislation create streamlining for certain projects that are consistent with an approved SCS or APS. Residential or mixed-use projects that are consistent with the SCS/APS and incorporate mitigation measures from relevant prior CEQA document/s are not required to reference, describe, or discuss growth-inducing impacts or impacts of cars and light-duty truck trips on climate change or on the regional transportation network. "Transit priority projects," as defined in this legislation and future RTPs, are exempt from CEQA review.

[18] California Air Resources Board (ARB). News Release: California Takes the First Step Toward More Livable, Sustainable Communities. Release #: 10-50. September 23, 2010. Available: http://www.arb.ca.gov/newsrel/newsrelease.php?id=154. Accessed September 19, 2011. California Air Resources Board (ARB). Staff Report. Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. Date of Release: August 9th, 2010. Available: http://arb.ca.gov/cc/sb375/staffreport_sb375080910.pdf. Accessed September 19, 2011.

2.3 Local Policy

Legislation and executive orders related to climate change in California have established a statewide context and process for evaluating GHG emissions. Different GHG emission sectors would experience varying degrees of state regulation and would be reduced overall on a statewide level. Legislation already in effect will achieve statewide reductions of GHG emissions associated with electricity production, industry, vehicle miles traveled (VMT), and motor vehicle emission rates. Certain GHG emission sectors regulated by statewide or federal measures are beyond the control of local government (e.g., vehicle emissions standards, renewable energy portfolio standards). However, other sources of GHG emissions are strongly influenced by local policy.

Local land use authorities guide development patterns, community design, transportation facilities planning, and other factors known to influence VMT, which, in turn, influence GHG emissions associated with the transportation sector. Application of the Guidelines for Determining Significance to discretionary projects will identify projects that have cumulatively considerable contributions to climate change effects and that require feasible mitigation under the requirements of CEQA.

In addition, the County's General Plan incorporates smart growth and land planning principles intended to reduce VMT, and thus result in a reduction of GHGs. This will be accomplished by locating future development within and near existing infrastructure. The General Plan also directs preparation of a Climate Action Plan with reduction targets; development of regulations to encourage energy efficient building design and construction; and development of regulations that encourage energy recovery and renewable energy facilities, among other actions.[19] These planning and regulatory efforts, in combination with application of the Significance Guidelines, will ensure that actions of the County of San Diego do not impede AB 32 and SB 375 mandates.

3.0. ADVERSE EFFECTS

California should anticipate hotter and drier conditions, reduced winter snow, increased winter rain, and accelerating sea level rise. Extreme weather events, such as heat waves, wildfires, droughts, and floods are expected to become more common. By 2050, temperatures are projected to increase by 1.8 to 5.4 °F.[20] Associated effects of climate change are briefly summarized in the material that follows.

3.1 Public Health

Climate change can trigger a range of public health effects. Extreme heat waves, increases in pollen, more frequent wildfires, and changes in the spread of vector-borne diseases represent threats to the public health. Climate change can also impact public health through changes to food supply, water systems, and shelter.[21]

[19] San Diego County. General Plan Update – News. Available: http://www.sdcounty.ca.gov/dplu/gpupdate/. Accessed July 13, 2011.
[20] California Natural Resources Agency. (2009). California Climate Adaptation Strategy.
[21] California Natural Resources Agency. (2009). California Climate Adaptation Strategy.

Health effects of increased temperature include heat exhaustion; heat stroke; and exacerbating existing cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy.[22] Climate change can promote the formation of ground-level pollutants, such as ozone and particulate matter, which have been shown to have adverse health effects, particularly among sensitive populations.[23]

3.2 Water

California can expect a 12 to 35% decrease in precipitation levels by mid-century, along with increased evaporation from higher temperatures. Snowpack serves a critical role in California's water supply. With increased temperatures, decreases in winter snow, and increases in winter rain, storage and conveyance of water supply will become more of a challenge.[24]

The average early spring snowpack runoff has decreased by about 10% over the last century. The Sierra Nevada snowpack is projected to decrease by 25 to 40% by 2050 compared to its mid-20th century average.[25] The loss of snowpack would also hamper hydropower generation and snow-related recreational activities.

3.3 Sea Level Rise

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the state's coastal regions. Recent estimates suggest sea level rise of up to 55 inches by the end of this century.[26] Sea level rise of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten levees and inland water systems, and disrupt natural habitats. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers.

Saltwater intrusion caused by rising sea levels is a major threat to water quality within the southern edge of the Sacramento/San Joaquin River Delta. Salt water intrusion will reduce water supply for plants, wildlife, agriculture, and metropolitan use.[27] The Delta accounts for a portion of San Diego County's water supply and is important to the state as a whole.

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[22] McGeehin, Michael A. and Mirabelli, Maria. (2001). The potential impacts of climate variability and change on temperature-related morbidity and mortality in the United States. Environmental Health Perspectives. Available: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240665/pdf/ehp109s-000185.pdf. Accessed: July 13, 2011.

[23] California Natural Resources Agency. (2009). California Climate Adaptation Strategy.

[24] California Natural Resources Agency. (2009). California Climate Adaptation Strategy.

[25] California Department of Water Resources (2008). California Drought, An Update.

[26] California Ocean Protection Council. 2011. Resolution of the California Ocean Protection Council on Sea-Level Rise. Available: <http://www.opc.ca.gov/webmaster/ftp/pdf/docs/OPC_SeaLevelRise_Resolution_Adopted031111.pdf>. Accessed September 21, 2011. California Natural Resources Agency. (2009). California Climate Adaptation Strategy.

[27] California Natural Resources Agency. (2009). California Climate Adaptation Strategy.

3.4 Agriculture

Increased GHG emissions are expected to cause widespread changes to agriculture, reducing the quantity and quality of agricultural products statewide. Reductions in available water supply to support agriculture will impact production. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, farmers will face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development will change, as will the intensity and frequency of pest and disease outbreaks.

Rising temperatures promote ozone formation, which will, in turn, make plants more susceptible to disease and pests and interfere with plant growth. Plant growth tends to be slow at low temperatures and increase up to a certain point with rising temperatures. Faster growth, however, can result in less-than-optimal development for many crops, thus decreasing the quantity and quality of yield for a number of agricultural products.

3.5 Ecosystems and Habitats

Climate change is anticipated to adversely affect biological resources in a number of ways. Various temperature-sensitive plant and animal species would have to adapt to warmer temperatures or shift their geographic range, which may not be feasible in certain instances. Species migration and invasions will alter species interactions. Longer fire seasons will affect vegetation and help to spread invasive species. Sea level rise may wipe out critical habitat for coastal species.[28]

The timing and amounts of water released from reservoirs and diverted from streams are constrained by their effects on various native fish, including rare species. Several potential hydrological changes associated with global climate change could influence the ecology of aquatic life and have several negative effects on cold-water fish. If climate change raises air temperature by just a few degrees, this could raise the water temperatures above the tolerance of salmon and trout in many streams, favoring non-native fish, such as sunfish and carp. Unsuitable summer temperatures would be particularly problematic for many of the threatened and endangered fish that spend summers in cold-water streams, either as adults, juveniles, or both.

3.6 Wildfire

Climate change is predicted to increase the number of wildfires and the acreage affected. Wildfire occurrence statewide could increase from 57% to 169% by 2085, depending on the emissions scenario, and events are predicted be more severe.[29] The wildfire season is apparently already increasing in intensity, starting sooner, and lasting longer.[30]

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[28] California Natural Resources Agency. (2009). California Climate Adaptation Strategy.

[29] Westerling, A.L, B. P. Bryant, H. K. Preisler, H. G. Hidalgo, T. Holmes, T.P. Das, S. R. Shrestha. 2009 (August). Climate Change, Growth and California Wildfire. California Energy Commission, Climate Change Center.

[30] Keithley, Chris and Bleier, Cathy. 2008 (December). An adaptation plan for California's forest sector and rangelands. Sacramento, CA: California Department of Forestry and Fire Protection.

Increased fire activity can threaten life and property and can have harmful effects on air quality, watersheds and water quality, natural habitats, recreation, and forestry resources.

4.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

GHG emissions have the potential to adversely affect the environment since such emissions contribute, on a cumulative basis, to the significant cumulative impact of global climate change. Cumulative impacts are those that result from the combination of past, present, and probable future projects, producing related effects.[31] The proper context for addressing GHG emissions is within an assessment of cumulative impacts because, although it is unlikely that a single project will contribute significantly to climate change, cumulative emissions from many projects could impact global GHG concentrations and the global climate system. State law has established that global climate change is a significant impact. This document is to be used to determine whether projects would have a cumulatively considerable incremental contribution to the significant impact of global climate change.

The County's Climate Action Plan (CAP) demonstrates a range of feasible reduction measures that will be implemented in order to achieve an overall communitywide reduction target. A set of project-specific implementing thresholds (4.3.1 through 4.3.4) will be used to ensure consistency of new projects with the County's CAP and the County's GHG emission reduction target. Please refer to Section 4.2 of this document, which provides a detailed, step-by-step guide to selecting the correct implementing threshold and use of the thresholds. Please refer to Section 4.3 and the Appendix for details on the approach embodied in each implementing threshold.

The overall framework for assessing consistency with AB 32 is provided by the CAP. The CAP includes GHG reduction measures that, if fully implemented, would achieve an emissions reduction target that is consistent with, and supports the state-mandated reduction target embodied in AB 32. For some project types, many of these CAP reduction measures would be relevant and should be incorporated as a part of project design or mitigation. For other project types, fewer CAP reduction measures would apply. To further ensure that the County's overall reduction target is achieved, considering the wide range of project types the County may approve during buildout of the General Plan, the County has prepared a companion set of quantified GHG emissions thresholds, as a supplement to the measures outlined in the CAP. The "dual approach" of using the County's CAP with quantified implementing significance thresholds provides the flexibility in addressing GHG emissions that will be needed for the diverse range of projects considered by the County, while also maintaining certainty that the County's reduction targets will actually be met, and that new development in the County will achieve its "fair share" of emissions reductions needed to reach the AB 32 mandate statewide.

[31] CEQA Guidelines Section 15130.

The development of GHG Significance Guidelines involved both efficiency-based threshold development (i.e., how GHG efficient is the project at hand relative to reduction targets per resident + employee?), as well as a "bright line" for assessing significance. Conceptually, both the Efficiency-Based and the Bright Line Thresholds rely on determining the proportional or fair-share of emission reductions required to meet the legislative mandate established in AB 32 that would be required within San Diego County. The Performance Threshold permits the application of project-specific mitigation measures that demonstrate a fair share of emissions reductions necessary statewide to achieve AB 32 targets. As mentioned previously, AB 32 requires that statewide GHG emissions must be reduced to 1990 levels by 2020.

This guidance document focuses on a 2020 timeline, consistent with the legislative mandate embodied in AB 32. Although it is possible that some projects and plans considered under the threshold guidance provided herein would be built out after 2020, there is not a comprehensive regulatory or legislative framework for addressing GHG emissions beyond 2020. Advances in science, new models for analysis, new mitigation, new state regulatory programs, technological advancement, and other new information will require the County to periodically consider whether revisions to this document are necessary. Please refer to Section 6.0 for more details on monitoring and updating of this document.

Future planning efforts that do not consider GHG emissions reduction strategies could conflict with AB 32, impeding California's ability to comply with the statewide mandate. The approach summarized in this document allows a comparative assessment of whether proposed projects would provide a fair share of emissions reductions needed to achieve the state's overall GHG emissions reduction mandate. Plans or projects that emit more than their fair share of GHG emissions could have a cumulatively considerable contribution to the significant cumulative impact of global climate change.

The Appendix provides more detail on the development of the implementing thresholds.

4.1 Purpose and Intent

Lead agencies are encouraged to develop and publish thresholds of significance for assessing environmental impacts under CEQA.[32] The County's purpose and intent is to provide clear and consistent guidance for assessing the significance of GHG emissions impacts of proposed projects under CEQA.[33] The County has prepared this document to promote clarity and provide support for regional significance determinations related to GHG emissions. The significance criteria provided in this document will help to ensure that new development projects implement project design features and/or feasible mitigation measures to reduce GHG emissions. The structure of the significance thresholds allows for appropriate consideration of GHG reducing features of projects

[32] CEQA Guidelines Section 15064.7 (a).

[33] GHG emissions have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change, which has been shown to result in sea level rise, changes in rainfall and snowfall (leading to changes in water supply), changes in temperatures and habitats (affecting biological resources), and many other adverse effects. The proper context for addressing this issue is within an assessment of cumulative impacts.

that can be a part of a project description (such as the project's location, design, density, mix of uses, surrounding land use context, and other elements), as well as modifications to the project's operational characteristics, materials, construction methods, and other mitigation measures.

The process described in this document incorporates the precision needed for certainty in the environmental review process and also the flexibility needed to work within the context of a range of policy approaches to this complex and dynamic issue.

The County has drafted this document using guidance provided by the Natural Resources Agency in amendments to the CEQA Guidelines (California Code of Regulations, title 14, sections 15000-15387) to address GHG emissions. To this end, the County's work constitutes a good-faith effort, based on available scientific and factual data, using quantified standards, as well as qualitative guidance to assess significance of impacts under CEQA (CEQA Guidelines Section 15064.4). This document is consistent with state-of-the-practice methods for estimating net GHG emissions changes attributable to development projects. The methods and assumptions used in developing the Guidelines for Determining Significance are consistent with CEQA practice for GHG emissions analysis.

As noted previously, the approach embodied in this document is consistent with and supportive of the state's approach to reducing GHG emissions, as established by AB 32. This document provides the methods the County will use for determining, on a consistent basis, whether projects have contributed their fair share toward meeting the AB 32 legislative mandate and supporting efforts to reduce emissions beyond 2020.

Given the critical importance of land use and transportation planning for GHG emissions generation, oftentimes the most effective way to reduce emissions is through broad-scale planning efforts. General plans, community plans, specific plans, and GHG reduction plans are the most appropriate place for many communities to establish community GHG goals, policies, and standards for existing and new development. A long-term, comprehensive, integrated plan for reducing overall GHG emissions to a less-than-significant level can be preferable to a project-by-project analysis and mitigation of impacts. A programmatic approach can help to provide more predictable and consistent mitigation requirements based on an overall plan and emissions reduction target. When communities take a proactive approach to GHG emissions in their planning documents, they can create a context wherein more projects can succeed in providing GHG-efficient places. For example, a general plan or GHG reduction plan could involve the development of a more complete and connected transportation network that encourages walking, bicycling, and transit. Each project proposed within this jurisdiction would be able to increase its GHG efficiency by taking advantage of this complete and connected transportation network. Addressing GHG emissions at the planning level can help to build GHG emissions goals, policies, and performance standards into the selection of project sites and create a more supportive land use context. A programmatic approach can reduce the need to use the CEQA process to add mitigation requirements to projects after they are already located and designed. The County's General Plan and CAP take advantage of the aforementioned benefits of

comprehensive and proactive planning to reduce GHG emissions.

4.2 Use of the Guidelines for Determining Significance

CEQA lead agencies use thresholds to differentiate between significant and less-than-significant adverse physical impacts on the environment. CEQA Guidelines Section 15064.7 provides guidance for lead agencies that wish to develop their own thresholds. A threshold of significance is "*an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant*."[34]

Lead agencies have substantial discretion in analytical approaches and assessing significance under CEQA. Although it is imperative to ground significance determinations in factual and scientific data, where possible, policy judgments are unavoidable in drawing the line between significant and insignificant impacts.[35]

In order to make use of this document, there are three general guidelines:

1. Estimate GHG emissions associated with construction and operation of proposed projects. This includes both direct and reasonably foreseeable indirect GHG emissions from operations. Detailed instructions for GHG analysis and reporting are included in the County's "*Report Format and Content Requirements*," under separate cover.

2. Do not include "life cycle" emissions embodied in manufactured materials. Construction materials (primary manufacturing and transport) or other materials used in projects are intended to meet general market demand, regardless of whether any particular project proceeds.[36]

3. GHG emissions from permitted stationary sources are estimated separately from a project or plan's operational emissions. The County has provided a different set of guidance for determining significance for stationary sources.

The focus of the implementing thresholds in this document is on *net new* emissions.[37] The continued operation of existing facilities, buildings, neighborhoods, communities, and cities would not typically represent "projects" subject to review under CEQA. The approach summarized in this document acknowledges that *existing* development is responsible for some share of GHG emission reductions needed to achieve AB 32

[34] CEQA Guidelines Section 15064.7.
[35] CEQA Guidelines Section 15064(b)
[36] In order to clarify whether life cycle emissions should be a part of CEQA analyses, 2010 amendments to the CEQA Guidelines removed the term "lifecycle," since "the term could refer to emissions beyond those that could be considered indirect effects of a project as that term is defined in section 15358 of the State CEQA Guidelines." California Natural Resources Agency. 2009 (December). *Final Statement of Reasons for Regulatory Action. Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97*.
[37] Emissions from existing development in San Diego County are also factored into the analysis that was used to develop the significance guidelines contained herein.

targets.[38] Measures to reduce GHG emissions in existing development (as well as new development) are often considered as a part of local GHG reduction plans (also called climate action plans). The County has also developed measures to reduce emissions from existing development as a part of the CAP. So, while the application of the implementing thresholds included herein would be to new projects, the County is pursuing reductions from existing development, as well.

Net increases in GHG emissions relative to the existing baseline include only those emissions attributable to the project and take into account emissions displaced by the project, as well as verifiable emission offsets incorporated into the project design or mitigation (see Section 5.0 for more detail on mitigation strategies). Depending on the nature and purpose of a project, the net emissions increase could be positive, neutral, or negative. Certain infrastructure projects, for example, might have no net additional operational emissions if they simply reconstruct or remodel existing facilities without expanding capacity. Some projects may provide for more efficient operations compared to existing conditions and could actually reduce operational GHG emissions. Exhibit 1 provides a step-by-step guide to the Guidelines for Determining Significance.

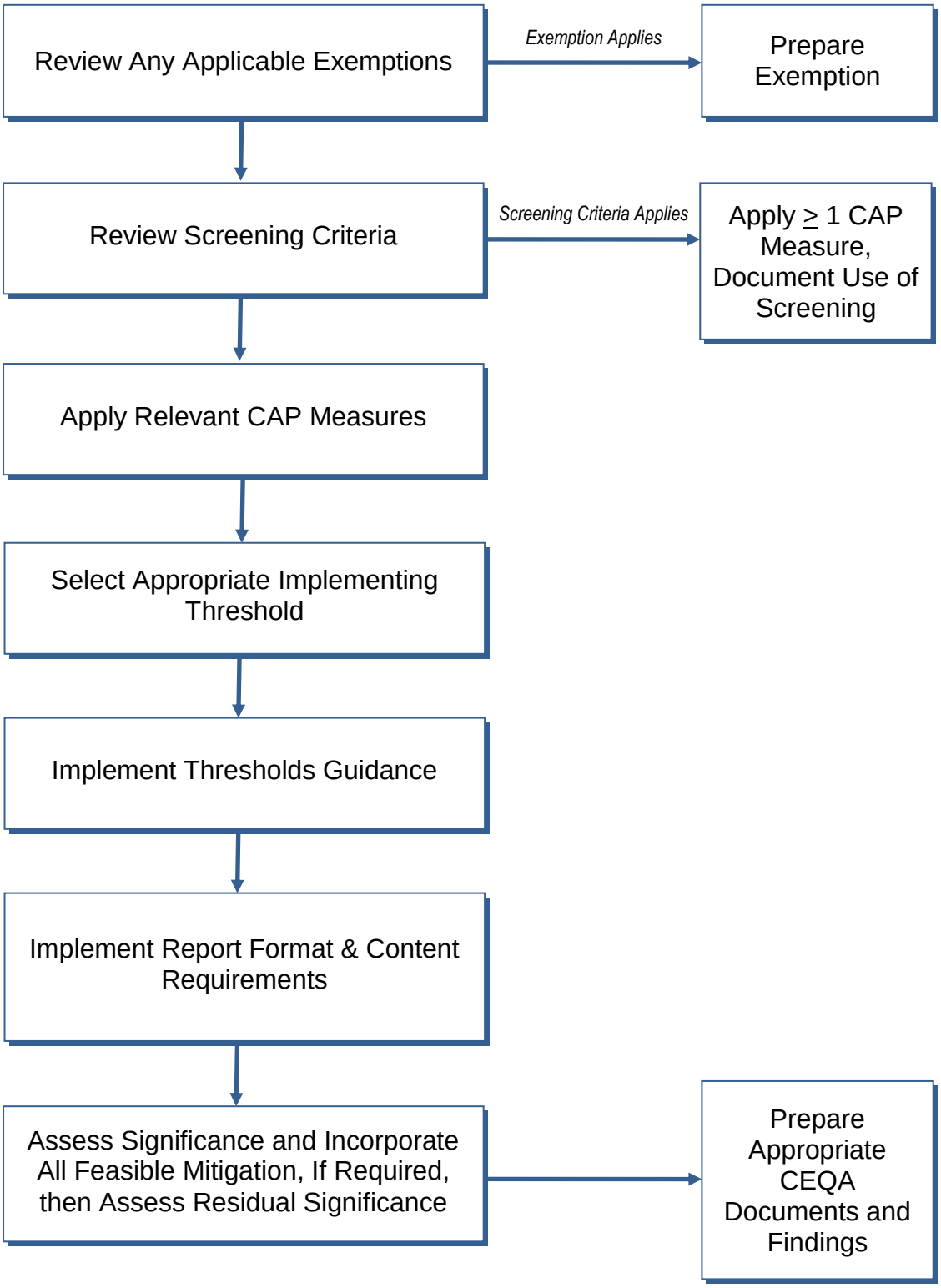
Step 1. Review and Apply Exemptions

This Significance Guidelines document does not limit the County's use of tiering or statutory, categorical, general rule, or disapproved project exemptions. Project applicants should first coordinate with the County to determine whether the proposed project is subject to CEQA. If a project does not require CEQA analysis and documentation, then it would also not require the use of these Guidelines for Determining Significance. The County will also consider whether the project has been analyzed as a part of a prior environmental impact report (EIR), consistent with CEQA Guidelines Section 15183. Exemptions for "transit priority projects" that are consistent with the applicable Sustainable Communities Strategy or Alternative Planning Strategy, as described in Public Resources Code Section 21155, could apply to certain proposals.[39] If a proposed project is determined to be exempt from CEQA review for any reason, the Significance Guidelines would not apply.

[38] GHG emissions reductions to existing developed areas can occur through revisions to codes and standards. This could occur through investments in non-automobile transportation facility improvements that increase non-automobile mode shares, as well as transportation facility investments that would have the effect of reducing trip lengths in existing developed areas. This could occur through infill and reinvestment, as well as federal and state actions related to emissions standards, renewable energy generation, and other regulations over activities beyond local authority, but that would effectively apply to both existing and new development. Improvements in the efficiency of existing development could also occur through actions described in climate action plans (also known as greenhouse gas reductions plans). Such actions could include requirements for new development, as well as prescriptive, incentive-based, or strictly voluntary measures to reduce emissions from on-the-ground existing land uses.

[39] Streamlining for residential or mixed-use residential projects consistent with a sustainable communities strategy or alternative planning strategy may also be available for certain proposals, using guidance in Public Resources Code Section 21159.28.

Exhibit 1 – Steps in Applying Guidelines for Determining Significance



This Guidelines for Determining Significance document does not limit the County's administration of CEQA requirements or streamlining, as described in Section 15152 (Tiering), Section 15162 (Subsequent EIRs and Negative Declarations), Section 15163 (Supplement to an EIR), Section 15164 (Addendum to an EIR or Negative Declaration), Section 15168 (Program EIR), Section 15175 (Master EIR), Section 15179.5 (Focused EIRs and Small Projects), or similar provisions of CEQA and the CEQA Guidelines.

Step 2. Apply Screening Criteria

If the project is determined to be subject to CEQA review, the next step is to compare the project to a list of screening criteria.

The County developed screening criteria for a range of project types and sizes to identify smaller projects that would have less-than-cumulatively considerable GHG emissions effects (Table 3). If a proposed project is the same type and equal to, or smaller than the project size listed, it is presumed that the construction and operational GHG emissions for that project would not exceed 2,500 MT CO_2e per year, and there would be a less-than-cumulatively considerable impact. This assumes that the project does not involve unusually extensive construction and does not involve operational characteristics that would generate unusually high GHG emissions. For example, the County's screening approach is not designed to address projects with high global warming potential emissions. If a project does involve unusually extensive construction and operational characteristics the project shall select the appropriate implementing threshold and follow the guidance provided herein.

The screening criteria were developed using conservative assumptions so that the County can ensure projects of the types and sizes listed would, in fact, produce GHG emissions of less than 2,500 MT CO_2e per year. In this case, the term, "conservative," means that the assumptions used to develop the screening criteria are based on emissions estimates that may be somewhat higher than actual GHG emissions for projects of the types and sizes listed. For example, the single-family housing screening criteria is 86 dwelling units. If, however, the site in question is close to public transit, within walking distance of parkland and a school, within an easy bike ride of commercial retail and services, and has good quality pedestrian and bicycle facilities, it is possible that a 90- or 100-unit project in such a location could have GHG emissions of less than 2,500 MT CO_2e per year. Conservative assumptions were employed in this analysis, in part, to account for GHG emissions reductions needed beyond 2020.

It is not possible within a list of screening criteria to account for all the potential project location and design features that would increase or decrease GHG emissions. The objective is to ease administrative burden for small projects, while ensuring that projects that are screened out actually would have GHG emissions that are lower than the County's Bright Line Threshold (see Section 4.3.2 for more detail).

Table 3 – Screening Criteria

Project / Plan Type	Screening Threshold
Single-Family Housing	86 dwelling units
Low-Rise Apartment Housing	121 dwelling units
Mid-Rise Apartment Housing	136 dwelling units
High-Rise Apartment Housing	144 dwelling units
Condominium or Townhouse Housing	120 dwelling units
Congregate Care (Assisted Living) Facility	239 dwelling units
Elementary or Middle School	91,000 square feet
High School	103,000 square feet
University/College (four years)	336 students
Library	81,000 square feet
Restaurant	12,000 square feet
Hotel	106 rooms
Free-Standing Retail Store	31,000 square feet
Shopping Center	33,000 square feet
Convenience Market (24 hour)	2,000 square feet
Office Building	61,000 square feet
Office Park	56,000 square feet
Hospital	47,000 square feet
Warehouse	141,000 square feet
Light Industrial Facility	74,000 square feet

Notes: Land use types outlined in the table above are intended to correlate with those presented in the Institute of Transportation Engineers' Trip Generation Manual (8th Edition). Proposed project land use types will be compared with the land use types included in the screening table above to determine applicability. Low-rise apartments have one or two stories, such as garden apartments. Mid-rise apartments have between 3 and 10 stories. High-rise apartments are normally rental units in buildings with more than 10 stories. A shopping center includes a group of commercial establishments that is developed as a unit. A free-standing retail store (also known as "free-standing discount store") is a free-standing store with off-street parking that offers a wide range of customer services and would typically be open 7 days per week with relatively long hours. Office parks are normally in a suburban context and contain office buildings and support services arranged in a campus-type setting, whereas an office building would accommodate multiple tenants in a single structure. Light industrial facilities would typically involve assembly of processed or partially processed materials into products and would have an energy demand that is not substantially higher than office buildings of the same size and scale. Light industrial facilities would not typically generate dust, other air pollutants, light, or noise that it perceptible beyond the boundary of the subject property.

The screening criteria can be used for multi-use projects, as well. For each use, determine the ratio of the screening threshold. For example, a project that proposes 43 single-family dwelling units would represent 50% of the Single-Family Housing screening level. Then, add the calculated ratios for each individual land use. An example project proposes 43 single-family dwelling units (50% of the threshold), 36 low-rise apartment units (29% of the threshold), and 6,000 square feet in a retail store (19% of the threshold). Adding the ratios of the screening thresholds together yields a total of 0.991. If the sum of the ratios is less than 1.0, the GHG emissions for that project would not exceed 2,500 MT CO_2e per year, and there would be a less-than-cumulatively considerable impact.

Construction Screening Criteria

The County has also developed screening criteria for projects that would only increase GHG emissions during the construction phases. This would include projects to improve existing facilities, without increasing the operational capacity of such facilities. This screening approach does not apply to new roads or new pipelines that the County determines could induce growth. As noted elsewhere, the criteria presented here do not in any way limit the County's ability to apply CEQA streamlining techniques, such as CEQA exemptions. For example, the Class I statutory exemption for existing facilities and the Class 2 exemption for replacement or reconstruction of facilities would still apply and, if used, the screening criteria would not be required. The screening criteria only apply to projects with typical construction techniques and schedules, and would not apply to projects that have characteristics that would produce unusually high GHG emissions from equipment use or other sources. If a project has significant earthmoving activities (greater than 20 acres per day), involves substantial demolition, or has additional haul trips associated with construction activities, the screening criteria would not apply. Applicants shall consult with County staff to determine if project construction activities are consistent with the underlying assumptions used in development of the screening criteria.

As with the above screening criteria, the construction screening criteria was developed to ensure that projects of the types and sizes listed would, in fact, produce GHG emissions of less than 2,500 MT CO_2e per year. Projects of the types listed below would generally have less-than-cumulatively considerable impacts:

- Grading and clearing of land involving no more than 1,285 acres of land per year with no soil hauling, and no other aspect of construction or site preparation.

- Grading and clearing of land involving no more than 100 acres per year, assuming up to 3,100 cubic yards per day of soil hauling.

- Based on an average truck size of 20 cubic yards and an average hauling distance of 30 miles round trip, a project that would haul less than 3,300 cubic

yards per day, not including emissions from any other activities, including off-road construction equipment.

- San Diego County Department of Public Works roadway resurfacing or asphalt concrete overlay project involving less than 32 linear miles, 133 construction days, and 120 acres of land area disturbed.[40]

- New pipeline or non-vehicular trail or pathway of no more than 11 miles that would disturb no more than 81 acres of land assuming no more than 3,100 cubic yards per day of soil hauling.

- Construction project that would use a total horsepower in all equipment of no more than 1,984 per day, not including any soil hauling; or a construction project that includes up to 3,100 cubic yards of soil hauling per day and has a total equipment horsepower of no more than 742 per day. These daily horsepower limits are based on a project that would take approximately one year and would involve 262 working days in this year. Projects with a shorter duration may increase these horsepower limits proportionally.

Step 3. Apply Relevant Climate Action Plan Measures

If the project complies with the Bright Line screening criteria, at least one CAP measure shall be incorporated. Impacts would be considered less than cumulatively considerable. Please refer to the "*County of San Diego CAP Compliance Checklist for Greenhouse Gas Analysis*," which clearly illustrates how to comply with the CAP.

If the project is of a type or size that does not comply with the screening criteria, the project should incorporate all applicable CAP measures and estimate emissions relative to one of the quantified implementing thresholds: Efficiency Threshold; Bright Line Threshold; Stationary Source Threshold; or Performance Threshold. The project requires a technical analysis to demonstrate that the project's design features, along with relevant CAP measure/s and, if necessary, additional feasible mitigation measures, are incorporated that would allow the project to be below the Efficiency Threshold; Bright Line Threshold; Stationary Source Threshold; or Performance Threshold.

Step 4. Consider Project Type and Select Appropriate Implementing Threshold

The next step is to identify which implementing significance threshold to use for GHG analysis (Table 4). The County has provided implementing thresholds that are specifically designed to assess the significance of different types of projects. The appropriate implementing threshold/s must be used, as intended, for the project type. The type-specific implementing thresholds (4.3.1 through 4.3.4) provide definitive guidance on assessing significance under the framework provided by the County's

[40] This screening approach is based on a specific mix of equipment and construction schedule provided by the San Diego County Department of Public Works. For projects with a different equipment mix or schedule, this screen would not apply. Please see the Appendix for more detail.

CAP. Table 4 illustrates the proper use of implementing thresholds for different types of projects.

Table 4 – Implementing Threshold by Project Type

Project Type	Implementing Threshold/s	Notes
Residential; retail; commercial service; private and government offices; warehouse and light industrial; lodging; public/quasi-public projects, including schools, libraries, clinics and hospitals, parks; and projects or plans proposing a mix of these or similar uses.	4.3.1 Efficiency Threshold, or 4.3.2 Bright Line Threshold, or 4.3.4 Performance Threshold	Land use development projects can use the Efficiency, Bright Line, or Performance Threshold to assess significance.
Stationary sources, such as cogeneration facilities, boilers, flares, heaters, refineries, and other types of facilities, including stationary sources that are a part of a project or plan with other sources of GHG emissions.	4.3.3 Stationary Source Threshold	Projects that propose stationary sources use the Stationary Source Threshold. Projects that involve both area/mobile sources AND stationary sources would use the Stationary Source Threshold to evaluate the stationary sources AND either the Efficiency Threshold, Bright Line Threshold, or Performance Threshold to evaluate other emissions sources (area, mobile).
Mining, agriculture, forestry, landfill, airport, water and wastewater treatment, roadway, and other infrastructure projects.	4.3.2 Bright Line, Threshold or 4.3.3 Stationary Source Threshold or 4.3.4 Performance Threshold	Other project types that are not typically considered “land use development” projects have the option of using the Bright Line Threshold or the Performance Threshold. The Stationary Source Threshold shall be used for those portions of projects that involve stationary source emissions.

As shown in Table 4, projects with different emissions sources need to use different thresholds. For example, projects that involve both area/mobile and stationary sources would use the Stationary Source Threshold to evaluate the stationary sources and either the Efficiency Threshold, Bright Line Threshold, or Performance Threshold to evaluate the area and mobile sources.

Step 5. Implement the Significance Thresholds (4.3.1 through 4.3.4)

The County has provided detailed guidance for the use of each implementing significance threshold. This guidance ensures consistent analysis and consistency of significance determinations. The guidance also ensures that the type-specific implementing thresholds (4.3.1 through 4.3.4) accurately assess whether projects contribute their fair share of GHG emissions reductions necessary to meet the AB 32 legislative mandate.

Step 6. Implement the Report Format and Content Requirements

The County has prepared detailed guidance for GHG analysis reports. The County's "*Report Format and Content Requirements*" document provides instructions for analyzing and reporting GHG emissions for projects and plans. This includes quantification (wherever feasible) of GHG emissions attributable to the subject project or plan. Once GHG emissions estimates are available, they can be compared against the appropriate implementing threshold.

Step 7. Assess Significance and Incorporate Feasible Mitigation, if Required

If impacts would be cumulatively considerable, according to the appropriate implementing threshold, feasible mitigation shall be incorporated (see Section 5.0 for detailed mitigation guidance). The emissions reduction benefit of mitigation must be quantified in a technical report, where feasible. Feasible mitigation is required to reduce total project emissions or project emissions per service population below the relevant type-specific implementing threshold level.

To estimate the effectiveness of mitigation, the County recommends using guidance in the California Air Pollution Control Officers Association document, "*Quantifying Greenhouse Gas Mitigation Measures*."[41] The acceptable tools to estimate the emissions with project mitigation include the Urban Emissions Model (URBEMIS), the California Emissions Estimator Model (CalEEMod), and spatially sensitive models, such as INDEX, I-PLACE^{3}S, Sustainable Systems Integrated Model (SSIM), and others. Additional guidance on estimating mitigation effectiveness is provided in the County's "*Report Format and Content Requirements*" document.

[41] 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 Gas Mitigation Measures. Available: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf Accessed July 16, 2011.

If the effectiveness of mitigation cannot be quantified, specific performance targets may be established for mitigation measures to guide outcomes, as appropriate. Once all feasible mitigation is identified, the residual significance is assessed and reported.

In addition to any required mitigation, there may be other federal, state, regional, or local standards or requirements that may apply to projects and may reduce potential GHG emissions. This guidance document does not supersede or supplant any such requirements.

4.3 Thresholds for Determining Significance

The County's CAP provides the overall framework for assessing significance. The County's General Plan EIR identifies potentially significant effects related to GHG emissions, which are addressed by numerous General Plan policies and mitigation measures. The centerpiece of the County's efforts to avoid cumulative GHG emissions impacts associated with implementation of the General Plan is preparation of the CAP. The CAP demonstrates a range of feasible reduction measures that can be implemented to achieve an overall reduction target that is supportive of the state-mandated reduction target embodied in AB 32. Type-specific implementing thresholds (4.3.1 through 4.3.4) are provided in order to allow projects to clearly demonstrate compliance with the CAP and identify the significance of cumulative contributions to GHG emissions effects.

The overarching threshold, as embodied in the County's CAP is:

A proposed project would have a cumulatively considerable contribution to climate change impacts if it would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment or would conflict with an applicable plan, policy, or regulation that was adopted for the purpose of reducing the emissions of greenhouse gases.[42]

CEQA analysis for projects in San Diego County can take advantage of tiering and streamlining provisions related to climate action plans described in Section 15183.5 of the CEQA Guidelines.[43] The County's General Plan and EIR anticipated preparation of a CAP, which has since been prepared. If a project is consistent with an adopted plan adopted to reduce GHG emissions, lead agencies may tier from and/or incorporate by reference that existing programmatic review.[44] Based on consistency with relevant

[42] This text is similar to that used in the CEQA Guidelines Appendix G to address Greenhouse Gas Emissions.
[43] See also CEQA Guidelines Section 15130(d).
[44] In addition to tiering/streamlining from a climate action plan, analysis of GHG emissions impacts, along with other impacts, can implement various other tiering and analysis streamlining techniques allowed under CEQA. For example, project-level CEQA documents can rely on a program EIR that addressed GHG emissions, as specified in CEQA Guidelines Section 15152. Also relevant for use would be the provisions for program EIRs; master EIRs; EIRs for Specific Plans; and EIRs for zoning, community plans, and general plans; and focused EIRs for small projects. Please refer to CEQA Guidelines Sections 15162, 15168, 15175-17179.5, 15182, and 15183 for more details. The County will continue to apply CEQA exemptions and tiering, as appropriate, in the context of new projects. Lead agencies have additional streamlining that is available for certain residential and

requirements of a GHG reduction plan, a lead agency may determine that a project's incremental contribution to climate change impacts is not cumulatively considerable. However, as noted in CEQA Guidelines Section 15064(h)(3), if "*there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding that the project complies with the specified plan… an EIR must be prepared*..."

If lead agencies intend to rely on GHG reduction plans in the manner contemplated by CEQA Guidelines Section 15183.5, there are specific components to include in such plans:

1. Quantified estimates of GHG emissions within a defined geographic area and over a specified period of time, and, where appropriate, estimates of population and employment;

2. Emissions reduction target or GHG efficiency target that is consistent with, and supportive of the legislative mandate embodied in AB 32;

3. Reduction measures, performance standards, incentives, and/or verifiable offsets that would collectively achieve the specified emissions reduction target or GHG efficiency target and could apply to both existing and new development; and

4. Provision to monitor implementation of each measure and progress of the GHG reduction plan in meeting the specified target, including a mechanism to consider changes to the plan, as necessary, to ensure progress toward the specified target.

GHG reduction plans are subject to CEQA review, public noticing, and public comment requirements. Methodologies and assumptions used in developing the GHG reduction plan should be documented and presented as a part of the public review process. The County has incorporated each of the above components in development of the CAP.

4.3.1 Efficiency Threshold

A proposed plan or 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, at a level exceeding 4.32 metric tons of CO_2e per year, per service population.

This guidance for determining significance represents the rate of emissions needed to achieve a fair share of the state's emissions mandate embodied in AB 32. The use of "fair share" in this instance indicates the GHG efficiency level that, if applied statewide,

mixed-use projects and transit priority projects that are included as a part of an adopted sustainable communities strategy (SCS) or alternative planning strategy, as described in CEQA Guidelines Section 15183.5(c). GHG emissions from cars and light duty trucks do not need to be analyzed in the environmental analysis for such projects.

would meet the AB 32 emissions target and support efforts to reduce emissions beyond 2020. The intent of AB 32 is to accommodate population and economic growth in California, but do so in a way that achieves a lower *rate* of GHG emissions. With a reduced rate of emissions per resident + employee, California can accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and supporting efforts to reduce emissions beyond 2020.

The level of emissions in 1990 represents the goal of AB 32 (i.e., reduce 2020 emissions to 1990 levels). The County identified the land use related parts of the 1990 emissions inventory and separated these sources of emissions from other emissions sources for the purpose of analysis.[45] The statewide inventory in 1990 for land use related emissions is approximately 264 MMT CO_2e. Using 1990 emissions levels and 2020 forecast population and employment, this equates to 4.32 CO_2e emissions per resident + employee (service population).

Focusing on per-unit rather than mass emissions levels is sometimes called "GHG efficiency." For land development projects, the use of an efficiency approach that considers emissions per resident + employee correlates with the activities that are accommodated by development: population growth and additional employment opportunities. Development projects and plans do not *create* new population or employment (except temporary construction related employment), but rather *accommodate* population and employment growth. One of the benefits of the Efficiency Threshold is that, because it does not focus on mass emissions, it is not necessary to isolate new emissions sources from exiting emissions sources that are moved to the subject project site. The efficiency approach allows lead agencies to assess whether any given project or plan would accommodate population and employment growth in a way that is consistent with the emissions limit established under AB 32.[46]

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[45] California Air Resources Board. 2010. *Inventory Data Archive – 1990 to 2004 Inventory*. Available: http://www.arb.ca.gov/cc/inventory/archive/archive.htm

[46] The AB 32 emissions limit applies to statewide emissions levels. Through implementation of ARB's Scoping Plan, various emissions sources will be reduced to achieve the statewide target. Economic feasibility is an important aspect of AB 32. From the language of the legislation (Health and Safety Code Section 38501 (h): "*It is the intent of the Legislature that the State Air Resources Board design emissions reduction measures to meet the statewide emissions limits for greenhouse gases established pursuant to this division in a manner that minimizes costs and maximizes benefits for California's economy…*" Overall, implementation of the Scoping Plan has been shown to include benefits related to overall economic production, gross state product, personal income, per-capita income, household cost savings, and business cost savings. However, these economic benefits and cost savings will not necessarily be evenly distributed. The legislation directs the State to implement AB 32 in a way that minimizes costs and maximizes benefits, but not in a way that necessarily distributes costs and benefits equally across the regions of the state. The Efficiency Threshold provides a straightforward approach for projects to demonstrate consistency with the AB 32 mandate, without adjustments for local conditions. Other Thresholds provide a more locally tailored approach. The Bright Line Threshold, for example, uses regional growth forecasts and the San Diego region's emissions profile. The Climate Action Plan includes measures that would achieve a specific local unincorporated County emissions reduction. Through the Climate Action Plan, the County was able to balance between those measures that are more or less efficient, given the specific local context. With the various options outlined in the Thresholds document, the County has provided both approaches that are directly connected to the AB 32 emissions limit (Efficiency Threshold, Performance Threshold) and those that take into account local conditions (Bright Line Threshold).

"Service population" is a term used to express the total population plus employment of proposed projects. Projects that accommodate only employment and no residences would estimate the level of employment accommodated at buildout and use this figure to represent the service population. Projects that would accommodate only residences would estimate the population accommodated by the project when fully occupied. The population and employment estimates should be consistent, where applicable, with SANDAG methods and assumptions, as well as any relevant density and intensity standards in a general plan, community plan, specific plan, or zoning. The Southern California Association of Governments conducted an extensive study of employment density, published in 2001, that may be helpful in estimating the service population of proposed projects.[47] The State Department of Finance provides information related to household sizes that can be used to estimate residential populations of proposed projects. Household sizes differ depending on demographic characteristics, housing type and density, and location, among other factors. Locally appropriate assumptions should be used, whenever available, to estimate the buildout service population of proposed projects.

This threshold is not designed to be used for projects or portions of projects that propose agricultural, forestry, or mining uses, manufacturing uses where the GHG emissions profile is largely a result of industrial processing, or permitted stationary sources of GHG emissions. This threshold is designed to be used to evaluate the operational emissions for projects and plans that include residential, commercial, civic, light industrial development, or a mix of these uses.[48] Analysis of mixed-use projects and plans will include GHG estimates for all land uses proposed – both residential and non-residential. For mixed-use projects or plans, full analysis of all proposed land uses – those that provide for a residential population and those that would provide employment – will balance with the "denominator" of the efficiency ratio, which includes population + employment.

To ensure that the Efficiency Threshold provides an accurate assessment tool, it is important to carefully consider the relationship between land uses proposed within a project, as well as the variety of land uses in the area surrounding the proposed project. Accurate GHG assessment techniques are needed to ensure that the GHG efficiency of mixed use and other project types is not understated or overstated. For example, if a retail project is proposed for a residential area that does not have any existing retail, this project could help to shorten existing trips or increase the mode shares for walking and bicycling, which would promote GHG efficiency. If a mixed-use residential and retail project was proposed instead, this may not achieve the same benefit in terms of GHG efficiency as a retail-only project located in a housing-rich location. Therefore, proper application of the GHG efficiency metric per service population would not create any

[47] The Natelson Company, Inc. 2001 (October). Employment Density Study Summary Report.

[48] Correctional facilities can count inmates as residents since inmates are included as a part of the statewide population estimates used to derive the Efficiency Threshold. Schools cannot count students as residents in the service population unless the students actually do reside at the school. Hospitals cannot count inpatients as residents as a part of the service population for the purposes of determining compliance with the Efficiency Threshold.

undue "reward" for mixed-use projects. The GHG emissions for both the residential and non-residential components of mixed-use projects are included in the GHG emissions estimate, in balance with the inclusion of both population and employment in the "denominator" of the efficiency ratio. Proper use of the Efficiency Threshold reveals the benefits of projects that enhance land use diversity of the type that would be needed to provide a more "complete" community, with the requisite services. Proper use of the Efficiency Threshold will demonstrate the GHG efficiency benefits of projects that are located and designed to provide opportunities to reduce the rate of growth in vehicular travel demand, including the project's location, design, land use context, and other important factors.[49]

Net GHG emissions attributable to a proposed project or plan should be estimated using a cumulative scenario.[50] Use of the term "net emissions" in this context connotes a flexible approach that would consider both on-site and off-site emissions reduction strategies. If offset or credit programs are used, it is important to ensure consistency of metrics used in the offset or credit program and the metrics used in the thresholds presented in this document (CO_2e rather than CO_2, annual emissions over the life of the proposed project rather than total emissions or emissions at a single point in time, etc.). The emissions estimate should focus on net new emissions attributable to project or plan operations. If there are existing legal sources of GHG emissions on the subject site at the time of analysis and the project proposes to remove these emissions, they can be "netted out" of the final GHG emissions estimate.

VMT used in deriving GHG estimates for comparison against the Efficiency Threshold should account for the relationships between project land uses and surrounding land uses, as well as the transportation network. The VMT used in estimating GHG emissions should represent the difference between: (1) cumulative areawide VMT *without* the project and (2) cumulative areawide VMT *with* the project. VMT estimates should reflect aspects of the project's location, density, design, access to non-automobile transportation facilities, travel behavior of inhabitants, and other relevant

[49] If the same percentage GHG reduction were required of transit-oriented, infill, and/or compact development as dispersed, lower-density, automobile-dependent development, this could have the unintended consequence of discouraging the former and encouraging more of the latter. This same conceptual observation was observed by the California Energy Commission in considering the mitigation responsibility of new, efficient power plants vis-à-vis existing, less efficient and more polluting plants. See California Energy Commission. 2009 (March). Committee Guidance on Fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts in Power Plant Siting Applications.

[50] Net emissions would consider plans and projects that reduce emissions through selection of a project site, adding land use diversity, GHG-efficient design, and other on-site strategies, as well as taking actions off-site. Net emissions represent the total after cumulative emissions are calculated, along with any verifiable, additional sequestration or other GHG-reducing components of a project are included. Carbon offset programs are designed to achieve a net emissions objective by allowing additional emissions but also requiring purchase of offsetting credits. Funds from these credits could be used for a variety of projects, such as planting trees (which absorb carbon dioxide), converting vehicle fleets to more efficient/less polluting technologies, funding for energy efficiency retrofits of existing buildings, renewable energy projects, and other activities. For a discussion of the potential for carbon offsets in the context of "indirect" GHG emissions and the California regulatory context, see Timothy P. Duane and Joanna D. Malaczynski, "Reducing Greenhouse Gas Emissions from Vehicle Miles Traveled: Integrating the California Environmental Quality Act with the California Global Warming Solutions Act," Ecology Law Quarterly, Vol. 36:71.

characteristics that affect travel demand and mode choice.

There are many tools available today that are routinely used to derive more accurate measures of VMT than historically had been used for transportation and air quality analysis, including estimates that are sensitive to the surrounding land context, urban design elements, access to non-automobile travel options, density, demographics, and other important factors. This continues to be an active area of research, as well. VMT estimates and methods must be verifiable and approved by County staff.
The guidance to estimate VMT by examining the difference between cumulative with project and cumulative without project conditions is for the purposes of assessing GHG emissions estimates only. Local guidance on estimating travel demand should be used, as appropriate, for the purpose of traffic impact assessment.

All applicable, adopted statewide measures that would be implemented by 2020 can be included when estimating GHG emissions under the Efficiency Threshold. Applicants shall coordinate with the County prior to conducting the analysis to ensure that applicable statewide measures are included and to ensure that the emissions reductions levels from statewide measures are appropriate for the subject project. Please refer to the County's "*Report Format and Content Requirements*," under separate cover, which provides additional detailed guidance.

Construction-related emissions must be analyzed and included as a part of the assessment of project effects relative to the Efficiency Threshold. Total construction-related emissions must be quantified and amortized over the lifetime of the proposed project to extrapolate an annual estimate of construction emissions. The average yearly emissions from amortized construction would be added to the operational emissions and evaluated against the Efficiency Threshold for assessing significance. The operational life of buildings will vary by building type and purpose. State Executive Order D-16-00 suggests that useful building lifetime is more than 25 years. A report commissioned for the Sustainable Building Task Force, a group of over 40 California state government agencies, estimates the life of a building to conservatively be 20 years. Average building life could change over time, with changes in building materials and construction techniques. At this time, the County recommends amortizing over a 20-year period to estimate annual emissions, when using the Efficiency Threshold, unless evidence is presented establishing a longer project life.

4.3.2 Bright Line Threshold

A proposed project would have a cumulatively considerable contribution to climate change impacts if it would result in a net increase of operational greenhouse gas emissions, either directly or indirectly, at a level exceeding 2,500 metric tons of CO_2e per year.

This guidance for determining significance was derived by estimating the mass emission reductions needed throughout the County from land use development projects to achieve the local fair share of the state's emissions mandate embodied in AB 32 and to support efforts to reduce emissions beyond 2020.

The County identified land use related emissions (residential, retail, service, office, and industry) in ARB's revised 2020 "business as usual" scenario (311 MMT CO_2e per year). The County estimated the effect of statewide GHG emission reduction measures, ensuring that the most up-to-date and accurate estimates were used and that there is no double counting (approximately 39 MMT CO_2e per year in 2020). The County then estimated the remaining emissions reductions needed to get to 1990 levels for land use related emissions at the statewide level. This percentage "gap" for statewide emissions (approximately 3%) was then applied to total 2020 land use related emissions in San Diego County to yield a mass emissions reduction target that would be achieved through feasible mitigation. This level of regional mass emissions reductions needed is the "land use gap."

Population and employment growth was translated into URBEMIS project types and sizes according to a frequency distribution based on a list of historic projects located throughout San Diego County. A sensitivity analysis was conducted using this database of URBEMIS projects to determine where to set the Bright Line Threshold so that feasible mitigation (for projects above the Bright Line) would meet or exceed the land use gap.

This threshold is designed to be used for projects or plans that include residential, commercial, civic, light industrial uses, or a mix of these uses. This threshold could also be used for projects or portions of projects that propose agricultural, forestry, or mining uses. This threshold cannot be used for permitted stationary sources of GHG emissions.

As with the Efficiency Threshold, GHG emissions attributable to a proposed project should be estimated using a cumulative scenario. Consistent with the guidance for the Efficiency Threshold, VMT used in deriving GHG emissions estimates must account for the relationships between project land uses and surrounding land uses and transportation facilities. VMT estimates should reflect aspects of the project's location, design, access to non-automobile transportation facilities, travel behavior of inhabitants, and other relevant characteristics that affect travel demand and mode choice. The level of emissions for any given project depends on its location, design, and other project-specific characteristics. For example, a 100-unit apartment complex adjacent to light rail with frequent headways would have lower GHG emissions compared to the same apartment building that did not have access to transit. GHG analysis should take into account project- and plan-specific characteristics that pertain to the level of GHG emissions generation.

All applicable, adopted statewide measures that would be implemented by 2020 can be included when estimating GHG emissions under the Bright Line Threshold. Applicants shall coordinate with the County prior to conducting the analysis to ensure that applicable statewide measures are included and to ensure that the emissions reductions levels from statewide measures are appropriate for the subject project.

Construction-related emissions do not need to be separately analyzed and included as

a part of the assessment of projects against the Bright Line Threshold. Instead, construction emissions for San Diego County land use projects between present and 2020 were quantified and incorporated into the Bright Line Threshold. The Bright Line is set such that the land use gap and construction emissions are both addressed by feasible mitigation for projects above the Bright Line. In other words, the feasible mitigation that will be triggered by projects above the Bright Line will reduce GHG emissions at a level that is sufficient both to meet the land use gap and to make up for construction-related emissions.

4.3.3 Stationary Source Threshold

A proposed project would have a cumulatively considerable contribution to climate change impacts if it would result in a net increase of greenhouse gas emissions, either directly or indirectly, at a level exceeding 10,000 metric tons of* CO_2e *per year.

This guidance for determining significance is intended to apply a significance level that would capture the vast majority of stationary source emissions. Based on information collected from the San Diego Air Pollution Control District (APCD) on permitted sources, the significance threshold established here would capture more than 90% of GHG emissions (91.3%).

A stationary source is one with an identified emission point or points, often associated with industrial processes. Stationary sources can include cogeneration facilities, boilers, flares, heaters, refineries, and other types of facilities. Single facilities can have many individual emission points. Many of these types of facilities would require a permit from APCD. The permit issued by APCD would normally include certain permit conditions. Facilities that are subject to APCD permits may be required to implement Best Available Control Technology (BACT) or Best Available Control Measures (BACM). BACT or BACM may include equipment or operational thresholds to reduce air pollutant emissions, including GHG emissions. The definition of BACT and BACM for the purposes of CEQA analysis should key to the meaning of “feasibility” for mitigation as provided in the CEQA Guidelines and relevant case law. Among BACM for stationary sources may be verifiable GHG emissions offsets or credits administered through a third party or registry. Please refer to Section 5.0, “Mitigation and Project Design Considerations,” for additional guidance.

For San Diego County, local stationary sources of emissions represent a relatively small portion of the total emissions profile. Local agencies are not normally responsible for permitting stationary source projects. Nonetheless, the County is interested in providing some clarity and guidance for a range of project types, including industrial/stationary source emissions. For projects that have a direct stationary source component in addition to other sources of emissions, the stationary source component must be analyzed separately using guidance provided in this section. Non-stationary sources of emissions must be analyzed using other type-specific implementing thresholds.

To support this document, the County collected data from APCD and analyzed the GHG emissions associated with permitted stationary source projects of different types and representing a range of industries. Data includes actual use of permitted sources, as opposed the theoretical level of use that may be allowed under the subject permit. Of the 925 permits where the permitted facility reported use, 11% have emissions levels above 900 MT CO_2e/yr, 3% have emissions levels above 10,000 MT CO_2e/yr, and 2% have emissions levels above 25,000 MT CO_2e/yr.

Air districts in California have identified 10,000 MT CO_2e/yr for permitted, stationary source emissions (industrial projects, for example) as a level below which the project would not be expected to substantially conflict with existing legislation adopted to reduce statewide GHG emissions and would therefore represent a less-than-cumulatively considerable contribution to the significant cumulative impact of global climate change. Use of this emissions level is explained and justified in documents developed by the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and the San Luis Obispo County Air Pollution Control District (SLOAPCD).[51,52,53,54] The use of the County's Stationary Source Threshold provides consistency relative to thresholds adopted for use in other parts of the state. For most industrial operations, 25,000 MT CO_2 is the level at which the State of California requires mandatory reporting and verification of GHG emissions.

The County's intent is to set the Stationary Source Threshold at a level that would require the vast majority of new development emission sources to analyze and quantify direct stationary source GHG emissions and incorporate feasible mitigation in order to reduce such emissions. The availability and effectiveness of mitigation is highly variable for stationary sources, just as the level of emissions associated with stationary sources is highly variable. For example, according to data provided by EPA, vapor recovery or control can reduce 90-95% of emissions for different types of storage tanks, while tuning and optimization of boilers can reduce 3-4% of emissions.[55] What constitutes "feasible" mitigation for the purposes of CEQA would be subject to a case-by-case analysis. Feasible mitigation will likely change over time as new technologies, materials, and methods become available to address GHG emissions for stationary sources.

As noted, GHG emissions from stationary sources must be estimated separately from other operational sources of emissions in the comparison with the appropriate

[51] Bay Area Air Quality Management District (BAAQMD). 2011 (May). California Environmental Quality Act. Air Quality Guidelines.

[52] California Air Pollution Control Officers Association (CAPCOA). 2008 (January). CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.

[53] SCAQMD directs that CEQA analysis of industrial projects should include construction emissions amortized over a 30-year time period when assessing impacts relative to the 10,000 MT CO2e/yr threshold.

[54] San Luis Obispo County Air Pollution Control District (SLOAPCD). 2011 (December 8th). Proposed Greenhouse Gas Thresholds and Supporting Evidence.

[55] United States Environmental Protection Agency (U.S. EPA). Clean Air Act Permitting for Greenhouse Gases. Available online at: http://www.epa.gov/nsr/ghgpermitting.html. Accessed July 12, 2011.

implementing threshold. For projects that would include a stationary source of emissions, the guidance in this section must be used for assessing significance. Project analysis must also include analysis of construction emissions and operational emissions associated with mobile sources, electricity use, water delivery, and other non-stationary sources associated with the facility.

If the stationary source emissions estimate would exceed the significance criteria, BACT or BACM shall be used to reduce emissions. If the GHG emissions level still exceeds the significance level, verifiable offsets can be used, where feasible, to reduce GHG emissions impacts below the significance level.[56]

It may not be feasible for projects of a certain scale to mitigate GHG emissions levels to a less-than-cumulatively considerable level. This determination must be made by the lead agency on a case-by-case basis according to CEQA statutory guidance, the CEQA Guidelines, and relevant case law.

Stationary source evaluations should occur within the context of regulations intended to implement AB 32. It is anticipated at this time that future state regulations will address stationary sources of GHG emissions. CEQA analysis by lead agencies of these types of projects should account for the evolving regulatory setting in conducting this type of analysis.

4.3.4 Performance Threshold

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.

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.[57] A project that

[56] Offsets, or emissions credits, are a technique to achieve a net emission reduction associated with a project through funding of GHG emission reducing activities off-site, such planting trees (which absorb carbon dioxide), converting vehicle fleets to more efficient/less polluting technologies, funding for energy efficiency retrofits of existing buildings, renewable energy projects, and other activities. Please refer to Section 5.0 of this document, which discusses mitigation techniques, including offsets.

[57] ARB has updated 2020 estimates of GHG emissions to account for new estimates for future fuel and energy demand, the effects of the recent economic recession, and other factors. California Air Resources Board (ARB). 2010 (October 29). Greenhouse Gas Inventory - 2020 Emissions Forecast. Available: http://www.arb.ca.gov/cc/inventory/data/forecast.htm. Accessed July 16, 2011.

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.

Early coordination with the County is necessary for projects that contemplate use of this percentage mitigation approach to assessing significance. Impact analysis shall occur relative to the existing environmental baseline and consider whether project-related emissions are cumulatively considerable.

Overall, the County's focus in developing this guidance document for assessing the significance of GHG emissions is focused on the most common project types that would need CEQA analysis. However, there are a range of other proposals and actions that could represent "projects" as defined by CEQA, but may require case-by-case assessment of significance. Mining projects, airport and wastewater treatment plant expansions, landfills, agricultural operations, road and other infrastructure replacement projects, along with other project types may not lend themselves to the application of the Efficiency Threshold or Bright Line Threshold. These project types may require an approach to gauging significance that is tailored to the project type, character, location, and size. The Performance Threshold provides a viable option for these types of projects.

There are several types of projects that could be initiated by the County Department of Public Works, other public agencies, or other private or nonprofit entities that could include GHG reduction during operations as a co-benefit. Examples may include:

- **Wastewater Treatment Plant Improvements**. Improvements to wastewater treatment facilities can reduce fugitive emissions of methane (CH_4) from wastewater and nitrous oxides (N_2O) from nitrification/denitrification processes. CH_4 and N_2O are both GHGs. Improvements to facilities can also improve the energy efficiency, resulting in lower indirect emissions from electricity generation.

- **Congestion Management**. Projects to alleviate congestion, reduce trip lengths, reduce idling, and otherwise address congestion could also reduce vehicular GHG emissions and improve overall efficiency of vehicular movement.

- **Habitat Restoration**. Restoring habitat can improve ecosystem function and can be designed to avoid the need for supplemental irrigation. Habitat restoration projects sometimes replace paved surfaces with trees, which would reduce GHG emissions compared to existing conditions.

- **Xeriscaping**. Landscaping projects that use low-water plans can reduce water demand and the energy associated with moving water and associated GHG emissions. Introducing landscaping can also increase carbon sequestration.

- **Flood Control, Bridges, and Other Infrastructure Improvements**. Improvements to infrastructure and facilities can help to reduce lifetime maintenance requirements and maintain efficiency of vehicular movement. Depending on the specifics of the project, these types of improvement projects could have GHG reduction benefits.

- **Construction of Bicycle and Pedestrian Facilities**. Projects that increase the convenience or otherwise promote bicycle and pedestrian travel would be expected to reduce vehicular travel and the associated VMT and GHG emissions.

The operation of projects that improve GHG efficiency of communities, such as a project to extend public transit or a project to reduce congestion and vehicle idling, would normally have less-than-cumulatively considerable effects. For many project types, however, the extent to which the project would enhance GHG efficiency of the community that it serves may not be as clear-cut. For some project types, the project would serve market demand that could be either focused or dispersed and dynamic, rather than demand generated within a static and identifiable community.

It is important in assessing impacts of non-land use projects to carefully consider what *new* emissions are attributable to the project. Depending on the nature and purpose of a project, the *net* emissions increase could be positive, neutral, or negative. For example, the State Department of General Services and State Department of Forestry and Fire Protection concluded that the relocation of the Ukiah Air Attack Base could provide for more efficient ground-based operations and therefore, reduced GHG emissions compared to baseline conditions.[58] The City of Los Angeles found that, for the LAX Crossfield Taxiway Project, the changes analyzed under the EIR would reduce both natural gas and electricity related GHG emissions. For this same project, the EIR indicates that GHG emissions associated with aircraft operations would also decrease, due to a reduction in the amount of idling time.[59] For a project that would involve rehabilitation of an existing roadway, there may be no change in the long-term operational GHG emissions, and rather, the analysis would focus on construction-related emissions. It is possible that an airport project could provide service to a greater number of people in closer proximity to their residences, reducing GHG emissions associated with reaching the airport compared to the baseline condition. An agricultural project could be intended to meet existing demand in closer proximity to the end market. Depending on the details of the existing baseline and the project characteristics, this type of project could have GHG reduction benefits compared to existing conditions. Just as with other aspects of the analysis report, evidence would be required to demonstrate that projects would provide a net GHG benefit.[60]

[58] State Department of General Services and Department of Forestry and Fire Protection. 2008 (January) Draft Environmental Impact Report. Ukiah Air Attack Base Relocation Project.
[59] City of Los Angeles. 2008 (September) Draft Environmental Impact Report for Los Angeles International Airport (LAX) Crossfield Taxiway Project.
[60] County staff should be consulted before such an approach is used.

Early coordination with the County is required for applicants that wish to use the Performance Threshold 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.[61] 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 in updates to GHG emissions models.

Mitigation for land use and transportation reduction measures can be included for the Performance Threshold. In order to estimate the effect of such measures, applicants shall estimate VMT using County-approved trip rates for the subject land use and average trip lengths for the same land use specific to the area of the unincorporated County where the project is proposed. The County has developed estimates of trip lengths by land use for different parts of the unincorporated County to support the development of traffic impact fees. These estimates, or those deemed by the County to be more appropriate or more up to date must be used for the pre-mitigation scenario. VMT for the post-mitigation scenario is used to estimate the percentage mitigation that is appropriate for proposed land use and transportation reduction measures. This should be based on a transportation study that is relevant to the subject project and is subject to County staff approval.

5.0 MITIGATION AND PROJECT DESIGN CONSIDERATIONS

Projects that have cumulatively considerable (i.e. significant) impacts according to the Guidelines for Determining Significance shall include project design features and/or adopt mitigation to reduce or avoid impacts to below the cumulatively considerable level. The benefits of proposed mitigation should be quantified, wherever feasible. Refer to Section 4.2 under "Step 7" for examples of acceptable emission models that can be used to estimate mitigation benefits. Refer also to the County's "*Report Format and Content Requirements*," under separate cover, for additional detailed direction.

The County does not have a "standard" list of mitigation that would be required for projects with potentially significant GHG emissions impacts. The type, character, and level of mitigation will depend entirely on the project type, size, location, context, and

[61] Other significance threshold efforts have relied on 28-30% as the reduction from business as usual conditions in order to achieve the 2020 emissions limit. However, ARB revised the business as usual estimate downward recently.

other factors. The availability of mitigation measures changes over time, as well, with new technologies, building materials, building and design practices, and other changes.

Local policy, implementation programs, and standards can provide guidance for identifying feasible mitigation. However, if a project design or operational features is already required, this would be required as a part of the project description, rather than serving as mitigation.

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://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf. Accessed: July 16, 2011.

- **California Air Pollution Control Officers Association (CAPCOA). 2008 (January). CEQA & Climate Change. Evaluating and Addressing Greenhouse Gas Emissions from Projects 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. Accessed July 16, 2011.

- **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 Gas Mitigation Measures.** Available: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf Accessed July 16, 2011.

- **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. Accessed July 21, 2011.

The above documents, in addition to lists of mitigation measures and design features maintained by other organizations cover a wide range of topics, including:

- **Land use, urban design, transportation measures.** Locating projects in higher-density, mixed-use areas with access to jobs, services, infrastructure, and transit can reduce GHG emissions. As noted previously, the level of GHG

emissions associated with a project will depend on its land use profile, as well as the relationship with surrounding land uses. The degree to which a project is able to reduce VMT and GHG emissions will depend on the existing and planned transportation network in and around the subject project site. Other options may include carpool programs; strategies to increase the operational efficiency of transportation systems; improvements to transit level of service, bicycle and pedestrian facilities; limiting parking; pricing strategies; and measures to limit idling. Increased transportation connectivity may help improve the mode share for non-automobile trips, but also can shorten vehicle trips (and thus reduce VMT and GHG emissions). There are many other potentially feasible land use, urban design, and transportation mitigation strategies and design features available to proposed projects that may be considered to reduce potentially significant impacts.

- **Shade and sequestration**. Urban forestry projects and tree-planting programs can help reduce the net increase in GHG emissions attributable to projects. In addition to the direct benefit associated with sequestration, planting trees or constructing other shade structures can reduce the need for air conditioning and associated energy demand and GHG emissions.

- **Energy conservation.** There are a wide variety of structural enhancements that can be used to increase the energy efficiency of structures beyond that required by current codes. More energy efficient equipment and vehicles or those that use zero carbon fuels can help to cut GHG emissions. Educational programs can help to make the operation of physical energy efficiency improvements more effective. Replacing traffic lights, street lights, and other lights with more energy efficient technologies and installation of renewable energy systems, including use of landfill gas, can help to reduce indirect emissions. Water and wastewater systems and other types of infrastructure can be built new or retrofitted to increase efficiency. Codes that require proper solar orientation, passive heat/cooling, insulation, and climate-appropriate landscaping and shade trees can reduce energy demand and therefore reduce indirect GHG emissions.

- **Solid waste.** Increasing recycling and greenwaste collection programs and otherwise reducing solid waste generation can help to cut GHG emissions. This could occur both during construction and demolition phases, as well as operational phases of projects. Collecting organic waste more frequently and implementing waste to energy (i.e. digestion and biogas production) projects can also have GHG reduction benefits.

- **Water conservation.** Water conservation measures can help to reduce GHG emissions since energy is used to move water, particularly for projects in southern California. This can include the use of landscaping that does not require much water, reuse of water, and other approaches for outdoor water use, as well as a range of physical improvements and education programs to decrease indoor use.

- **Construction**. Feasible mitigation could include strategies that would reduce GHG emissions from construction equipment, which may include, but is not limited to the use of alternative fuels and recycling or reuse of construction/demolition debris.[62] Other examples include minimizing idling time of equipment, maintaining equipment in proper working condition, training on the proper use of equipment, and using the right equipment for the job. There could be a minor benefit for GHG reductions attributable to use of coatings with low volatile organic compound (VOC) content.[63]

- **Carbon reduction credits (offsets).** After feasible on-site methods to reduce construction and operation emissions are incorporated, if effects would still be cumulatively considerable, the County may allow the use of verified carbon reduction credits (also known as offsets). The emission credit must be in addition to any GHG reduction otherwise required by law or regulation, and any GHG emission reduction that otherwise would occur.[64] The required amount of credits shall be calculated on an annual basis for the lifetime of the proposed project to correlate with the implementing thresholds, which are presented on an annual basis. An enforcement mechanism of some type must be implemented so that the offset requirement is tracked through the planning, subdivision, and entire project approval process. Offset credits should be either issued by the California Air Resources Board (ARB) or shall comply with offset protocols maintained by ARB, once those protocols are established. Offsets used for mitigation should have a mechanism to monitor the effectiveness of offsets over time to ensure that they accurately account for the needed level of mitigation for the lifetime of the subject project. The use of offsets for mitigation must be approved by the County. The County may provide and periodically update a list of acceptable offset programs to guide applicants.

Some mitigation and design approaches that reduce GHG emissions are built into the location, design, and context of project, while other mitigation measures may require ongoing monitoring. In general, projects that exceed the screening criteria and implementing thresholds would be larger discretionary projects that would likely include ongoing permits or site plans. These projects would have ongoing GHG emissions mitigation enforced through permit conditions. In the event that the project is a subdivision or required only a one-time approval, enforcement of ongoing GHG emissions mitigation would require application of an additional permit or easement to ensure the mitigation is satisfied.

In addition to any required mitigation, there may be other federal, state, regional, or local standards or requirements that may apply to projects and may reduce potential

[62] Secondary effects related to other air pollutants or co-benefits should be identified if alternative fuel use is proposed as mitigation.
[63] National Oceanic and Atmospheric Administration National Climatic Data Center. Greenhouse Gases, Frequently Asked Questions. Available: <http://www.ncdc.noaa.gov/oa/climate/gases.html> .Accessed September 21, 2011.
[64] See CEQA Guidelines Section 15126.4 (c).

GHG emissions. This guidance document does not supersede or supplant any such requirements.

The above guidance is not necessarily exhaustive and is not prescriptive. Projects are encouraged to incorporate relevant measures from the County of San Diego CAP and, if necessary, identify measures tailored to address project-specific emissions sources.

6.0 MONITORING AND UPDATE MECHANISMS

This guidance document focuses on a 2020 timeline, consistent with the legislative mandate embodied in AB 32. Some projects and plans considered under the Guidelines for Determining Significance provided herein would build out after 2020, and while there is not a comprehensive regulatory or legislative framework for addressing GHG emissions beyond 2020, this guidance document and its updates will also support efforts to reduce emissions beyond 2020.

There are several factors that will require the County to revise the CEQA approach to analyzing and mitigating GHG emissions over time. There will be new assessment tools and new mitigation techniques. Revised and new legislation, incentive programs, and regulations will affect the implementation of CEQA, including, potentially, the need for revised approaches to assessing significance. Revisions to the statewide and regional GHG emissions inventory could affect certain aspects of this document.

Lead agencies that establish GHG emission reduction targets and reduction plans should monitor progress toward those targets over time and consider whether changes to their reduction plan are necessary. In order to achieve GHG emission-related policies in general plans or measures included in GHG reduction plans, it may be necessary to revise street standards, drainage requirements, zoning and development standards, and other implementing mechanisms related to local land use and development policy.

New statewide regulatory programs may be enacted that did not exist when the local agency adopted the reduction target. This is important since there can be an interaction between local GHG reduction measures and those implemented at the state level (for example a statewide program to reduce the GHG intensity of vehicle fuels would increase the reduction benefits of local programs to reduce vehicle miles traveled).

Therefore the County will provide for annual monitoring of the CAP and the reduction targets, considering the current environmental, technological, economic, and regulatory context.

It may become appropriate to revise certain of the guidance contained in this document in the context of future Sustainable Communities Strategy work, CEQA Guidelines updates and new precedent case law, new emission factors and modeling tools, new AB 32-related regulatory rollouts that create new statewide GHG reduction measures, and other changes. It is possible that programs for sequestration, offsets, and GHG emission credits could provide new opportunities for communities and businesses,

which could be taken into account in local GHG reduction plans. It is possible that new indirect source review programs may become enacted, which could address GHG emissions. It is anticipated that the state may release guidelines for climate action plans/GHG reduction plans, which could influence somewhat the guidance provided herein. The ARB could consider and adopt statewide GHG significance thresholds. It is possible that state regulations could supersede local air quality thresholds or rules.

The Bright Line Threshold is based, in part, on conservative assumptions regarding the effectiveness of feasible mitigation incorporated into new development projects in San Diego County. If the actual level of mitigation achieved by new development projects is substantially different from these assumptions, the County will need to revise the Bright Line Threshold. Similarly, the implementing thresholds outlined in this document are based on the framework established in the County's CAP. If GHG emissions reductions achieved under the CAP are dramatically different than anticipated in this document, the County may need to revisit both the CAP and this Significance Guidelines document and consider appropriate revisions.

The County envisions that the guidance contained within this document and the County's Guidelines for Determining Significance will be updated, as necessary, to be consistent with the County's CAP.

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3.18 THEORETICAL BUILD OUT

The theoretical build-out scenario is included in the Draft General Plan Program Environmental Impact Report (Program EIR) to provide the reader with the ability to understand the worst-case scenario of full, but theoretical development of the General Plan.[1] The theoretical build-out scenario demonstrates residential and non-residential development levels that could theoretically be achieved by the Draft General Plan. The Draft General Plan does not change adopted plan land use or zoning designations currently in place, but provides land use categories that may be used during community plan updates and amendments. Since the Draft General Plan does not propose changing adopted community plan land use or zoning designations, the density and floor area ratio (FAR) proposed in the theoretical maximum build out of all lands was estimated using the assigned land use designations from adopted community plans and zoning designations.

Unlike a forecast, the theoretical build-out scenario does not have a time horizon, such as 2030, nor does it include transportation, demographic, existing land use, or economic assumptions typically used by a forecasted model to provide more realistic land use planning data. Therefore, due to regulatory constraints, physical constraints, and foreseeable market conditions, realization of this scenario is highly unlikely, but the program EIR includes an analysis of this scenario because the General Plan land use categories do provide the theoretical capacity for residential units and non-residential building square feet to allow the build-out estimates presented on **Tables 3.18-1** and **3.18-2** respectively.

Theoretical build out of land within the City of San Diego would be a substantial change in the level of residential and non-residential development described in the Existing Conditions.

Multifamily Residential Development

Under the theoretical build-out scenario, when compared to the Existing Conditions, there would be a 54 percent increase in total housing units (which would be predominantly multifamily) and a 439 percent increase in non-residential (commercial, industrial and public) building square feet. Theoretical build out assumes full development of all multifamily designated land in Coastal, Post World War II Suburban (1945-1970), and Pre World War II (pre 1945) communities at the maximum allowable community plan designated density (units per acre). It also assumes that full development build out of the 53,100 units identified in the 2006 adopted Downtown Community Plan. The theoretical build out scenario does not assume any additional development of multifamily units beyond the 2030 Forecast in Master Planned Suburban (1970-present) and Newer Urban (1960-present) communities. Refer to the notes listed in Table 3.18-1 for additional details.

Given the generalized, highly theoretical nature of this build-out analysis, the analysis did not account for variations due to the implementation of additional regulations or site-specific conditions that could affect attainment of density. Specifically for Post World War II Suburban and Pre World War II communities, the theoretical build-out scenario does not consider existing

[1] This section was provided to be responsive to a 2003 court decision regarding the El Dorado County General Plan which required that the El Dorado County address theoretical build–out.

built conditions, type of ownership, historic value, regulatory constraints and physical constraints. Regulations, such as those addressing parking requirements and Environmentally Sensitive Lands regulations may make attainment of maximum densities infeasible, and site specific easements may restrict development of certain properties to levels below what is permitted by the base zoning ordinance. For example, the zoning may allow the development of a certain number of units on a parcel, but a portion of the site could be constrained due to environmentally sensitive lands and/or height limitations; thereby reducing the feasibility of the parcel developing at the maximum allowed units.

The analysis did not include density bonus regulations that could allow for additional units. The analysis assumes that existing mobile homes and single-family units located on adopted community plan designated multifamily land would be developed for multifamily units as part of the theoretical build-out scenario. This assumes that all existing units on a parcel are either demolished and new residential units are constructed or that additional units are added to the parcel to the maximum allowed. For example, a parcel may have 28 existing multifamily units on-site; however, the units per acre (density) would allow up to a total of 30 multifamily units. The theoretical built out scenario assumes that the existing 28 units would be demolished and replaced with 30 units for an increase of two units. While theoretically possible, the likelihood of this occurring for a slight increase in total units is unrealistic due to the high cost of development.

The realization of this scenario is highly unlikely, but the program EIR includes an analysis of this scenario because the General Plan land use categories do provide the theoretical capacity for residential units. Another variable is that decision-makers have the authority to approve, deny, or modify discretionary projects based on site-specific factors and project level environmental analysis.

Non-Residential Development

For non-residential development, the theoretical build out scenario also assumes the full utilization of the allowable zoning ordinance floor area ratio (FAR) (to derive total building square footage except for Downtown) for land that is designated for retail, office, and industrial uses under the Draft General Plan. The theoretical build-out scenario includes the build out building square footage from the 2006 adopted Downtown Community Plan. Although theoretically possible based only on the allowable maximum floor area ratio, there could be constraints in place that limit or reduce the feasibility of additional square footage at the maximum floor area ratio, such as physical constraints, regulatory or environmental constraints, or economic market conditions. For example, a parcel may allow the development of maximum amount square footage based on the FAR, but a portion of the site could be constrained by environmentally sensitive lands, which would reduce the site area and could affect the ability to provide the required amount of parking; thereby reducing the feasibility of the parcel developing at the maximum allowable FAR. Another variable is that decision-makers have the authority to approve, deny, or modify discretionary projects based on site-specific factors.

SANDAG 2030 Forecast (Year 2030 Scenario)

As part of the SANDAG forecast process, the City provides land use inputs to SANDAG addressing the feasibility of development to existing conditions and constraints that may limit future development. By 2030, SANDAG forecasts that approximately 107,400 additional multifamily units could be built within the City, which is a 54 percent increase in multifamily units from 2004 consistent with adopted community plan land use designations. Overall, when including the additional single-family units, SANDAG forecasts a 24 percent increase in the total number of units by 2030.

It is important to note that the SANDAG 2030 Regional Growth Forecast does not forecast building square footage. The City based the 2004 and 2030 building square feet estimates on the SANDAG (Series 11) 2030 Regional Growth Forecast for Civilian Employment. For the purposes of this Program EIR, the City derived the building square footage estimates from the forecast by using typical square feet per employee by land use designation (retail, office, and industrial) ratios. The City used building square footage estimates for 2030, so that it could be compared relationship to the theoretical build out scenario as part of the environmental analysis. Since uses with lower employment densities, such as industrial, typically have more square footage per employee than uses with higher employment densities, such as office, it is difficult to use gross estimate of total square footage as an indicator of employment growth.

The SANDAG 2030 forecast uses an econometric forecast for regional employment population growth for the San Diego region based on national and statewide forecasts that incorporate demographic and economic factors. SANDAG uses employees per acre by land use types rather than building square footage in the forecast process. Between 2004 and 2030, SANDAG forecasts that the civilian employment will increase by 24 percent in the City.

SANDAG forecasts that the percentage increase for both new housing units and civilian jobs are at 24 percent for the City. The forecast indicates that jobs to housing ratio (civilian employment per housing unit) increases less than one percent from 1.60 in 2004 to 1.61 by 2030. During this same period, that employment density in the City increases by 10 percent from 24.8 to 27.4 civilian employments per developed employment acre.

Comparison between the Theoretical Build Out and the SANDAG 2030 Forecast Scenarios

Although the theoretical build-out scenario does not have a time horizon associated with it, there could be substantially more development than forecasted under the Year 2030 scenario. When comparing the two scenarios, there could be 24 percent more total housing units (which would be predominantly multifamily) and 298 percent more non-residential building square feet. The theoretical build-out scenario assumes for residential development that existing land uses, located on plan designated multifamily land, would redevelop or infill at the maximum point of their adopted community plan residential density range. For non-residential (commercial and industrial uses), the analysis assumes that all existing land uses, located on plan designated non-residential land, would redevelop or infill at the maximum allowed zoning ordinance FAR.

Table 3.18-1
Comparison between the Theoretical Build Out Scenario and the SANDAG 2030 Forecast Scenario for Housing Units

Housing Units	SANDAG 2030 Forecast				Theoretical Build Out				
	Base Year	Horizon Year	Change from Existing Conditions		Theoretical	Change from Existing Conditions		Change from 2030 Forecast	
	2004	2030	Numeric	Percent	Build Out	Numeric	Percent	Numeric	Percent
Single Family	285,435	297,759	12,324	4%	272,200	-13,235	-5%	-25,599	-9%
Multifamily	199,188	306,655	107,467	54%	480,100	280,912	141%	173,445	57%
Mobile Homes	5,625	5,635	10	0%	2,100	-3,525	-63%	-3,535	-63%
Total	**490,266**	**610,049**	**119,783**	**24%**	**754,400**	**264,134**	**54%**	**144,351**	**24%**

Notes:
1) The theoretical build-out scenario was prepared solely for the purposes of the General Plan Environmental Impact Report only and should not be used for any other long range planning purposes.
2) Build out generally refers to the theoretical maximum build out of all lands within the planning area in accordance with assigned land use designations.
3) Theoretical build-out scenario assumes full development of all multifamily designated land in Coastal, Post-World War II Suburban (1945-1970), and Pre-World War II (pre 1945) communities at the maximum allowable community plan designated density (units per acre).
4) Theoretical build-out does scenario not assume any additional development of multifamily units beyond the (Series 11) 2030 Forecast in Master Plan Suburbs (1970-present) and Newer Urban (1960-present) communities. Theoretical build out assumes that full development build out of the 53,100 units identified in the 2006 adopted Downtown Community Plan.
5) The reduction of single family units is the result of existing single family units located on adopted community plan designated multifamily land that would be developed for multifamily units as part of the theoretical build out.
6) The reduction of mobile units is the result of existing mobile units located on adopted community plan designated multifamily land that would be developed for multifamily units as part of the theoretical build out.
7) Theoretical build out scenario does not assume any additional development of single-family units beyond the (Series 11) 2030 Forecast.
8) Multifamily units include units that are developed on mixed-use designated land.
9) Although theoretically possible based only on the allowable maximum density, there could be constraints in place that would limit or reduce the feasibility of additional units at the maximum density, such as physical constraints, regulatory constraints, or market conditions.
10) The (Series 11) 2030 Region Growth Forecast allocated additional multifamily units to multifamily designated land considered more feasible for future development.
11) The (Series 11) 2030 Region Growth Forecast was approved by the SANDAG Board for planning purposes in September 2006. The 2030 Forecast uses the Year 2004 as a base year and 2030 as the forecast horizon year.

Table 3.18-2
Comparison between the Theoretical Build Out Scenario and the SANDAG 2030 Forecast Scenario for Total Non-Residential Square Feet

SANDAG 2030 Forecast (Estimates)				Theoretical Build Out				
Base Year	Horizon Year	Change from Existing Conditions		Theoretical	Change from Existing Conditions		Change from 2030 Forecast	
2004	2030	Numeric	Percent	Build Out	Numeric	Percent	Numeric	Percent
203,833,250	275,702,300	71,869,050	35%	1,097,680,700	893,847,450	439%	821,978,400	298%

Notes:
1) The theoretical build-out scenario was prepared solely for the purposes of the General Plan Environmental Impact Report only and should not be used for any other long range planning purposes.
2) Build -out scenario refers to the theoretical maximum build out of all lands within the planning area in accordance with assigned land use designations.
3) The SANDAG 2030 Regional Growth Forecast does not forecast building square footage. The 2004 and 2030 building square feet estimates are based on the SANDAG (Series 11) 2030 Regional Growth Forecast for Civilian Employment. The building estimates were derived from the forecast by using typical square feet per employee by land use designation (retail, office, and industrial) ratios as in the table below.

Generalized Land Use Type	Description	Square Foot per Employee
Visitor Commercial	Hotel/Motel (Lo-Rise)	1400
Visitor Commercial	Hotel/Motel (Hi-Rise)	1000
Visitor Commercial	Resort	1000
Industrial	Heavy Industry	550
Industrial	Industrial Parks	400
Industrial	Light Industry-General	400
Industrial	Warehousing and Public	800
Retail Commercial	Wholesale Trade	500
Retail Commercial	Regional Shopping	450
Retail Commercial	Community Shopping	400
Retail Commercial	Neighborhood Shopping	350
Retail Commercial	Specialty Commercial	300
Retail Commercial	Automobile Dealerships	300
Retail Commercial	Store-Front	300
Retail Commercial	Other Retail Trade	300
Office Commercial	Office (High-Rise)	300
Office Commercial	Office (Lo-Rise)	300
Office Commercial	Government Office/Civic	300

Notes:
1) The theoretical build-out scenario for square feet assumes the full utilization of the allowable zoning ordinance floor area ratio (FAR) for land that is designated for retail, office, and industrial uses, except for downtown. The theoretical build-out scenario includes the build out building square footage that is reported in the 2006 adopted Downtown Community Plan.
2) Although theoretically possible based only on the allowable maximum floor area ratio, there could be constraints in place that would limit or reduce the feasibility of additional square footage at the maximum floor area ratio, such as physical constraints, regulatory constraints, or market conditions.
3) The (Series 11) 2030 Region Growth Forecast allocated additional multifamily units to multifamily designated land considered more feasible for future development.
4) The (Series 11) 2030 Region Growth Forecast was approved by the SANDAG Board for planning purposes in September 2006. The 2030 Forecast uses the Year 2004 as a base year and 2030 as the forecast horizon year.

Table 3.18-3
SANDAG 2030 Forecast for Civilian Employment

Base Year	Horizon Year	Change from Existing Conditions		Remaining Forecast Capacity
2004	**2030**	**Numeric**	**Percent**	**Beyond 2030**
782,245	980,374	198,129	25%	74,133

3.18.1 Agricultural Resources

Although the theoretical build-out scenario does not assume the development of land designated or zoned for agricultural uses and there are not any Williamson Act designated farmlands within the City, the level of development associated with this scenario would have the potential to impair the productivity of agricultural lands because of effects caused by greater residential and employment population growth. The increase in population associated with this scenario would limit the ability of farmers to use pesticides, which is essential for agricultural resources. The increase in population would also have higher water demands, which would affect water supplies currently used for farming.

It is infeasible at this program EIR level to provide specific mitigation that would reduce impacts to a less than significant level since no specific development projects are proposed. Due to the level of development under the theoretical build-out scenario, and the lack of specific development projects and associated project-level mitigation, the impacts to agricultural resources would be significant and unavoidable.

3.18.2 Air Quality

Under the theoretical build-out scenario, the increase in population associated with the significant increase in residential and non-residential development would add a substantial number of automobile, train, truck, transit, or airplane trips or stationary source emissions, which could potentially affect San Diego's ability to meet regional, state and federal clean air standards, including the Regional Air Quality Strategy or State Implementation Plan. Under the Year 2030 scenario, infill and redevelopment of residential and non-residential uses would occur in close proximity to transit stations and corridors. This is intended to relieve some of the increased automobile trips that would have otherwise occurred without alternative transportation planning in mind and could positively affect San Diego's air quality.

Under the theoretical build-out scenario, the increase in development and population could also create air emissions that could substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations. The construction needed to create this increase in density would be a considerable source of NO_X, CO_2, and ROG from the diesel fuel used to operate construction equipment. Construction activities also associated

with the theoretical build-out scenario would generate additional vehicle trips by construction workers traveling to and from construction sites. Therefore, implementation of the theoretical build-out scenario would result in localized short-term air quality impacts.

Although mitigation framework measures summarized in **Section 3.2.4** would reduce impacts, the magnitude of change in the level of residential and non-residential development under the theoretical build-out scenario would result in impacts to air quality that could not be mitigated without major advancements in technology or restrictions on travel. It is also infeasible at this program EIR level to provide more specific mitigation that would reduce impacts to a less than significant level since no specific development projects are known. Therefore, impacts would be significant and unavoidable.

3.18.3 Biological Resources

Under the theoretical build-out scenario the level of development may not substantially alter the expected development footprint, but the infill and redevelopment associated with this scenario would lead to a considerably larger residential and employment population within the City, beyond the anticipated growth scenarios forecasted by SANDAG and planned for in the Year 2030 scenario. Although additional development under theoretical build-out scenario would not necessarily encroach into protected habitats, it would be reasonable to assume that an increase in impacts on the edge of habitats (including wetlands) would occur from increased population.

Habitat areas are easily degraded by anthropogenic influences, and the growth in residential and employment population resulting from the build-out scenario could lead to impacts to biologic resources. Unique, rare, endangered, sensitive, or fully protected species of plants or animals could be more vulnerable due to the increased likelihood of interaction between humans and habitat areas. Many of the areas within the City that are designated for preservation do allow for passive recreational uses, and the admittance of dogs. Increased use of preserve areas, even for passive recreation, can interfere with species functions, including the movements of resident or migratory fish or wildlife species.

Under the theoretical build-out scenario, the increased level of development could also result in increased noise levels throughout the City. Construction activities associated with the theoretical build-out scenario would generate elevated noise from construction. An increase in automobile, truck, transit, rail, aircraft traffic associated with residential and employment population growth would lead to a general increase in ambient noise levels. An increase in noise levels has the potential to affect behavioral and physiological responses in noise-sensitive wildlife receptors. Adverse responses to increased noise may include hearing loss or the temporary masking of vocalizations commonly used during the breeding season, nest abandonment, and decrease in predator awareness, thereby resulting in a decrease in reproductive and overall fitness of certain animal species.

Although mitigation framework measures summarized in Section 3.3.4 would reduce impacts to biologic resources, the magnitude of change under the theoretical build-out scenario would result in substantial impacts to biologic resources. It is infeasible at this program EIR level to provide

more specific mitigation that would reduce impacts to a less than significant level because no specific projects are know. Therefore, these impacts would be significant and unavoidable.

3.18.4 Geologic Conditions

Under the theoretical build-out scenario, there could be increased development on steep slopes or areas prone to geologic hazards, which would not occur to the same extent under the Year 2030 scenario. It is assumed that under the theoretical build-out scenario, development will occur at the maximum allowable residential density and non-residential FAR, but these assumptions do not account for geologic constraints that could affect the level of development. Many of the existing developments within the City are already built-out to the maximum extent feasible under the constraints that the surrounding geologic conditions impose, which may be less than theoretically allowed. The increased level of development associated with the theoretical build-out scenario could require the alterations of cliffs, hillsides, and shorelines.

Although mitigation framework measures summarized in **Section 3.4.4** seek to reduce the impacts and risks, in certain instances under a theoretical build-out scenario, structures would be located on geological units or soils that are unstable or that would become unstable and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse. As a result, a greater number people and properties could be exposed to geologic hazards such as groundshaking, fault rupture, landslides, mudslides, ground failure, or similar hazards even though available mitigation would be applied. Also, since no specific development projects are identified, it is infeasible at this program EIR level to provide more specific mitigation that would reduce impacts to a less than significant level. Therefore, these impacts would be significant and unavoidable.

3.18.5 Health and Safety

Under the theoretical build-out scenario, development could occur on contaminated sites located throughout the City. This increased level of development could also lead to an increase in the number of underground storage tanks and thus, potentially more leaking underground storage tanks. New development and redevelopment could result in the increased use, transport, and disposal volumes of hazardous materials within the City. All of these conditions would create a much more substantial risk of exposure to people or sensitive receptors to potential health hazards over the Year 2030 scenario because of the amount of volume of development that would have to occur to create theoretical build-out conditions.

Under the theoretical build-out scenario, the increased level of development would also result in increased growth in residential and employment population. As a result, a greater number of people and structures could be at risk of significant loss, injury or death from wildland fires, flooding, seiches, tsunamis, mudflows or aircraft operations accidents. The adopted emergency response plan and emergency evacuation plan are not based on the increased level of development associated with the theoretical build-out scenario as a result they would need to be updated to address the increased population.

Although mitigation framework measures summarized in **Section 3.4.4** would lessen impacts, due to the magnitude of change in the level of residential and non-residential development under the theoretical build-out scenario and associated population growth, reduction to a less than significant level is unlikely. Also, since no specific development projects are proposed, it is infeasible at this program EIR level to provide more specific mitigation measures that would reduce impacts to a less than significant level. Therefore, impacts to community health and safety would be significant and unavoidable.

3.18.6 Historic Resources

Under the theoretical build-out scenario, extensive grading of large amounts of area within the City could be necessary - much more than would be anticipated under the Year 2030 scenario. Because the majority of these projects would be infill and redevelopment, this grading would occur on previously graded surfaces. Previously excavated areas are generally considered to have a low potential for archaeological resources, since the soil containing such resources has been removed. Sites that have been minimally excavated in the past (e.g., undeveloped parcels, vacant lots and lots containing surface parking; undeveloped areas around historic buildings; under buildings with post, pier, slab, or shallow wall foundations without basements, etc.) have the greatest likelihood of encountering archaeological resources.

Under the theoretical build-out scenario, it is assumed that future development would involve mass grading, road construction, underground parking areas, sea walls, underground tanks, new pipelines or replacement of pipelines, potentially at a lower depth than the previous development. It is assumed that many future projects could also require subterranean parking, causing the likelihood of impacts of historical resources to amplify because of the increased depth of grading. The demolition of buildings and surface clearance could result in impacts to archaeological resources. Within the City, prehistoric human remains have been uncovered during both previous archaeological investigations and grading activities. The potential for encountering human remains during construction development activities is possible and impacts to human remains under the theoretical build-out scenario could occur.

Since the theoretical build-out scenario does not include assumptions concerning the preservation of historical resources, the substantial redevelopment of all Pre-World War II communities under the theoretical build-out scenario has the potential to cause significant impacts to architectural resources. Many of these structures (though not recognized on any official historic preservation list) still contain valuable elements of San Diego history. The total redevelopment of these areas under the theoretical build-out scenario would be a significant loss to the historic record of the City.

It is infeasible at this program EIR level to provide specific mitigation that would reduce impacts to a less than significant level since no specific development projects are proposed. Due to the magnitude of grading that would be required to support the infill and redevelopment of residential and non-residential densities under the theoretical build-out scenario, the potential for adverse physical or aesthetic effects to prehistoric, historic, or architecturally significant buildings, structures, objects, or sites; or in impacts to existing religious or sacred uses within the

City or the disturbance of any human remains, including those interred outside formal cemeteries would be significant and unavoidable.

3.18.7 Hydrology

Under the theoretical build-out scenario, there would be substantially more development than that forecasted under the Year 2030 scenario. When comparing the two, there would be 24 percent more total housing units (which would be predominantly multifamily) and 298 percent more non-residential building square feet. This would also lead to a substantial change in absorption rates, drainage patterns, and the rate of surface runoff. To achieve the theoretical build-out scenario, it was assumed for residential development that existing land uses located on plan designated multifamily land would redevelop or infill at the maximum point of their adopted community plan residential density range. For non-residential (commercial and industrial uses) it is assumed that all existing land uses located on plan designated non-residential land would redevelop or infill at the maximum allowed zoning ordinance floor area ratio. This level of development under the theoretical build-out scenario could lead to considerably more non-permeable surface added to the environment. This additional non-permeable surface area would limit absorption rates, radically alter drainage patterns, and substantially increase the rate of surface runoff.

Although mitigation framework measures summarized in **Section 3.7.4** would reduce impacts, it is infeasible at this program EIR level to provide more specific mitigation that would reduce impacts to a less than significant level. Due to the magnitude of change in the level of residential and non-residential development under the theoretical build-out scenario and the lack of specific development projects and associated project-level mitigation, the impacts to absorption rates, drainage patterns, and the rate of surface runoff would be significant and unavoidable.

3.18.8 Land Use

Under the theoretical build-out scenario, the increased level of development could also result in physically dividing established communities or creating incompatibilities between adjacent land use densities and intensities throughout the City. The analysis assumes that existing mobile homes and single-family units located on adopted community plan designated multifamily land would be developed for multifamily units as part of the theoretical build-out scenario. The theoretical scenario also assumes the full utilization of the allowable zoning ordinance floor area ratio for land that is designated for retail, office, and industrial uses under the Draft General Plan. It is likely that under the theoretical build-out scenario, small parcels will be consolidated as part of larger full block developments.

Although the mitigation framework measures summarized in **Section 3.8.4** would reduce impacts, it is infeasible at this program EIR level to provide more specific mitigation that would reduce impacts to a less than significant level, since specific development projects are not known. Due to the level of development under the theoretical build-out scenario and the lack of specific development projects and associated project-level mitigation, impacts related to land use would be significant and unavoidable under the theoretical build-out scenario.

3.18.9 Mineral Resources

Although development would limit access to mineral resources and possibly limit the ability for extraction, the construction needed to create this increase in density would considerably affect the supply of regional mineral resources, particularly sand and gravel. The use of regionally mined materials for development is desirable as it reduces the need for trucking materials over long distances, thus reducing costs. Regional sand and gravel sources could be depleted and unable to support the magnitude of development required under the theoretical build-out scenario. As such, the combination of the magnitude of change in the level of development under this scenario and the lack of available mitigation measures to lessen these impacts would result in significant and unavoidable impacts to mineral resources (e.g. sand and gravel).

3.18.10 Noise

Under the theoretical build-out scenario, the increased level of development could also result in increased noise levels throughout the City. Construction activities associated with the theoretical build-out scenario would generate elevated noise from construction. An increase in automobile, truck, transit, rail, aircraft traffic associated with residential and employment population growth would lead to a general increase in ambient noise levels. An increase in noise levels has the potential to affect noise-sensitive receptors and uses.

Although mitigation framework measures summarized in **Section 3.10.4** would reduce impacts, it is infeasible at this program EIR level to provide more specific mitigation that would reduce impacts to a less than significant level, since specific development projects are not known. Due to the magnitude of change in the level of residential and non-residential development under the theoretical build-out scenario and the lack of specific development projects and associated project-level mitigation, and all impacts to noise would be significant and unavoidable under the theoretical build-out scenario.

3.18.11 Paleontological Resources

Under the theoretical build-out scenario, the increased level of development could result extensive grading of areas within the City, which would be more than is anticipated under the Year 2030 scenario. It is likely that under this scenario grading would occur on previously graded surfaces since the majority of the future development would be associated with infill and redevelopment.. The bedrock formation on areas previously graded will be closer to the surface, so even shallow excavations, such as building footings, may extend into formations. Projects involving extensive grading, road construction, underground parking areas, sea walls, underground tanks, or new pipelines or replacement of pipelines at a lower depth than the original installation could extend into valuable formations. It is likely that under the theoretical build-out scenario, many projects would require subterranean parking, causing the likelihood of impacts to paleontological resources to increase. The increase in residential and employment population associated with the theoretical build-out scenario could also require additional roads, pipelines, storage tanks and other infrastructure, which could require grading or subterranean investigation.

Due to the magnitude of grading that could be required to support development under theoretical build out, and the lack of specific development projects and associated project-level mitigation, the impacts to unique paleontological resources or a geologic formations possessing a medium to high fossil bearing potential would be significant and unavoidable.

3.18.12 Population and Housing

Under the theoretical build-out scenario, it is assumed that there would be a 24 percent increase in the total amount of housing units above the forecasted Year 2030 scenario. While it is likely that the increase supply of housing units could provide for additional housing opportunities and the replacement of substandard housing with newer housing units, it is also likely that residents of older housing units could be displaced as a result of the demolition and replacement of older housing units with newer and more expensive housing units. This displacement could be particularly substantial in the mobile home communities. In some instances, people could have access to City, state, and federal programs providing housing assistance.

Although mitigation framework measures summarized in **Section 3.12.4** would seek to reduce displacement impacts, it is infeasible at this program EIR level to provide mitigation that can reduce such impacts to a less than significant level, since specific development projects are not known. For this reason and due to the magnitude of change in the level of residential and non-residential development under the theoretical build-out scenario, the physical environmental effects related to the construction of replacement housing would be significant and unavoidable.

3.18.13 Public Services and Facilities

Under the theoretical build-out scenario, it is assumed that there would be a 24 percent increase in the total amount of housing units above the forecasted Year 2030 scenario. This could lead to a residential population within the City, which could require increased public services. This could create need for new or expanded public facilities in order to maintain adequate public service levels. The construction of new and expanded facilities could cause environmental impacts.

It is likely that under the theoretical build-out scenario existing and planned park and recreation facilities may not be able to adequately serve the increased residential population. Based on the 1979 General Plan population-to park-acreage standards, many of the older urbanized areas are deficient in park acreage in relation to their current population. Fee structures identified in the mitigation framework **Section 3.13.4** would help to increase park and recreation facilities as part of the development process; however, under the theoretical build-out scenario, it is not likely that adequate park and recreation facilities could be provided to accommodate the growth beyond land currently designated for park uses. It is assumed that all residential and non-residential plan designated land would be built to their full development potential.
Mitigation framework measures summarized in **Section 3.13.4** would reduce these impacts; however, it is infeasible at this program EIR level to provide more specific mitigation that would reduce such impacts to a less than significant level since no specific public facility improvement project information is known. The considerable population growth also associated with the theoretical build-out scenario can be expected to create substantial impacts associated with construction of new or expanded public facilities needed to accommodate a substantial increase in the use of park and recreation facilities. For these reasons, these impacts would be significant and unavoidable.

3.18.14 Public Utilities

Under the theoretical build-out scenario, the increased level of development could result in an increased demand for public utilities beyond projected supplies of water, electrical power, fuel, or other forms of energy. Typically, most utility service providers in the region utilize the SANDAG regional forecast data. The increased demand for utilities under the theoretical build-out scenario could result in the construction of new or physically altered utilities in order to maintain service objectives which could cause significant environmental impacts.

Although mitigation framework measures summarized in **Section 3.14.4** would reduce impacts, it is infeasible at this program EIR level to provide more specific mitigation that would reduce impacts to a less than significant level, since specific development projects are not known. Due to the magnitude of change in the level of residential and non-residential development under the theoretical build-out scenario and the lack of specific development projects and associated project-level mitigation, impacts related to the construction or alteration of public utilities would be significant and unavoidable under the theoretical build-out scenario.

3.18.15 Transportation/Traffic/Circulation/Parking

Under the theoretical build-out scenario, the increased level of development could result in an increase in the number of roadway miles and percent of daily vehicle miles traveled at a Level of Service E or F on the planned transportation network and circulation system. Transportation planning in the San Diego region including the Year 2030 scenario uses the SANDAG regional forecast for the Year 2030. SANDAG has not produced a forecast using the theoretical build-out scenario; and Citywide and regional transportation plans and policies do not address the population and employment growth associated with a theoretical build-out scenario.

Although the mitigation framework measures summarized in **Section 3.15.4** would reduce impacts, it is infeasible at this program EIR level to provide more specific mitigation that would reduce impacts to a less than significant level, since specific development projects are not known. Due to the magnitude of change in the level of residential and non-residential development under the theoretical build-out scenario and the lack of specific development projects and associated project-level mitigation and the fact that regional transportation plans do not address transportation needs beyond what is anticipated in the Year 2030 forecast, transportation-related impacts would be significant and unavoidable.

3.18.16 Visual Effects and Neighborhood Character

Under the theoretical build-out scenario, the increased level of development could result in a change to neighborhood character. Areas currently occupied by with single-family homes, mobile homes, lower density multifamily homes, such as duplexes, in areas that allow multifamily uses would be replaced with multifamily uses at the maximum allowed community plan density. Existing commercial areas would also be intensified to the maximum allowable FAR. It is also assumed under the build-out scenario that there could be major alterations to the City's topography to accommodate this level of development. View corridors could also be substantially altered or blocked in some areas.

Due to the level of development under the theoretical build-out scenario and the lack of specific development projects and associated project-level mitigation, the impacts to visual effects and neighborhood character would be significant and unavoidable.

3.18.17 Water Quality

Under the theoretical build-out scenario, the increased level of development could result in an increase of non-permeable surface area. Due to the anthropogenic nature of water quality impairments, the growth in residential and employment population required to support the build-out scenario could lead to significant unavoidable impacts to regional water quality. The need for water to support the increased level of development could also require the use of ground water resources, which would also lead to degradation due to the unique attributes of regional aquifers. Significant and unavoidable impacts to groundwater could arise from the theoretical build-out scenario.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION No. 2010-06

A Resolution of the Board of Directors of the Bay Area Air Quality Management District Adopting Thresholds For Use In Determining the Significance of Projects' Environmental Effects Under the California Environmental Quality Act

WHEREAS, pursuant to Title 14, Chapter 3, Article 5, Section 15064.7 of the California Code of Regulations ("Section 15064.7"), the California Resources Agency encourages public agencies to adopt "Thresholds of Significance" under the California Environmental Quality Act ("CEQA");

WHEREAS, pursuant to Section 15064.7, CEQA Thresholds of Significance are identifiable quantitative, qualitative or performance levels of a particular environmental effect, non-compliance with which means the effect will normally be determined to be "significant" under CEQA, and compliance with which means the effect normally will be determined to be less than significant under CEQA;

WHEREAS, the Board of Directors ("Board") of the Bay Area Air Quality Management District ("District") finds it necessary and appropriate to adopt CEQA Thresholds of Significance as set forth in Attachment A hereto for use by District staff and by other appropriate agencies in determining whether projects may have significant effects on the environment for purposes of CEQA environmental analyses;

WHEREAS, the CEQA Thresholds of Significance as set forth in Attachment A hereto do not alter the existing procedural and substantive requirements of CEQA under California law, but simply clarify the level at which, in the District's considered opinion, an environmental effect should normally be considered "significant" for purposes of existing CEQA law;

WHEREAS, the CEQA Thresholds of Significance set forth in Attachment A hereto were developed through an extensive public review process, which included public workshops, Board meetings and meetings with local government agency and non-government organization staff, including the cities of Berkeley, Colma, Daly City, Dublin, Fremont, Livermore, Oakland, Pleasanton, Richmond, San Leandro, San Mateo, San Francisco and Santa Rosa; the counties of Alameda, Contra Costa, Napa, Santa Clara, and Sonoma; and the CARE Task Force, the Alameda County Planning for Healthy Communities Network and the Governor's Office of Planning and Research Local Government Roundtable;

WHEREAS, District staff held ten public workshops throughout the Bay Area on February 26, 2009, April 27, 29 and 30, 2009, September 8, 9, and 10, 2009, October 2, 2009, and April 15 and 26, 2010; solicited Thresholds of Significance options for consideration; and published for public review and comment the Threshold Options Report on April 24, 2009, the CEQA Thresholds Options and Justification Report on October 8, 2009, and the Proposed Thresholds of Significance Report on November 2, 2009, December 7, 2009 and May 3, 2010;

WHEREAS, District staff held ten local agency staff workshops throughout the Bay Area on March 30 and April 12, 13, 14, 16, 19, 20, 21 and 27, 2010.

WHEREAS, District staff considered and responded in writing to all written comments on the Proposed Thresholds of Significance that were received prior to May 25, 2010;

WHEREAS, public meetings to consider and discuss the proposed Thresholds of Significance options and staff's recommendations were held before several committees of the Board, including the Board's Executive Committee on March 16, 2009, June 29, 2009, September 24, 2009, February 22, 2010, and May 24, 2010; the Board's Climate Protection Committee on September 10, 2009; and the Board's Stationary Source Committee on November 16, 2009;

WHEREAS, the Thresholds of Significance set forth in Attachment A hereto are supported by substantial evidence, as documented in the report entitled Proposed Thresholds of Significance, dated May 3, 2010, and other documentation compiled by District staff;

WHEREAS, the substantial evidence as documented in the May 3, 2010, Proposed Thresholds of Significance report and other documentation establishes that the Thresholds of Significance set forth in Attachment A hereto reflect the levels at which environmental effects should be considered "significant" for purposes of CEQA, such that exceedance of the thresholds will normally establish that the effect is "significant" under CEQA and compliance with the thresholds normally will establish that the effect is less than "significant" under CEQA;

WHEREAS, the CEQA Thresholds of Significance set forth in Attachment A hereto are consistent with the principles and jurisprudence of CEQA law as set forth in CEQA, its implementing regulations, and applicable judicial interpretations;

WHEREAS, if the California Air Resources Board were to adopt CEQA thresholds of significance for greenhouse gas emissions at a future date, the District will revaluate the adopted greenhouse gas thresholds of significance to ensure they are consistent with the California Air Resources Board;

WHEREAS, as SB 375 is implemented and the region develops a Sustainable Community Strategy, the District will reevaluate the adopted greenhouse gas thresholds of significance to ensure consistency with the intent of SB 375;

WHEREAS, District staff will work with cities and counties to provide technical resources and financial assistance to develop climate action plans and community risk reduction plans;

WHEREAS, the CEQA Thresholds of Significance set forth in Attachment A hereto are written and displayed so that their meaning can be easily understood by District staff and other agencies using them as a means to assess whether a project's environmental effects will be significant under CEQA;

WHEREAS, public meetings of the Board to consider adoption of the Thresholds of Significance were properly noticed and convened in accordance with all requirements of law, which public

meetings were held on November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010;

WHEREAS, at the November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010 public meetings, the subject matter of the Thresholds of Significance was discussed with interested persons in accordance with all provisions of law;

WHEREAS, the November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010 public meetings and the other public review opportunities that the District has provided regarding the Thresholds of Significance, constitute a public review process as required by Section 15064.7;

WHEREAS, District staff has prepared and presented to this Board the May 3, 2010, Proposed Thresholds of Significance report, which has been considered by this Board and is incorporated herein by reference;

WHEREAS, the documents and other materials that constitute the record of the public review process under Section 15064.7 on which this Resolution is based are located at the Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, 94109, and the custodian for these documents is Ms. Lisa Harper, Clerk of the Boards;

WHEREAS, District staff recommends adoption of the CEQA Thresholds of Significance set forth in Attachment A hereto;

WHEREAS, the Board of Directors concurs with District staff's recommendations and desires to adopt the CEQA Thresholds of Significance set forth in Attachment A hereto;

NOW, THEREFORE, BE IT RESOLVED that that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the CEQA Thresholds of Significance, pursuant to the authority granted by law, as set forth in Attachment A hereto, and discussed in the Proposed Thresholds of Significance report dated May 3, 2010, with instructions to staff to correct any typographical or formatting errors before final publication of the CEQA Thresholds of Significance.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that projects that do not comply with the CEQA Thresholds of Significance will normally be determined to have a significant effect on the environment for purposes of CEQA, and projects that comply with the CEQA Thresholds of Significance normally will be determined to have a less-than-significant effect on the environment for purposes of CEQA.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that Lead Agencies in the Bay Area apply the CEQA Thresholds of Significance, except for the Risk and Hazard thresholds for Receptor Projects, for Notices of Preparation issued, and environmental analyses begun, on or after the date of adoption of this Resolution.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that Lead Agencies in the Bay Area apply the CEQA Thresholds of Significance for the

Risk and Hazard thresholds for Receptor Projects for Notices of Preparation issued, and environmental analyses begun, after January 1, 2011.

The foregoing Resolution was duly and regularly introduced, passed and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of Director KALRA, seconded by Director UILKEMA, on the 2nd day of JUNE, 2010, by the following vote of the Board:

AYES: BATES, GARNER, GIOIA, GROOM, HOSTERMAN, HUDSON, KALRA, MAR, ROSS, SPERING, TORLIATT, UILKEMA, YEAGER, WAGENKNECHT

NOES: NONE

RECUSED: HAGGERTY

ABSENT: BROWN, DALY, DUNNIGAN, KLATT, KNISS, MILEY, ZANE

Brad Wagenknecht
Chairperson of the Board of Directors

ATTEST:

John Gioia
Secretary of the Board of Directors

ATTACHMENT A

THRESHOLDS OF SIGNIFICANCE FOR USE IN DETERMINING THE SIGNIFICANCE OF PROJECTS' ENVIRONMENTAL EFFECTS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

ATTACHMENT A

Proposed Air Quality CEQA Thresholds of Significance (May 3, 2010)			
Pollutant	**Construction-Related**	**Operational-Related**	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	**Average Daily Emissions (lb/day)**	**Average Daily Emissions (lb/day)**	**Maximum Annual Emissions (tpy)**
ROG	54	54	10
NO_X	54	54	10
PM_{10} (exhaust)	82	82	15
$PM_{2.5}$ (exhaust)	54	54	10
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs **Projects other than Stationary Sources**	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO_2e/yr OR 4.6 MT CO_2e/SP/yr (residents + employees)	
GHGs **Stationary Sources**	None	10,000 MT/yr	
Risks and Hazards – New Source (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 $\mu g/m^3$ annual average <u>Zone of Influence</u>: 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Receptor (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 $\mu g/m^3$ annual average <u>Zone of Influence</u>: 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Source (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 $\mu g/m^3$ annual average (from all local sources) <u>Zone of Influence</u>: 1,000-foot radius from fence line of source or receptor	

Proposed Air Quality CEQA Thresholds of Significance (May 3, 2010)		
Pollutant	**Construction-Related**	**Operational-Related**
Risks and Hazards – New Receptor (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 $\mu g/m^3$ annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Odors	None	Complaint History—5 confirmed complaints per year averaged over three years
Plan-Level		
Criteria Air Pollutants and Precursors	None	1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
GHGs	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO2e/ SP/yr (residents + employees)
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Odors	None	Identify locations of odor sources in general plan
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Regional Plans (Transportation and Air Quality Plans)		
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions

Notes: CO = carbon monoxide; CO_2e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_X = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SP = service population; tpy = tons per year; yr = year.

* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

FILED
Clerk of the Superior Court
DEC 03 2012
By: _____ Deputy

FILED
Clerk of the Superior Court
DEC 03 2012
By: A. Taylor, Deputy

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SAN DIEGO

CLEVELAND NAT'L FOREST FOUNDATION, et al., Petitioners, v. SAN DIEGO ASS'N OF GOVERNMENTS, Respondent; And CONSOLIDATED CASE and COMPLAINT IN INTERVENTION BY the ATTORNEY GENERAL OF CALIFORNIA	Case No. 2011-00101593 **RULING ON PETITIONS FOR WRIT OF MANDATE** Judge: Timothy B. Taylor Dept.: 72 Hearing: November 30, 2012

1. Overview and Procedural History.

In this CEQA case, the petitioners and the Attorney General claim SANDAG abused its discretion when it decided to certify an EIR and adopt a Regional Transportation Plan (RTP) which for the first time included a "Sustainable Communities Strategy" (SCS) ostensibly designed to meet a greenhouse gas emission reduction target as required by Senate Bill 375, Stats. 2008, Ch. 728. The parties agree this is the first RTP in California to be adopted following the 2008 legislation [AR2075; AR 04465], but they fundamentally disagree about the reach and requirements of that statute as it interfaces with the requirements of CEQA. No court has heretofore interpreted SB 375; the RTP/SCS at issue is meant to provide a blueprint for transportation planning for the next

40 years; and entities like SANDAG up and down the State are looking for guidance from this case regarding how to implement SB 375 in the context of an EIR. Thus, this court is but a way station in the life of this case, which is clearly headed for appellate review regardless of the outcome at the trial level. The case arises against a backdrop of intense scientific and political debate over what one counsel referred to as the signal issue of our time: global climate change.

Petitioners Cleveland Nat'l Forest Foundation ("Cleveland") and the Center for Biological Diversity ("CBD") filed the petition on November 28, 2011. The case was assigned to Judge Hayes, but Cleveland challenged her and the case was reassigned. Petitioners CREED-21 and the Affordable Housing Coalition ("AHC") filed a substantially similar petition, also on November 28, 2011 (ROA 42). This case, No. 2011-00101660, was initially assigned to another department, but the parties later stipulated to (and the court ordered) consolidation with the low-numbered case (ROA 41).

Cleveland and CBD filed an amended petition on 1/23/12, adding the Sierra Club as a petitioner (ROA 17). The AG sought and obtained leave to intervene on 1/25/12, and filed her petition in intervention the same day on behalf of the People (ROA 22-25).

At a CMC on 2/24/12, the parties advised the court that the Administrative Record in this case exceeds 10,000 pages in length (as it turned out, it is over 30,000 pages). In light of this, the court adopted a party-proposed briefing schedule, granted relief from brief page limits imposed by the Rules of Court, and set the matter for a merits hearing (ROA 38). SANDAG subsequently filed answers to both the Cleveland/CBD/Sierra Club amended petition and the CREED-21/AHC petition (ROA 48, 49). SANDAG also filed its answer to the AG's petition in intervention.

The Administrative Record, which is contained on a CD, was lodged on June 27 (ROA 53), having been certified by SANDAG on May 3 (ROA 45). Joint excerpts are contained in two binders, which were lodged 10/25/12. On November 19, the parties lodged a "Corrected Joint Appendix" (ROA 80); but by this time, the court had done the lion's share of its review using the joint excerpts lodged in October.

The briefing has been extensive, and as will be explained below, might have been even <u>more</u> extensive. On June 27, the AG filed an opening brief, an amended opening brief, and (a few days later) an errata to the amended opening brief (ROA 52, 56). Also on June 27, CREED-21/AHC filed their opening brief (ROA 54), and Cleveland/CBD/Sierra Club filed their opening brief (ROA 55). This was a total of 81 pages of briefing (not counting the AG's amendments and corrections). On Sept. 10, SANDAG filed its responsive briefs: one in response to the AG's amended brief (ROA 62), and a second in response to the Cleveland and CREED-21 briefs (ROA 61). This was a total of 95 pages of briefing.

On September 25, 2012, the court had the unpleasant experience of denying several requests for leave to file *amicus* briefs. ROA 68. Respondents recruited several *amici*

who spent time and energy preparing extensive briefs. See ROA 59, 64. The parties and the proposed *amici* appeared on September 25 to ask the court to allow the filing of these briefs, and to set a briefing schedule for joinders and responses thereto. The court was constrained to exercise its discretion to deny all such requests; it explained its decision in two ways. First, the court is aware of its limited role here: to ensure a complete record, and to provide the parties with a timely decision so that the case may proceed promptly to appellate review. The court was concerned that allowing *amicus* briefing, joinders and responses would retard rather than advance the latter goal (particularly given that the trial court's decision will not affect the others statewide with an interest in this topic, but rather only the parties – and then only for the limited period between the decision set forth below and the issuing of a learned opinion from the 4th DCA, Div. 1).

Second, and in a related vein, the court noted that Brobdingnagian budget cuts recently suffered by the Judicial Branch have caused the San Diego Superior Court to lay off hundreds of staff, stop providing court reporters in civil cases, restrict office hours, and, most recently, close a county-wide total of seven civil independent calendar courtrooms (with a consequent re-distribution of the caseload among the "surviving" departments). Again, the court was concerned that 100+ pages of additional briefing (on top of the lengthy party/intervenor briefs) could not be properly addressed by the court in a timely fashion, given these harsh fiscal and workload realities. Fortunately, the work done by *amici* will not have been wasted; they remain free to polish their briefs in light of this court's decision and seek leave to file them as the case proceeds to review before courts with broader authority.

Finally, reply briefing was filed by the AG on October 12; petitioners filed their consolidated reply that same day (ROA 72, 73). This was an additional 50 pages of briefing. The court has reviewed the opening, opposition and reply briefing, as well as the Administrative Record and the Supplement thereto filed October 22 (ROA 74).

The court notes that the briefing was accompanied by lodgments of non-California authorities. The court asks the parties to forebear from routinely lodging copies of federal or foreign authorities in the future. These are ordinarily available to the court on Westlaw. Counsel are encouraged to review the Summer 2011 amendments to CRC 3.1113(i) in this regard. The former rule made such lodgments mandatory; the current rule permits judicial discretion in this area. The court will advise counsel if it needs a lodgment of a non-California authority. Many trees will be saved if counsel will honor this request. Also, recent budget cuts imposed on the court make the clerk time for the handling of these lodgments quite problematic.

On November 16, 2012, the court published a lengthy tentative ruling. The court did so early, in order to facilitate counsel's preparation in light of the intervening Thanksgiving holiday. The court entertained well-prepared and very thoughtful argument on November 30 from Mr. Seymour on behalf of SANDAG, Mr. Selmi on behalf of petitioners, and by Mr. Patterson and Ms. Durbin on behalf of the AG. Petitioners and the AG used a Powerpoint presentation, which the court marked as Ex. 1 to the hearing for record purposes. Following argument, the court took the matter under submission. The court

now renders its decision. Record references below are to the excerpts lodged by the parties in October, except where stated. The court notes that, near the end of her comments during the 1 hour 45 minute hearing, Ms. Durbin requested a Statement of Decision. This is not required, as there was no "trial" of this matter as contemplated by CCP section 632. There was no testimony or cross examination; the matter proceeded, as most if not all CEQA cases do, in the manner of a complex motion argument. The court hopes that the following discussion will be deemed by the parties and the reviewing court to be an adequate specification of the grounds for non-compliance as required by Pub. Res. Code section 21005(c), and an adequate setting forth of the court's decision and the reasons therefor.

2. <u>Overview of the CEQA Process.</u>

A. <u>The Court's Role in CEQA Cases.</u>

In *Mira Mar Mobile Community v. City of Oceanside,* 119 Cal.App.4th 477, 486 (2004) (*Mira Mar Mobile Community*), the court explained that "[i]n a mandate proceeding to review an agency's decision for compliance with CEQA, [courts] review the administrative record *de novo* [citation], focusing on the adequacy and completeness of the EIR and whether it reflects a good faith effort at full disclosure. [Citation.] [The court's] role is to determine whether the challenged EIR is sufficient as an information document, not whether its ultimate conclusions are correct. [Citation.]" An EIR is presumed adequate. Pub. Res. Code § 21167.3, subd. (a).

Courts review an agency's action under CEQA for a prejudicial abuse of discretion. Pub. Res. Code § 21168.5. "Abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence." *Id.;* see *Mira Mar Mobile Community, supra*, 119 Cal.App.4th at 486; *County of San Diego v. Grossmont-Cuyamaca Community College Dist.* ("*Grossmont*"), 141 Cal. App. 4th 86, 96 (2006)(same).

In defining the term "substantial evidence," the CEQA Guidelines state: " 'Substantial evidence' ... means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made ... is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion[,] narrative [or] evidence which is clearly erroneous or inaccurate ... does not constitute substantial evidence." CEQA Guidelines, § 15384(a). "In applying the substantial evidence standard, [courts] resolve all reasonable doubts in favor of the administrative finding and decision. [Citation.]" *Mira Mar Mobile Community, supra*, 119 Cal.App.4th at 486; *Grossmont, supra*, 141 Cal. App. 4th at 96.

Although the lead agency's factual determinations are subject to the foregoing deferential rules of review, questions of interpretation or application of the requirements of CEQA are matters of law. While judges may not substitute their judgment for that of the decision

makers, they must ensure strict compliance with the procedures and mandates of the statute. *Grossmont, supra*, 141 Cal. App. 4th at 96.

B. <u>The Three Steps of CEQA</u>.

CEQA establishes "a three-tiered process to ensure that public agencies inform their decisions with environmental considerations." *Banker's Hill, et al v. City of San Diego*, 139 Cal. App. 4th 249, 257 (2006)("*Banker's Hill*"); see also CEQA Guidelines, § 15002(k)(describing three-step process).

First Step in the CEQA Process.

The first step "is jurisdictional, requiring that an agency conduct a preliminary review in order to determine whether CEQA applies to a proposed activity." *Banker's Hill, supra,* 139 Cal. App. 4th at 257; see also Guidelines, § 15060. The Guidelines give the agency 30 days to conduct this preliminary review. (Guidelines, § 15060.) The agency must first determine if the activity in question amounts to a "project." *Muzzy Ranch Co. v. Solano County Airport Land Use Com.* (2007) 41 Cal.4th 372, 380. "A CEQA ...project falls into one of three categories of activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment (§ 21065.)" *Sunset Sky Ranch Pilots Assn. v. County of Sacramento* (2009) 47 Cal.4th 902, 907.

As part of the preliminary review, the public agency must also determine the application of any statutory exemptions or categorical exemptions that would exempt the proposed project from further review under CEQA. See Guidelines, § 15282 (listing statutory exemptions); Guidelines, §§ 15300–15333 (listing 33 classes of categorical exemptions). The categorical exemptions are contained in the Guidelines and are formulated by the Secretary under authority conferred by CEQA section 21084(a). If, as a result of preliminary review, "the agency finds the project is exempt from CEQA under any of the stated exemptions, no further environmental review is necessary. The agency may prepare and file a notice of exemption, citing the relevant section of the Guidelines and including a brief 'statement of reasons to support the finding.' " *Banker's Hill, supra*, 139 Cal.App.4th at 258, citing Guidelines, §§ 15061(d), 15062(a)(3).

Second Step in the CEQA Process.

If the project does not fall within an exemption, the agency proceeds to the second step of the process and conducts an initial study to determine if the project *may* have a significant effect on the environment. (Guidelines, § 15063.) If, based on the initial study, the public agency determines that "there is substantial evidence, in light of the whole record ... that the project may have a significant effect on the environment, an environmental impact report [(EIR)] shall be prepared." [CEQA, § 21080(d).] On the other hand, if the initial study demonstrates that the project "would not have a significant effect on the environment," either because "[t]here is no substantial evidence, in light of whole record" to that effect or the revisions to the project would avoid such an effect, the

agency makes a "negative declaration," briefly describing the basis for its conclusion. (CEQA, § 21080(c)(1); see Guidelines, § 15063(b)(2); *Banker's Hill, supra*, 139 Cal.App.4th at 259.)

The Guidelines and case law further define the standard that an agency uses to determine whether to issue a negative declaration. "[I]f a lead agency is presented with a *fair argument* that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect." (Guidelines, § 15064(f)(1), italics added.) This formulation of the standard for determining whether to issue a negative declaration is often referred to as the "fair argument" standard. See *Laurel Heights Improvement Assn. v. Regents of University of California,* 6 Cal.4th 1112, 1134–1135 (1993). Under the fair argument standard, a project "may" have a significant effect whenever there is a "reasonable possibility" that a significant effect will occur. *No Oil v. City of Los Angeles*, 13 Cal.3d 68, 83-84 (1974). Substantial evidence, for purposes of the fair argument standard, includes "fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact." § 21080, subd. (e)(1). Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts unrelated to physical impacts on the environment. § 21080, subd. (e)(2).

If the initial study reveals no substantial evidence that the project may have a significant environmental effect, the agency may adopt a negative declaration. Pub. Res. Code § 21080, subd. (c)(2); Guidelines, § 15070, subd. (b); *Grand Terrace, supra,* 160 Cal.App.4th at 1331; *Save the Plastic Bag Coalition v. City of Manhattan Beach*, 52 Cal. 4th 155, 175 (2011)(holding common sense is part of the substantial evidence analysis). "Alternatively, if there is no substantial evidence of any net significant environmental effect in light of revisions in the project that would mitigate any potentially significant effects, the agency may adopt [an MND]. [Citation.] [An MND] is one in which '(1) the proposed conditions "avoid the effects or mitigate the effects to a point where *clearly* no significant effect on the environment would occur, *and* (2) there is *no substantial evidence* in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." (§ 21064.5 . . . .)' [Citations.]" *Grand Terrace, supra,* at 1331-1332. The MND allows the project to go forward subject to the mitigating measures. Pub. Res. Code §§ 21064.5, 21080, subd. (c); see *Grand Terrace, supra,* 160 Cal. App. 4th at 1331.

Third Step in the CEQA Process.

If no negative declaration is issued, the preparation of an EIR is the third and final step in the CEQA process. *Banker's Hill, supra*, 139 Cal. App. 4th at 259; Guidelines, §§ 15063(b)(1), 15080; CEQA, §§ 21100, 21151.

C. The Environmental Impact Report.

Central to CEQA is the EIR, which has as its purpose informing the public and government officials of the environmental consequences of decisions before they are made. [Citation.] "An EIR must be prepared on any 'project' a local agency intends to approve or carry out which 'may have a significant effect on the environment.' Pub. Res. Code §§ 21100, 21151; Guidelines, § 15002, subd. (f)(1). The term 'project' is broadly defined and includes any activities which have a potential for resulting in a physical change in the environment, directly or ultimately. Pub Res. Code § 21065; Guidelines, §§ 15002, subd. (d), 15378, subd. (a); [Citation].) The definition encompasses a wide spectrum, ranging from the adoption of a general plan, which is by its nature tentative and subject to change, to activities with a more immediate impact, such as the issuance of a conditional use permit for a site-specific development proposal." *CREED v. City of San Diego*, 134 Cal. App. 4th 598, 604 (2005).

"To accommodate this diversity, the Guidelines describe several types of EIR's, which may be tailored to different situations. The most common is the project EIR, which examines the environmental impacts of a specific development project. (Guidelines, § 15161.) A quite different type is the program EIR, which 'may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically, (2) As logical parts in the chain of contemplated actions, (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.'" Guidelines, § 15168, subd. (a); *CREED, supra*, 134 Cal. App. 4th at 605. As the court held in *CREED*, a program EIR may serve as the EIR for a subsequently proposed project only to the extent it contemplates and adequately analyzes the potential environmental impacts of the project. *CREED, supra,* 134 Cal. App. 4th at 615.

The EIR at issue in this case is of the latter variety, a program EIR. Cleveland/CBD/ Sierra Club accuse SANDAG of attempting to use the "programmatic" nature of the EIR as an invalid attempt to excuse it from fully analyzing the health impacts of the RTP. [ROA 55 at 15] The AG joins in this criticism. [ROA 52 at 29]

Under CEQA, an EIR is presumed adequate (Pub. Resources Code, § 21167.3), and the plaintiff in a CEQA action has the burden of proving otherwise. (*Preserve Wild Santee v. City of Santee*, 210 Cal. App. 4th 260, 275 (4th DCA Div. 1 Oct. 19, 2012, internal quotation marks omitted), quoting *Concerned Citizens of South Central L.A. v. Los Angeles Unified School Dist.* (1994) 24 Cal.App.4th 826, 836.) Courts review an agency's determinations and decisions for abuse of discretion. An agency abuses its discretion when it fails to proceed in a manner required by law or there is not substantial evidence to support its determination or decision. [§§ 21168, 21168.5; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 426-427 (2007) ("*Vineyard*")]. "Judicial review of these two types of error differs significantly: While [courts] determine de novo whether the agency has employed the correct procedures, 'scrupulously enforc[ing] all legislatively mandated CEQA

requirements' [citation], [courts] accord greater deference to the agency's substantive factual conclusions." (*Vineyard, supra,* 40 Cal. 4th at 435.)

Consequently, in reviewing an EIR for CEQA compliance, courts adjust "scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts." (*Vineyard, supra,* 40 Cal.4th at 435.) For example, where a petitioner claims an agency failed to include required information in its environmental analysis, the court's task is to determine whether the agency failed to proceed in the manner prescribed by CEQA. Conversely, where a petitioner challenges an agency's conclusion that a project's adverse environmental effects are adequately mitigated, courts review the agency's conclusion for substantial evidence. (*Vineyard, supra,* 40 Cal. 4th at 435.)

4. <u>Issues Raised in This Case</u>.

SANDAG is a council of local governments, and is one of 18 Metropolitan Planning Organizations ("MPO") in California. Each MPO is charged under law with the development of the region's RTP, which must be updated every four years. SANDAG began its work in April of 2010, released drafts of the RTP/SCS for public comment on 4/22/11, and released the draft EIR for public comment on June 7, 2011 [AR225-1580]. Petitioners and the AG's office criticized the drafts. [AR4430, 12696-12699, 17972-75, 18053-55] The final EIR was released on October 18, 2011 [AR1969-3401], and was certified after a public hearing on October 28, 2011. Inasmuch as the petitions were filed on November 28, there is no issue in this case regarding the timeliness of the legal challenges to the EIR. Nor are any issues raised by SANDAG with regard to exhaustion of administrative remedies or standing.

There is substantial overlap in the attacks on the EIR leveled by petitioners and the AG. Both sets of petitioners assert that the EIR fails to adequately analyze air quality impacts [ROA 54 at 3-6; ROA 55 at 12-20]. The AG joins in this assertion [ROA 52 at 7-29]. Both petitioners add that the EIR failed to analyze a reasonable range of alternatives [ROA 54 at 6; ROA 55 at 38].

CREED-21/AHC's brief focuses on the failure of the EIR to properly analyze air quality impacts in two specific areas: greenhouse gas emissions and sensitive receptors [ROA 54 at 4-6]. The Cleveland/CBD/Sierra Club brief carefully analyzes the deficiencies of the EIR in relation to greenhouse gas emissions (ROA 55 at part III), while the AG provides extensive discussion on both sensitive receptors and greenhouse gas emissions [ROA 52 at 14-18 and 22-29]. The Cleveland/CBD/Sierra Club brief raises several other issues which neither the AG nor CREED-21/AHC discuss in any detail (mass transit ridership, agricultural land, growth-inducing impacts, parking management, etc.).

5. <u>Ruling</u>.

The court finds that the real focal point of this controversy is whether the EIR is in conformance with a series of state policies enunciated by the legislative and executive branches since 2005 relating to greenhouse gases. Governor Schwarzenegger issued, in

2005, Executive Order S-03-05, which for the first time set a state goal of reducing greenhouse gas emissions. This Executive Order gave rise to the Global Warming Solutions Act of 2006 (AB 32), which is codified at H&S Code section 38500 *et seq.* Section 38550 provides:

"By January 1, 2008, the [Air Resources Board] shall, after one or more public workshops, with public notice, and an opportunity for all interested parties to comment, determine what the statewide greenhouse gas emissions level was in 1990, and approve in a public hearing, a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. In order to ensure the most accurate determination feasible, the state board shall evaluate the best available scientific, technological, and economic information on greenhouse gas emissions to determine the 1990 level of greenhouse gas emissions."

It is undisputed that the ARB has established greenhouse gas targets for the SANDAG region for 2020 and 2035.

In 2008, the Legislature passed SB 375, which amended both the Public Resources Code and the Government Code in several respects. In section 1 of the statute, the Legislature found and declared:

"(a) The transportation sector contributes over 40 percent of the greenhouse gas emissions in the State of California; automobiles and light trucks alone contribute almost 30 percent. The transportation sector is the single largest contributor of greenhouse gases of any sector.
(b) In 2006, the Legislature passed and the Governor signed Assembly Bill 32 (Chapter 488 of the Statutes of 2006; hereafter AB 32), which requires the State of California to reduce its greenhouse gas emissions to 1990 levels no later than 2020. According to the State Air Resources Board, in 1990 greenhouse gas emissions from automobiles and light trucks were 108 million metric tons, but by 2004 these emissions had increased to 135 million metric tons.
(c) Greenhouse gas emissions from automobiles and light trucks can be substantially reduced by new vehicle technology and by the increased use of low carbon fuel. However, even taking these measures into account, it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.
(d) In addition, automobiles and light trucks account for 50 percent of air pollution in California and 70 percent of its consumption of petroleum. Changes in land use and transportation policy, based upon established modeling methodology, will provide significant assistance to California's goals to implement the federal and state Clean Air Acts and to reduce its dependence on petroleum.
(e) Current federal law requires regional transportation planning agencies to include a land use allocation in the regional transportation plan. Some regions have engaged in a regional "blueprint" process to prepare the land use allocation. This process has been open and transparent. The Legislature intends, by this act, to build upon that successful process by requiring metropolitan planning organizations to develop and incorporate a sustainable communities strategy which will be the land use allocation in the regional transportation plan.
(f) The California Environmental Quality Act (CEQA) is California's premier environmental statute. New provisions of CEQA should be enacted so that the statute encourages developers to submit applications and local governments to make land use decisions that will help the state achieve its climate goals under AB 32, assist in the achievement of state and federal air quality standards, and increase petroleum conservation.
(g) Current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives.
(h) The California Transportation Commission has developed guidelines for travel demand models used in the development of regional transportation plans. This act assures the commission's continued oversight of the guidelines, as the commission may update them as needed from time to time.

(i) California local governments need a sustainable source of funding to be able to accommodate patterns of growth consistent with the state's climate, air quality, and energy conservation goals."

Section 4 of SB 375 added Government Code section 65080, which provides, in relevant part:

"(a) **Each transportation planning agency** designated under Section 29532 or 29532.1 **shall prepare and adopt a regional transportation plan directed at achieving a coordinated and balanced regional transportation system**, including, but not limited to, mass transportation, highway, railroad, maritime, bicycle, pedestrian, goods movement, and aviation facilities and services. The plan shall be action-oriented and pragmatic, considering both the short-term and long-term future, and shall present clear, concise policy guidance to local and state officials. The regional transportation plan shall consider factors specified in Section 134 of Title 23 of the United States Code. Each transportation planning agency shall consider and incorporate, as appropriate, the transportation plans of cities, counties, districts, private organizations, and state and federal agencies.

(b) The regional transportation plan shall be an internally consistent document and shall include all of the following:

(1) A policy element that describes the transportation issues in the region, identifies and quantifies regional needs, and describes the desired short-range and long-range transportation goals, and pragmatic objective and policy statements. The objective and policy statements shall be consistent with the funding estimates of the financial element. The policy element of transportation planning agencies with populations that exceed 200,000 persons may quantify a set of indicators including, but not limited to, all of the following:
(A) Measures of mobility and traffic congestion, including, but not limited to, daily vehicle hours of delay per capita and vehicle miles traveled per capita.
(B) Measures of road and bridge maintenance and rehabilitation needs, including, but not limited to, roadway pavement and bridge conditions.
(C) Measures of means of travel, including, but not limited to, percentage share of all trips (work and nonwork) made by all of the following:
(i) Single occupant vehicle.
(ii) Multiple occupant vehicle or carpool.
(iii) Public transit including commuter rail and intercity rail.
(iv) Walking.
(v) Bicycling.
(D) Measures of safety and security, including, but not limited to, total injuries and fatalities assigned to each of the modes set forth in subparagraph (C).
(E) Measures of equity and accessibility, including, but not limited to, percentage of the population served by frequent and reliable public transit, with a breakdown by income bracket, and percentage of all jobs accessible by frequent and reliable public transit service, with a breakdown by income bracket.
(F) The requirements of this section may be met utilizing existing sources of information. No additional traffic counts, household surveys, or other sources of data shall be required.

(2) A sustainable communities strategy prepared by each metropolitan planning organization as follows:
(A) No later than September 30, 2010, the State Air Resources Board shall provide each affected region with greenhouse gas emission reduction targets for the automobile and light truck sector for 2020 and 2035, respectively.

***

(B) **Each metropolitan planning organization shall prepare a sustainable communities strategy,** subject to the requirements of Part 450 of Title 23 of, and Part 93 of Title 40 of, the Code of Federal Regulations, including the requirement to utilize the most recent planning assumptions considering local general plans and other factors. The sustainable communities strategy shall (i) identify the general location of uses, residential densities, and building intensities within the region, (ii) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over

the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth, (iii) identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Section 65584, (iv) identify a transportation network to service the transportation needs of the region, (v) gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of Section 65080.01, (vi) consider the state housing goals specified in Sections 65580 and 65581, (vii) **set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board,** and (viii) allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C. Sec. 7506).

Section 14 of SB 375, among other revisions, amended Pub. Res. Code section 21155.3 to provide as follows:

"(a) The legislative body of a local jurisdiction may adopt traffic mitigation measures that would apply to transit priority projects. These measures shall be adopted or amended after a public hearing and may include requirements for the installation of traffic control improvements, street or road improvements, and contributions to road improvement or transit funds, transit passes for future residents, or other measures that will avoid or mitigate the traffic impacts of those transit priority projects.

(b)(1) A transit priority project that is seeking a discretionary approval is not required to comply with any additional mitigation measures required by paragraph (1) or (2) of subdivision (a) of Section 21081, for the traffic impacts of that project on intersections, streets, highways, freeways, or mass transit, if the local jurisdiction issuing that discretionary approval has adopted traffic mitigation measures in accordance with this section.
(2) Paragraph (1) does not restrict the authority of a local jurisdiction to adopt feasible mitigation measures with respect to the effects of a project on public health or on pedestrian or bicycle safety.

(c) The legislative body shall review its traffic mitigation measures and update them as needed at least every five years."

As already noted, the centerpiece of this case is the parties' fundamental disagreement over implementation of these statutory requirements within the framework of CEQA. In all the statutory quotations immediately above, **bold type** has been added by the court.

The court agrees with the points made in section III of the Cleveland brief (ROA 55), part II of the AG's brief (ROA 52), and pp. 4-5 of the CREED-21 brief (ROA 54) regarding the inadequate treatment of greenhouse gas emissions in the EIR. This failure is not, as SANDAG would have it, merely a debate over "editorial control" of the EIR (ROA 62 at 32:24). Rather, the issue is whether the EIR fails to carry out its role as an informational document to inform the public about the choices made by its leaders. The court finds that this failure is manifest in several ways.

First, although SANDAG acknowledges SB 375 mandates a "sharper focus on reducing GHG emissions" (AR 13091, Excerpt Tab 190), the EIR is impermissibly dismissive of Executive Order S-03-05. SANDAG argues that the Executive Order does not constitute a 'plan' for GHG reduction, and no state plan has been adopted to achieve the 2050 goal. [ROA 62 at 34] The EIR therefore does not find the RTP/SCS's failure to meet the Executive Order's goals to be a significant impact. This position fails to recognize that Executive Order S-3-05 is an official policy of the State of California, established by a

gubernatorial order in 2005, and not withdrawn or modified by a subsequent (and predecessor) governor. Quite obviously it was designed to address an environmental objective that is highly relevant under CEQA (climate stabilization). See AR 17622 (Excerpt Tab 216). SANDAG thus cannot simply ignore it. This is particularly true in a setting in which hundreds of thousands of people in the communities served by SANDAG live in low-lying areas near the coast, and are thus susceptible to rising sea levels associated with global climate change. The court in *Association of Irritated Residents v. State Air Resources Board*, 206 Cal. App. 4th 1487, 1492-93 (2012), recognized the importance of the Executive Order in upholding the ARB's Scoping Plan. The court agrees with petitioners that the failure of the EIR to cogently address the inconsistency between the dramatic increase in overall GHG emissions after 2020 contemplated by the RTP/SCS and the statewide policy of reducing same during the same three decades (2020-2050) constitutes a legally defective failure of the EIR to provide the SANDAG decision makers (and thus the public) with adequate information about the environmental impacts of the SCS/RTP. Moreover, as was pointed out in oral argument, having chosen to develop a plan for 15 years beyond that which was required under law, SANDAG was obligated to discuss impacts beyond the 2020 horizon. The ARB's scoping plan adopts the Executive Order, and SANDAG failed to extend the analysis to 2050.

Second, SANDAG's response has been to "kick the can down the road" and defer to "local jurisdictions." See, e.g. AR 31-0064, 32-0065, 33-0066, 34-0067, 35-0068, 117-0090, 118-0091 (Excerpts Vol. 1, Tab 3); 4.8-36, 0790 (Excerpts Tab 7); AR G-63-64, 03825-3826 (Excerpts Tab 8B); AR 27734 and 8A:2588 (Nov. 19 Appx.). This theme is repeated in SANDAG's brief at page 38 (arguing mitigation is the responsibility of other agencies). This perverts the regional planning function of SANDAG, ignores the purse string control SANDAG has over TransNet funds, and more importantly conflicts with Govt. Code section 65080(b)(2)(B) quoted above. As the AG argues, it is certainly feasible for SANDAG to agree to fund local climate action plans, yet the EIR does not adopt or even adequately discuss this form of mitigation (AR 2588, Excerpt Tab 8A). And as argued by petitioners in their consolidated reply brief, "encouraging" an optional local plan that "should" incorporate regional policies falls well short of a legally enforceable mitigation commitment with teeth. This is what the CEQA Guidelines require at subsections 15126.4(a)(1)(B), (a)(2) and (c)(5) in a setting in which SANDAG controls the funding for at least some of the projects contemplated by the SCS/RTP. Contrary to SANDAG's assertion (Oppo. at 38:21), it does have the legal power -- indeed, the obligation – to see to it that TransNet funds are spent in a manner consistent with the law. SANDAG conceded (even embraced) this at the November 30 hearing.

Resolution No. 2012-09, adopted by SANDAG, finds that the RTP/SCS "achieves the regional greenhouse gas reduction targets established by CARB" (AR 239-0219, Excerpts Tab 4) when in fact it either does not (AR 118-0091-92, Excerpts Tab 3; AR 4.8-21-23, 0775-0777, Excerpts Tab 7; AR 4.8-15-17, 02567-2569, 2578, Excerpts Tab 8A; AR08242-8245, Excerpts Tab 111) or does so based on questionable inputs [AR 30143, 30187 *et seq.* (Supp. filed 10/22/12); compare AR 14550 (Excerpt Tab 190). The shortcomings of the **EIR** in this regard (for petitioners do not contend, nor does the court

find, that SB 375 was violated) were called to SANDAG's attention as evidenced by what it called "Master Response # 20-23," discussed at AR G-55, 03817 *et seq*. (Excerpts Tab 8B); see also AR 19685 (Excerpts Tab 296); AR 25640 *ff* (Excerpts Tab 311). SANDAG erroneously and peremptorily states in response to these comments that the "upward trajectory" in per capita GHG emissions "does not present an SB 375 or CEQA compliance issue." AR G-59. CEQA requires further discussion, not a one sentence dismissal. Nor is the court convinced that SANDAG may avoid examination of GHG reduction due to "modeling constraints." AR G-68, 003830 (Master Response #23).

In light of the foregoing, the court finds that the petitioners and intervenor have overcome the presumption of validity and have established a prejudicial abuse of discretion. The court does not reach this conclusion lightly, as it is evident from section 9.0 of the EIR that it involved thousands of hours of effort by numerous talented professionals. No doubt the EIR is a satisfactory informational document in many respects; being the first in the state to tackle something as important to future generations as reduction of greenhouse gases in a regional transportation setting carried some risk, and the court, after reviewing the Administrative Record independently, finds that the EIR is inconsistent with state law as described above. Thus, it is the court's duty under *Vineyard, supra*, to sustain the positions advanced by petitioners and the petitioner in intervention.

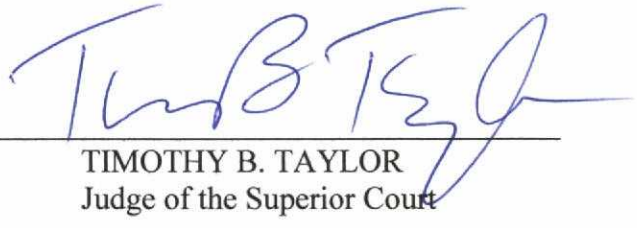
Had they been permitted to file briefs, *amici* would no doubt have argued that the court's interpretation of CEQA's interface with Executive Order S-03-05 and the statutory scheme of SB 375 (which the Legislative Counsel's Digest filed with Secretary of State September 30, 2008 concedes is an "unfunded mandate") will retard growth, harm California's efforts to attract jobs and create economic activity, and slow down the state's recovery from the recession. All of this may very well be true, but these are arguments properly presented to the political branches of the government which adopted the Executive Order and enacted SB 375 in the first place.

Because the court finds it can resolve the case solely on the inadequate treatment in the EIR of the greenhouse gas emission issue, it finds that it need not address the other issues raised by the parties. *Compare Natter v. Palm Desert Rent Review Comm'n.,* 190 Cal. App. 3d 994, 1001 (1987); *Young v. Three for One Oil Royalties*, 1 Cal. 2d 639, 647-648 (1934).

Let a writ of mandate issue forthwith, directing respondent SANDAG to set aside its October 28, 2011certification of the EIR for the RTP/SCS. Counsel for petitioners is directed to forthwith submit same to the court for signature.

IT IS SO ORDERED.

Dated: December 3, 2012



TIMOTHY B. TAYLOR
Judge of the Superior Court

SUPERIOR COURT OF CALIFORNIA, COUNTY OF SAN DIEGO

Central
330 West Broadway
San Diego, CA 92101

SHORT TITLE: Cleveland National Forest Foundation vs. San Diego Association of Governments [IMAGED]

CLERK'S CERTIFICATE OF SERVICE BY MAIL	CASE NUMBER: **37-2011-00101593-CU-TT-CTL**

I certify that I am not a party to this cause. I certify that a true copy of the Ruling on Petitions for Writ of Mandate dated December 3, 2012 was mailed following standard court practices in a sealed envelope with postage fully prepaid, addressed as indicated below. The mailing and this certification occurred at San Diego, California, on 12/03/2012.

Clerk of the Court, by: Andrea Taylor A. Taylor, Deputy

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SUPERIOR COURT OF CALIFORNIA,
COUNTY OF SAN DIEGO
CENTRAL

MINUTE ORDER

DATE: 04/19/2013 TIME: 03:36:00 PM DEPT: C-72

JUDICIAL OFFICER PRESIDING: Timothy Taylor
CLERK: Patricia Ashworth
REPORTER/ERM: Not Reported
BAILIFF/COURT ATTENDANT:

CASE NO: **37-2012-00101054-CU-TT-CTL** CASE INIT.DATE: 07/20/2012
CASE TITLE: **SIERRA CLUB vs. County of San Diego [E-FILE]**
CASE CATEGORY: Civil - Unlimited CASE TYPE: Toxic Tort/Environmental

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APPEARANCES

The Court, having taken the above-entitled matter under submission on 04/19/2013 and having fully considered the arguments of all parties, both written and oral, as well as the evidence presented, now rules as follows:

1. Overview and Procedural Posture.

In this CEQA case, this court for the second time in the last 6 months is required to address the controversial topic of global climate change. The court last addressed this subject in Cleveland Nat'l. Forest Foundation v. SANDAG, Case No. 2011-00101593; that case is now on appeal (D063288). As noted in its December 2012 ruling, this court recognizes it is but a way station in the life of most CEQA cases, and it seems this one will likely fit this pattern.

Because the trial courts are not final, it is important that they be prompt, and the court has done its best in that regard. The petition was filed on July 20, 2012. The case was assigned to Judge Hayes, but the Sierra Club challenged her, and the case was reassigned to Dept. 72. ROA 9, 11. The petition was promptly served. ROA 10.

The parties were first before the court on November 6, 2012, when they sought a hearing date and supplied the court with a stipulated briefing schedule. The court granted the requests. ROA 15, 16. The County filed its answer on January 9, 2013 (ROA 19), and the briefing began in February, 2013. ROA 21-25. The 4300+ page Certified Administrative Record (AR) is contained on a compact disk which was lodged on April 4 (the CD lodged with the opening brief, ROA 22, was either blank or incompatible with the court's aging desktop computers). The court has reviewed the briefing and the record.

Sierra Club contends that the County's June 20, 2012 "Climate Action Plan" (CAP), which is AR 002-126, is insufficient and violates CEQA in several respects: it does not comply with mitigation measures spelled out in the County's 2011 Program EIR (PEIR), adopted in connection with the 2011

General Plan Update (GPU)(AR 0441 ff); it fails to satisfy the requirements for adopting thresholds of significance for greenhouse gas emissions (GHG); and it should have been set forth in a stand-alone environmental document rather than in an addendum to the PEIR. The County denies these claims, and asserts the CEQA challenge is time-barred, the CAP complies with all legal requirements, the use of an addendum was appropriate, and that all relief is barred by the Sierra Club's failure to notify the AG as required by Pub. Res. Code section 21167.7. Although briefed by Sierra Club, neither standing nor exhaustion are challenged by the County.

Following publication of a tentative ruling on April 16, the case was argued on the afternoon of April 19 by Cory Briggs, Esq. on behalf of Sierra Club, and Ellen Pilsecker, Deputy County Counsel, on behalf of the County. The arguments were focused and thoughtful. Following the arguments, the court took the matter under submission. The court's ruling follows.

2. Overview of the CEQA Process.

A. The Court's Role in CEQA Cases.

In Mira Mar Mobile Community v. City of Oceanside, 119 Cal.App.4th 477, 486 (2004) (Mira Mar Mobile Community), the court explained that "[i]n a mandate proceeding to review an agency's decision for compliance with CEQA, [courts] review the administrative record de novo [citation], focusing on the adequacy and completeness of the EIR and whether it reflects a good faith effort at full disclosure. [Citation.] [The court's] role is to determine whether the challenged EIR is sufficient as an information document, not whether its ultimate conclusions are correct. [Citation.]" An EIR is presumed adequate. Pub. Res. Code § 21167.3, subd. (a).

Courts review an agency's action under CEQA for a prejudicial abuse of discretion. Pub. Res. Code § 21168.5. "Abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence." Id.; see Mira Mar Mobile Community, supra, 119 Cal.App.4th at 486; County of San Diego v. Grossmont-Cuyamaca Community College Dist. ("Grossmont"), 141 Cal. App. 4th 86, 96 (2006)(same).

In defining the term "substantial evidence," the CEQA Guidelines state: " 'Substantial evidence' ... means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made ... is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion[,] narrative [or] evidence which is clearly erroneous or inaccurate ... does not constitute substantial evidence." CEQA Guidelines, § 15384(a). "In applying the substantial evidence standard, [courts] resolve all reasonable doubts in favor of the administrative finding and decision. [Citation.]" Mira Mar Mobile Community, supra, 119 Cal.App.4th at 486; Grossmont, supra, 141 Cal. App. 4th at 96.
Although the lead agency's factual determinations are subject to the foregoing deferential rules of review, questions of interpretation or application of the requirements of CEQA are matters of law. While judges may not substitute their judgment for that of the decision makers, they must ensure strict compliance with the procedures and mandates of the statute. Grossmont, supra, 141 Cal. App. 4th at 96.

B. The Three Steps of CEQA.

CEQA establishes "a three-tiered process to ensure that public agencies inform their decisions with

environmental considerations." Banker's Hill, et al v. City of San Diego, 139 Cal. App. 4th 249, 257 (2006)("Banker's Hill"); see also CEQA Guidelines, § 15002(k)(describing three-step process).

First Step in the CEQA Process.

The first step "is jurisdictional, requiring that an agency conduct a preliminary review in order to determine whether CEQA applies to a proposed activity." Banker's Hill, supra, 139 Cal. App. 4th at 257; see also Guidelines, § 15060. The Guidelines give the agency 30 days to conduct this preliminary review. (Guidelines, § 15060.) The agency must first determine if the activity in question amounts to a "project." Muzzy Ranch Co. v. Solano County Airport Land Use Com. (2007) 41 Cal.4th 372, 380. "A CEQA ...project falls into one of three categories of activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment (§ 21065.)" Sunset Sky Ranch Pilots Assn. v. County of Sacramento (2009) 47 Cal.4th 902, 907.

As part of the preliminary review, the public agency must also determine the application of any statutory exemptions or categorical exemptions that would exempt the proposed project from further review under CEQA. See Guidelines, § 15282 (listing statutory exemptions); Guidelines, §§ 15300–15333 (listing 33 classes of categorical exemptions). The categorical exemptions are contained in the Guidelines and are formulated by the Secretary under authority conferred by CEQA section 21084(a). If, as a result of preliminary review, "the agency finds the project is exempt from CEQA under any of the stated exemptions, no further environmental review is necessary. The agency may prepare and file a notice of exemption, citing the relevant section of the Guidelines and including a brief 'statement of reasons to support the finding.' " Banker's Hill, supra, 139 Cal.App.4th at 258, citing Guidelines, §§ 15061(d), 15062(a)(3).

Second Step in the CEQA Process.

If the project does not fall within an exemption, the agency proceeds to the second step of the process and conducts an initial study to determine if the project may have a significant effect on the environment. (Guidelines, § 15063.) If, based on the initial study, the public agency determines that "there is substantial evidence, in light of the whole record ... that the project may have a significant effect on the environment, an environmental impact report [(EIR)] shall be prepared." [CEQA, § 21080(d).] On the other hand, if the initial study demonstrates that the project "would not have a significant effect on the environment," either because "[t]here is no substantial evidence, in light of whole record" to that effect or the revisions to the project would avoid such an effect, the agency makes a "negative declaration," briefly describing the basis for its conclusion. (CEQA, § 21080(c)(1); see Guidelines, § 15063(b)(2); Banker's Hill, supra, 139 Cal.App.4th at 259.)

The Guidelines and case law further define the standard that an agency uses to determine whether to issue a negative declaration. "[I]f a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect." (Guidelines, § 15064(f)(1), italics added.) This formulation of the standard for determining whether to issue a negative declaration is often referred to as the "fair argument" standard. See Laurel Heights Improvement Assn. v. Regents of University of California, 6 Cal.4th 1112, 1134–1135 (1993). Under the fair argument standard, a project "may" have a significant effect whenever there is a "reasonable possibility" that a significant effect will occur. No Oil v. City of Los Angeles, 13 Cal.3d 68, 83-84 (1974). Substantial evidence, for purposes of the fair argument standard, includes "fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact." § 21080, subd. (e)(1).

Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts unrelated to physical impacts on the environment. § 21080, subd. (e)(2).

If the initial study reveals no substantial evidence that the project may have a significant environmental effect, the agency may adopt a negative declaration. Pub. Res. Code § 21080, subd. (c)(2); Guidelines, § 15070, subd. (b); Grand Terrace, supra, 160 Cal.App.4th at 1331; Save the Plastic Bag Coalition v. City of Manhattan Beach, 52 Cal. 4th 155, 175 (2011)(holding common sense is part of the substantial evidence analysis). "Alternatively, if there is no substantial evidence of any net significant environmental effect in light of revisions in the project that would mitigate any potentially significant effects, the agency may adopt [an MND]. [Citation.] [An MND] is one in which '(1) the proposed conditions "avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." (§ 21064.5 . . . .)' [Citations.]" Grand Terrace, supra, at 1331-1332. The MND allows the project to go forward subject to the mitigating measures. Pub. Res. Code §§ 21064.5, 21080, subd. (c); see Grand Terrace, supra, 160 Cal. App. 4th at 1331.

Third Step in the CEQA Process.

If no negative declaration is issued, the preparation of an EIR is the third and final step in the CEQA process. Banker's Hill, supra, 139 Cal. App. 4th at 259; Guidelines, §§ 15063(b)(1), 15080; CEQA, §§ 21100, 21151.

C. The Environmental Impact Report.

Central to CEQA is the EIR, which has as its purpose informing the public and government officials of the environmental consequences of decisions before they are made. [Citation.] "An EIR must be prepared on any 'project' a local agency intends to approve or carry out which 'may have a significant effect on the environment.' Pub. Res. Code §§ 21100, 21151; Guidelines, § 15002, subd. (f)(1). The term 'project' is broadly defined and includes any activities which have a potential for resulting in a physical change in the environment, directly or ultimately. Pub Res. Code § 21065; Guidelines, §§ 15002, subd. (d), 15378, subd. (a); [Citation].) The definition encompasses a wide spectrum, ranging from the adoption of a general plan, which is by its nature tentative and subject to change, to activities with a more immediate impact, such as the issuance of a conditional use permit for a site-specific development proposal." CREED v. City of San Diego, 134 Cal. App. 4th 598, 604 (2005).

"To accommodate this diversity, the Guidelines describe several types of EIR's, which may be tailored to different situations. The most common is the project EIR, which examines the environmental impacts of a specific development project. (Guidelines, § 15161.) A quite different type is the program EIR, which 'may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically, (2) As logical parts in the chain of contemplated actions, (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.'" Guidelines, § 15168, subd. (a); CREED, supra, 134 Cal. App. 4th at 605. As the court held in CREED, a program EIR may serve as the EIR for a subsequently proposed project only to the extent it contemplates and adequately analyzes the potential environmental impacts of the project. CREED, supra, 134 Cal. App. 4th at 615.

As noted in part 1 above, the EIR at issue in this case is of the latter variety, a PEIR.

Under CEQA, an EIR is presumed adequate (Pub. Resources Code, § 21167.3), and the plaintiff in a CEQA action has the burden of proving otherwise. (Preserve Wild Santee v. City of Santee, 210 Cal. App. 4th 260, 275 (2012), internal quotation marks omitted, quoting Concerned Citizens of South Central L.A. v. Los Angeles Unified School Dist. (1994) 24 Cal.App.4th 826, 836.) Courts review an agency's determinations and decisions for abuse of discretion. An agency abuses its discretion when it fails to proceed in a manner required by law or there is not substantial evidence to support its determination or decision. [§§ 21168, 21168.5; Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 426-427 (2007) ("Vineyard")]. "Judicial review of these two types of error differs significantly: While [courts] determine de novo whether the agency has employed the correct procedures, 'scrupulously enforc[ing] all legislatively mandated CEQA requirements' [citation], [courts] accord greater deference to the agency's substantive factual conclusions." (Vineyard, supra, 40 Cal. 4th at 435.)

Consequently, in reviewing an EIR for CEQA compliance, courts adjust "scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts." (Vineyard, supra, 40 Cal.4th at 435.) For example, where a petitioner claims an agency failed to include required information in its environmental analysis, the court's task is to determine whether the agency failed to proceed in the manner prescribed by CEQA. Conversely, where a petitioner challenges an agency's conclusion that a project's adverse environmental effects are adequately mitigated, courts review the agency's conclusion for substantial evidence. (Vineyard, supra, 40 Cal. 4th at 435.)

D. Further Requirements of CEQA.

In addition to the foregoing public process/decision maker information steps, the Legislature in enacting CEQA also intended to "provide certain substantive measures for protection of the environment. [Citations.] In particular, one court noted [Public Resources Code] section 21002 requires public agencies 'to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects.' [Citation.] (Quail Botanical Gardens Foundation, Inc. v. City of Encinitas (1994) 29 Cal.App.4th 1597, 1601-1602, citing No Oil, Inc. v. City of Los Angeles (1974) 13 Cal.3d 68, 75 and Laurel Heights Improvement Assn. v. Regents of University of California (1993) 6 Cal.4th 1112, 1123 . . . .). The Legislature declared its intention in enacting CEQA "that all public agencies responsible for regulating activities affecting the environment give prime consideration to preventing environmental damage when carrying out their duties. [Citations.] CEQA is to be interpreted 'to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.' " (Mountain Lion Foundation v. Fish & Game Com. (1997) 16 Cal.4th 105, 112.)

3. RFJN.

Sierra Club, with its reply briefing, filed a Request for Judicial Notice to which was attached a copy of the AG's letter acknowledging receipt of a copy of the petition in July of 2012 (shortly after it was filed). The court grants the request for judicial notice under Evid. Code section 452(c) and (g). This conclusively eliminates the County's third affirmative defense and the argument under Pub. Res. Code section 21167.7 contained on pp. 14-15 of the County's brief. In fact, this argument was meritless from the outset, as Sierra Club filed a proof of service on the AG last July (ROA 8). In other words, the County's

argument that "the case file contains no indication that [the AG notification requirement] was met" was demonstrably untrue when the County's answer was filed and when it brief was filed. County Counsel forthrightly acknowledged this at the April 19 hearing.

4. Discussion and Ruling.

Former Governor Schwarzenegger issued, in 2005, Executive Order S-03-05, which for the first time set a state goal of reducing greenhouse gas emissions. This Executive Order gave rise to the Global Warming Solutions Act of 2006 (AB 32), which is codified at H&S Code section 38500 et seq. Section 38550 provides:

"By January 1, 2008, the [Air Resources Board] shall, after one or more public workshops, with public notice, and an opportunity for all interested parties to comment, determine what the statewide greenhouse gas emissions level was in 1990, and approve in a public hearing, a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. In order to ensure the most accurate determination feasible, the state board shall evaluate the best available scientific, technological, and economic information on greenhouse gas emissions to determine the 1990 level of greenhouse gas emissions."

In the 2011 PEIR for the GPU, the County concluded that the GHG and climate-change impacts from the County's own operations and from community sources were "potentially significant" both in relation to compliance with AB 32 and with regard to the updated general plan itself. AR 488 (end of first paragraph under "Summary"), 493 (end of "Summary" paragraph). Consequently, the County had to adopt a series of mitigation measures to render these impacts insignificant. AR 494-500. Among those mitigation measures was CC-1.2, which is the focus of Sierra Club's attack:

"Prepare a County Climate Change Action Plan with an update[d] baseline inventory of greenhouse gas emissions from all sources, more detailed greenhouse gas emissions reduction targets and deadlines; and a comprehensive and enforceable GHG emissions reduction measures that will achieve a 17% reduction in emissions from County operations from 2006 by 2020 and a 9% reduction in community emissions between 2006 and 2020. Once prepared, implementation of the plan will be monitored and progress reported on a regular basis." [AR 496]

The County undertook to prepare the CAP, in accordance with Mitigation Measure CC-1.2, within six months [AR 313-314]. The County did not do so; the CAP was not approved until nearly a year after the PEIR was certified.

The central questions in this case are whether the CAP was properly approved, and whether it meets the requirements of Mitigation Measure CC-1.2. Thus, the court rejects the County's first affirmative defense which is addressed on pp. 5-7 of the County's brief. These arguments are premised on the notion that because the GPU and PEIR were adopted in the summer of 2011, an action filed in July of 2012 cannot pass muster under the 180 day limitations period of Pub. Res. Code section 21167. But the court agrees with Sierra Club that the gravamen of its petition is not an attack on the PEIR, but rather an effort to enforce the PEIR's requirement of enforceable mitigation measures. The case law relied on by the County all arose in settings in which the mitigation measures themselves were challenged as inadequate, or the cases are otherwise inapplicable. This case was filed 30 days after the June 20, 2012 approval by the County of the CAP, and it is not time-barred.

Regarding the first central question identified above: the court finds the CAP should have been the subject of a supplemental EIR instead of an addendum to the PEIR that concluded the CAP is within the scope of the PEIR. (AR 16:1372, second sentence of last paragraph.) Thus, the CAP was not properly approved and violates CEQA.

There is no explanation and no substantial evidence to justify why the CAP was not subject to a supplemental EIR with public notice and opportunity for comment. There is no showing that the County properly considered whether the CAP is within the scope of the PEIR; a supplemental EIR would require the Board of Supervisors to confront this issue. Further, environmental review is necessary to ascertain whether the CAP met the necessary GHG emission reductions when considering the CAP is merely hortatory and contains no enforcement mechanism for reducing GHG emissions.

In this regard, the case has some similarities to Center for Sierra Nevada Conservation v. County of El Dorado (2012) 202 Cal.App.4th 1156 (County of El Dorado). That case, like this one, involved a program EIR for a general plan. Id. at 1175. One of the mitigation measures called for implementation of a mitigation fee program. The county later did an initial study for the fee program, and stopped short of a more complete environmental review. The court of appeal held a tiered EIR was required to examine the specific mitigation measures and fee rate, rejecting the argument that the fee program was merely implementation of the general plan. Here, the CAP "provides the specific details associated with the ... General Plan ... strategies and measures for greenhouse gas (GHG) emissions and reductions that were not available during program-level analysis of the General Plan" (AR 16:1357), and as such, the CAP should have been the subject of a supplemental EIR [as opposed to an IS followed by addendum to the PEIR]. Thus, the CAP was not properly approved and violated CEQA.

Turning to the second central question identified above: the court finds that even if the CAP was properly approved, it does not comport with the requirements of Mitigation Measure CC-1.2; thus, the CAP violates CEQA. In this regard, there is no substantial evidence in the AR that the CAP satisfies Mitigation Measure CC-1.2; in fact, the evidence in the AR discloses the reverse is true.

For instance, the AR shows the CAP fails to meet Mitigation Measure CC-1.2 GHG emission reduction goals and targets. The CAP admits "The CAP itself does not itself ensure reductions ..." [AR 2:74]; the CAP regards its goals and strategies as mere recommendations [AR 2:27 - "The goals and strategies recommended in the CAP ..."]; and the CAP describes itself as a "living document," a "working document," and "a platform for the County to build strategies to meet its emission-reduction targets" [AR 2:15, 73.] As the court noted in its December 2012 decision, the County's adoption of the CAP occurs "in a setting in which hundreds of thousands of people in [the County] live in low-lying areas near the coast, and are thus susceptible to rising sea levels associated with global climate change." There is no time for "building strategies" or "living documents;" as the PEIR quite rightly found, enforceable mitigation measures are necessary now.

The AR shows the CAP contains no detailed deadlines for GHG emission reductions. This is borne out by the consultant who prepared the CAP for the County pointing out early on "[t]he Draft CAP neglects to describe how the County will monitor the effectiveness of the plan and its component measures over time" [AR 83:1947, last paragraph]; the County's admission "the CAP did not set such dates" [County's opposition memorandum, page 11:21-22]; and the word "deadline" appears but once in the CAP, in describing Mitigation Measure CC-1.2 [AR 2:76.]

Further, the AR shows the CAP contains no enforcement mechanism for reducing GHG emissions. The

CAP's goals and strategies are mere recommendations [AR 2:27 - "The goals and strategies recommended in the CAP..."]; there is no indication in the CAP how the measures described for community activities (Chapter 3) and the County's operations (Chapter 4) can or will be enforced [AR 2:26-57, 59-63]; the County contends five of the CAP's twenty-seven GHG reduction measures are required under state law and thus enforceable but fails to address the other twenty-two reduction measures [County's opposition memorandum, page 9:1-8; and Exhibit A to County's opposition memorandum]; and no evidence is related in the AR that supports the "belief" of the County staffer that GHG emissions reductions can be achieved through only education and incentives [AR 20:1581 and AR 23:1629 -"It is important to note that, as currently written, none of these measures are mandates. We believe that the emission reduction can be achieved through education and incentives."]

At the April 19 argument, County Counsel suggested that some of the absent benchmarks can be found in the Minutes of the Board reflecting its approval of the CAP. Having reviewed the minutes, the court agrees with Sierra Club that the minutes do not set forth enforceable standards or create any mandatory duty that could later be enforced if not carried out.

As such, the CAP, even if it was properly approved, does not comport with the requirements of Mitigation Measure CC-1.2, and thus violates CEQA.

In view of the foregoing, the court finds it unnecessary to address the subsidiary dispute over whether the guidelines for determining thresholds of significance for GHG were adopted or not. Compare Natter v. Palm Desert Rent Review Comm'n., 190 Cal. App. 3d 994, 1001 (1987); Young v. Three for One Oil Royalties, 1 Cal. 2d 639, 647-648 (1934).

Let a writ of mandate issue forthwith, directing respondent the County of San Diego to set aside its June 20, 2012 approval of the CAP. Counsel for petitioners is directed to forthwith submit same to the court for signature.

IT IS SO ORDERED.

Judge Timothy Taylor

- RIVERSIDE COUNTY TLMA
- ONLINE SERVICES TRANSPORTATION & LAND MANAGEMENT AGENCY
- TLMA
- ADMINISTRATIVE SERVICES
- BUILDING & SAFETY
- CODE ENFORCEMENT
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10. EVERY 001 GENERAL CONDITIONS	SP - Hold Harmless	Status: INEFFECT	Conditions: Informational

The applicant/permittee or any successor-in-interest shall defend, indemnify, and hold harmless the County of Riverside or its agents, officers, and employees (COUNTY) from the following:

(a) any claim, action, or proceeding against the COUNTY to attack, set aside, void, or annul an approval of the COUNTY, its advisory agencies, appeal boards, or legislative body concerning the SPECIFIC PLAN and,

(b) any claim, action or proceeding against the COUNTY to attack, set aside, void or annul any other decision made by the COUNTY concerning the SPECIFIC PLAN including, but not limited to, decisions made in response to California Public Records Act requests.

The COUNTY shall promptly notify the applicant/permittee of any such claim, action, or proceeding and shall cooperate fully in the defense. If the COUNTY fails to promptly notify the applicant/permittee of any such claim, action, or proceeding or fails to cooperate fully in the defense, the applicant/permittee shall not, thereafter, be responsible to defend, indemnify or hold harmless the COUNTY.

The obligations imposed by this condition include, but are not limited to, the following: the applicant/permittee shall pay all legal services expenses the COUNTY incurs in connection with any such claim, action or proceeding, whether it incurs such expenses directly, whether it is ordered by a court to pay such expenses, or whether it incurs such expenses by providing legal services through its Office of County Counsel.

10. EVERY 002 GENERAL CONDITIONS	SP - Definitions	Status: INEFFECT	Conditions: Informational

The words identified in the following list that appear in all capitals in the attached conditions of Specific Plan No.375 shall be henceforth defined as follows:

SPECIFIC PLAN = Specific Plan No. 375

CHANGE OF ZONE = Change of Zone No. 7623.

GPA = Comprehensive General Plan Amendment No. 910.

EIR = Environmental Impact Report No. 514.

DISTRICT or DISTRICTS = A SPECIFIC PLAN'S Planning Cluster of Planning Areas as specified in the SPECIFIC PLAN, a large planning area. The intent of the DISTRICT is to break down a very large Specific Plan into manageable sections or pieces. Each DISTRICT should be about the size of a traditional Specific Plan.

DISTRICT REFINEMENT PLAN or DRP = a substantial conformance to the SPECIFIC PLAN intended to become a Design Guideline Document, submitted separately for each DISTRICT within the SPECIFIC PLAN. The DISTRICT REFINEMENT PLAN may address features that are specific to an individual DISTRICT and may not affect the entire SPECIFIC PLAN.

TOTAL DWELLING UNIT TRACKING MATRIX = A chart for purposes of tracking the total build out of the SPECIFIC PLAN maintained by TLMA Counter Services Divison. The matrix shall differentiate between individual building permits and the total number of dwelling units that are represented by the building permits that have been issued for the entire Specific Plan.

BUILDING PERMITS = the number of dwelling units constructed within an implementing project. Any condition of approval that uses the term "building permit" to trigger an event or to cause another action to take place shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

CLIMATE ACTION PLAN or CAP = a section of the SPECIFIC PLAN that outlines standards, suggestions, and guidance intended to reduce Greenhouse Gases.

10. EVERY 003 GENERAL CONDITIONS	SP - SP Document	Status: INEFFECT	Conditions: Informational

Specific Plan No. 375 shall include the following:

a. Specific Plan Document, which shall include:

1. Board of Supervisors Specific Plan Resolution including the Mitigation Reporting/Monitoring Program 2. Conditions of Approval. 3. Specific Plan Zoning Ordinance. 4. Land Use Plan in both 8 1/2" x 11" black-and-white and 11" x 17" color formats. 5. Specific Plan text. 6. Descriptions of each DISTRICT in both graphical and narrative formats.

b. Final Environmental Impact Report No. 514 Document, which must include, but not be limited to, the following items:

1. Mitigation Monitoring/Reporting Program. 2. Draft EIR 3. Comments received on the Draft EIR either verbatim or in summary. 4. A list of person, organizations and public agencies commenting on the Draft EIR. 5. Responses of the County to significant environmental points raised in the review and consultation process. 6. Technical Appendices on CD.

If any specific plan conditions of approval differ from the specific plan text or exhibits, the specific plan conditions of approval shall take precedence.

10. EVERY 004 GENERAL	SP - Ordinance Requirements	Status: INEFFECT	Conditions: Informational

CONDITIONS

The development of the property shall be in accordance with the mandatory requirements of all Riverside County ordinances including Ordinance Nos. 348 and 460 and state laws; and shall conform substantially with the adopted SPECIFIC PLAN as filed in the office of the Riverside County Planning Department, unless otherwise amended.

10. EVERY 005 GENERAL CONDITIONS	SP - Limits of SP DOCUMENT	Status: INEFFECT	Conditions: Informational

No portion of the SPECIFIC PLAN which purports or proposes to change, waive or modify any ordinance or other legal requirement for the development shall be considered to be part of the adopted specific plan. Notwithstanding to above, the design guidelines and development standards of the SPECIFIC PLAN shall apply in place of more general County guidelines and standards.

10.BS GRADE 001 GENERAL CONDITIONS	SP-GSP-1 ORD. NOT SUPERSEDED	Status: INEFFECT	Conditions: Informational

Anything to the contrary, proposed by this Specific Plan, shall not supersede the following: All grading shall conform to the California Building code, County General Plan, Ordinance 457 and all other relevant laws, rules and regulations governing grading in Riverside County.

10.BS GRADE 002 GENERAL CONDITIONS	SP-GSP-2 GEO/SOIL TO BE OBEYED	Status: INEFFECT	Conditions: Informational

All grading shall be performed in accordance with the recommendations of the included -County approved- geotechnical/soils reports for this Specific Plan.

10.BS GRADE 003 GENERAL CONDITIONS	SP-ALL CLEARNC'S REQ'D B-4 PMT	Status: INEFFECT	Conditions: Informational

Prior to issuance of a grading permit, all certifications affecting grading shall have written clearances. This includes, but is not limited to, additional environmental assessments, erosion control plans, geotechnical/soils reports, and departmental clearances.

10.BS GRADE 004 GENERAL CONDITIONS	SP-NO GRADING & SUBDIVIDING	Status: INEFFECT	Conditions: Informational

If grading of the entire - or any portion there of - Specific Plan site is proposed, UNDER A SUBDIVISION OR LAND USE CASE ALREADY APPROVED FOR THIS SPECIFIC PLAN, at the same time that application for further subdivision of any of its parcels is being applied for, an exception to Ordinance 460, Section 4.5.B, shall be obtained from the Planning Director, prior to issuance of the grading permit (Ord. 460 Section 3.1). THIS EXCEPTION WILL NOT APPLY TO ANY CASE HAVING ONLY AN APPROVED SPECIFIC PLAN.

10.FIRE 001 GENERAL CONDITIONS	SP-#47 SECONDARY ACCESS	Status: INEFFECT	Conditions: Informational

In the interest of Public Safety, the project shall provide an Alternate or Secondary Access(s) as

stated in the Transportation Department Conditions. Said Alternate or Secondary Access(s) shall have concurrence and approval of both the Transportation and Fire Departments and shall be maintained through out any phasing.

10.FIRE 002 GENERAL CONDITIONS	SP-#86-WATER MAINS	Status: INEFFECT	Conditions: Informational

All water mains and fire hydrants providing required fire flows shall be constructed in accordance with the appropriate sections of Riverside County Ordinance 460 and/or No.787, subject to the approval by the Riverside County Fire Department.

10.FIRE 003 GENERAL CONDITIONS	SP-#101-DISCL/FLAG LOT	Status: INEFFECT	Conditions: Informational

1) FLAG LOTS WILL NOT BE PERMITTED BY THE FIRE DEPARTMENT.

) This project lies within the VERY HIGH FIRE HAZARD SEVERITY ZONE.

3) A fire fuel analysis of the open space/wildlands within and outside the project area may be required prior to submitting a fuel modification plan.

NOTICE: The transferor of real property shall disclose to the transferee that this project lies within a VERY HIGH FIRE HAZARD area.

10.FIRE 004 GENERAL CONDITIONS	SP-#71-ADVERSE IMPACTS	Status: INEFFECT	Conditions: Informational

The proposed project will have a cumulative adverse impact on the Fire Department's ability to provide an acceptable level of service. These impacts include an increased number of emergency and public service calls due to the increased presence of structures and population. The project proponents/develpers shall participate in the development Impact fee program as adopted by the Riverside County Board of Supervisors to mitigate a portion of these impacts. This will provide funding for capitol improvements such as land/equipment purchases and fire station construction. The Fire Department reserves the right to negotiate developer agreements associated with the development of land and/or construction of fire facilities to meet service demands through the regional integrated fire protection response system.

10.FIRE 005 GENERAL CONDITIONS	SP-#100-FIRE STATION	Status: INEFFECT	Conditions: Informational

Based on the adopted Riverside County Fire Protection Master Plan, one new fire station and/or engine company could be required for every 2,000 new dwelling units,and/ or 3.5 million square feet of commercial/industrial occupancy. Given the project's proposed development plan, up to 6 fire station(s) MAY be needed to meet anticipated service demands. The Fire Department reserves the right to negotiate developer agreements associated with the development of land and/or construction of fire facilities to meet service demands through the rgional intergrated fire protection response system.

10.PLANNING 017	SP - PDP01341	Status:	Conditions:

GENERAL CONDITIONS INEFFECT Informational

County Paleontological Report (PDP) No. 1341, submitted for this case (SP00375), was prepared by Paleo Environmental Associates, Inc. and is entitled: "Paleontological Resources Inventory and Impact Assessment Technical Report prepared in support of Travertine Point Specific Plan, Vicinity of Salton Sea, Riverside County, California", dated December 2008.

PDP01341 concluded:

1.The project plan area is underlain by paleontologically highly sensitive strata.

2.Earthmoving activities associated with development of the plan area would have a high potential for encountering fossil remains.

3.Paleontological resources might be adversely affected by the earth-moving activities associated with the development of the Travertine Point Specific Plan.

4.Paleontological resources impact mitigation is warranted.

PDP01341 recommended:

1.Paleontological construction monitoring and fossil/sample recovery.

2.Paleontological Resource Impact Mitigation Program design criteria are discussed in this report.

3.The level and type of mitigation effort in a particular part of the plan area reflects the paleontologic or scientific importance and the corresponding impact sensitivity.

PDP01341 satisfies the requirement for a Paleontological Study for Planning/CEQA purposes. PDP01341 is hereby accepted for SP00375. A project specific Paleontological Resource Impact Mitigation Program (PRIMP) shall be prepared and submitted to the County Geologist for review and approval prior to issuance of any grading permit for each implementing project under this Specific Plan.

10.PLANNING 018 Status: Conditions:
GENERAL CONDITIONS SP - GEO02091 INEFFECT Informational

County Geologic Report (GEO) No. 2091, submitted for this project (SP00375) was prepared by Sladden Engineering and is entitled: "Geotechnical Investigation, Proposed Master Planned Community, Rivera-Travertine Properties, South of 81st Avenue Along Highway 86, Oasis Area of Riverside County, California, Project No. 544-06699", dated November 30, 2006. In addition, Sladden prepared the following documents:

"Response to County of Riverside Review comments dated October 30, 2008: County Geologic Report No. 2091", dated May 24, 2009.

"Response to County of Riverside Review comments dated November 12, 2009: County Geologic Report No. 2091; Review Comments #2", dated December 16, 2009

These documents are herein incorporated as a part of GEO02091.

GEO02091 concluded:

1.The subject site is located in an area of seismic activity and will likely experience intense seismic shaking during the design life of the proposed project.

2.No known faults have been mapped trending through the site.

3.Risks associated with surface fault rupture should be considered low.

4.The low calculated factors of safety for some of the granular layers and non-plastic silt deposits suggest that the layers may exhibit liquefaction behavior for the design level earthquake ground shaking considered.

5.The maximum total liquefaction-induced ground settlement at the site could be up to 3 inches during the postulated earthquake. The differential settlement resulting from liquefaction should be less than 1.5 inches.

6.The subject parcels are located on relatively level ground and are not situated immediately adjacent to any mountains or hillsides. As such, the subject parcels are not susceptible to any forms of slope instability.

7.Seiches should be considered a potential hazard to the site.

8.Risks associated with flooding and erosion may need to be considered.

GEO02091 recommended:

1.Remedial grading for building areas to result in the construction of a uniform compacted soil mat beneath all structures.

2.Post-tensioned slabs are recommended to mitigate surficial ground movement related to liquefaction.

3.Mitigation of seiche potential through the use of earthen levees, dykes, or similar water retaining structures.

GEO02091 satisfies the requirement for a Geologic Study for Planning / CEQA purposes. GEO No. 2091 is hereby accepted for Planning purposes for this Specific Plan. This approval is not intended, and should not be misconstrued as approval for any future entitlement project or grading permit. Engineering and other building code parameters will be reviewed and additional comments and/or conditions may be imposed by the Building and Safety Department upon

application for grading and/or building permits.

A geologic investigation report will be required for all implementing projects (Tract Map, Plot Plan, etc.) as described elsewhere in this conditions set.

10.PLANNING 019 GENERAL CONDITIONS	SP - MANTN AREAS,PHASES&DIST	Status: INEFFECT	Conditions: Informational

All planning area's, phase numbers, and DISTRICT numbers shall be maintained throughout the life of the SPECIFIC PLAN, unless changed through the approval of a specific plan amendment or specific plan substantial conformance accompanied by a revision to the complete SPECIFIC PLAN document.

10.PLANNING 020 GENERAL CONDITIONS	SP - NO P.A. DENSITY TRANSPER	Status: INEFFECT	Conditions: Informational

Density transfers between Planning Areas within the SPECIFIC PLAN shall not be permitted, except through the Specific Plan Amendment process.

In this SPECIFIC PLAN, each Planning Area (PA) has a "Target" unit count. Each PA also has a Land Use Designation Range. The Target unit count is an estimate used to create a total dwelling unit number for the entire SPECIFIC PLAN. However, the target for each PA does not limit the number of dwelling units in a PA. A PA is permitted to build over or under the Target density so long as the PA total unit count does not exceed the top or bottom of its Land Use Designation range. In no case shall the SPECIFIC PLAN maximum total permitted residential dwelling units (16,655) be exceeded.

10.PLANNING 022 GENERAL CONDITIONS	SP - LC LANDSCAPING PLANS	Status: INEFFECT	Conditions: Informational

All landscaping plans shall be prepared in accordance with Ordinance No. 859 (as adopted and any amendments thereto), the Riverside County Guide to California Landscaping, and Ordinance No. 348, Section 18.12. In the event conflict arises between Ordinance No. 859 and the SPECIFIC PLAN, then the requirements of Ordinance No. 859 shall prevail.

10.PLANNING 023 GENERAL CONDITIONS	SP - MITIG MEASURE 6.2-2	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.2-2 from EIR514 requires:

Prior to building final inspection, applicant shall provide for the purchasers of residential, commercial, and industrial units in planning areas that would be located adjacent to active agricultural land (either active agricultural land within the project site or adjacent to the project site's boundaries) to be notified pursuant to either the Right To Farm notice for Riverside County (Ordinance No.460) and/or Imperial County (Right-to-Farm Ordinance) as appropriate.

10.PLANNING 024 GENERAL CONDITIONS	SP - MITIG MEASURE 6.3-19	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.3-19 from EIR514 requires:

Prior to issuance of the wastewater treatment facility building final permits for each tract map, the wastewater treatment facility shall enclose odor-generating processes and utilize other odor-abatement technologies as required under state and local regulations.

10.PLANNING 025 GENERAL CONDITIONS	SP - MITIG MEASURE 6.3-18	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.3-18 from EIR514 requires:

Prior to issuance of the wastewater treatment facility building final permits for each tract map, the wastewater treatment facility shall develop a protocol for handling odor complaints.

10.PLANNING 026 GENERAL CONDITIONS	SP - MITIG MEASURE 6.5-7	Status: INEFFECT	Conditions: Informational

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"Mitigation Measure 6.5-7 from EIR514 (as revised by the RRDEIR) requires:

If human remains are encountered during a public or private construction (earthmoving) activity, State Health and Safety Code 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The Riverside County Coroner must be notified within 24 hours. If the coroner determines that the burial is not historic, but prehistoric, the Native American Heritage Commission (NAHC) must be contacted to determine the most likely descendent (MLD) for this area. The MLD may become involved with the disposition of the burial following scientific analysis. Upon clearance by the coroner and the NAHC for Native American remains, construction(earthmoving) activities may resume."

10.PLANNING 027 GENERAL CONDITIONS	SP - MITIG MEASURE 6.5-5	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.5-5from EIR514 requires:

If avoidance and/or preservation in place of cultural resources is not possible, the following mitigation measures shall be initiated for each impacted site:

(1) A participant-observer from the appropriate Indian Band or Tribe shall be used during archaeological testing or excavation in the project site.

(2) Prior to grading final, the project applicant shall develop a test level research design detailing how the cultural resource investigation shall be executed and providing specific research questions that shall be addressed through the excavation program. In particular, the testing program shall characterize the site constituents, horizontal and vertical extent, and, if possible,

period of use. The testing program shall also address the California Register and National Register eligibility of the cultural resource and make recommendations as to the suitability of the resource for listing on either register. The research design shall be submitted to the County of Riverside Regional Park and Open-Space District or the County or Imperial Planning Department, as appropriate, for review and comment. For sites determined through the testing program to be ineligible for listing on either the California or National Register, execution of the testing program will suffice as mitigation of project impacts to this resource.

(3) Prior to the issuance of a grading permit issuance for each implementing project, and after approval of the research design, the project applicant shall complete the excavation program as specified in the research design. The results of this excavation program shall be presented in a technical report that follows the County of Riverside outline for Archaeological Testing. The Test Level Report shall be submitted to the County of Riverside Regional Park and Open-Space District or the County of Imperial Planning Department, for review and comment. If cultural resources that would be affected by the project are found ineligible for listing on the California or National Register, test level investigations will have depleted the scientific value of the sites and the project can proceed.

(4) If the resource is identified as being potentially eligible for either the California or National Register, and project designs cannot be altered to avoid impacting the site, a Treatment Program to mitigate project effects shall be initiated. A Treatment Plan detailing the objectives of the Treatment Program shall be developed. The Treatment Plan shall contain specific, testable hypotheses relative to the sites under study and shall attempt to address the potential of the sites to address these research questions. The Treatment Plan shall be submitted to the County of Riverside Regional Park and Open-Space District or Imperial Planning Department, as appropriate, for review and comment.

(5) After approval of the Treatment Plan, the Treatment Program for affected, eligible sites shall be initiated. A Treatment Program typically involves excavation of a statistically representative sample of the site to preserve those resource values that qualify the site as being eligible for the California or National Register. At the conclusion of the excavation or research program, a Treatment Report, following the outline of the County of Riverside for Archaeological Mitigation or Data Recovery, shall be developed. This data recovery report shall be submitted to the County of Riverside Regional Park and Open-Space District or Imperial Planning Department, as appropriate, for review and comment.

10.PLANNING 028 GENERAL CONDITIONS	SP - MITIG MEASURE 6.5-4	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.5-4from EIR514 requires:

Consultation and in conjunction with the Torres-Martinez Desert Cahuilla Indians is recommended to ascertain if Phase II Testing and Evaluation is warranted for CA-IMP-33 to assess the site's content, depth, and integrity for cultural deposits, as well as data removal. It is also recommended that the modern graffiti be carefully removed from Travertine Rock in its entirety, with special care not to damage the prehistoric rock art. It is also recommended that aesthetically pleasing and protective fencing be placed around Travertine Rock. And finally,

Travertine Rock should be formally nominated as a Traditional Cultural Property (TCP).

10.PLANNING 029 GENERAL CONDITIONS	SP - MITIG MEASURE 6.5-2	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.5-2 from EIR514 requires:

The following standard policies and policy implementation measures shall be implemented prior to implementing project approval:

Cultural Resources Policy 1

Prior to grading final for each implementing project, a comprehensive survey program for unsurveyed areas within the project area shall be completed to identify, document, and protect, if feasible, prehistoric and historical archaeological sites, and sites containing Native American human remains.

Implementation Measure 1.1 The proposed project would be covered under the State CEQA Guidelines (California 2005) or Section 106 of the NHPA, and shall be surveyed by a professional who meets the Secretary of the Interior's Standards and Guidelines regarding archaeological activities and methods prior to the County's approval of proposed project plans and prior to grading final (48 CFR 44716-44742).

Implementation Measure 1.2 All archaeological site location data collected during the cultural resources surveys must be considered to be of a sensitive nature and must remain confidential. Caution must be exercised when disseminating this information; in particular, maps and site location data should be made available only to managers, County officials, and other professionals who have a legitimate need to know.

Implementation Measure 1.3 For potentially significant prehistoric archaeological resources or sites containing Native American human remains identified during the project's archaeological surveys, the project proponent, Federated Insurance Company or their designee, shall continue consultation with the NAHC in Sacramento and interested Native American individuals and organizations.

Cultural Resources Policy 2

Avoid impacts to potentially significant prehistoric and historical archaeological resources and sites containing Native American human remains, where feasible.

Implementation Measure 2.1 If cultural resources avoidance is feasible, potentially significant archaeological resources and sites containing Native American human remains shall be placed within permanent project-specific conservation easements or dedicated open space areas prior to grading final.

Implementation Measure 2.2 Where avoidance of archaeological resources and sites containing Native American human remains is not a feasible management option, capping these resources

with sterile sediments and avoidance planting (e.g., planting of cactus, mesquite, or other native plants) shall be considered the next most favorable management option. In doing so, capping the resource(s) will ensure that indirect impacts from increased public availability to these sites are avoided. Plans for capping identified cultural resources shall be submitted to and approved by the County prior to map recordation.

Cultural Resources Policy 3

Reduce adverse impacts to significant archaeological resources that cannot be protected in place through data recovery excavations.

Implementation Measure 3.1 If avoidance and/or preservation in place of known prehistoric and historical archaeological resources is not a feasible management option, the project proponent shall ensure that potentially significant archaeological resource(s) and site(s) shall be investigated pursuant to the standards, guidelines, and principles of the Advisory Council's Treatment of Archaeological Properties: A Handbook (ACHP 1980).

Prior to grading final for each implementing project, the project applicant shall retain a qualified archaeologist who meets the Secretary of Interior's Standards and Guidelines, and shall use the project's Research Design detailed in the Phase I Cultural Resources Survey Report for the Travertine Point Specific Plan (Applied EarthWorks 2008) to guide the implementation of a Phase II Testing and Evaluation Program. In general terms, the Phase II Testing and Evaluation Program shall be designed to further define site boundaries and to assess the structure, content, nature, and depth of subsurface cultural deposits and features. Emphasis shall also be placed on assessing site integrity and the site's potential to address regional archaeological research questions. These data shall then be used to address the NRHP/CRHR eligibility requirements for the archaeological resource and make recommendations as to the suitability of the resource for listing on either the NRHP/CRHR.

Prior to grading final for each implementing project and after approval of the project's various cultural resources survey reports by the County, the project applicant shall retain a qualified archaeologist to complete the Phase II Testing and Evaluation Program as specified in the project's Phase II Testing and Evaluation Proposal and Research Design and prior to the issuance of a project grading permit. The results of this Phase II Testing Program shall be presented in a technical report that follows the State of California Office of Historic Preservation Archaeological Resource Management Report Recommended Contents and Format Guidelines (California 1990). The Phase II Report shall be submitted to the County's Planning Department for review and comment and the Torres-Martinez Desert Cahuilla Indians prior to the issuance of a project grading permit. If the resource is determined to be ineligible for listing on the NRHP or CRHR upon completion of the Phase II Testing Program, no further cultural resources management of this resource would be required.

Implementation Measure 3.2 A participant-observer(s) from the Torres-Martinez Desert Cahuilla Indians shall be present during Phase II archaeological excavations involving all sites of Native American concern.

Implementation Measure 3.2 A participant-observer(s) from the Torres-Martinez Desert Cahuilla Indians shall be present during Phase II archaeological excavations involving all sites of Native American concern. Implementation Measure 3.3?If the cultural resource is identified as being potentially eligible for listing on either the NRHP or CRHR, and project designs cannot be altered to avoid impacting the site, a Phase III Data Recovery Program to mitigate project effects shall be initiated. A Data Recovery Treatment Plan detailing the objectives of the Phase III Program shall be developed and shall contain specific testable hypotheses pertinent to the project's Research Design and relative to the site(s) under study. The Phase III Data Recovery Treatment Plan shall be submitted to the County's Planning Department, the Torres-Martinez Desert Cahuilla Indians, if applicable, and the SHPO for review and comment prior to implementation of the Data Recovery Program.

After approval of the Treatment Plan, the Phase III Data Recovery Program for affected, eligible site(s) shall be completed. Typically, a Phase III Data Recovery Program involves the excavation of a statistically representative sample of the site(s) to preserve those resource values that qualify the site(s) as being eligible for listing on the NRHP/CRHR. Again, participant-observer(s) from the Torres-Martinez Desert Cahuilla Indians shall be present during archaeological data-recovery excavations involving sites of Native American concern. At the conclusion of the Phase III Program, a Phase III Data Recovery Report shall be prepared, following the State of California Office of Historic Preservation Archaeological Resource Management Report Recommended Contents and Format Guidelines (California 1990).

The Phase III Data Recovery Report shall be submitted to the County's Planning Department, the Torres-Martinez Desert Cahuilla Indians, if applicable, and the SHPO for review and comment prior to the issuance of a project grading permit.

Implementation Measure 3.4 All archaeological materials recovered during implementation of the project's Phase II Testing or Phase III Data Recovery programs shall be processed, including cleaning and cataloging, detailed description, and analysis, as appropriate. Following completion of laboratory and analytical procedures, all project-related collections shall be suitably packaged and transferred to a curation facility that meets the standards of 36 CFR 79 for long-term storage. Materials to be curated include archaeological specimens and samples, field notes, feature and burial records, maps, plans, profile drawings, photo logs, photographic negatives, consultants' reports of special studies, and copies of the final technical reports.

It should be noted that provisions of the Native American Graves Protection Repatriation Act (NAGPRA) pertaining to Native American burials, sacred objects, and objects of cultural patrimony would come into effect when archaeological materials are recovered from lands owned by the Torres-Martinez Desert Cahuilla Indians and managed by the BIA. NAGPRA would also come into effect when ownership of the collections from anywhere within the Travertine Specific Plan study area is transferred to a curation repository that receives federal funding.

Cultural Resources Policy 4

Ensure proper identification and treatment of cultural resources discovered during project

development and construction.

Implementation Measure 4.1 Registered professional archaeologists and culturally affiliated Native Americans, with knowledge in cultural resources, shall monitor all project-related ground-disturbing activities that extend into natural sediments in areas determined to have high archaeological sensitivity for prehistoric resources.

Prior to grading final for each implementing project, the project applicant shall include in its mitigation plan provisions for the identification and evaluation of archaeological resources inadvertently discovered during construction. If buried archaeological resources are uncovered during construction, all work shall be halted in the vicinity of the archaeological discovery until a registered professional archaeologist can visit the site of discovery and evaluate the significance of the archaeological resource.

Implementation Measure 4.2 If the archaeological resource is determined to be a potentially significant cultural resource, the project proponent's mitigation plan shall include provisions for the preparation and implementation of a Phase III Data Recovery Program, as well as disposition of recovered artifacts, in accordance with Cultural Resources Policy 3 Implementation Measure 4, above. The mitigation plan shall be reviewed and approved by the County prior to grading final.

Implementation Measure 4.3 In the event of an accidental discovery of any human remains in a location other than a dedicated cemetery on privately owned or State-owned land, the steps and procedures specified in Health and Safety Code Section 7050.5, State CEQA Guidelines 15064.5(d), and Public Resources Code Section 5097.98 shall be implemented. Specifically, in accordance with Public Resources Code (PRC) Section 5097.98, the Riverside County Coroner shall be notified within 24 hours of the discovery of potentially human remains. The Coroner shall then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the NAHC by phone within 24 hours, in accordance with PRC Section 5097.98. The NAHC shall then designate a Most Likely Descendant (MLD) with respect to the human remains within 48 hours of notification.

The MLD shall then have the opportunity to recommend to the project proponent means for treating or disposing, with appropriate dignity, the human remains and associated grave goods within 24 hours of notification. Whenever the NAHC is unable to identify a MLD, or the MLD fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the MLD and the mediation provided for in subdivision (k) of PRC Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

It should be noted in the event that Native American human remains are inadvertently discovered during the County-permitted, project-related construction activities, there would be unavoidable significant adverse impacts to these resources. Implementation of the Cultural Resources Policies

1, 2, and 3 and their corresponding implementation measures would, however, reduce impacts to other types of archaeological resources to a level that is less than significant.

Implementation Measure 4.4 The treatment and management of potential TCPs identified with the Travertine Point Specific Plan study area shall be conducted through extensive consultation with concerned Native American groups and organizations. These consultation efforts shall be conducted utilizing the County of Riverside's SB 18 consultation process.

Cultural Resources Policy 5

Ensure that the project proponent shall bear all costs associated with cultural resources management within the County's jurisdiction.

Implementation Measure 5.1 The project proponent shall bear all expenses related to the identification, evaluation, and treatment of cultural resources directly or indirectly affected by project-related construction activity. Such expenses may include pre-field planning, field work, post-field analysis, research, interim and summary report preparation, and final report production (including draft and final versions), and costs associated with the curation of project documentation and the associated artifact collections.

Implementation Measure 5.2 Prior to grading final, on behalf of the County and the project applicant, the final technical reports detailing the results of the Phase II Testing or Phase III Data Recovery programs shall be submitted to the appropriate Archaeological Information Centers of the California Historical Resources Inventory System for their information and where they would be available to other researchers. Final Phase III Data Recovery Reports shall also be submitted to local libraries, schools, and historical societies to enable the general public to learn about their local cultural heritage.

10.PLANNING 030 GENERAL CONDITIONS	SP - MITIG MEASURE 6.22-2	Status: INEFFECT Conditions: Informational

Mitigation Measure 6.22-2 from EIR514 requires:

The project proponent shall make every effort feasible to recycle, reuse, and/or reduce the amount of construction and demolition materials (i.e., concrete, asphalt, wood, etc.) generated by development of the project that would otherwise be taken to a landfill. This diversion of waste must exceed a 50 percent reduction by weight. The project shall complete the Riverside County Waste Management Department Construction and Demolition Waste Diversion Program Form B or and Form C process as evidence to ensure compliance. Form B (Recycling Plan) must be submitted and approved by the Riverside County Waste Management Department and provided to the Department of Building and Safety prior to the issuance of building permits. Form C (Reporting Form) must be approved by the Riverside County Waste Management Department and submitted to the Department of Building and Safety prior to the issuance of certificate of occupancy/final inspection.

10.PLANNING 031 GENERAL CONDITIONS	SP - MITIG MEASURE 6.22-3	Status: INEFFECT Conditions: Informational

Mitigation Measure 6.22-3from EIR514 requires:

Applicant(s) shall dispose of any hazardous wastes, including paint, used during construction and grading at a licensed facility in accordance with local, state, and federal guidelines.

10.PLANNING 032 GENERAL CONDITIONS	SP - MITIG MEASURE 6.22-4	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.22-4 from EIR514 requires: All commercial and residential refuse generated from the proposed project within Riverside County portion of the proposed project shall be delivered to the Coachella Valley Transfer Station or the Edom Hill Transfer Station; any residual waste that these transfer stations could not accept shall be disposed of at the Lamb Canyon Landfill or Badlands Landfill or other locations as determined by the Riverside County Waste Management Department. All commercial and residential refuse generated from the proposed project within the Imperial County portion of the proposed project shall be delivered to Salton City Landfill or other locations as determined by the Imperial County Waste Management Department.

10.PLANNING 033 GENERAL CONDITIONS	SP - MITIG MEASURE 6.22-5	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.22-5 from EIR514 requires:

The Homeowners Association established for the proposed development shall establish green waste recycling through its yard maintenance or waste hauling contracts. Green waste recycling includes such things as grass recycling (where lawn clippings from a mulching-type mower are left on the lawn) and on- or off-site composting. This measure shall be implemented to reduce green waste going to landfills. If such services are not available through the yard maintenance or waste haulers in the area, the HOA shall provide individual homeowners with information about ways to recycle green waste individually and collectively. Homeowners shall be notified of such in the CC&Rs.

10.PLANNING 034 GENERAL CONDITIONS	SP - MITIG MEASURE 6.7-1	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.7-1 from EIR514 requires:

Proposed school sites shall undergo subsequent environmental review prior to construction as required by the Coachella Valley Unified School District (CVUSD). Final locations shall be subject to the review and approval of the CVUSD subject to the requirements of the California Department of Education (CDE) and the Department of Toxic Substances Control (DTSC).

10.PLANNING 035 GENERAL CONDITIONS	SP - MITIG MEASURE 6.7-4	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.7-4 from EIR514 requires:

Prior to building final inspection for each development phase, the homeowner's associations (HOAs) shall coordinate with the CVMVCD to provide public pamphlets that provide

information to minimize mosquito breeding grounds and the HOAs shall work with the CVMVCD to control the mosquito population.

10.PLANNING 036 GENERAL CONDITIONS	SP - MITIG MEASURE 6.7-5	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.7-5 from EIR514 requires:

Work crews shall use respirators during project clearing, grading, and excavation operations, in accordance with California Division of Occupational Safety and Health regulations. The cabs of grading and construction equipment shall be air conditioned.

10.PLANNING 037 GENERAL CONDITIONS	SP - MITIG MEASURE 6.7-6	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.7-6 from EIR514 requires:

Construction roads shall be paved, when possible, to reduce fugitive dust and potential exposure to the fungus; or the access road into the project site shall be paved or treated with environmentally safe dust control agents, and where unpaved shall be wetted two times per day to minimize dust.

10.PLANNING 038 GENERAL CONDITIONS	SP - MITIG MEASURE 6.7-7	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.7-7 from EIR514 requires:

Prior to building final inspection for each planning area, the HOA, in coordination with government authorities (i.e., California Fish and Game), shall prepare public outreach programs and information pamphlets regarding the potential danger of digesting fish and waterfowl tissue that would be contaminated with selenium.

10.PLANNING 039 GENERAL CONDITIONS	SP - MITIG MEASURE 6.8-4	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.8-4 from EIR514 requires:

Periodic inspection of the conditions of the channels will need to be performed year round and after significant precipitation events will be required to be performed by each homeowner-owner association (HOA). Annual inspection reports shall be prepared by each HOA, and submitted to and filed with the Coachella Valley Water District by June 30th of each calendar year.

10.PLANNING 040 GENERAL CONDITIONS	SP - MITIG MEASURE 6.8-7	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.8-7from EIR514 requires:

The location, nature, and importance of the subdrainage system shall be disclosed to the ultimate owners of the property, so that the property owners can avoid damage to the drains' or negatively

affect the drains' performance. In addition to disclosure to potential homeowners, tile drains that cross onto private lots shall be protected by one or more of the following mechanisms: the creation of easements, CC&R protocols, identification through flagging or risers, or other suitable mechanisms.

10.PLANNING 041 GENERAL CONDITIONS	SP - MITIG MEASURE 6.8-9	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.8-9 from EIR514 requires:

Prior to implementing project approval for each phase or district, as appropriate, the applicant shall submit for review and approval a hydrology report to further define flow conditions related to Channel 4 at SR-86S and for all channels east of SR 86S, and provide for the design of such facilities such that discharge is released in a manner consistent with pre-project/existing conditions, or alternatively, provide for storage or discharge flows within the boundaries of the northern portion of the proposed project or off-site with approval and easements from adjacent property owners.

10.PLANNING 042 GENERAL CONDITIONS	SP - MITIG MEASURE 6.8-11	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.8-11 from EIR514 requires:

Prior to implementing project approval for each phase or district, as appropriate, the applicant shall submit for review and approval a hydrology report to address potential sediment depositions in the Salton Sea and downstream properties. The report shall provide for design considerations to be implemented in proposed Channels 1, 2 and 3, as appropriate.

10.PLANNING 043 GENERAL CONDITIONS	SP - MITIG MEASURE 6.8-12	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.8-12 from EIR514 requires:

Prior to implementing project approval for each phase or district, as appropriate, the applicant shall submit for review and approval a plan for the management, operation and maintenance of the flood control system.

10.PLANNING 044 GENERAL CONDITIONS	SP - MITIG MEASURE 6.11-1	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.11-1 from EIR514 requires:

Where feasible and consistent with the Riverside County standards, any paving or repaving of off-site roadways that must be conducted in conjunction with implementation of the specific plan should utilize asphalt-rubber paving material consisting of 20 percent recycled rubber or more and 80 percent paving-grade asphalt. Studies have demonstrated that such paving material will reduce traffic noise by as much as 3 to 5 dB(A).

10.PLANNING 045	SP - MITIG MEASURE 6.11-2	Status:	Conditions:

GENERAL CONDITIONS INEFFECT Informational

Mitigation Measure 6.11-2 from EIR514 requires:

With permission from the Riverside County Transportation Departments, speed limits on arterials experiencing significant noise impacts off-site should be reduced from existing speed limits. Each 5 mile per hour reduction in the speed limit can decrease the CNEL level by about 1 dB(A).

10.PLANNING 046

GENERAL CONDITIONS SP - MITIG MEASURE 6.11-8 Status: INEFFECT Conditions: Informational

Mitigation Measure 6.11-8 from EIR514 requires:

The project applicant shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:

-Two weeks prior to the commencement of construction, notification must be provided to surrounding land uses within 1,000 feet of a project site disclosing the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period.

-Ensure that construction equipment is properly muffled according to industry standards and in good working condition.

-Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.

-Schedule high noise-producing activities between the hours of 8:00 AM and 5:00 PM to minimize disruption to sensitive uses.

-Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.

-Use electric air compressors and similar power tools rather than diesel equipment, where feasible.

-Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.

-Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the Riverside County or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. Contract specifications shall be included in the proposed

project construction documents, which shall be reviewed by Riverside County prior to grading final.

The Riverside County Building and Safety Department shall monitor and oversee the BMPs to verify that they are implemented correctly by the construction contractors.

10.PLANNING 047 GENERAL CONDITIONS | SP - MITIG MEASURE 6.13-4 | Status: INEFFECT | Conditions: Informational

Mitigation Measure 6.13-4 from EIR514 requires:

Prior to final building inspection for each implementing project, applicants for implementing projects shall provide final fire-flow plans to the RCFD and SCSD, as appropriate, which include fire-flow requirements within commercial projects to be based on square footage and type of construction associated with development of the structures.

10.PLANNING 048 GENERAL CONDITIONS | SP - MITIG MEASURE 6.13-5 | Status: INEFFECT | Conditions: Informational

Mitigation Measure 6.13-5 from EIR514 requires:

Prior to final building inspection for each implementing project, applicants for implementing projects shall provide final fire flow plans to the RCFD ensuring that all water mains and fire hydrants providing required fire flows would be constructed in accordance with the appropriate development schedule sections of Riverside County Ordinance No. 460 and/or Ordinance No. 787. Each fire flow plan that is submitted would be reviewed and approved by the RCFD prior to final building inspection.

10.PLANNING 049 GENERAL CONDITIONS | SP - MITIG MEASURE 6.21-1 | Status: INEFFECT | Conditions: Informational

Mitigation Measure 6.21-1 from EIR514 requires:

The applicant shall prepare and submit to CVWD, SCSD, the County of Riverside, as appropriate, a Wastewater Management Plan (WMP) that provides for the final location, development, and funding mechanisms of the wastewater conveyance infrastructure system and wastewater treatment system associated with development of the entire project. This WMP shall describe and finalize the design parameters and locations of piping necessary to convey wastewater originating within the project site for the specified tract. Each WMP shall also be submitted to the Regional Water Quality Control Board for approval and to ensure that the wastewater infrastructure conveyance system meets their requirements for collection and treatment of wastewater. The Wastewater Management Plan shall be reviewd and approved by CVWD and Riverside County for the portion of the project in Riverside County prior to the recordation of any final subdivision map in Riverside County.

10.PLANNING 051 GENERAL CONDITIONS | SP - MITIG MEASURE 6.22-6 | Status: INEFFECT | Conditions: Informational

Mitigation Measure 6.22-6 from EIR514 requires:

Prior to issuance of Building Permits for any multi-unit residential, commercial or industrial facilities, clearance from the Riverside County Waste management Department is needed to verify compliance with California Solid Waste Reuse and Recycling Act of 1991 (AB 1327), which requires the local jurisdiction to require adequate areas for collecting and loading recyclable materials.

10.PLANNING 052 GENERAL CONDITIONS	SP - MITIG MEASURE 6.22-8	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.22-8 from EIR514 requires:

Prior to implementing project approval for Planning Areas 2-17, 2-21, 2-19, and 2-20, the applicant(s) shall provide for a buffer and restrict development adjacent to the active or closed landfill from the Oasis Landfill property line for a distance of a minimum of 1,000 feet and a maximum of 1,320 feet originating at the Oasis Landfill disposal footprint, until the landfill is closed to provide adequate spacing for monitoring probes, as recommended by the RCWMD and in accordance with the Southern California Air Quality Management District's Rule 1150.1.

10.PLANNING 053 GENERAL CONDITIONS	SP - MITIG MEASURE 6.22-9	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.22-9 from EIR514 (as revised by the RRDEIR) requires:

Prior to implementing project approval for Planning Areas 2-18 and 2-19, the Oasis landfill shall be closed by the RCWMD in accordance with CalRecycle guidelines for closure with waste in place.

10.PLANNING 054 GENERAL CONDITIONS	SP - MITIG MEASURE 6.22-10	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.22-10 from EIR514 requires:

Prior to implementing project approval in Planning Area 2-18, the applicant shall consult with officials from RCWMD and agree on a circulation plan for roads that would be developed around and adjacent to the Oasis Landfill site. Best Management Practices (BMPs) shall be developed and implemented within the circulation plan for Planning Areas 2-18 and 2-19 to avoid the restructuring of roadways around and adjacent to the Oasis Landfill.

10.PLANNING 055 GENERAL CONDITIONS	SP - MITIG MEASURE 6.23-4	Status: INEFFECT	Conditions: Informational

Mitigation Measure 6.23-4 from EIR514 requires:

Prior to the first implementing project approval for each development phase, the project applicant shall submit a plan for providing local transit services within the project site to the Riverside County Planning Department for review and approval.

10.PLANNING 056	SP - HOLD HARMLESS (2)	Status:	Conditions:

GENERAL CONDITIONS INEFFECT Informational

The Desert Recreation District (DRD) or other designated entity responsible for park maintenance shall indemnify all usual park and recreational activities and shall be responsible for all maintenance and repair activities of improvements proposed by and for the SPECIFIC PLAN within Planning Area 2-18. This does not include Riverside County Waste Management facilities.

10.PLANNING 057 GENERAL CONDITIONS SP - DRP CONSISTENCY Status: INEFFECT Conditions: Informational

All implimenting projects must be consistent with the approved DISTRICT REFINEMENT PLAN of the corresponding DISTRICT, per the SPECIFIC PLAN.

10.PLANNING 058 GENERAL CONDITIONS SP - DU/BLDG PERM MATRIX Status: INEFFECT Conditions: Informational

Given the size and scope of the project, every condition of approval which uses the term "Building Permit" as a trigger point shall be interpreted to mean "Residential Dwelling Unit." For example a 100 unit apartment complex in one building shall count as 100 BUILDING PERMITS for purposes of these conditions, not simply one building permit. Additionally, the Matrix shall make it clear which residential units are within the County Jurisdiction and which are not. A total unit count, regardless of jurisdiction, must be shown as most conditions are triggered by a total project unit count for all jurisdictions.

For purposes of tracking the total build out of the SPECIFIC PLAN, the TLMA Counter Services Team shall maintain a TOTAL DWELLING UNIT TRACKING MATRIX. The matrix shall differentiate between individual building permits and the total number of dwelling units that are represented by the building permits that have been issued for the entire SPECIFIC PLAN. Any condition that requires a specific action at a specified "building permit issuance" shall use the TOTAL DWELLING UNIT TRACKING MATRIX to determine if the threshold has been met.

10.PLANNING 059 GENERAL CONDITIONS SP - PUB BLDG STANDARDS Status: INEFFECT Conditions: Informational

All public buildings which require an occupancy permit and are intended to be owned by the County upon completion shall comply with Board Policy H-29.

10.PLANNING 060 GENERAL CONDITIONS SP - MODIFICATN TO CONDITIONS Status: INEFFECT Conditions: Informational

Once the SPECIFIC PLAN is approved, in addition to any thresholds listed in the SPECIFIC PLAN, any modifications to the Conditions of Approval that affect the entire SPECIFIC PLAN shall require a SPECIFIC PLAN Amendment unless otherwise determined by the County Planning Director. Any modifications to the Conditions of Approval that only affect a specific DISTRICT shall require a Substantial Conformance determination to the SPECIFIC PLAN.

10.PLANNING 061 GENERAL SP - IMPERIAL SP APPROVAL Status: INEFFECT Conditions: Informational

CONDITIONS

The County of Riverside adoption of the SPECIFIC PLAN only pertains to those areas where the County has jurisdiction. If for any reason Imperial County does not approve the portion of the SPECIFIC PLAN within Imperial County, or if Imperial County adopts a version of the SPECIFIC PLAN that is not in substantial conformance with the County of Riverside adopted SPECIFIC PLAN, then an amendment to the entire SPECIFIC PLAN, through the County of Riverside will be required to assure consistency.

10.PLANNING 062 GENERAL CONDITIONS	SP - IMPLEMENTING PROJECTS	Status: INEFFECT	Conditions: Informational

For the purposes of this project, any condition of approval that refers to "implementing projects" shall include Schedule I subdivisions as identified in Ordinance No. 460.

10.PLANNING 063 GENERAL CONDITIONS	SP - TILE DRAINS	Status: INEFFECT	Conditions: Informational

Portions of the site are underlain by an existing tile drain system installed in the past to help control high groundwater levels and related saltation problems associated with former agricultural activities. If any tile drains exist within the boundaries of any implementing project, that project shall complete a review of the tile drain system to be submitted for review and approval by the County Geologist. Said study shall, at a minimum, determine if the drains are structurally sound, or if the system should be replaced. In no case shall a project with previous tile drains be permitted to develop without a tile drain system to control future groundwater levels which will assist in the mitigation of liquefaction. In addition these drains will help prevent the development of a "salt" crust related to evapotranspiration of landscape water.

Any future underground utility lines which intercept the existing tile drain system should be evaluated on a case-by-case basis to determine if they will interfere with or assist the performance of the existing tile drains. All underground utilities which may potentially provide for enhanced groundwater control should be incorporated into the existing system so as to provide additional control of the groundwater levels beneath this site. Any interference of a newly installed utility or any other underground installation (i.e. swimming pools, basements, etc.) with the existing tile drains should be addressed in such a way as to maintain the functionality of the tile drain system. If no tile drains are located this condition shall not apply.

10.PLANNING 064 GENERAL CONDITIONS	SP - DRP REQUIRED	Status: INEFFECT	Conditions: Informational

Prior to or concurrent with the first approval of any implementing project within any DISTRICT, a Specific Plan Substantial Conformance application for a DISTRICT REFINEMENT PLAN shall be required in accordance with Section 3.13.1.1 of the SPECIFIC PLAN. No implementing project shall be approved before a DISTRICT REFINEMENT PLAN for the corresponding DISTRICT receives approval from the Planning Commission. DISTRICT REFINEMENT PLANS may be processed concurrently with implementing projects.

Note: The DISTRICT REFINEMENT PLAN is processed as a Specific Plan Substantial Conformance; however, once approved the Planning Director shall create a new LMS

development number for the land management tracking system and all implementing projects within the respective DISTRICT shall be attached to the new DISTRICT REFINEMENT PLAN development number. Once the DISTRICT REFINEMENT PLAN is approved, all Specific Plan Conditions of approval shall be transferred into the new development number created by the DISTRICT REFINEMENT PLAN. All dwelling units shall be tracked at the DISTRICT level through the DISTRICT REFINEMENT PLAN development number and through the separate spread sheet referenced in condition 10.Planning.58 DU/BUILDING PERMIT MATRIX. Additionally, only Conditions of Approval approriate to the DISTRICT need be moved. Minor modifications to the Conditions of Approval are permitted for the DRP if said revisions are specific to the DISTRICT and do not significantly alter the intent of the Condition of Approval. This note shall not apply if an alternative permit tracking process to LMS is being used.

Once approved, the DISTRICT REFINEMENT PLAN shall be added as an appendix to the SPECIFIC PLAN and act as additional Design Standards for the respective DISTRICT."

10.PLANNING 065 GENERAL CONDITIONS	SP - NEIGHBORHOOD PARKS	Status: INEFFECT	Conditions: Informational

A minimum of 6.6 acres of neighborhood parks shall be developed in conjunction for every 500 residential dwelling units.

10.PLANNING 066 GENERAL CONDITIONS	SP - AG SETBACKS	Status: INEFFECT	Conditions: Informational

Existing Agricultural uses are allowed to continue during the development of the SPECIFIC PLAN. Proposals to improve, enhance, intensify and/or expand an existing agricultural operation shall be subject only to the approval of the Travertine Point Property Owners Association, provided the public's health, safety and welfare are protected and that no existing residential use is closer than 300 feet of the existing and/or proposed improvement, enhancement, intensification and/or expansion. Residential units associated with or ancillary to the existing agricultural operation are not included in the 300 foot setback requirement. Agricultural uses proposed less than 300 feet from existing residential uses would require a Conditional Use Permit.

10.PLANNING 067 GENERAL CONDITIONS	MM - LANDFILL MOU IMP	Status: INEFFECT	Conditions: Informational

All provisions of the Landfill MOU specified in condition of approval 30.PLANNING.2 shall be implemented throughout the life of the project to the satisfaction of the Riverside County Waste Management Department.

10.PLANNING 068 GENERAL CONDITIONS	SP - MUOZ BOUNDARY	Status: INEFFECT	Conditions: Informational

The zoning ordinance for the project permits the use of Mixed Use Overlay Zones (MUOZ) intended to foster different types of mixed use development. Mixed Use Overlay Zones are only permitted in Planning Areas with a Mixed Use Designation, specifically Districts 1, 2, and/or 4. The boundary of any MUOZ shall be legally defined by zoning ordinance in conjunction with approval of one or more Districts Refinement Plans (DRPs) as outlined in the SPECIFIC PLAN.

Changes to the boundaries of any established MUOZ shall require a change of zone application to be approved.

10.PLANNING 069 GENERAL CONDITIONS	SP - MITIG MEASURE 6.3-17(2)	Status: INEFFECT	Conditions: Informational

To assure that all payments indicated in Condition of Approval 30.PLANNING.157 have been made, 10 years after the first $25,000 payment has been made to the Salton Sea Authority, the applicant shall provide evidence that all payments required by EIR Mitigation Measure 6.3-17 have been made.

*This Condition was added as a result of the RRDEIR.

10.PLANNING 070 GENERAL CONDITIONS	SP - MITIG MEASURE 6.16-7	Status: INEFFECT	Conditions: Informational

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"Mitigation Measure 6.16-7 from EIR514 (as revised by the RRDEIR) requires:

Prior to approval of any subsequent actions to implement the project in planning areas as defined in the specific plan located adjacent to western boundary of the site, a landscaping plan shall be developed and submitted for drainage channels along the western perimeter of the project site. The landscaping plan shall require the planting of native plant species with thorns, such as cat-claw acacia and mesquite shrubs, adjacent to walls and trails on the western boundary of the site. This plan must be reviewed and approved by the Riverside or Imperial County Planning Director for the portions of the project located in each county."

10.TRANS 001 GENERAL CONDITIONS	SP - SP375/TS CONDITIONS	Status: INEFFECT	Conditions: Informational

The Transportation Department has reviewed the Traffic Impact Analysis (TIA), dated March 9, 2009 submitted for the proposed project. The TIA has been prepared in accordance with County-approved guidelines. The Transportation Department has also reviewed the Traffic Study Supplement (TSS), dated August 5, 2010. We generally concur with the findings relative to traffic impacts.

The General Plan circulation policies require a minimum of Level of Service 'C', except that Level of Service 'D' may be allowed in community development areas at intersections of any combination of secondary highways, major highways, arterials, urban arterials, expressways or state highways and ramp intersections.

The TIA and TSS indicate that it is possible to achieve adequate levels of service for the following intersections based on the traffic study assumptions.

Harrison Street (NS) at: 62nd Avenue (EW)

Harrison Street (NS) at: 64th Avenue (EW)

Harrison Street (NS) at: 66th Avenue (EW)

Harrison Street (NS) at: 70th Avenue (EW)

Harrison Street (NS) at: 72nd Avenue (EW)

Harrison Street (NS) at: 74th Avenue (EW)

Harrison Street (NS) at: Pierce Street (EW)

Harrison Street (NS) at: 78th Avenue (EW)

Harrison Street (NS) at: 81st Avenue (EW)

Polk Street (NS) at: 74th Avenue (EW)

Fillmore Street (NS) at: 78th Avenue (EW)

Village Way (NS) at: 82nd Avenue (EW)

Village Way (NS) at: Jewel Street (EW)

Village Way (NS) at: Town Center Way North (EW)

Village Way (NS) at: Town Center Way South (EW)

SR-86S Southbound Ramps (NS) at: 62nd Avenue (EW)

SR-86S Northbound Ramps (NS) at: 62nd Avenue (EW)

SR-86S Southbound Ramps (NS) at: 66th Avenue (EW)

SR-86S Northbound Ramps (NS) at: 66th Avenue (EW)

SR-86S Southbound Ramps (NS) at: 70th Avenue (EW)

SR-86S Northbound Ramps (NS) at: 70th Avenue (EW)

SR-86S Southbound Ramps (NS) at: 74th Avenue (EW)

SR-86S Northbound Ramps (NS) at: 74th Avenue (EW)

SR-86S Southbound Ramps (NS) at: 81st Avenue (EW)

SR-86S Northbound Ramps (NS) at: 81st Avenue (EW)

SR-86 Southbound Ramps (NS) at: Town Center Way (EW)

SR-86 Northbound Ramps (NS) at: Town Center Way (EW)

SR-86 Southbound Ramps (NS) at: Desert Shores Drive (EW)

SR-86 Northbound Ramps (NS) at: Desert Shores Drive (EW)

SR-86 Southbound Ramps (NS) at: Brawley Avenue (EW)

SR-86 Northbound Ramps (NS) at: Brawley Avenue (EW)

SR-86 Southbound Ramps (NS) at: Sea Oasis Boulevard (EW)

SR-86 Northbound Ramps (NS) at: Sea Oasis Boulevard (EW)

SR-86 Southbound Ramps (NS) at: Marina Drive (EW)

SR-86 Northbound Ramps (NS) at: Marina Drive (EW)

Paseo Street (NS) at: 81st Avenue (EW)

Lincoln Street (NS) at: 81st Avenue (EW)

Lincoln Street (NS) at: Paseo Street (EW)

Lincoln Street (NS) at: Jewel Street (EW)

Gateway Street (NS) at: Town Center Way West (EW)

Jewel Street (NS) at: Paseo Street North (EW)

Jewel Street (NS) at: Paseo Street South (EW)

Jewel Street (NS) at: Bayside Way (EW)

Town Center Way (NS) at: Paseo Street North (EW)

Town Center Way (NS) at: Paseo Street South (EW)

Travertine Estates (NS) at: Paseo Street (EW)

A Street (NS) at: Jewel Street (EW)

A Street (NS) at: Desert Shores Drive (EW)

Sea Oasis Drive (NS) at: Travertine Estates (EW)

Sea Oasis Drive (NS) at: Desert Shores Drive (EW)

The associated conditions of approval incorporate mitigation measures identified in the traffic study, which are necessary to achieve or maintain the required level of service.

10.TRANS 002 GENERAL CONDITIONS	SP-SP375/DEF-PROJ DEV DISTS	Status: INEFFECT	Conditions: Informational

In SP00375 five Development Districts are identified. The Planning Areas in each District are numbered as follows:

District 1:Planning Areas 1-1 through 1-23

District 2:Planning Areas 2-1 through 2-21

District 3:Planning Areas 3-1 through 3-12

District 4:Planning Areas 4-1 through 4-8

District 5:Planning Areas 5-1 through 5-15

10.TRANS 003 GENERAL CONDITIONS	SP-SP375/DEF-RDWY IMPVT PHASES	Status: INEFFECT	Conditions: Informational

In the TSS for SP00375, dated August 5, 2010, nineteen (19) transportation improvement phases are identified. Following is a listing of the transportation system improvement phases and the Planning Areas that would be developed in each phase.

Rdwy Impvt Phase Planning Areas Developed

1 1-1,1-2,1-3,1-5,1-7,1-8,1-12 (partial)

2a 1-9,1-12(partial),1-13,1-14,1-15

2b 1-4,1-6,1-11

2c 2-1,2-1,2-3

2d 2-8,2-9,2-14 (partial)

2e 1-16,4-5 (partial)

2f 2-19 (partial),2-20 (partial), 2-21,4-1

3a 1-10,2-4,2-5,2-6,2-7,2-10,2-11,2-12

3b 4-3,4-4 (partial), 5-1

3c 5-13

3d 2-13,2-14 (partial),2-15,2-16

3e 2-17, 2-18,2-19 (partial),2-20 (partial)

3f 4-2,4-5 (partial),4-6

3g 1-17,1-18,1-19,1-20,1-21,1-22,1-23

3h 4-7,4-8

3i 3-1,3-2

3j 3-3,3-4,3-5,3-6,3-7,3-8,3-9,3-10, 3-11,3-12

3k 4-4,5-2,5-3,5-4,5-5

3l 5-6,5-7,5-8,5-9,5-10,5-11,5-12, 5-14,5-15

If development occurs in a different order, or if there is substantial overlapping of phases, then a new traffic study shall be completed to determine if any improvements from the prior un-built phase need to be constructed to mitigate impacts caused by the phase being developed.

10.TRANS 004 GENERAL CONDITIONS	SP-SP375/FUND SR-86/SR-86S IMP	Status: INEFFECT	Conditions: Informational

Recognizing that 00375 and other developments in Riverside and Imperial Counties along the SR-86/SR86-S will necessitate improvements along SR-86/SR-86S, Riverside County will take the lead in upgrading SR-86/SR-86S to a six-lane freeway between 62nd Avenue in Riverside County and Marina Drive in Imperial County. The six-lane freeway would have grade-separated interchanges in Riverside County at SR-86S/62nd Avenue, SR-86S/66th Avenue,SR-86S/70th Avenue, SR-86S/74th Avenue, SR-86S/81st Avenue, SR-86/Town Center Way North, and in Imperial County at SR-86/Desert Shores Drive, SR-86/Brawley Avenue, SR-86/Sea Oasis Boulevard, and SR-86/Marina Drive. Pending the outcome of further engineering, financial,

environmental, and other studies, the County intends to establish a Road and Bridge Benefit District (RBBD), or other area-wide funding mechanism for the corridor, which includes this project site, in order to upgrade SR-86/SR-86S to a six-lane freeway. The funding mechanism may have a two-tiered structure:

One tier to fund the addition of one lane in each direction along SR-86/SR-86S that would include the entire benefit corridor, and

A second tier consisting of several subareas within the benefit corridor to fund interchanges that would serve a specific subarea.

The Traffic Study for the Project used a 10 mile study area north and south of the Project site, which is twice the 5 mile study scope typically required by the County. Impacts within the study scope area are fully mitigated as set forth in this EIR. Possible impacts beyond the 10 mile study area are deemed too speculative to evaluate at this time, given various unknown factors such as the pace of Specific Plan implementation over an estimated 30-40 year build out, the pace of other improvements to local roads and highways during that 30-40 year project build out, and the pace of other development in the vast area north and south of the Specific Plan site that may contribute trips but also funding sources for road and highway improvements. The project conditions of approval require that all future tract maps be conditioned to provide updated traffic studies prior to final map approval. Those traffic studies shall include an analysis of potentially significant traffic impacts beyond the 10 mile study scope established by the County for the Specific Plan traffic study. To the extent that future traffic studies, required for all implementing tract maps, show any significant impacts beyond the 10 mile study area used for the Specific Plan traffic study, including but not limited to significant impacts to 86s, the I-10, and/or local roadways, the tract map applicants shall be required to participate in an RBBD, or other similar financial mechanism such as a CFD, to mitigate such impacts to a less than significant level. Implementing projects of SP375 shall be required to pay CVAG TUMF fees. The fees collected can also be made eligible, through the CVAG transportation prioritization process, for regional improvements within and beyond the study area.

20.PLANNING 001
PRIOR TO A CERTAIN DATE

SP - 90 DAYS TO PROTEST

Status: INEFFECT

Conditions: Outstanding

The applicant has ninety (90) days from the date of the approval of these conditions to protest, in accordance with the procedures set forth in Government Code Section 66020, the imposition of any and all fees, dedications, reservations, and/or exactions imposed on this project as a result of the approval or conditional approval of this project.

20.PLANNING 002
PRIOR TO A CERTAIN DATE

SP - SUBMIT FINAL DOCUMENTS

Status: INEFFECT

Conditions: Outstanding

Within 60 days of the tentative approval of the project by the Board of Supervisors and prior to closing the DBF accounts for the project, Four (4) hard copies and Fifteen (15) copies on CD of the final SPECIFIC PLAN and EIR documents (SP/EIR) documents shall be submitted to the Planning Department for review, approval and distribution. The documents shall include all the items listed in the condition titled "SP - Documents". The final SP/EIR documents shall be

distributed in the following fashion:

One hard copy to the Planning Counter Services Division,

One hard copy to the Planning Department Library,

One hard copy to the Desert Office,

One hard copy to the Planning Department Project Manager,

Digital versions (CD) to the following:

Building and Safety Department 1 copy

Department of Environmental Health 1 copy

Fire Department 1 copy

Flood Control and Water Conservation District 1 copy

Transportation Department 1 copy

Executive Office - CSA Administrator 1 copy

Clerk of the Board of Supervisors 1 copy

Any park provider if not the CSA 1 copy

Any and all remaining documents shall be kept with the Planning Department in Riverside, or as otherwise determined by the Planning Director.

30.E HEALTH 001 PRIOR TO ANY PROJECT APPROVAL	SP-WATER AND SEWER WILL SERVE	Status: INEFFECT	Conditions: Outstanding

A "will serve" letter from the agency serving potable water and sanitary sewers is required.

30.E HEALTH 002 PRIOR TO ANY PROJECT APPROVAL	SP - LEA CLEARANCE	Status: INEFFECT	Conditions: Outstanding

Clearance from Environmental Resource Management Division (Local Enforcement Agency) is required.

30.EPD 001 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-1	Status: INEFFECT	Conditions: Outstanding

EIR00514 MM 6.4-1 Prior to implementing project approval, a qualified biologist currently holding an MOU with Riverside County shall conduct a focused survey for the two special-status plant species observed within the Riverside County portion of the proposed project site,

chaparral sand verbena and Peirson's pebble pincushion, which are not covered under the CVMSHCP within the proposed development areas in order to determine the extent of individual plants to be impacted by the implementing project design. Impacts resulting from project construction to the two special-status plant species observed shall be mitigated through a seed collection and planting program. The planting program will be reviewed and approved by the Environmental Programs Division and CDFG and will include provisions for monitoring success criteria and performance standards.

30.EPD 002

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-2	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-2 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), the project applicant shall retain a qualified biologist currently holding an MOU with Riverside County, to collect seed from special status plant species individuals during the appropriate season (after the blooming period, when seeds have formed). The collected seed shall be planted in predetermined suitable habitat in an appropriate area within Open Space (Conservation) on the project site that will not be impacted by project development or subsequent activities. A portion of Sonoran creosote bush scrub and blue palo verde wash woodland located in the southern portion of the proposed project site will remain undeveloped upon implementation of the proposed project. In addition, appropriate disturbed/recovering Sonoran creosote bush scrub areas will also be areas for potential seed planting.

30.EPD 003

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-3	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-3 Prior to map recordation (AND/OR OTHER APPROPRIATE MILESTONE), the project applicant shall protect those portions of Sonoran creosote bush scrub and blue palo verde wash woodland occurring within the Open Space-Conservation land use category through a conservation easement, deed restriction, or similar mechanism. This area provides suitable habitat for relocation of chaparral sand verbena and Peirson's pebble pincushion. A report documenting the seed collection and planting plan shall be submitted to the Riverside County Environmental Programs Division.

30.EPD 004

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-4	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map,

parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-4 Impacts resulting from project construction within the Riverside County portion of the proposed project site to those special-status wildlife species covered under the CVMSHCP, including desert pupfish, flat-tailed horned lizard, Yuma clapper rail, burrowing owl, Crissal thrasher, Le Conte's thrasher, western yellow bat, Palm Springs round-tailed ground squirrel, and Palm Springs pocket mouse, shall be mitigated through payment of the CVMSHCP Local Development Mitigation Fee.

Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), fee payment shall be made in accordance with Ordinance 875 by the project applicant to Riverside County.

30.EPD 005

		Status:	Conditions:
PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-5	INEFFECT	Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-5 Impacts resulting from project construction within the Riverside County portion of the proposed project site to Couch's spadefoot, which is not covered under the CVMSHCP, shall be mitigated. Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), in areas of suitable habitat for Couch's spadefoot on the project site, a qualified biologist currently holding an MOU with Riverside County shall conduct focused surveys including areas of ruts or small pools, as well as the irrigation ponds, and relocate any toad individuals or eggs found. The survey shall be conducted during the active season of Couch's spadefoot (which corresponds with the rainy season). The survey results shall be submitted to the Riverside County Environmental Programs Division and CDFG.

30.EPD 006

		Status:	Conditions:
PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-6	INEFFECT	Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-6 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), if the focused surveys required under mitigation measure 6.4-5 result in the observation of Couch's spadefoot within project impact areas, observed individuals and/or eggs shall be removed from project impact areas (with the prior approval of the CDFG) and relocated to predetermined suitable habitat in an appropriate area within Open Space-Conservation areas on the project site that will not be impacted. A portion of Sonoran creosote

bush scrub and blue palo verde wash woodland located in the southern portion of the proposed project site will remain undeveloped upon implementation of the proposed project.

Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), the project applicant shall protect those portions of Sonoran creosote bush scrub and blue palo verde wash woodland occurring within the Open Space-Conservation land use category through a conservation easement, deed restriction, or similar mechanism, as required by Mitigation Measure 6.4-3. If suitable habitat for relocation of Couch's spadefoot is found within this area, toad individuals or eggs will be taken to this location. In addition, suitable disturbed/recovering Sonoran creosote bush scrub areas will also be considered for relocation efforts.

30.EPD 007
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.4-7 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-7 Impacts resulting from project construction to rosy boa, which is not covered under the CVMSHCP, within the Riverside County portion of the proposed project site shall be mitigated through pre-construction surveys and relocation. Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), the applicant shall retain a qualified biologist currently holding an MOU with Riverside County to conduct focused pre-construction surveys for individuals of this species within suitable habitat for the species. Surveys shall be conducted within suitable habitat located within 500 feet of the grading limits. Surveys shall include an examination of those portions of Sonoran creosote bush scrub, blue palo verde wash woodland, disturbed/recovering Sonoran creosote bush scrub, and saltbush scrub habitats that will be developed as part of project implementation.

If rosy boa individuals are found, an active trapping and relocation program, conducted by a qualified biologist currently holding an MOU with Riverside County and in coordination with the CDFG, that will move individuals to suitable on-site habitat that will not be directly impacted by project implementation, shall take place. A portion of Sonoran creosote bush scrub and blue palo verde wash woodland located in the southern portion of the proposed project site will remain undeveloped upon implementation of the proposed project.

In the event that off-site habitat areas within 500 feet of grading are not accessible during preconstruction surveys, the presence of rosy boa shall be assumed and the entire project site boundary within 500 feet of grading activities shall be fenced to prohibit entry of rosy boa into the grading site. The fence shall be monitored as a regular part of construction monitoring.

The project applicant shall protect those portions of Sonoran creosote bush scrub and blue palo verde wash woodland occurring within the Open Space-Conservation land use category through a conservation easement, deed restriction, or similar mechanism, as required by Mitigation Measure 6.4-3. This area provides suitable habitat for relocation of rosy boa.

30.EPD 008 | SP - MITIG MEASURE 6.4-8 | Status: | Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-8 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), impacts resulting from project construction within the Riverside County portion of the proposed project site to special-status bird species not covered under the CVMSHCP, which include loggerhead shrike and black tailed gnatcatcher, shall be mitigated through pre-construction surveys for nesting individuals of these species. Such surveys may be conducted concurrently with general nesting bird surveys, discussed in Mitigation Measure 6.4-13, and shall follow the methodology given in Mitigation Measure 6.4-13. If construction activities on the site are proposed during the nesting/breeding season (February 1 through August 31), a pre-activity survey shall be conducted by a qualified biologist currently holding an MOU with Riverside County prior to implementing project approval, to determine if active nests of species protected by the Migratory Bird Treaty Act (MBTA) or the California Fish and Game Code are present in the construction zone. Once the survey is complete, a report shall be prepared and sent to the Environmental Programs Division for review and concurrence. If active nests are observed and located, consultation with the California Department of Fish and Game (CDFG) to establish appropriate buffers will be required and the results of the report shall be submitted to CDFG for review and approval. The Environmental Programs Division will be contacted to ensure that proper CDFG approved buffers are in place prior to the issuance of a grading permit. No grading permits will be issued until the Environmental Programs Division confirms the presence of appropriate buffers. In addition, a biological monitor will also be required to be on site during all grading activities to ensure that the buffers are not compromised. At the conclusion of all grading activity, the biological monitor will submit a letter report to the Environmental Programs Division summarizing the result of the grading activity. Focused surveys for nesting loggerhead shrike and black-tailed gnatcatcher individuals shall be conducted in trees and shrubs of Sonoran creosote bush scrub, blue palo verde wash woodland, disturbed/recovering Sonoran creosote bush scrub, and saltbush scrub habitats that will be developed as part of project implementation or that is located within 500 feet of development areas. Because of the high mobility of non-nesting adult individuals of these species, it is expected that surveys for nesting individuals and their young, and protection for any nesting birds found, will provide the mitigation appropriate for project-related impacts. Where nesting loggerhead shrike and/or black tailed gnatcatcher individuals are found, protection of nests shall include postponing or halting clearing and construction activities within 500 feet of the nest until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting, as determined by the biologist Construction personnel shall be instructed on the sensitivity of nest areas and shall be instructed to avoid entering the approved buffers around the nest. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas (within 500 feet) to ensure that no inadvertent impacts on these nests will occur. The results of the survey, as well as any avoidance measures taken and the success of those measures, shall be submitted to the Riverside County Environmental Programs Division within 30 days of completion of the pre-construction surveys and/or

construction nest monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

30.EPD 009
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.4-9 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-9 Prior to implementing project approval, impacts resulting from project construction within the Riverside County portion of the proposed project site to pallid San Diego pocket mouse, which is not covered under the CVMSHCP, shall be mitigated through focused surveys utilizing small mammal trapping and relocation of this species. The applicant shall retain a qualified biologist currently holding a MOU with Riverside County to conduct the trapping. The survey results shall be submitted to the Riverside County Environmental Programs Division and CDFG. If pallid San Diego pocket mouse is found during small mammal trapping efforts, an active trapping and relocation plan shall be prepared by a qualified biologist currently holding a MOU with Riverside County. The relocation plan shall be submitted to Riverside County Environmental Programs Division and CDFG for review and approval.

Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), if pallid San Diego pocket mouse is found during small mammal trapping efforts, an active trapping and relocation program shall be conducted by a qualified biologist currently holding a MOU with Riverside County, in accordance with the approved relocation plan. The active trapping and relocation program shall move individuals to suitable on-site or off-site habitat that will not be directly impacted by project implementation. Permits will not be issued until all appropriate documentation relative to the completion of the trapping effort has been submitted to Riverside County Environmental Programs Division and CDFG for review and approval. A portion of Sonoran creosote bush scrub and blue palo verde wash woodland located in the southern portion of the proposed project site will remain undeveloped upon implementation of the proposed project. Prior to implementing project approval, the project applicant shall protect those portions of Sonoran creosote bush scrub and blue palo verde wash woodland occurring within the Open Space- Conservation land use category through a conservation easement, deed restriction, or similar mechanism, as required by Mitigation Measure 6.4-3. This area provides suitable habitat for relocation of pallid San Diego pocket mouse.

30.EPD 010
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.4-10 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-10 Prior to the issuance of a grading permit (AND/OR OTHER

APPROPRIATE MILESTONE), impacts resulting from project construction within the Riverside County portion of the proposed project site to Colorado Valley woodrat, which is not covered under the CVMSHCP, shall be mitigated through pre-construction surveys and relocation. The applicant shall retain a qualified biologist currently holding an MOU with Riverside County, to conduct focused pre-construction surveys for individuals of this species within suitable habitat for the species. Surveys shall be conducted within suitable habitat located within 500 feet of grading limits. Surveys shall include an examination of those portions of Sonoran creosote bush scrub, blue palo verde wash woodland, disturbed/recovering Sonoran creosote bush scrub, and saltbush scrub habitats that will be developed as part of project implementation. The biologist shall survey for Colorado Valley woodrat nests.

Where a Colorado Valley woodrat nest is found, it shall be determined by the biologist in which direction escape by any rat individuals occurring inside the nest will be encouraged. Vegetation around the nest in the opposite direction shall be cleared to discourage woodrat individuals from moving in that direction. Once vegetation in that direction is cleared, the nest shall be nudged with a front-end loader, encouraging any woodrats in the nest to exit the structure in the direction that leads toward adjacent habitat occurring within the Open Space-Conservation land use category of the proposed project or alternatively within areas near the project site (such as ABDSP and SRSJM National Monument, or other state or federally controlled open space lands as allowable by the administering agencies) including areas within conservation easements). Once any woodrats present in the nest have been encouraged to exit the nest, nest materials shall be carefully and slowly picked up with a front end loader (slowly enough that any woodrats remaining in the nest can escape), and the materials shall be moved to adjacent suitable habitat, as noted above, that will not be impacted by project development, where woodrats may scavenge nest materials to build new nests. Due to hantavirus hazards, the nest shall not be excavated by hand, and nest materials shall not be carried by hand.

In the event that off-site habitat areas within 500 feet of grading are not accessible during preconstruction surveys, the presence of Colorado Valley woodrat shall be assumed and the entire project site boundary within 500 feet of grading activities shall be fenced to prohibit entry of woodrats into the grading site. The fence shall be monitored as a regular part of construction monitoring.

30.EPD 011

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-11	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-11 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), impacts resulting from project construction within the Riverside County portion of the proposed project site to American badger, which is not covered under the CVMSHCP, shall be mitigated through a pre-construction clearance survey. The applicant shall retain a qualified biologist currently holding an MOU with Riverside County to conduct focused pre-construction surveys for individuals of this species within suitable habitat

for the species. Surveys shall be conducted within suitable habitat located within 500 feet of grading limits. Surveys shall include an examination of those portions of Sonoran creosote bush scrub, blue palo verde wash woodland, disturbed/recovering Sonoran creosote bush scrub, and saltbush scrub habitats that will be developed as part of project implementation.

If an active American badger burrow is located within project impact areas, a relocation program shall be implemented to remove the individual(s) from the area. The relocation program may be passive, in which badgers are excluded from occupied burrows by installation of a one-way door in burrow entrances, monitoring of the burrow for one week to confirm badger usage has been discontinued, and hand excavation and collapse of the burrow to prevent reoccupation; or the relocation program may be active, in which badger individuals are safely captured and transported to suitable habitat outside the impact area. Trapped individuals of the above species shall be safely relocated onto on-site Sonoran creosote bush scrub and blue palo verde wash woodland habitat located in of the project site that is not planned for development. A portion of Sonoran creosote bush scrub and blue palo verde wash woodland located in the southern portion of the proposed project site will remain undeveloped upon implementation of the proposed project.

In the event that off-site habitat areas within 500 feet of grading are not accessible during preconstruction surveys, the presence of American badger shall be assumed and the entire project site boundary within 500 feet of grading activities shall be fenced to prohibit entry of badgers into the grading site. The fence shall be monitored as a regular part of construction monitoring.

The project applicant shall protect those portions of Sonoran creosote bush scrub and blue palo verde wash woodland occurring within the Open Space (Conservation) land use category through a conservation easement, deed restriction, or similar mechanism, as required by Mitigation Measure 6.4-3. This area provides suitable habitat for relocation of American badger and sufficient carrying capacity is assumed for the conserved areas.

30.EPD 012 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-12	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-12 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), impacts resulting from project construction within the Riverside County portion of the proposed project site to special-status bird species not covered under the CVMSHCP, which include great egret, great blue heron, black-crowned night heron, double-crested cormorant, snowy egret, gull billed tern, white-faced ibis, and black skimmer, shall be mitigated through pre construction surveys for nesting individuals of these species. Such surveys may be conducted concurrently with general nesting bird surveys, discussed in Mitigation Measure 6.4-13, below, and shall follow the methodology given in Mitigation Measure 6.4-13. If construction activities on the site are proposed during the nesting/breeding season (February 1 through August 31), a pre-activity survey shall be conducted by a qualified

biologist currently holding an MOU with Riverside County prior to implementing project approval, to determine if active nests of species protected by the Migratory Bird Treaty Act (MBTA) or the California Fish and Game Code are present in the construction zone. Once the survey is complete a report shall be prepared and sent to the Environmental Programs Division for review and concurrence. If active nests are observed and located consultation with the California Department of Fish and Game (CDFG) to establish appropriate buffers will be required and the results of the report shall be submitted to CDFG for review and approval. The Environmental Programs Division will be contacted to ensure that proper CDFG approved buffers are in place prior to grading permit issuance. No grading permits will be issued until the Environmental Programs Division confirms the presence of appropriate buffers. In addition, a biological monitor will also be required to be on site during all grading activities to insure that the buffers are not compromised. At the conclusion of all grading activity, the biological monitor will submit a letter report to the Environmental Programs Division summarizing the result of the grading activity. Focused surveys for nesting individuals of these species shall be conducted in trees and shrubs and on the ground of Salton Sea shoreline habitat and arrowweed scrub adjacent to the Salton Sea that will be developed as part of project implementation or that is located within 500 feet of development areas. Because of the high mobility of non-nesting adult individuals of these species, it is expected that surveys for nesting individuals and their young, and protection for any nesting birds found, will provide the mitigation appropriate for project-related impacts.

30.EPD 013 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-13	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-13 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), proposed project construction impacts to nesting birds located in project impact areas within the Riverside County portion of the project site shall be mitigated through pre-construction nesting bird surveys and avoidance of any nesting birds found.

If construction activities on the site are proposed during the nesting/breeding season (February 1 through August 31), a pre-activity survey shall be conducted by a qualified biologist currently holding an MOU with Riverside County prior to implementing project approval, to determine if active nests of species protected by the Migratory Bird Treaty Act (MBTA) or the California Fish and Game Code are present in the construction zone. Once the survey is complete, a report shall be prepared and sent to the Environmental Programs Division for review and concurrence. If active nests are observed and located, consultation with the California Department of Fish and Game (CDFG) to establish appropriate buffers will be required and the results of the report shall be submitted to CDFG for review and approval. The Environmental Programs Division will be contacted to ensure that proper CDFG approved buffers are in place prior to grading permit issuance. No grading permits will be issued until the Environmental Programs Division confirms the presence of appropriate buffers. In addition, a biological monitor will also be required to be on site during all grading activities to insure that the buffers are not compromised. At the

conclusion of all grading activity, the biological monitor will submit a letter report to the Environmental Programs Division summarizing the result of the grading activity. Prior to grading final for each implementing project for construction or site preparation, including grubbing or grading, the applicant shall have weekly surveys conducted by a qualified biologist currently holding an MOU with Riverside County to determine if active nests of native bird species (including the special-status species discussed above) protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 300 feet (500 for raptors) of the construction zone. Surveys shall take place in all habitat types containing trees, shrubs, or grasses. Because many birds known to the project area (including loggerhead shrike) nest during the late winter, breeding bird surveys shall be carried out both during the typical nesting/breeding season (mid-March through September) and in January, February, and early March for winter nesting species. The surveys shall continue on a weekly basis, with the last survey being conducted no more than three days prior to initiation of clearance or construction work. If ground-disturbing activities are delayed, then additional pre-construction surveys shall be conducted such that no more than three days will have elapsed between the last survey and the commencement of ground disturbing activities. Surveys shall include examination of trees, shrubs, and the understory, as several bird species known to the area and project site, are ground nesters, including burrowing owl, California horned lark, and mourning dove.

30.EPD 014 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-25	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-25 Prior to building final inspection (AND/OR OTHER APPROPRIATE MILESTONE), a public awareness program shall be developed by the homeowners' association (HOA), or an acceptable land manager/agency, as approved by the Riverside County Environmental Programs Division, to educate residents of the proposed project about impacts to biological resources resulting from increased human and domestic animal presence in the area. The public awareness program shall address the impact domestic cats have on local wildlife populations (especially birds and small mammals), to encourage pet owners to keep their cats indoors. This program shall include supplying educational information to future residents of the project site regarding the importance of preventing unleashed domestic animals from entering ecologically sensitive areas within the proposed project (Open Space [Conservation]) or areas adjacent to the project site (such as ABDSP, SRSJM National Monument, or other state or federally protected lands) and of prohibiting off-leash domestic animals from disturbing native wildlife species. The public awareness program shall specifically address potential indirect impacts to Peninsular bighorn sheep associated with human and domestic animal presence in the rocky hills and mountains. In addition, the public awareness program will include discussion of cryptobiotic soils and their role in preserving desert soils, promoting nitrogen fixation, storing atmospheric carbon, and preventing erosion by wind and water.

30.EPD 015 PRIOR TO ANY	SP - MITIG MEASURE 6.4-26	Status: INEFFECT	Conditions: Outstanding

PROJECT APPROVAL

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-26 Dogs and cats owned by future residents of the proposed project shall be contained within their property boundary, or shall be leashed while in areas designated Open Space-Conservation. Prior to building final inspection (AND/OR OTHER APPROPRIATE MILESTONE), the HOA, or an acceptable land manager/agency, as approved by the Riverside County Environmental Programs Division, shall add a prohibition to the covenants, conditions, and restrictions (CCRs) for the community against unleashed dogs and cats in areas designated Open Space-Conservation.

30.EPD 016

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-27	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-27 Prior to building final inspection (AND/OR OTHER APPROPRIATE MILESTONE), to reduce indirect impacts to wildlife remaining in the project area upon implementation of the proposed project, waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed in common areas throughout the project site. The HOA, or an acceptable land manager/agency, as approved by the Riverside County Environmental Programs Division, shall be responsible for maintaining these receptacles.

30.EPD 017

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-28	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-28 Prior to building final inspection (AND/OR OTHER APPROPRIATE MILESTONE), the HOA, or an acceptable land manager/agency, as approved by the Riverside County Environmental Programs Division, shall supply educational information to future residents of the project site regarding the importance of not feeding wildlife, ensuring that trash containing food is not accessible to wildlife, and not leaving pet food outside.

30.EPD 018

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.4-29	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the

implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-29 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), the project applicant shall develop a lighting plan that shall be subject to approval by the Riverside County Environmental Programs Division. The plan is discussed in detail within Section 6.1, Aesthetics, of EIR00514 and incorporates dark-sky requirements for the project site area.

30.EPD 019
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.4-30 | Status: INEFFECT | Conditions: Outstanding

EIR00514 MM 6.4-30 Prior to implementing project approval, the applicant shall prepare a landscape plan for all common areas of the site in accordance with modified Tables 3-7a through 3-7f, Proposed Plant Palette, in Section 3.11, Landscape Design Guidelines, of the Travertine Point Specific Plan, which will be consistent with the Coachella Valley Native Plants Recommended for Landscaping per the CVMSHCP (Table 6.4-4). This plan shall be prepared by or approved by a qualified biologist currently holding an MOU with Riverside County, and will be subject to review by the Riverside County Environmental Programs Division. The plan shall include a plant palette composed of non-invasive species that are adapted to the conditions found on the project site, including the condition of a dry, low-rainfall climate. The landscaping plan will also include a list of invasive plant species prohibited from being planted in the common areas of the project site. Plant species included in the Prohibited Invasive Ornamental Plants per the CVMSHCP (Table 6.4-5) will be prohibited from all landscape plant palettes within 1,000 feet of the western boundary of the Travertine Point Specific Plan area. The Specific Plan landscape plant palette will exclude invasive Acacia species, fruiting Olea europaea, Phoenix canariensis, and Washingtonia robusta. Phoenix dactylifera existing on the project site, especially male trees, may be planted outside of conservation areas, a minimum distance of 1,000 feet. The HOA, or an acceptable land manager/agency, as approved by the Riverside County Environmental Programs Division, shall be responsible for providing the landscape plan to landscapers hired to install landscaping in common areas within the proposed project site.

30.EPD 020
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.4-31 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-31 Prior to building final inspection (AND/OR OTHER APPROPRIATE MILESTONE), the HOA, or an acceptable land manager/agency, as approved by the Riverside County Environmental Programs Division, shall supply future residents of the project site with a list of invasive plant species prohibited from being planted on the project site and with educational materials emphasizing the importance of planting noninvasive, drought-tolerant plants.

30.EPD 021 | SP - MITIG MEASURE 6.4-32 | Status: | Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-32 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), the applicant or grading contractor shall develop a plan indicating that all stockpiled soils and vegetation shall be covered daily with sheeting to prevent wind and waterborne transport of such propagules in order to discourage the transport of invasive species propagules to undeveloped on-site and off-site areas.

30.EPD 022
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.4-33 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project. This language represents the minimum requirement, and therefore additional language may be added to clarify the process of implementation:

EIR00514 MM 6.4-33 Prior to the issuance of a grading permit (AND/OR OTHER APPROPRIATE MILESTONE), the applicant or grading contractor shall develop a plan indicating that all graded areas, in the event that construction activities are anticipated to be postponed for longer than one year subsequent to continued grading, shall be hydroseeded with a cover crop of locally indigenous native annual species prior to the first rainfall subsequent to the cessation of construction activity so as to discourage the growth of invasive species within disturbed areas.

30.EPD 023
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.4-34 Status: INEFFECT Conditions: Outstanding

EIR00514 MM 6.4-34 Prior to each implementing project approval, the Riverside County Environmental Programs Division shall review the subdivision design for the proposed project. The County shall confirm that recreational trails associated with the proposed project do not lead into Open Space-Conservation areas or other environmentally sensitive areas adjacent to the project site (such as ABDSP, SRSJM National Monument, or other state or federally protected lands) to the south and west of the project site. Specifically, the County shall ensure that trails do not lead into Peninsular bighorn sheep habitat in ABDSP and the SRSJM National Monument in the rocky hills and mountains. In addition, each subdivision design shall provide a minimum 500-foot setback between ABDSP or SRSJM National Monument lands and proposed residential or commercial land uses.

30.EPD 024
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.4-48 Status: INEFFECT Conditions: Outstanding

EIR00514 MM 6.4-48 Prior to implementing project approval, the applicant shall retain a qualified biologist currently holding an MOU with Riverside County to conduct a jurisdictional

delineation in the Riverside County portion of the project site. The jurisdictional delineation shall be submitted to the USACE and CDFG for review, and the delineation shall be certified by the USACE prior to grading final. To mitigate for impacts to jurisdictional waters, the applicant shall either recreate habitat of similar value and area or secure lands in a program that has already entered a conservation easement at a minimum of 1:1 replacement ratio by acreage to maintain equivalent habitat of suitable USACE and CDFG waters, in consultation with the permitting agency. Use of other tribal lands that are currently being considered for mitigation banking including the Torres-Martinez Desert Cahuilla Indians Wetland Project near the Whitewater River water at the north end of the Salton Sea for delivery into a freshwater wetland and into a shallow saline habitat wetland on the Torres- Martinez Reservation. As feasible, mitigation for USACE and CDFG waters may be carried out in conjunction with mitigation for potential impacts to blue palo verde wash woodland, a sensitive plant community, which is discussed in Mitigation Measure 6.4-46, above.

30.PARKS 001

		Status:	Conditions:
PRIOR TO ANY PROJECT APPROVAL	SP - SP TRAILS PLAN	INEFFECT	Outstanding

PRIOR TO THE APPROVAL OF ANY PROJECT (TENTATIVE MAP, USE PERMIT, AND/OR CHANGE OF ZONE):

The applicant is required to submit a trails plan for the project to the Riverside County Regional Park and Open-Space District for review and approval prior to project approval. The plan is to show an internal trail network and all connections to both the County of Riverside and County of San Diego trails systems and surrounding cities. It is provide typical cross sections for proposed development.

The applicant and its representative is advised to coordinate a meeting with the Planning staff at the Regional Park and Open-Space District to review trails and trail standards. The District's phone number is 951.955.4310

30.PLANNING 001

		Status:	Conditions:
PRIOR TO ANY PROJECT APPROVAL	MM - TRIBAL MOU	INEFFECT	Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the applicant shall secure a Memorandum of Understanding (MOU) between (a) the applicat, Riverside County, and the Torres Martinez Desert Cahuilla Indians (TMDCI) and (b) the applicant, Imperial County, and the TMDCI to address issues relating to tribal involvement on the properties within the boundaries of the specific plan and the application of EIR mitigation measures for the entire project site.

The MOU shall, at a minimum, include:

a. a tax-sharing arrangement between each County and the TMDCI;

b. assurances that drainage can and will be maintained across tribal land in perpetuity;

c. assurances that conservation easements can and will be maintained on tribal land in perpetuity;

d. assurances that the roads and circulation through tribal land will remain open to the public;

e. assurances that the land uses on tribal land will remain compatible with those areas in each County areas surrounding the tribal land;

f. permission to perform studies, including but not limited to, health risk assessments and biological surveys to ensure that public health and safety are maintained;

g. that proposed mitigations that involve tribal lands shall be permitted and implemented on all land within the project site; and

h. a limited waiver of sovereign immunity by the TMDCI sufficient to ensure that each County has an adequate legal remedy with respect to enforceability of the above items.

30.PLANNING 002 PRIOR TO ANY PROJECT APPROVAL	MM - WASTE MGMT MOU (1)	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN, the County of Riverside Waste Management Department and the applicant shall enter into a Memorandum of Understanding (MOU) regarding the entire 166.6-acre County owned property, which includes the Oasis Landfill (two parcels consisting of APN 737-240-003 consisting of 161 acres and APN 737-200-032 consisting of 5.6 acres, and also referred as Planning Areas 2-18 and 2-19 of the SPECIFIC PLAN). If a portion of the 166.6 acre aforementioned property is not used as a regional style park, an amendment to the SPECIFIC PLAN shall be filed to specify an alternate location for a regional style park.

The Oasis Landfill shall remain open and active until Riverside County decides in its discretion to close the Oasis Landfill. The applicant shall use approximately 116.6 acres of the Oasis Landfill site as a future regional style park or other related uses (e.g., drainage). If the Oasis Landfill is to be used as a park site or otherwise developed, a formal agreement must be entered into between Riverside County and applicant or their successors and assigns, allowing for development of the 116.6-acre site for the use proposed by the applicant.

The MOU shall, at a minimum:

a. provide that approximately 50 acres of the Oasis Landfill site within the 161-acre parcel (APN 737-240-003), including the 23 acres currently permitted and used for solid waste disposal, will remain owned by the Riverside County Waste Management Department (the 50-acre site);

b. specify applicant's obligation to provide replacement off-site acreage (in fee simple title), for the 116.6 acres of non-landfill acreage owned by the County within the project site (i.e., SPECIFIC PLAN Planning Area 2-18 and the 166.6 acres owned by the County less the 50 acre site for the Oasis Landfill), in an acreage amount and location acceptable to the Riverside County Waste Management Department. The acreage amount shall not exceed 116.6 replacement acres. Other financial arrangements acceptable to the Riverside County may also be made in lieu of providing 116.6 replacement acres to the County;

c. specify the amount and timing of applicant's obligations, if any, with respect to funding the Box Canyon/State Highway 195 realignment and securing any and all necessary right-of-way approvals for such realignment;

d. provide that the applicant shall be responsible for mitigating the land use compatibility impacts associated with developing the SPECIFIC PLAN area and shall fund all mitigation costs necessary to make development activities compatible with adjacent Oasis Landfill (including, but not limited to screening, enhanced security, and enhanced environmental monitoring);

e. provide that applicant shall convey easements to the County sufficient to allow for the County's environmental monitoring/control activities within areas adjacent to the Oasis Landfill site;

f. provide that the Riverside County Waste Management Department and Riverside County is defended and indemnified for any liabilities arising out of applicant's activities on the 116.6 acre site;

g. provide that Riverside County Waste Management Department shall continue to be responsible for all monitoring and maintenance activity on the 50-acre site.

In the event that the Developer and/or the County elects not to enter into an MOU, then a Specific Plan Amendment shall be filed that shall, at a minimum, remove the 166.6-acre County owned land from the SPECIFIC PLAN, identify an alternative regional park location within the SPECIFIC PLAN, revise the Land Use Plan to reflect the new park site, and revise all other aspects of the SPECIFIC PLAN to accommodate the new park site. Any revised CEQA documentation shall also be completed with the Specific Plan Amendment.

30.PLANNING 003 PRIOR TO ANY PROJECT APPROVAL	MM - WASTE MGMT MOU (2)	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"Prior to the issuance of any grading permits within the Specific Plan boundaries, a clearance letter shall be obtained from the Riverside County Waste Management Department (RCWMD) indicating that the applicant is in substantial conformance with the terms of the Landfill MOU specified in condition of approval 30.PLANNING.2, to the satisfaction of RCWMD."

30.PLANNING 004 PRIOR TO ANY PROJECT APPROVAL	SP - MASTER CULTURAL RES PLAN	Status: INEFFECT	Conditions: Outstanding

The following policies and implementation measures comprise the Master Cultural Resources Plan for SP 375 - Travertine Point Specific Plan and any descendant or implementing projects

within the specific plan boundaries.

Cultural Resources Policy 1: To actively pursue a comprehensive survey program for the entire 4,918-acre project area to identify, document, and protect, if feasible, prehistoric and historical archaeological sites, and sites containing Native American human remains.

Implementation Measure 1-1: the proposed Project would be covered under the CEQA Guidelines (California 2005) or Section 106 of the National Historic Preservation Act (NHPA), and shall be surveyed by a professional who is registered with the County of Riverside for those areas within Riverside County, and acceptable to Imperial County and/or the Bureau of Indian Affairs for those project areas under those jurisdictions, regarding archaeological activities and methods prior to the County's approval of proposed Project plans (48 CFR 44716-44742).

Implementation Measure 1-2: All archaeological site location data collected during the cultural resources surveys shall be considered to be of a sensitive nature and must remain confidential. Caution must be exercised when disseminating this information; in particular, maps and site location data should be made available only to managers, County officials, federal officials, and other professionals on a demonstrated need to know basis.

Implementation Measure 1-3: For potentially significant prehistoric archaeological resources or sites containing Native American human remains identified during the Project's archaeological surveys, the Project proponent, or their designee or successors, shall continue consultation with the Native American Heritge Commission (NAHC) in Sacramento and interested Native American individuals and organzations.

Cultural Resources Policy 2: To avoid impacts to potentially significant prehistoric and historical archaeology resources and sites containing Native American human remains, where feasible.

Implementation Measure 2-1: If Cultural resources avoidance is feasible, potentailly significant archaeological resources and sites containing Native American human remains shall be placed within permanent Project-specific conservation easements or dedicated open space-conservation areas.

Implementation Measure 2-2: Where avoidance of archaeological resources and sites containing Native American human remains is not a feasible managment option, capping these resources with sterile sediments and avoidance planting (e.g. planting of cactus, mesquite, or other Native plants) shall be considered the next most favorable management option. In doing so, capping the resource(s) will ensure that direct impacts from increased public availability to these sites are avoided. Site CA-RIV-8895 (33-17086) deep sediments may contain intact subsurface cultural deposits below the zone of disturbance. If this site cannot be avoided during project development, Phase II Testing and Evaluation is required to ascertain site integrity, data potential, and significance.

Site CA-RIV-8896 (33-17087) - If this site cannot be avoided during project development, Phase II testing is required to ascertain site integrity, data potential, and significance.

Site CA-IMP-8784 (13-009821) - If this site cannot be avoided during project development, Phase II testing is required to ascertain site integrity, data potential, and significance, in accordance with the standards of Imperial County.

Site CA-IMP-8785 (13-009822) - If this site cannot be avoided during project development, Phase II testing is required to ascertain site integrity, data potential, and significance, in accordance with the standards of Imperial County.

Site CA-IMP-8786 (13-009823) - this site consists of several interconnecting segments of a prehistoric aboriginal trail system that may be part of the "Northwest Santa Rosa Trail". Consultation with the participating Native American tribes is required to complete a determination for significance. Pending that consultation, this site is determined to be significant, in accordance with teh standards of Imperial County.

Site CA-IMP-33 - Travertine Rock - This is a significant site and avoidance is strongly recommended, in accordance with the standards of Imperial County. This site shall be be formally nominated as a Traditional Cultural Property (TCP) and to the National Register of Historic Places, if it has not already been listed, in accordance with the standards of Imperial County.

Site CA-IMP-92 - This site shall be tested to ascertain site integrity, data potential, and site signfiicance if it cannot be avoided during project development, in accordance with the standards of Imperial County.

Site CA-IMP-100 - This site shall be tested to ascertain site integrity, data potential, and site significance if it cannot be avoided during project development, in accordance with teh standards of Imperial County.

Site CA-IMP-2626 - If this site cannot be avoided during project development, Phase II Testing and Evaluation is recommended to ascertain site integrity, data potential, and significance, in accordance with the standards of Imperial County.

Site CA-RIV-1525 - This site contained the largest aggregate of fish traps yet found in the Coachella Valley, however much of the site was destroyed by agriculture and land clearing by the applicant. Extant portions of the site may be eligible for listing on the National Register of Historic Places, and further evaluation is required prior to any implementing project approval within the site area. Portions of the site located on the tribal lands of the Torres-Martinez Desert Cahuilla Indians should be preserved in perpetuity.

Cultural Resources Policy 3: To reduce adverse impacts to significant archaeological resources

that cannot be protected in place through data recovery excavations.

Implementation Measure 3-1: If avoidance and/or preservation in place of known prehistoric and historical archaeological resources is not a feasible management option, the Project proponent or his/her successors, shall ensure that potentially significant archaeological resource(s), and site(s) shall be investigated pursuant to the standards, guidelines, and principles of the Advisory Council's Treatment of Archaeological Properties: A Handbook (ACHP 1980), except where any existing policies or guidelines adopted by the County of Riverside, County of Imperial, and/or Bureau ofIndian Affairs differ.

Prior to the issuance of a Project-related grading permit, the Projects' proponent's consultant, registered with the County of Riverside and/or who meets the professional requirements of the County of Imperial or the Bureau of Indian Affairs, shall use the Project's Research Design detailed in Chapter 6 of the Phase I Cultural Resources report prepared by Applied Earthworks, dated April 2008, to guide the implementation of a Phase II Testing and Evaluation Program. In general terms, the Phase II Testing and Evaluation Program shall be designed to further define site boundaries and to assess the structure, content, nature, and depth of subsurface cultural deposits and features. Emphasis shall also be placed on assessing site integrity and the site's potential to address regional archaeological research questions. These data shall then be used to address the NRHP/CRHR eligibility requirements for the archaeological resource, and make recommendations as to the suitability of the resource for listing on either the national or state register of sites.

After approval of the Project's various cultural resources reports by the appropriate County and/or Bureau of Indian Affairs and prior to issuance of Project-related grading permits, the Project proponent's consultant shall complete the Phase II Testing Program as specified in the Project Phase II Testing and Evaluation Proposal and Research Design and prior to the issuance of a Project grading permit. The results of this Phase II Testing Program shall be presented in a technical report that follows the report requirements of the County of Riverside and/or the County of Imperial or the Bureau of Indian Affairs. The Phase II Report shall be submitted to the Lead Agency's Planning Department for review and comment and the Torres-Martinez Desert Cahuilla Indians prior to the issuance of a Project-related grading permit. If the resource is determined to be ineligible for listing on the NRHP/CRHR upon completion of the Phase II Testing Program, no further cultural resources management of this resource would be required.

Implementation Meausre 3-2: A participant-observer(s) from the Torres-Martinez Desert Cahuilla Indians shall be present during Phase II archaeological excavations involving all sites of Native American concern.

Implementation Measure 3-3: If the cultural resource is identified as being potentially eligible for listing on wither NRHP and CRHR, and Project designs cannot be altered to avoid impacting the site, a Phase III Data Recovery Program to mitigate project effects shall be initiated. A Data Recovery Treatment plan detailing the objectives of the Phase III Program shall be developed and contain specific testable hypotheses pertinent to the project's Research Design and relative to the site(s) under study. The Phase III Data Recovery Treatment Plan shall be submitted to the County's Planning Department, the Torres-Martinez Desert Cahuilla Indians, if applicable, and

the State Historic Preservation Office (SHPO) for review and comment prior to implementation of the Data Recovery program.

After Approval of the Treatment Plan, the Phase III Data Recovery Program for affected, eligible site(s) shall be completed. Typically, a Phase III Data Recovery Program involves the excavation of a statistically representative sample of the site(s) as being eligible for listing on the National Register of Historic Places of the California Register of Historic Resources. Again, participant-observer(s) from the Torres-Martinez Desert Cahuilla Indians shall be present during archaeological data-recovery excaations involving sites of Native American concern. At the conclusion of the Phase III Program, a Phase III Data Recovery Report shall be prepared, fulfilling the report requirements of the County of Riverside, County of Imperial, and/or the Bureau of Indian Affairs, as applicable. The Phase III Data Recovery Report shall be submitted to the County's Planning Department, the Torres-Martinez Desert Cahuilla Indians, if applicable, and the BIA and SHPO for review and comment prior to the issuance of a Project grading permit.

Implementation Measure 3-4: All arcaheological materials recovered during implementation of the Project's Phase II Testing or Phase III Data Recovery programs shall be processed, including cleaning and cataloguing, detailed description, and analyses, as appropriate. Following completion of laboratory and analytical procedures, all Project-related collections shall be suitably packaged and transferred to a curation facility that meets the standards of 36 CFR 79 for long-term storage. Materials to be curated include archaeological specimens and samples, field notes, feature and burial records, maps, plans, profile drawings, photo logs, photographic negatives, consultant's reports of special studies, and copies of the final technical reports.

It should be noted that provisions of the Native American Graves Protection Repatriation Act (NAGPRA) pertaining to Native American burials, sacred objects, and objects of cultural patrimony would come into effect when archaeological materials are recovered from lands owned by the Torres-Martinez Desert Cahuilla Indians and managed by the BIA. As well, NAGPRA would also apply when ownership of the collections from anywhere within the Travertine Point Specific Plan study area transfer to a curation repository that received federal funding. Should the Torres-Martinez Band of Desert Cahuilla Indians request repatriation of cultural materials from non-federal lands within the Specific Plan, those materials shall be repatriated upon submittal of the Phase IV Archaeological Monitoring Report to the County Archaeologist. This report shall follow the report format posted on the TLMA website for Phase IV work.

Cultural Resources Policy 4: To ensure proper identification and treatment of cultural resources discovered during Project development and construction.

Implementation Meaure 4-1: Registered professional archaeologists and culturally affiliated Native Americans, with knowledge in cultural resources, shall monitor all Project-related ground-disturbing activities that extend into natural sediments or other land forms in areas determined to have high archaeological sensitivity for prehistoric resources.

Prior to the County-permitted Project, the Project proponent shall include in their Mitigation Plan

provisions for the identification and evaluation of archaeological resources inadvertantly discovered during construction. Thus, if buried archaeological resources are uncovered during construction, all work shall be halted in the vicinity of the archaeological discovery until a registered professional archaeologist can visit the site of discovery and evaluate the significance of the archaeological resource.

Implementation Measure 4-1a: Registered professional archaeologists experienced in historical archaeological resources shall monitor all Project-related ground-disturbing activities that extend into natural sediments or other land forms in areas determined to have high archaeological sensitivity for historical resources.

Implementation Measure 4-2: If the archaeological resource is determined to be a potentially significant cultural resource, the Project proponent's Mitigation Plan shall include provisions for the preparation and implementation of a Phase III Data Recovery Program, as well as disposition of recovered artifacts, in accordance with Cultural Resource Policy 3, Implementation Measure 4, above.

Implementation Measure 4-3: In the event of an accidental discovery of any human remains in a location other than a dedicated cemetery on privately-owned or State-owned land, the steps and procedures specified in Health and Safety Code Subsection 7050.5, State CEQA Guidelines 15064.5(d, and Public Resources Code Subsection 5097.98 shall be implemented. Specifically, in accordance with Public Resources Code Subsection 5097.98, the Riverside County Coroner shall be notified within 24 hours of the discovery of potentially human remains. The Coroner shall then detemine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with PRC Subsection 5097.98. The NAHC shall then designate a Most Likely Descendant (MLD) with respect to the human remains within 48 hours of notification.

The MLD shall then have the opportunity to recommend to the Project proponent means for treating or dispsoing with appropriate dignity, the human remains and associated grave goods wtihin 24 hours of notification. Whenever the NAHC is unable to identify an MLD, or the MLD fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the MLC and the mediation provided for in subdivision (k) of the PRC SS 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

It should be noted that in the event that Native American human remains are inadvertantly discovered during the County-permitted, Project-related construction activitie, there would be unavoidable signfiicant adverse impacts to these resources. Implementation of the Cultural Resources Policies 1, 2 and 3 and their corresponding implmentation measures would, however, reduce impacts to other types of archaeological resources to a level that is less than significant.

Implementation Measure 4-4: The treatment and management of potential Traditional Cultural

Properties (TCPs) identified with the Travertine Point Specific Plan study area shall be conducted through extensive consultation with concerned Native American groups and organzations. These consultation efforts shall be conducted utilizing the County of Riverside's SB 18 consultation process, or those employed by the County of Imperial, as appropriate.

Cultural Resources Policy 5: To ensure that the Project proponent shall bear all costs associated with cultural resources management within the County's jurisdiction. Implementation Measure 5-1: The Project proponent shall bear all expenses realted to the identification, evaluation, and treatment of cultural resources directly or indirectly affected by Project-related construction activity. Such expenses may include, pre-field planning, field work, post field analyses, research, interim and summary report preparation, and final report production (including draft and final versions), and costs associated with the curation of project documentation and the associated artifact collections.

Implementation Measure 5-2: On behalf of the County and the Project proponent, the final technical reports detailing the results of the Phase II Testing or Phase III Data Recovery programs shall be submitted to the appropriate Archaeological Information Centers of the California Historical Resources Inventory System for their information and where they would be available to other researchers. As well, final Phase III Data Recovery Reports shall be submitted to local libraries, schools, participating tribes, and historical societies to enable the general public to learn about their local cultural heritage.

Implementation Measure 5-3: Phase IV Archaeological Monitoring Reports shall be submitted prior to final inspection for each permitted project within the specific plan. Every grading permit subject to archaeological monitoring shall result in a Phase IV report submitted to the County Archaeologist and/or BIA.

Cultural Resources Policy 6- Directives for specific cultural resources sites known as of September 18, 2008, pursuant to the recommendations from the Phase I Cultural Resources report prepared for this specific plan by Applied Earthworks, April 2008:

Site AE-TRV-1H - preliminary significance evalution determines that this site is potentially significant resource as it has been an important source of fresh water to enable the settlement and agricultural development of this portion of the Coachella Valley for the past 70 years.

Site CA-RIV-8891 (33017082) - if this site cannot be avoided during project development, Phase II Testing and Evaluation is recommended to ascertain site integrity, data potential, and significance.

Site CA-RIV-8892/H (33-17083) - The data potential was realized during site recordation and archival resarch, therefore no further management of this resource is recommended.

Site CA-RIV-8893/H (33-17084) - The data potential was realized during recordation and archival research, therefore no further management of this resource is recommended.

Site CA-RIV-8894 (33-17085) - The site is located within an alluvial, depositional environment

with undetermined soil depth, and there is some potential for intact subsurface cultural deposits beneath the zone of mechanical distrubance. If this site cannot be avoided during the project development, Phase II Testing and Evaluation is recommended to ascertain site integrity, data potential, and significance.

Site CA-RIV-8895 (33-17086) deep sediments may contain intact subsurface cultural deposits below the zone of disturbance. If this site cannot be avoided during project development, Phase II Testing and Evaluation is required to ascertain site integrity (33-17086) - The potentially s

30.PLANNING 007
PRIOR TO ANY PROJECT APPROVAL | SP - GEOLOGIC STUDY | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project and satisified prior to scheduling that project for public hearing:

"PRIOR TO SCHEDULING THIS PROJECT FOR A PUBLIC HEARING/ACTION, THE FOLLOWING SPECIAL GEOLOGIC STUDIES SHALL BE SUBMITTED TO AND APPROVED BY THE COUNTY GEOLOGIST:

A geologic/geotechnical investigation report. The investigation shall address geologic hazards including, but not necessarily limited to, slope stability, rock fall hazards, landslide hazards, surface fault rupture, fissures, liquefaction potential, collapsible and/or expansive soils, subsidence, wind and water erosion, debris flows, and groundshaking potential. For completeness and direct correlation to the proposed project, the consultant shall be provided the most recent copy of the project case exhibit (tract map, parcel map, plot plan, CUP, etc.) for incorporation into the consultant's report. Furthermore, the consultant shall plot all appropriate geologic and geotechnical data on this case exhibit and include it as an appendix/figure/plate in their report. The geologic/geotechnical investigation report shall be reviewed and approved by the County Engineering Geologist prior to scheduling this case for a public hearing.

Note: acquisition of a County geologic report (GEO) number and submittal of review fees is required (DBF to be determined). All reports (2 wet-signed original copies), Planning Geologic Report application (case sub-type GEO3) and deposit base fee payment should be submitted, in person by the applicant or his/her representative, at one of the County's two main offices (Riverside, Palm Desert). These items should be submitted at the Land Use counter. Reports and payment should not be given to the Planner or County Geologist directly.

The applicant and their consultant should also be aware that County Ordinance 457.98 requires a grading permit for any exploratory excavations consisting of 1000 cubic yards or greater in any one location of one acre or more. This applies to all trenching, borings and any access road clearing/construction that may be necessary."

30.PLANNING 008
PRIOR TO ANY PROJECT APPROVAL | SP - M/M PROGRAM (GENERAL) | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map,

parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"The EIR prepared for the SPECIFIC PLAN imposes specific mitigation measures and monitoring requirements on the project. Certain conditions of the SPECIFIC PLAN and this implementing project constitute reporting/monitoring requirements for certain mitigation measures."

30.PLANNING 012 PRIOR TO ANY PROJECT APPROVAL	SP - PROJECT LOCATION EXHIBIT	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"The applicant shall provide to the Planning Department an 8 1/2" x 11" exhibit showing where in the SPECIFIC PLAN this project is located. The exhibit shall also show all prior implementing projects within the SPECIFIC PLAN that have already been approved.

This condition shall be considered MET once the applicant provides the Planning Department with the required information. This condition may not be DEFERRED."

30.PLANNING 019 PRIOR TO ANY PROJECT APPROVAL	SP - EA REQUIRED	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementation project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"If this implementing project is subject to the California Environmental Quality Act (CEQA), an environmental assessment shall be filed and processed concurrently with this implementing project. At a minimum, the environmental assessment shall utilize the evaluation of impacts addressed in the EIR prepared for the SPECIFIC PLAN.

This condition shall be considered as MET if an environmental assessment was conducted for this implementing project. This condition may be considered as NOT APPLICABLE if this implementing project is not subject to CEQA. This condition may not be DEFERRED."

30.PLANNING 020 PRIOR TO ANY PROJECT APPROVAL	SP *- ADDENDUM EIR	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"This implementing project has been reviewed in the context the EIR, which is associated with this SPECIFIC PLAN. The Planning Department has reviewed this project and its relationship to the EIR, and has found that no new environmental impacts have arisen since the certification of

the EIR. Although the EIR adequately addressed the environmental impacts of the SPECIFIC PLAN as a whole, more detailed technical informaiton (i.e. traffic studies, updated biological studies, etc.) have been required by the Planning Department and/or other COUNTY land development review departments in order to complete its environmental review. Therefore, an ADDENDUM to the previously certified EIR has been prepared in conjunction with this implementing application.

This condition shall be considered MET if an ADDENDUM to the EIR has been prepared. Alternatively, this condition shall be considered as NOT APPLICABLE if an ADDENDUM to the EIR is not required."

30.PLANNING 021 PRIOR TO ANY PROJECT APPROVAL	SP *- SUPPLEMENT TO EIR	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"This implementing project has been reviewed in the context the EIR, which is associated with this SPECIFIC PLAN. The Planning Department has reviewed this project and its relationship to the EIR, and has found that although the EIR adequately addressed the environmental impacts of the SPECIFIC PLAN at the time, new environmental impacts have arisen since the certification of the original EIR. The Planning Department has determined that the new environmental impacts can be mitigated to below a level of significance. Therefore, a SUPPLEMENT to the previously certified EIR has been prepared in conjunction with this implementing application.

This condition shall be considered MET if a SUPPLEMENT to the EIR has been prepared. Alternatively, this condition shall be considered as NOT APPLICABLE if a SUPPLEMENT to the EIR is not required."

30.PLANNING 022 PRIOR TO ANY PROJECT APPROVAL	SP *- SUBSEQUENT EIR	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"This implementing project has been reviewed in the context the EIR, which is associated with this SPECIFIC PLAN. The Planning Department has reviewed this project and its relationship to the EIR, and has found that although the EIR adequately addressed the environmental impacts of the SPECIFIC PLAN at the time, new environmental impacts have arisen since the certification of the original EIR. The Planning Department has determined that this implementing project may have a signficant impact to the new environmental impacts that have arisen. Therefore, a SUBSEQUENT EIR has been prepared in conjunction with this implementing application.

This condition shall be considered MET if a SUBSEQUENT EIR has been prepared. Alternatively, this condition shall be considered as NOT APPLICABLE if a SUBSEQUENT to

the EIR is not required."

30.PLANNING 023 PRIOR TO ANY PROJECT APPROVAL	SP - COMPLETE CASE APPROVALS	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project (tract map, parcel map, use permit, plot plan, etc.) the SPECIFIC PLAN, the GPA, the CHANGE OF ZONE, and the EIR must have been approved, adopted, and certified by the Board of Supervisors, respectively.

This condition shall be considered as MET once the SPECIFIC PLAN, the GPA, the CHANGE OF ZONE, and the EIR have been approved, adopted, and certified by the Board of Supervisors, repectively. This condition may not be DEFERRED.

30.PLANNING 024 PRIOR TO ANY PROJECT APPROVAL	SP - AMENDMENT REQUIRED	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"If this implementing project meets any of the following criteria, an amendment to the SPECIFIC PLAN shall be required and processed concurrently with this implementing project:

1. The implementing project adds any area to, or deletes area from, the SPECIFIC PLAN;

2. The implementing project proposes a substantially different use than currently allowed in the SPECIFIC PLAN (i.e. proposing a residential use within a commercially designated area); or

3. as determined by the Planning Director.

Any amendment to the SPECIFIC PLAN, even though it may affect only one portion of the SPECIFIC PLAN, shall be accompanied by a complete specific plan document which includes the entire specific plan, including both changed and unchanged parts.

This condition shall be considered MET if the specific plan amendment has been filed, and NOT APPLICABLE if a specific plan amendment is determined to be unnecessary."

30.PLANNING 025 PRIOR TO ANY PROJECT APPROVAL	SP - PARK AGENCY REQUIRED	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing land division project within the SPECIFIC PLAN (i.e. tract map, or parcel map), the following condition shall be placed on the implementing project:

"PRIOR TO MAP RECORDATION of any subdivision, or other residential development application, all portions of this implementing project not currently within the boundaries of the Desert Recreation District (DRD), shall be annexed into the DRD or a similar entity such as a County Service Area/District that has been designated by the Board of Supervisors, pursuant to Section 10.35(G) of Ordinance No. 460, to receive park dedications and fees. Documentation of

said annexation shall be provided to the Planning Department.

This condition shall be considered as NOT APPLICABLE if the DRD, or simmilar entity, is unwilling or unable to annex the property in question."

30.PLANNING 026
PRIOR TO ANY PROJECT APPROVAL | SP - AG/DAIRY NOTIFICATION | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing residential land division within the SPECIFIC PLAN, and within one half mile of existing agricltural uses, the following condition of approval shall be applied to the implementing project stating that:

"PRIOR TO MAP RECORDATION, the applicant shall submit a detailed proposal for the notification of all initial and future purchasers of dwelling units within the subject project of the existence of dairies and/or other agricultural uses within one half mile of the subject property (both within and external to the SPECIFIC PLAN) and potential impacts resulting from those uses. Said notification shall be in addition to any notice required by Ordinance No. 625 (Riverside County Right-to-Farm Ordinance). Said approved notification shall be provided to all initial and all future purchasers of dwelling units within the subject project as long as proximal agricultural uses continue."

30.PLANNING 027
PRIOR TO ANY PROJECT APPROVAL | SP *- PA PROCEDURES | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map or parcel map), the following condition shall be placed on the implementing project PRIOR TO MAP RECORDATION in the case of land division applications (tentative parcel maps or tentative tract maps) or PRIOR TO BUILDING PERMITS in the case of use permit applications (plot plans, conditional use permits, or public use permits):

"The planning area[s] for which this land division application is located must be legally defined. Any of the following procedures may be used in order to legally define this [these] planning area[s]:

1. The project proponent has processed a FINAL CHANGE OF ZONE MAP concurrent with the SPECIFIC PLAN which legally defined this [these] planning area[s]. 2. The project proponent shall file a change of zone application along with a legal description defining the boundaries of the planning area affected by this land division application. The applicant will not be changing the allowed uses or standards within the existing zone but will merely be providing an accurate legal description of the affected planning area. The change of zone shall be approved and adopted by the Board of Supervisors."

30.PLANNING 028
PRIOR TO ANY PROJECT APPROVAL | SP *- CC&R RES PUB COMMON AREA | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing land division project (i.e. tract map or parcel map), the following condition shall be applied to the land division PRIOR TO MAP RECORDATION if the permanent master maintenance organization referenced in the condition entitled "SP -

Common Area Maintenance" is a public organization:

"The applicant shall convey to the County fee simple title, to all common open space areas, free and clear of all liens, taxes, assessments, leases (recorded or unrecorded) and easement, except those easements which in the sole discretion of the County are acceptable. As a condition precedent to the County accepting title to such areas, the applicant shall notify the Planning Department that the following documents shall be submitted to the Office of the County Counsel and submit said documents for review along with the current fee, which shall be subject to County Counsel approval:

1. A cover letter identifying the project for which approval is sought;

2. A signed and notarized declaration of covenants, conditions and restrictions;

3. A sample document, conveying title to the purchaser, of an individual lot or unit which provides that the declaration of covenants, conditions and restrictions is incorporated therein by reference; and,

4. A deposit equaling three (3) hours of the current hourly fee for Review of Covenants, Conditions and Restrictions established pursuant to County Ordinance No. 671 at the time the above referenced documents are submitted for County Counsel review.

The declaration of covenants, conditions and restrictions submitted for review shall a) provide for a minimum term of 60 years, b) provide for the establishment of a property owners' association comprised of the owners of each individual lot or unit as tenants in common, and c) contain the following provisions verbatim:

"Notwithstanding any provision in this Declaration to the contrary, the following provisions shall apply:

The property owners' association established herein shall, if dormant, be activated, by incorporation or otherwise, at the request of the County of Riverside, and the property owners' association shall unconditionally accept from the County of Riverside, upon the County's demand, title to all or any part of the 'common area', more particularly described on Exhibit '___' attached hereto. Such acceptance shall be through the president of the property owner's association, who shall be authorized to execute any documents required to facilitate transfer of the 'common area'. The decision to require activation of the property owners' association and the decision to require that the association unconditionally accept title to the 'common area' shall be at the sole discretion of the County of Riverside.

In the event that the 'common area', or any part thereof, is conveyed to the property owners' association, the association, thereafter, shall own such 'common area', shall manage and continuously maintain such 'common area', and shall not sell or transfer such 'common area' or any part thereof, absent the prior written consent of the Planning Director of the County of Riverside or the County's successor-in-interest. The property owners' association shall have the right to assess the owner of each individual lot or unit for the reasonable cost of maintaining such

'common area', and shall have the right to lien the property of any such owner who defaults in the payment of a maintenance assessment. An assessment lien, once created, shall be prior to all other liens recorded subsequent to the notice of assessment or other document creating the assessment lien.

This declaration shall not be terminated, 'substantially' amended, or property deannexed therefrom absent the prior written consent of the Planning Director of the County of Riverside or the County's successor-in-interest. A proposed amendment shall be considered 'substantial' if it affects the extent, usage or maintenance of the 'common area' established pursuant to this Declaration.

In the event of any conflict between this Declaration and the Articles of Incorporation, the Bylaws, or the property owners' association Rules and Regulations, if any, this Declaration shall control."

Once approved by the Office of County Counsel, the declaration of covenants, conditions and restrictions shall be recorded by the Planning Department with one copy retained for the case file, and one copy provided to the County Transportation Department - Survey Division."

30.PLANNING 029 PRIOR TO ANY PROJECT APPROVAL	SP *- CC&R RES PRI COMMON AREA	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing land division project within the SPECIFIC PLAN (tract map or parcel map), the following condition shall be placed on the implementing project PRIOR TO MAP RECORDATION if the permanent master maintenance organization referenced in the condition entitled "SP - Common Area Maintenance" is a private organization:

"The applicant shall notify the Planning Department that the following documents shall be submitted to the Office of County Counsel and submit said documents for review along with the current fee, which shall be subject to County Counsel approval:

1. A cover letter identifying the project for which approval is sought;

2. A signed and notarized declaration of covenants, conditions and restrictions;

3. A sample document, conveying title to the purchaser of an individual lot or unit, which provides that the declaration of covenants, conditions and restrictions is incorporated therein by reference; and,

4. A deposit equaling three (3) hours of the current hourly fee for Review if Covenants, Conditions and Restrictions established pursuant to County Ordinance No. 671 at the time the above referenced documents are submitted for County Counsel review.

The declaration of covenants, conditions and restrictions submitted for review shall a) provide for a minimum term of 60 years, b) provide for the establishment of a property owners' association comprised of the owners of each individual lot or unit as tenants in common, c) provide for ownership of the common area by either the property owners' association or the

owners of each individual lot or unit as tenants in common, and (d) contain the following provisions verbatim:

"Notwithstanding, any provision in this Declaration to the contrary, the following provisions shall apply:

The property owners' association established herein shall manage and continuously maintain the 'common area', more particularly described on Exhibit '___', attached hereto, and shall not sell or transfer the 'common area' or any part thereof, absent the prior written consent of the Planning Director of the County of Riverside or the County's successor-in-interest.

The property owners' association shall have the right to assess the owners of each individual lot or unit for the reasonable cost of maintaining such 'common area' and shall have the right to lien the property of any such owner who defaults in the payment of a maintenance assessment. An assessment lien, once created, shall be prior to all other liens recorded subsequent to the notice of assessment or other document creating the assessment lien.

This Declaration shall not be terminated, 'substantially' amended, or property deannexed therefrom absent the prior written consent of the Planning Director of the County of Riverside or the County's successor-in-interest. A proposed amendment shall be considered 'substantial' if it affects the extent, usage or maintenance of the 'common area' established pursuant to this Declaration.

In the event of any conflict between this Declaration and the Articles of Incorporation, the Bylaws, or the property owners' association Rules and Regulations, if any, this Declaration shall control."

Once approved by the Office of County Counsel, the declaration of covenants, conditions and restrictions shall be recorded the Planning Department with one copy retained for the case file, and one copy provided to the County Transportation Department - Survey Division."

		Status:	Conditions:
30.PLANNING 031 PRIOR TO ANY PROJECT APPROVAL	SP - PALEO M/M PROGRAM	INEFFECT	Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMITS, the project applicant shall enter into an agreement with a qualified paleontologist. This agreement shall include, but not be limited to, the preliminary mitigation and monitoring procedures to be implemented during the process of grading. A copy of said agreement shall be submitted to the Planning Department. No grading permits will be issued unless the preliminary mitigation and monitoring procedures as described in the EIR are substantially complied with."

		Status:	Conditions:
30.PLANNING 032 PRIOR TO ANY PROJECT APPROVAL	SP - GENERIC M/M PROGRAM	INEFFECT	Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMITS, the project applicant shall provide to the Planning Department a detailed proposal for complying with the preliminary mitigation and monitoring procedures described in the EIR for the process of grading. Grading permits will not be issued unless the preliminary mitigation and monitoring procedures as described in the EIR are substantially complied with."

30.PLANNING 033

PRIOR TO ANY PROJECT APPROVAL	SP - F&G CLEARANCE	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e. tract map, parcel map, use permit, plot plan, etc.) which may propose grading or construciton within or along the banks of any blue-lined stream, the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMITS, the applicant shall obtain written notification to the County Planning Department that the appropriate California Department of Fish and Game notification pursuant to Sections 1601/1603 of the California Fish and Game Code has taken place, or obtain an "Agreement Regarding Proposed Stream or Lake Alteration" (Sections 1601/1603 Permit) should any grading or construction be proposed within or along the banks of any natural watercourse or wetland, located either on-site or any required off-site improvement areas. Copies of any agreement shall be submitted with the notification."

30.PLANNING 034

PRIOR TO ANY PROJECT APPROVAL	SP - ACOE CLEARANCE	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e. tract map, parcel map, use permit, plot plan, etc.) which may propose grading or construciton within or along the banks of any blue-lined stream which is determined to be within the jurisdiction of the United States Army Corps of Engineers, the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMITS, the applicant shall obtain written notification to the County Planning Department that the alteration of any watercourse or wetland, located either on-site or on any required off-site improvement areas, complies with the U.S. Army Corps of Engineers Nationwide Permit Conditions, or obtain a permit under Section 404 of the Clean Water Act should any grading or construction be proposed within or along the banks of any natural watercourse or wetland. Copies of any agreement shall be submitted with the notification."

30.PLANNING 036

PRIOR TO ANY PROJECT APPROVAL	SP - POST GRADING REPORT	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the

implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMITS, the project applicant shall provide to the Planning Department a post grading report. The report shall describe how the mitigation and monitoring program as described in the EIR and pre-grading agreement with the qualified archaeologist/paleontologist/other were complied with."

30.PLANNING 037
PRIOR TO ANY PROJECT APPROVAL | SP - SCHOOL MITIGATION | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO BUILDING PERMITS, impacts to the Coachella Valley Unified School District shall be mitigated in accordance with state law."

30.PLANNING 038
PRIOR TO ANY PROJECT APPROVAL | SP - ARCHAEOLOGIST RETAINED | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any land division or development permit (use permit, plot plan, etc.), a condiiton of approval shall be applied to the land division or development permit to ensure that the unique archaeologic resources identified in the Cultural Resources Report prepared as part of this Specific Plan's environmental documentation have been adequately addressed. The condition shall read as follows:

Prior to the issuance of grading permits, a qualified archaeologist shall be retained by the land divider for consultation and comment on the proposed grading with respect to potential impacts to unique archaeological resources. Should the archaeologist, after consultation with the appropriate Native American tribe, find the potential is high for impact to unique archaeological resources (cultural resources and sacred sites), a pre-grading meeting between the archaeologist, a Native American observer, and the excavation and grading contractor shall take place. During grading operations, when deemed necessary in the professional opinion of the retained archaeologist (and/or as determined by the Planning Director), the archaeologist, the archaeologist's on-site representative(s) and the Native American Observer shall actively monitor all project related grading and construction and shall have the authority to temporarily divert, redirect, or halt grading activity to allow recovery of unique archaeological resources. Prior to the issuance of grading permits, the NAME, ADDRESS and TELEPHONE NUMBER of the retained archaeologist shall be submitted to the Planning Department and the B&S Grading Division. If the retained archaeologist, after consultation with the appropriate Native American tribe, finds no potential for impacts to unique archaeological resources, a letter shall be submitted to the Planning Department certifying this finding by the retained qualified archaeologist.

30.PLANNING 039
PRIOR TO ANY PROJECT APPROVAL | SP - IF HUMAN REMAINS FOUND | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any land division or development permit (use permit, plot plan, etc.), a condition of approval shall be applied to the land division or development permit, and shall read

as follows:

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resource Code section 5097.98. The County Coroner shall be notified of the find immediately. If the remains are determined to be prehistoric, the coroner shall notify the Native American Heritage Commission, which will determine and notify the appropriate NATIVE AMERICAN TRIBE who is the most likely descendent. The descendent shall inspect the site of the discovery and make a recommendation as to the appropriate mitigation. After the recommendations have been made, the land divider, a Native American Tribe representative, and a County representative shall meet to determine the appropriate mitigation measures and corrective actions to be implemented.

30.PLANNING 040 PRIOR TO ANY PROJECT APPROVAL	SP - COMMON AREA MAINTENANCE	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing land division project within the SPECIFIC PLAN (i.e. tract map or parcel map), the following condition shall be placed on the implementing application:

"PRIOR TO MAP RECORDATION, the following procedures for common area maintenance procedures shall be complied with:

a. A permanent master maintenance organization shall be established for the SPECIFIC PLAN area to assume ownership and maintenance responsibility for all common recreation, open space, circulation systems and landscaped areas. The organization may be public or private. Merger with an area-wide or regional organization shall satisfy this condition provided that such organization is legally and financially capable of assuming the responsibilities for ownership and maintenance. If the organization is a private association then neighborhood associations shall be established for each residential development, where required, and such associations may assume ownership and maintenance responsibility for neighborhood common areas.

b. Unless otherwise provided for in these conditions of approval, common open areas shall be conveyed to the maintenance organization as implementing development is approved or any subdivision as recorded.

c. The maintenance organization shall be established prior to or concurrent with the recordation of the first land division. Any agreements with the maintenance organization shall stipulate that maintenance of landscaped areas will occur in accordance with Ordinance No. 859 (as adopted and any amendments thereto) and the Riverside Guide to California Friendly Landscaping.

d. Covenants, Conditions, and Restrictions for the SPECIFIC PLAN shall prohibit the use of water-intensive landscaping and require the use of low water use landscaping pursuant to the provisions of Ordinance No. 859 (as adopted and any amendments thereto).

e. Covenants, Conditions, and Restrictions for the SPECIFIC PLAN shall incorporate provisions concerning landscape irrigation system management and maintenance for the purpose of

facilitating the water-efficient landscaping requirements of Ordinance No. 859 (as adopted and any amendments thereto). The common areas to be maintained by the master maintenance organization shall be identified in the DISTRICT REFINMENT PLAN'S"

30.PLANNING 041

PRIOR TO ANY PROJECT APPROVAL	SP - ENTRY MONUMENTATION	Status: INEFFECT	Conditions: Outstanding

All monumentation shall be in substantial conformance to the DISTRICT REFINMENT PLAN for the respective DISTRICT of the SPECIFIC PLAN.

Landscaping of entry monument(s) shall comply with Ordinance No. 859 (as adopted and any amendments thereto) and the Riverside County Guide to California Friendly Landscaping."

30.PLANNING 045

PRIOR TO ANY PROJECT APPROVAL	SP - CVWD CLEARANCE	Status: INEFFECT	Conditions: Outstanding

The Coachella Valley Water District (CVWD) has indicated a conceptual approval of the Specific Plan design and related studies in a letter provided to the Planning Department on October 22, 2010. The following conditions of approval were requested in said letter. Prior to approval of any implementing project, the project proponent shall provide a clearance letter from CVWD to the Planning Department indicating that the following requirements have been met to the satisfaction of CVWD:

1. Flood risks from two drainage areas and potential flows from the Un-named Canyon South of Barton Canyon-Fan 6 and Barton Canyon-Fan 5 were not identified in the Report as a flood hazard that impact the development at the northwestern and north boundaries (Pierce Street and Avenue 80). The two drainage areas contribute approximately 1,200 - 2,000 cfs per square mile. The flows from the two drainage areas along with potential flows from Un-named Canyon-Fan 6 and Barton Canyon-Fan 5 will need to be determined and facilities constructed to collect, route and discharge the flows in a manner compatible with pre-project/existing conditions. These flood risks are identified on the Exhibit.

2. The proposed flood control scheme will need to adequately address potential upstream and downstream impacts, as summarized below:

a. Channel 4 collects flow from a fan surface and discharges 3,490 cfs of concentrated flow into a culvert at HWY 86 where there are no downstream improvements. The discharge from Channel 4 must be released in a manner consistent with pre- project/existing conditions, which will require future analysis to define these conditions. Altematively, the developer can store or discharge flows within the boundaries of the northem portion of the development or obtain flooding easements from northem adjacent property owners.

b. The existing flood hazard analysis shows depths of 1 to 2 feet and velocities of 6 to 7 feet per second (fps) near the upstream (southwesterly) boundary of the development. The flood control concept plans show velocities that exceed 15 fps and depths of over 2 feet in the proposed channels. It is our view that the proposed depths and velocities will rapidly erode their proposed (natural bottom) flood channels and erosion may extend upstream of the development boundary.

Future detailed analyses will be required to demonstrate that the channels remain stable, maintain their flood conveyance capacity and do not alter properties upstream of the development. Engineering solutions may include wider or concrete lined flood control channels.

c. The flood control scheme proposes to excavate flood basins and sediment traps and construct diversion channels to route flows from Channel 1, 2 and 3 through existing culverts within HWY 86's right-of-way. It is not known if Caltrans will permit the developer to build these facilities and we are not yet convinced that routing the peak flows through the existing culverts is a practical solution to flood management. Future detailed analysis will be required and engineering solutions may require improved or new culverts/bridges under HWY 86.

d. The developer will be required to obtain tentative approval from Caltrans for use and/or improvements within their right-of-way.

e. The flood control scheme has three channels that discharge concentrated flows of 840 cfs, 34,039 cfs and 11,306 cfs into the Salton Sea. No analysis has been provided to demonstrate these discharges are reasonably similar to pre-project conditions. As well, potential impacts from sediment deposition and the Sea's receding shoreline on downstream properties have not been addressed. Future detailed analysis will be required that demonstrates the issues above have been addressed; such an analysis may result in changes to the conceptual designs of Channels 1, 2 and 3.

f. The flood control scheme proposes flood basins and sediment traps to the east of HWY 86 as part of protecting the development. These basins will capture sediment transported from the Santa Rosa Mountains and also capture sediments eroded from the flood control channels. Future detailed analyses will be required to predict the volumes of sediment that might be transported and trapped to ensure that the flood control scheme will function under these predicted volumes and develop a practical sediment management program.

3. A future detailed document that discusses the management, operations, and maintenance of the flood control system will also be required.

The development proposes to use for flood control several CVWD irrigation drainage channels that discharge into the Salton Sea. Coachella Valley drainage channels have existing beneficial uses that include preservation of rare, threatened or endangered species. Please note that the Conditional Letter of Map Revision (CLOMR) process as of October l, 2010, requires compliance with the Endangered Species Act (ESA). ESA compliance documentation is required prior to submitting the CLOMR to FEMA. Because of the recent change, CVWD may require that the developer obtain a CLOMR prior to approval of Tentative Map.

The Salton Sea is designated as Waters of the United States; the developer will be required to obtain permission and/or permits for the construction of the channels at the Salton Sea from the Army Corps of Engineers, the Environment Protection Agency (EPA) and the Regional Water Quality Control Board.

The developer is urged to begin consultation with U.S. Department of Interior's Fish and

Wildlife Service, California Department of Fish and Game, Army Corps of Engineers and other environmental agencies regarding the flood control scheme to minimize any potential future impacts/changes to the flood control scheme.

CVWD requests the county require the developer to update the pertinent sections of Specific Plan 375 and the EIR documentation to include the above conditions as part of the flood control scheme concept approval. Also, CVWD requests to reserve the right to comment on the flood control scheme in the event modifications are made during the finalization of the Specific Plan & EIR documentation.

30.PLANNING 046
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.1-4
Status: INEFFECT
Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.1-4 from EIR514 requires:

Prior to grading final, the project applicant shall develop a lighting plan to reduce off-site and nighttime lighting impacts that shall be subject to approval by the Riverside Planning Department. The plan shall require all lighting adjacent to open space areas to be downcast luminaries with light patterns directed away from and shielded so that light is not directed into open space areas. Mercury vapor and halide lighting shall not be used on the perimeter of the developed areas and in areas adjacent to undeveloped open space. Security lighting throughout the project shall be controlled to limit light shine to necessary periods."

30.PLANNING 047
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.3-1
Status: INEFFECT
Conditions: Outstanding

Mitigation Measure 6.3-1 from EIR514 requires:

Prior to implementing project approval, applicants for implementing projects shall develop a Construction Traffic Emission Management Plan to minimize emissions from vehicles including, but not limited to, scheduling truck deliveries to avoid peak hour traffic conditions, consolidating truck deliveries, and prohibiting truck idling in excess of 5 minutes.

30.PLANNING 048
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.3-2
Status: INEFFECT
Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following

language shall be added to the implementing project:

Mitigation Measure 6.3-2 from EIR514 requires:

Prior to grading permit issuance, applicants for implementing projects shall develop a Construction Emission Management Plan to minimize construction-related emissions. The Construction Emission Management Plan shall include, at a minimum, the following elements:

-Use of water trucks or sprinkler system in sufficient quantities to prevent airborne dust from leaving the site. When wind speeds exceed 15 miles per hour the operators shall increase watering frequency.

-Suspend grading and excavation activities during windy periods (i.e., surface winds in excess of 20 miles per hour).

-Suspend the use of all construction equipment during first-stage smog alerts.

-Active sites shall be watered at least three times daily during dry weather.

-Increase watering frequency during construction or use non-toxic chemical stabilizers if it would provide higher control efficiencies.

-Application of non-toxic chemical soil stabilizers or apply water to form and maintain a crust on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days) or plant vegetative ground cover as soon as possible. -Application of non-toxic binders to exposed areas after cut and fill operations and hydroseeded areas.

-Cover or application of water or non-toxic chemical suppressants to form and maintain a crust on inactive storage piles.

-Retrofit large off-road construction equipment that will be operating for significant periods. Retrofit technologies such as particulate traps, selective catalytic reduction, oxidation catalysts, air enhancement technologies, etc., shall be evaluated. These technologies will be required if they are certified by CARB and/or the US EPA, and are commercially available and can feasibly be retrofitted onto construction equipment.

-The project applicant shall require all on-site construction equipment to meet US EPA Tier 4 or higher emissions standards according to the following:

-Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, BACT documentations, and CARB, SCAQMD, or ICAPCD operating permit shall be provided at the

time of mobilization of each applicable unit of equipment.

-Designate personnel to monitor dust control measures to ensure effectiveness in minimizing fugitive dust emissions.

-An information sign shall be posted at the entrance to each construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive fugitive dust generation. Any reasonable complaints shall be rectified within 24 hours of their receipt.

"The contractor shall utilize low-VOC content coatings and solvents that are consistent with applicable SCAQMD and ICAPCD rules and regulations.

Consideration shall be given to use of other transportation methods to deliver materials to the construction sites (for example, trains or conveyors) if it would result in a reduction of criteria pollutant emissions."

30.PLANNING 049 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.3-3	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.3-3 from EIR514 requires:

Prior to implementing project approval, applicants for implementing projects located in areas under the jurisdiction of the SCAQMD shall be required to conduct a project-level Localized Significance Thresholds (LST) analysis in accordance with the SCAQMD Final Localized Significance Thresholds Methodology or any superseding guidance document adopted by the SCAQMD Governing Board (South Coast Air Quality Management District, Final Localized Significance Threshold Methodology (2008). The guidance document may be viewed at the following website: http://www.aqmd.gov/ceqa/handbook/lst/lst.html.).

30.PLANNING 050 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.3-4	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.3-4 from EIR514 requires:

Prior to building final inspection, the applicant shall submit building plans to the County Building Department to demonstrate that all residential buildings are designed to achieve energy efficiency equivalent to levels 30 percent better than the current standards required by Title 24 (2008) Standards at the time building permits are issued."

30.PLANNING 051	SP - MITIG MEASURE 6.3-5	Status:	Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.3-5 from EIR514 requires:

Prior to building final inspection, the applicant shall submit building plans to the County Building Department to demonstrate that all commercial buildings shall be designed to achieve energy efficiency equivalent to levels 15 percent better than the current standards presently required by Title 24 (2008) Standards at the time building permits are issued."

30.PLANNING 052
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.3-6 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.3-6 from EIR514 requires:

Prior to building final inspection, the applicant shall provide preferential parking spaces for carpools and vanpools at major commercial and office locations. The spaces shall be clearly identified in plot plans and may not be pooled in one location. A minimum of 10 percent of parking spaces in excess of those required by County ordinance shall be reserved for carpool or vanpool parking."

30.PLANNING 054
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.3-7 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.3-7 from EIR514 requires:

Prior to building final inspection, applicants shall post "5-minute idling" signs for trucks where

applicable."

30.PLANNING 055
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.3-8
Status: INEFFECT
Conditions: Outstanding

Mitigation Measure 6.3-8 from EIR514 requires:

Prior to implementing project approval, applicants for implementing projects shall provide or make arrangements to provide shuttle service connecting the project's medium- and high-density development areas to existing transit service until such time that full transit service is provided to and within the project site.

30.PLANNING 056
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.3-10
Status: INEFFECT
Conditions: Outstanding

Mitigation Measure 6.3-10 from EIR514 requires:

Prior to implementing project approval, plans demonstrating that active parks, playgrounds, schools, and nursing/hospital facilities are to be located at least 500 feet from the closest right of way of State Route 86S shall be submitted to the County Planning Department for review and approval.

30.PLANNING 057
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.3-11
Status: INEFFECT
Conditions: Outstanding

Mitigation Measure 6.3-11 from EIR514 requires:

Prior to implementing project approval, plans demonstrating that residential units are to be located a minimum of 300 feet from the nearest right of way of State Route 86S to the lot line shall be submitted to the County Planning Department for review and approval.

30.PLANNING 058
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.3-12
Status: INEFFECT
Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.3-12 from EIR514 requires:

Prior to building final inspection, residential units located within 500 feet from the closest right of way of State Route 86S shall be equipped with high-efficiency electrostatic cleaning devices."

30.PLANNING 059
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.3-13
Status: INEFFECT
Conditions: Outstanding

Mitigation Measure 6.3-13 from EIR514 requires:

Prior to implementing project approval, residential units located within 500 feet from the closest right of way of State Route 86S shall be required to conduct a health risk assessment.

30.PLANNING 060 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.3-14	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.3-14 from EIR514 (as revised by the RRDEIR) requires:

Prior to building final inspection, permit applicants shall provide the County Planning Department with a disclosure document form, to be provided to all future property owners (residential and commercial), disclosing that the property is in the Salton Sea Air Basin, which is an area designated as in nonattainment status by the U.S. EPA and California Air Resources Board (CARB) for particulate matter, including but not limited to PM10. The documentation shall note that periodic wind blown dust and particulate matter from agricultural lands in Riverside and Imperial County, and exposed Salton Sea shoreline areas if sea levels recede further, may result in adverse respiratory health impacts. The disclosure form shall be provided to all future property owners within the Project site, after review and approval by the County Planning Department."

30.PLANNING 061 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.3-15	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.3-15 from EIR514 (as revised by the RRDEIR) requires:

Prior to grading permit issuance, the construction contractor shall prepare a Work Plan for review and approval by County Building and Safety Department and County Department of Public Health that includes the following measures, where feasible, to reduce valley fever and Hantavirus risk during construction:

-For construction activity involving substantial soil disturbance activity, preferentially assign persons with positive coccidioidin skin tests (since those with positive tests can be considered

immune to reinfection of valley fever) to perform the work.

-Hire crews from local populations when and where possible, since it is more likely that they have been previously exposed to the fungus (coccidioides immitis) and are therefore immune.

-Consult with staff from the Coachella Valley Mosquito and Vector Control District to ascertain whether the wild rodent surveillance program has identified risks posed by the Hantavirus in areas under construction. Construction activity shall be limited in areas identified as a risk and workers shall be notified of the findings.

-Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.

-Require that the cabs of grading and construction equipment be air-conditioned.

-Preferentially assign crews to work upwind from excavation sites to the greatest extent possible. This measure does not apply to persons with positive coccidioidin skin tests (since those with positive tests can be considered immune to reinfection of valley fever).

-Pave or apply sufficient water or environmentally safe dust control agents on all construction roads.

-Where acceptable to the fire department, control weed growth by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.

-During rough grading and construction, the access way into the project site from adjoining paved roadways should be paved or treated with water or environmentally safe dust control agents."

30.PLANNING 062 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.3-18	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.3-18 from EIR514 requires:

Prior to implementing project approval, stationary sources of diesel, ozone, toxic air contaminants (TAC's) or particulate matter (PM10 and PM2.5) contaminants or projects attracting or generating substantial numbers of diesel truck trips shall be required to demonstrate to the County Planning Department that such projects would not exceed the health-based significance thresholds established by the SCAQMD and/or ICAPCD as appropriate. Based on the current health-based significance thresholds, if the assessment determines that the project would result in an incremental increase in cancer risk of more than 10 in 1 million at the maximally impacted residential, sensitive, and off-site workplace receptors or that the chronic hazard indices for non-cancer health impacts are above 1.0 at the maximally exposed residential, sensitive, and off-site workplace receptors, the proposed project shall be required to implement project design changes or measures that would reduce impacts to below the existing established thresholds.

30.PLANNING 063	SP - MITIG MEASURE 6.3-21	Status:	Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Mitigation Measure 6.3-21 from EIR514 (as revised by the RRDEIR) requires:

Prior to implementing project approval, plans demonstrating that auto body shops with painting/coating operations are to be located at least 1 mile feet from odor sensitive receptors shall be submitted to the County Planning Department for review and approval.

30.PLANNING 064
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.3-22 Status: INEFFECT Conditions: Outstanding

Mitigation Measure 6.3-22 from EIR514 (as revised by the RRDEIR) requires:

Prior to implementing project approval, plans demonstrating that asphalt plants are to be located at least 1 mile feet from odor sensitive receptors shall be submitted to the County Planning Department for review and approval.

30.PLANNING 065
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.5-1 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.5-1 from EIR514 requires:

Prior to issuance of a grading permit, as required by State CEQA Guidelines Sections 15064.5(e) and (f), a cultural resources management plan (CRMP) shall be prepared and submitted for the appropriate County Planning Department for review and approval. The CRMP shall contain detailed provisions for the treatment of unanticipated discoveries during project construction, including human remains. The provisions of the CRMP should be consistent with state law as contained in Health and Safety Code Section 7050.5, and PRC Sections 5097.94 and 5097.98. Such mitigation shall be addressed in a manner consistent with the following:

-If buried materials of potential historical or cultural significance are accidentally discovered during any earth-moving operations associated with the proposed project, all work in that area shall be halted or diverted until a qualified historian/archaeologist can evaluate the nature and significance of the finds. If the find is determined to be an historical resource, as defined in Section 15064.5 of the California Code of Regulations (State CEQA Guidelines), avoidance or other appropriate measures as discussed in the CRMP shall be implemented.

-If evidence of potentially significant prehistoric or historic resources is uncovered during project-related grading areas in which archaeological and Native American monitoring has already been required, the extent of monitoring shall be amended and the presence of a Native

American monitors shall be incorporated into the monitoring program for all areas in the affected tentative tract."

30.PLANNING 066
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.5-3 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.5-3 from EIR514 requires:

Prior to grading final for any grading activity near any of the sites listed below, the respective following site shall be tested and evaluated in consultation with the Torres-Martinez Desert Cahuilla Indians as required, and pursuant to the requirements of Phase II Archaeological standards and practices, as approved by Riverside County, for the sites to determine integrity, data potential and significance: CA-RIV-8891 (33-17082), CA-RIV-8894 (33-17085), CA-RIV-8895 (33-17086), CA-RIV-8896 (33-17087), CA-IMP-8784 (13-009821), CA-IMP-8785 (13-009822), CA-IMP-8786 (13 009823), CA-IMP-92, CA-IMP-100, and CA-IMP-2626."

30.PLANNING 067
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.5-7 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

"Mitigation Measure 6.5-7 from EIR514 (as revised by the RRDEIR) requires:

Prior to grading final for each implementing project, the areas under consideration shall be monitored by a County-approved and qualified paleontologist, who shall develop a formal agreement with a recognized museum repository, such as the Natural History Museum of Los Angeles County Vertebrate Paleontology Department (LACM). Prior to earth moving activities, the paleontologist shall coordinate with appropriate construction contractor personnel.

Should paleontological resources be discovered during earthmoving activities, work shall cease and no further disturbance shall occur in the immediate vicinity of the uncovered resource and an area 50 feet in diameter of the find. A paleontologist shall be contacted to investigate the find and, if deemed necessary, collect uncovered paleontological resources, curate any resources collected with an appropriate reposition, and file a report with the appropriate Planning Department documenting any paleontological resources that are found. Upon completion of the

field investigation, collection of the resources, if necessary, and clearance of the find by the paleontologist, earthmoving activities may resume."

30.PLANNING 068
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.6-1
Status: INEFFECT
Conditions: Outstanding

Mitigation Measure 6.6-1 from EIR514 requires:

Prior to implementing project approval, site-specific geotechnical and engineering geologic investigations that analyze site-specific seismic shaking including provisions for appropriate construction techniques, including adherence to local codes and the California Building Code's design criteria for construction within former Seismic Zone 4, now Seismic Design Category E or F, shall be prepared by California-registered geotechnical engineers and certified engineering geologists, and submitted to the Riverside County Planning Department-Geology (or equivalent) for review and approval.

30.PLANNING 069
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.6-2
Status: INEFFECT
Conditions: Outstanding

Mitigation Measure 6.6-2 from EIR514 requires:

Prior to implementing project approval, site-specific geotechnical and engineering geologic investigations shall analyze site-specific lateral spread landslide potential (in accordance with Special Report 117 and the 2007 CBC) and (as appropriate) include provisions for appropriate construction techniques. This shall include adherence to the California Building Code's design criteria for construction within Seismic Design Category E or F. This study and all appropriate recommendations shall be prepared by California registered geotechnical engineers and certified engineering geologists, and submitted to the Riverside County Planning Department-Geology (or equivalent) for review and approval.

30.PLANNING 070
PRIOR TO ANY PROJECT APPROVAL
SP - MITIG MEASURE 6.6-3
Status: INEFFECT
Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GARDING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.6-3 from EIR514 requires:

Prior to the issuance of grading permits and in compliance with the requirements of Riverside County ordinances, a detailed design-level geotechnical report(s) shall be submitted to the County's Geologist for review and approval concurrent with each tract map or parcel map application. The report(s) shall identify and address site-specific (a) underlying soil conditions (including corrosive and expansive soil conditions), (b) liquefaction potential, (c) seismic parameters and building requirements, (d) tile drain and subdrainage system conditions, and (e)

slope stability and rockfall hazards. The measures recommended in the final geotechnical report(s) shall be identified on applicable grading plans and shall be implemented to the satisfaction of the County Geologist. Grading shall be performed in accordance with applicable provisions of the Standard Grading Specifications contained in the design-level geotechnical reports."

30.PLANNING 071 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.6-4(A)	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.6-4 from EIR514 requires:

Prior to implementing project approval (and grading final, see 30.PLANNING.72) site-specific hydrologic, geotechnical and engineering geologic investigations shall analyze site-specific soils for erosion, sedimentation, and debris flow potential (in accordance with local codes and the 2007 CBC) and (as appropriate) include provisions for appropriate construction techniques. These studies and all appropriate recommendations shall be prepared by California registered geotechnical engineers, registered civil engineers, and certified engineering geologists, and submitted to the Riverside County Planning Department-Geology (or equivalent) for review and approval.

30.PLANNING 072 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.6-4(B)	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.6-4from EIR514 requires:

Prior to grading final, site-specific hydrologic, geotechnical and engineering geologic investigations shall analyze site-specific soils for erosion, sedimentation, and debris flow potential (in accordance with local codes and the 2007 CBC) and (as appropriate) include provisions for appropriate construction techniques. These studies and all appropriate recommendations shall be prepared by California registered geotechnical engineers, registered civil engineers, and certified engineering geologists, and submitted to the Riverside County Planning Department-Geology (or equivalent) for review and approval."

30.PLANNING 073 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.6-5	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following

language shall be added to the implementing project:

Mitigation Measure 6.6-5 from EIR514 requires:

Prior to grading final for each implementing project, the project applicant shall submit a copy of the Notice of Intent (NOI) to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System (NPDES) issued by the Colorado River Regional Water Quality Control Board (CRRWQCB). The applicant shall submit a copy of the NOI and shall provide a copy of the required Storm Water Pollution Prevention Plan (SWPPP) to Riverside (or equivalent) for review and approval. A copy of the SWPPP must be maintained on the project site during grading and construction activities. The Riverside County Planning Department shall review the documentation and shall conduct site inspections during construction to monitor for compliance with the SWPPP. The project's SWPPP shall also include the following provisions:

-Pre-Grading: The portions of the site to be graded shall be pre-watered to a depth designated by the soils engineer prior to the onset of grading operations.

-Pre-Grading: Undisturbed areas of biological soil crusts in "non-construction" areas adjacent to proposed roadways, buildings, parking areas, etc., shall be marked so that unnecessary disturbance of the biological soil crusts is minimized.

-During Grading: Once grading has commenced, and until grading has been completed, watering of the site and/or other treatment(s) determined to be appropriate shall be ongoing.

-Post-Grading: All disturbed areas shall be treated to prevent erosion during the term that the area will remain undeveloped.

-Landscape and irrigation shall be installed per future plan submittals."

30.PLANNING 074 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.6-6	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.6-6 from EIR514 requires:

Prior to grading final for each implementing project, the applicant/owner shall submit and implement a Storm Water Quality Management Plan (SWQMP). The SWQMP shall include the following elements: identification of potential pollutant sources that may affect the quality of the storm water discharges; the proposed design and placement of structural and non-structural best management practices (BMPs) to address identified pollutants; a proposed inspection and

maintenance program; and a method for ensuring maintenance of all BMPs over the life of the project. The approved measures shall also be shown on site, building, and grading plans. Maintenance records shall be maintained by the applicant/owner for residential developments, or landowners for commercial developments. Prior to approval of the Land Use Permit, the SWQMP shall be submitted to Riverside County Flood Control and Water Conservation District. All measures specified in the plan shall be constructed and operational prior to occupancy clearance. Maintenance records shall be submitted to Riverside County Planning Department on an annual basis prior to the start of the rainy season and for five years thereafter. After the fifth year, the records shall be maintained by the landowner or applicant/owner, and be made available to Riverside County Planning Department on request."

30.PLANNING 075
PRIOR TO ANY PROJECT APPROVAL

SP - MITIG MEASURE 6.6-7

Status: INEFFECT

Conditions: Outstanding

Mitigation Measure 6.6-7 from EIR514 requires:

Prior to implementing project approval, site-specific geotechnical investigations shall be prepared and submitted to the Riverside County of Planning Department-Geology, as appropriate, to identify areas of potential shallow groundwater. The geotechnical studies shall identify appropriate construction techniques (e.g., dewatering, groundwater barriers, et al.) where groundwater is identified within 50 feet of the ground surface.

30.PLANNING 076
PRIOR TO ANY PROJECT APPROVAL

SP - MITIG MEASURE 6.6-8

Status: INEFFECT

Conditions: Outstanding

Mitigation Measure 6.6-8 from EIR514 requires:

Prior to implementing project approval, site-specific geotechnical investigations shall be prepared and submitted to the Riverside County Planning Department-Geology, as appropriate, to identify potential impacts related to subsidence. The geotechnical studies shall identify appropriate construction techniques to be used during grading and building design such as the compaction of soils, modified grading techniques, use of spread footings, the use of post tensioned slabs, and other methods.

30.PLANNING 077
PRIOR TO ANY PROJECT APPROVAL

SP - MITIG MEASURE 6.6-9

Status: INEFFECT

Conditions: Outstanding

Mitigation Measure 6.6-9 from EIR514 requires:

Prior to implementing project approval, site-specific geotechnical and engineering geologic investigations that analyze site-specific soil conditions, including the potential for collapsible soils, shall be prepared by California registered geotechnical engineers and certified engineering geologists, and submitted to the Riverside County Planning Department-Geology (or equivalent) for review and approval. Recommended mitigations may include overexcavation of the subject soils and recompaction on new engineered fill material, possibly pre-saturating the subject soils, and provision of proper surface drainage away from structures and building foundations.

30.PLANNING 078
PRIOR TO ANY

SP - MITIG MEASURE 6.6-10

Status: INEFFECT

Conditions: Outstanding

PROJECT APPROVAL

Mitigation Measure 6.6-10 from EIR514 requires:

Prior to implementing project approval, site-specific geotechnical studies, including soil expansion tests, shall be prepared and submitted to the Riverside County Planning Department-Geology, as appropriate, and shall include appropriate construction methods to reduce impacts from expansive soils.

30.PLANNING 079
PRIOR TO ANY PROJECT APPROVAL — SP - MITIG MEASURE 6.7-2 — Status: INEFFECT — Conditions: Outstanding

Mitigation Measure 6.7-2 from EIR514 requires:

Prior to implementing project approval and grading final, future applicants for implementing projects and grading permits on the project site shall conduct a site survey by a County-approved licensed professional to identify and remediate all contaminated soils on the project site. All pesticide residue measured in on-site soils shall not exceed the applicable Preliminary Remediation Goals and the survey report shall be approved and documented by the Riverside County Department of Environmental Health.

30.PLANNING 080
PRIOR TO ANY PROJECT APPROVAL — SP - MITIG MEASURE 6.7-3 — Status: INEFFECT — Conditions: Outstanding

Mitigation Measure 6.7-3 from EIR514 requires:

Prior to implementing project approval, the applicant shall submit plans to the Coachella Valley Mosquito and Vector Control District (CVMVCD) which identify potential breeding sources for mosquitoes (such as standing water in street catch basins, subdivision drains, roadside ditches, flood channels, ravines, and similar places on public right-of-way and parks) that demonstrate designs that would minimize such breeding sources.

30.PLANNING 081
PRIOR TO ANY PROJECT APPROVAL — SP - MITIG MEASURE 6.8-1 — Status: INEFFECT — Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.8-1 from EIR514 requires:

Prior to grading final for each implementing project, a project-specific water quality management plan (WQMP) shall be submitted to Riverside County for review and approval."

30.PLANNING 082
PRIOR TO ANY PROJECT APPROVAL — SP - MITIG MEASURE 6.8-2 — Status: INEFFECT — Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.8-2 from EIR514 (as revised by the RRDEIR) requires:

Prior to grading final for each implementing project, a detailed operation and maintenance plan shall be submitted to the Riverside County and Coachella Valley Water District for review and approval for the as-built project conditions."

30.PLANNING 083
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.8-3 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.8-3 from EIR514 requires:

Prior to grading final for each implementing project, a Storm Water Pollution Prevention Plan (SWPPP) shall be developed and submitted to the Regional Water Quality Control Board for review approval. The SWPPP shall identify potential sources of pollution and specify runoff controls or BMPs during construction for the purpose of minimizing the discharge of pollutants in stormwater from the construction area. In addition, the SWPPP must identify post-construction control measures and a monitoring plan."

30.PLANNING 084
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.8-5 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.8-5 from EIR514 requires:

Prior to grading final for each implementing project, the applicant shall provide a plan for re-routing or connecting to existing irrigation and drainage facilities. This may include use of or alternation to facilities operated by or within the rights-of-way of other entities/The plan shall be

submitted to the appropriate agency (US Bureau of Reclamation, Caltrans, or Coachella Valley Water District) for review and approval."

30.PLANNING 085
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.8-6 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.8-6 from EIR514 requires:

During grading, the existing under-drainage system (tile drains), shall be preserved, where possible, to reduce potential adverse effects due to groundwater. Light weight excavation equipment shall be used where excavations come near the existing title drains to prevent damage to the underdrainage system. Where the tile drains are to be disrupted or exposed during grading, a replacement set of drains will be needed. The grading and construction aspects of the underdrainage system shall be performed under the guidance, observation/documentation, and recommendations of the Project Geologist. A formal evaluation of the installed subdrainage system, including the remaining tile drains, shall be evaluated for operation and flow once grading activities are completed. This report shall be prepared by the Project Geologist, the Project Civil Engineer, or the Project Agricultural/Civil Engineer and submitted to Riverside County for review."

30.PLANNING 086
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.8-8 | Status: INEFFECT | Conditions: Outstanding

Mitigation Measure 6.8-8 from EIR514 requires:

Prior to implementing project approval, the applicant shall submit to Coachella Valley Water District (CVWD) for review and approval a hydrologic study that evaluates the potential flows from Un-Named Canyon-Fan 6 and Barton Canyon-Fan 5. This study will identify facilities to be constructed to collect, route and discharge flows in a manner compatible with pre-project/existing conditions across the project site.

30.PLANNING 087
PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.8-10 | Status: INEFFECT | Conditions: Outstanding

Mitigation Measure 6.8-10 from EIR514 requires:

Prior to implementing project approval for each phase or district, as appropriate, the applicant shall submit for review and approval a hydrology report to address potential erosion issues within the proposed channels to demonstrate that the channels remain stable, maintain their flood conveyance capacity, and do not alter properties upstream of the proposed project.

30.PLANNING 088 | SP - MITIG MEASURE 6.11-3 | Status: | Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Mitigation Measure 6.11-3 from EIR514 requires:

Prior to implementing project approval for each implementing project, for residential lots located within 65 dB(A) CNEL or greater noise contour or adjacent to a road that is classified as a secondary or larger, an acoustic analysis shall be required to address requirements for determining and mitigating traffic noise impacts to residential structures. The acoustical analysis must be received, reviewed, and approved by the appropriate agency (such as the Riverside County Office of Industrial Hygiene). Methods that may be implemented to meet the standards include, but are not limited to, providing noise walls of sufficient size to break the line of sight between roadways and residential areas, providing open-space buffers, providing natural barriers such as hills, berms, boulders, and dense vegetation, or a combination of these methods.

30.PLANNING 089
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.11-4 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"Mitigation Measure 6.11-4 from EIR514 (as revised by the RRDEIR) requires:

Prior to implementing project approval for each implementing project, a future noise study is required to address the stationary commercial noise standard as it relates to parking lot noise. Facility-related noise as projected to any portion of any surrounding property containing a "habitable dwelling, hospital, school, library, or nursing home," must not exceed the following worst-case noise levels of 45 dB(A) - 10-minute noise equivalent level (Leq) between the hours of 10:00 PM to 7:00 AM (nighttime standard); and 65 dB(A) - 10-minute Leq, between 7:00 AM and 10:00 PM (daytime standard). The noise study must be received, reviewed, and approved by the appropriate agency (such as the Riverside County Office of Industrial Hygiene). Methods that may be employed to reduce parking lot noise may include a noise barrier of sufficient size to break the line of sight, an open-space buffer, a setback, or a combination of methods shall be developed along locations between parking lot noise and exterior usable areas within residential uses where these uses interface."

30.PLANNING 090
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.11-5 Status: INEFFECT Conditions: Outstanding

Mitigation Measure 6.11-5 from EIR514 requires:

Prior to implementing project approval for each implementing project, a future noise study is required to address the stationary commercial noise standard as it relates to loading dock noise. Facility-related noise as projected to any portion of any surrounding property containing a "habitable dwelling, hospital, school, library, or nursing home," must not exceed the following worst-case noise levels of 45 dB(A) - 10-minute noise equivalent level (Leq) between the hours of 10:00 PM to 7:00 AM (nighttime standard); and 65 dB(A) - 10-minute Leq, between 7:00 AM

and 10:00 PM (daytime standard). The noise study must be received, reviewed, and approved by the appropriate agency (such as the Riverside County Office of Industrial Hygiene) prior to each implementing project approval. Methods that may be employed to reduce parking lot noise may include designing loading docks to have either a depressed (i.e., below grade) loading dock area, an internal bay, or a wall to break the line of sight between residential land uses and loading operations.

30.PLANNING 091
PRIOR TO ANY PROJECT APPROVAL — SP - MITIG MEASURE 6.11-6 — Status: INEFFECT — Conditions: Outstanding

Mitigation Measure 6.11-6 from EIR514 requires:

Prior to implementing project approval, a future noise study is required to address the stationary commercial noise standard as it relates to mechanical, electrical, or other related commercial type noise. Facility-related noise as projected to any portion of any surrounding property containing a "habitable dwelling, hospital, school, library, or nursing home," must not exceed the following worst-case noise levels of 45 dB(A) - 10 minute noise equivalent level (Leq) between the hours of 10:00 PM to 7:00 AM (nighttime standard); and 65 dB(A) - 10-minute Leq, between 7:00 AM and 10:00 PM (daytime standard). The noise study must be received, reviewed, and approved by the appropriate agency (such as the Riverside County Office of Industrial Hygiene) prior to each implementing project approval. Method that may be employed to reduce mechanical, electrical, or other commercial type noise may include locating equipment away from receptor areas, proper selection and sizing of equipment, installation of equipment with proper acoustical shielding, and incorporating the use of parapets into building design.

30.PLANNING 092
PRIOR TO ANY PROJECT APPROVAL — SP - MITIG MEASURE 6.11-7 — Status: INEFFECT — Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.11-7 from EIR514 requires:

Prior to grading final for each implementing project, the construction contractors shall use best management practices (BMPs) to reduce vibration due to specific plan construction activities by implementing the following:

-identifying all uses in the vicinity that may be adversely affected by the vibrations, including residences built in earlier phases and non-residential land uses that may contain vibration-sensitive equipment;

-installing seismographs at the aforementioned sensitive locations to ensure that vibration thresholds are not exceeded, and/or that construction activities would not cause structural

damage or adversely affect vibration-sensitive equipment;

-adjusting vibration amplitudes of the construction equipment used on site such as limiting the number of pieces operating in one location at the same time in areas where conditions would affect structures, the sensitivity of vibration sensitive equipment, and/or human tolerance;

-utilizing cast-in-drilled-hole (CIDH) piles in lieu of pile driving;

-providing notification to the residential land uses directly adjacent to the project site, at least 10 days in advance, of construction activities that are anticipated to result in vibration levels above the thresholds;

-conducting demolition, earthmoving, and ground-impacting operations sequentially, so as not to have two such operations occurring on the project site at the same time;

-selecting a demolition method to minimize vibration, where possible (e.g., sawing masonry into sections rather than demolishing it by pavement breakers); and/or

-operating earth-moving equipment on the construction site as far away as possible or practical from vibration-sensitive sites; using wheeled or rubber-tracked equipment, and using small pieces of equipment such as smaller bulldozers when possible.

The Riverside County Building and Safety Department shall monitor the conditions to determine that these BMPs are being utilized correctly and efficiently in order to reduce vibration impacts throughout the proposed project."

30.PLANNING 093 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.11-9	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.11-9from EIR514 requires:

Prior to grading final for each implementing project, the project applicant shall submit copies of proposed project construction documents and specifications to the Riverside County Building and Safety Department, as appropriate, indicating that construction staging areas along with the operation of earthmoving equipment within the project area is located as far away from vibration- and noise-sensitive sites as possible."

30.PLANNING 094 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.11-10	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.11-10 from EIR514 requires:

Prior to grading final for each implementing project, the project applicant shall submit copies of proposed project construction documents and specifications to the Riverside County Planning Department, as appropriate, indicating that heavily loaded trucks used during construction would be routed away from residential streets to the extent feasible."

30.PLANNING 095 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.13-7	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.13-7 from EIR514 requires:

Prior to grading final, the construction contractor shall provide a plan for review and approval by Riverside County Fire Department (RCFD) to demonstrate that during all grading and site clearance activities, all earth-moving equipment shall be equipped with spark arrestors and at least two portable fire extinguishers per vehicle. All equipment used in the vegetation-clearance phase shall be equipped with spark arrestors and best available fire safety technology. The vegetation-clearance activities shall be coordinated with and approved by the RCFD or SCSD in advance."

30.PLANNING 096 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.13-8	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.13-8 from EIR514 requires:

Prior to building final permit, the applicant shall submit proof that all structures adjacent to open

space shall be designed to satisfy at least a 1-hour fire resistant rating. Such structures shall incorporate fire retardant features such as boxed-in eaves, reduced overhangs, double-paned windows, convection resistant roof design, non-combustible roofing material, and related design features, as determined necessary by the RCFD and/or SCSD. Building permits shall not be issued until review of fire-retarding architectural features has been completed by the RCFD and/or SCSD. Design standards meeting RCFD and/or SCSD shall be included in the Fire Hazard Reduction Program and incorporated into the Fire Hazard Reduction Design Guidelines for the residential units."

30.PLANNING 097 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.13-10	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.13-10 from EIR514 requires:

Prior to building final inspection, the applicant shall provide for the purchasers of residential, commercial, and industrial units in planning areas that would be located adjacent to Open Space-Conservation and other off-site undeveloped or natural areas to be notified as to the requirements and maintenance of a brush-clearance radius of 100 feet around all buildings pursuant to Riverside County Ordinance No. 787 as appropriate."

30.PLANNING 098 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.14-1	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.14-1 from EIR514 requires:

Prior to grading final for each implementing project, a designated parking area with a security officer shall be provided for the construction workers during grading and construction operations. A site security plan shall be prepared and submitted to the Riverside County Sherriff's Department by the contractor indicating security features that shall be incorporated on the construction site(s), such as fencing and locked entrances, and construction equipment, tools, and material shall be secured by locking or placing them within sheds and/or other inaccessible areas while not in use."

30.PLANNING 099	SP - MITIG MEASURE 6.15-1	Status:	Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Mitigation Measure 6.15-1 from EIR514 requires:

Prior to implementing project approval, applicant(s) for implementing project development shall pay the development impact fees at the designated level (Level I, II, or III) as set forth by the Coachella Valley Unified School District (CVUSD), at the current rate. Fees shall be paid based on the square-footage of development per single-family residential unit, multi-family residential unit, commercial unit, and secondary living unit as required by CVUSD policy in each implementing project area. Active adult residential units proposed in the specific plan shall pay the development impact fees at the designated level (Level I, II, or III) for commercial/industrial development, as set forth by the CVUSD, at the current rate.

30.PLANNING 100
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.16-1 Status: INEFFECT Conditions: Outstanding

Mitigation Measure 6.16-1 from EIR514 requires:

Prior to the implementing project approval, a final biding Memorandum of Understanding (MOU) shall be executed between the applicant and Desert Recreation District (DRD) for the maintenance and operation of parks, including regional parks, within Riverside County. For the open space areas and other public parks areas within Riverside County not included as part of the final binding MOU between the applicant and DRD, the applicant shall annex into Community Service Area (CSA) 125, or other appropriate CSA, to provide for the maintenance and operation of such areas.

30.PLANNING 101
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.18-1 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.18-1 from EIR514 requires:

Prior to grading final for each implementing project, the contractors for construction activities for the applicants of implementing projects shall prepare a construction safety plan and submit it to the appropriate County Planning Department and Fire Department for review and approval. The plan shall include provisions for safety activities, including prevention, work-related injuries, on-site safety equipment, notification procedures, and other activities to prevent, reduce, and respond to injuries during construction."

30.PLANNING 102
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.20-1 Status: INEFFECT Conditions: Outstanding

Mitigation Measure 6.20-1 from EIR514 requires:

Prior to implementing project approval, future applicants for development permits must submit plans for water delivery systems to Coachella Valley Water District (CVWD) for review and approval.

30.PLANNING 103 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.20-2	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.20-2 from EIR514 requires:

Prior to implementing project approval, water quality testing for irrigation and fire suppression that uses nonpotable water shall submit documentation to Coachella Valley Water District (CVWD) indicating that the water quality meets the requirements of the California Department of Public Health and fire flow requirements for the Fire Department.

30.PLANNING 104 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.22-1	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.22-1 from EIR514 requires:

Prior to implementing project approval, a Waste Recycling Plan (WRP) shall be submitted to the appropriate County Waste Management Department or Planning Department for approval. At a minimum the WRP shall identify the materials (e.g., concrete, asphalt, wood, etc.) that would be generated by construction and development, the project amounts, measures/methods that would be implemented to recycle, reuse, and/or reduce the amount of materials, the facilities and haulers that would be utilized, and the targeted recycling or reduction rates to be achieved.

30.PLANNING 105 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.22-7	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.22-7 from EIR514 requires:

Prior to implementing project approval, applicant(s) shall submit for review and approval landscape plans that provide for the use of xeriscape landscaping and the use of drought tolerant low maintenance vegetation in all landscaped areas of the project.

30.PLANNING 106 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.23-1	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.23-1 from EIR514 requires:

Prior to building final, residential and commercial buildings shall be conditioned to participate in any future programs, such as green pricing programs, which allow customers to support the development of renewable energy sources by paying a small premium on their electric bills, established by the Imperial Irrigation District. If the district establishes a green pricing program whereby energy generated from renewable resources either exclusively or at a higher proportion may be purchased, the proposed project shall participate in the program. Proof of participation (enrollment) shall be submitted to the Planning Department within 30 days of occupancy."

30.PLANNING 107 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.23-2	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.23-2 from EIR514 requires:

Prior to implementing project approval, the applicant shall submit plans showing the proposed locations of electricity transmission and distribution infrastructure to the Imperial Irrigation District for review and approval.

30.PLANNING 108 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.24-1	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-1 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide a listing of the green building practices and design elements used in the building that reduce GHG emissions to the appropriate Planning Department. The green building practices and design elements shall be consistent with the CAP and any other green building standards adopted by either Riverside County. (See, e.g., California Department of Housing and Community Development's Green Building & Sustainability Resources handbook at www.hcd.ca.gov/hpd/green_build.pdf; e.g., the American Institute of Architects at http://www.wiki.aia.org/Wiki%20Pages/Home.aspx)"

30.PLANNING 109 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.24-2	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUILDING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-2 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence of its use of energy-efficient designs meeting and/or consistent with the standards in the CAP and any other green building standards adopted by either Riverside County to the appropriate Planning Department. In accordance with the CAP, all residential buildings shall, at a minimum, exceed Title 24 (2008) by 30 percent and all non-residential buildings shall, at a minimum, exceed Title 24 (2008) by 15 percent. This measure does not exempt buildings from meeting future energy efficiency obligations that may result from future revisions to the Title 24 standards."

30.PLANNING 110 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.24-3	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-3 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence to the appropriate Planning Department of its use of energy efficient lighting, heating and cooling systems, appliances, equipment, and control systems, including the installation of ENERGY STAR-certified products, consistent with the standards in the CAP and any other energy efficiency standards adopted by either Riverside County or \ County. (Information about ENERGY STAR-certified products are available at http://www.energystar.gov /index.cfm?fuseaction=find_a_product; see also the California Energy Commission's database of appliances meeting federal or state energy standards at http://www.appliances .energy.ca.gov; see the Electronic Product Environmental Assessment Tool for ranking of energy efficient computer equipment at http://www.epeat.net /AboutEPEAT.aspx; see the Online Guide to Energy Efficient Commercial Equipment at http://www.aceee.org/ogeece/ch1_index .htm)"

30.PLANNING 111 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.24-4	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-4 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence to the appropriate Planning Department of the use of "cool" roofs or "green" roofs, and cool

pavements. (See Consumer Energy Center, Cool Roofs at http://www.consumerenergycenter .org/coolroof/)"

30.PLANNING 113 PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.24-5 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-5 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence to the appropriate Planning Department of the use of automatic covers, efficient pumps and motors, and solar heating for pools and spas. (See http://www.consumerenergycenter.org/home /outside/pools_spas.html)."

30.PLANNING 114 PRIOR TO ANY PROJECT APPROVAL | SP - MITIG MEASURE 6.24-6 | Status: INEFFECT | Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-6 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence that the building is consistent with and/or does not conflict with the following Specific Plan-wide renewable energy targets:

-80 percent of residential units shall meet 60 percent of their baseline demand power energy needs with renewable energy; and

-80 percent of commercial building square footage shall meet 40 percent of their baseline demand power energy needs with renewable energy.

Should the individual structure not be able to demonstrate that power provided by the Imperial Irrigation District (IID) does not comply with this standard, then the individual structure shall comply by providing renewable energy power from a source within the limits of the Specific Plan. "

30.PLANNING 115 | SP - MITIG MEASURE 6.24-7 | Status: | Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-7 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence to the appropriate Planning Department of the use of water efficient irrigation systems and devices, such as soil-based irrigation controls and use water-efficient irrigation methods consistent with measures recommended in the CAP. In accordance with the CAP, the applicant shall provide evidence that the building is consistent with the following Specific Plan-wide water conservation measures and/or does not prevent or conflict with the Specific Plan's ability to meet the following water conservation measures:

-90 percent of all builder-installed plumbing devices in each residential buildings will be low-flow and water-efficient;

-90 percent of all builder-installed plumbing devices in each non-residential buildings will be low-flow and water-efficient;

-Turf will not exceed 20 percent of the total landscaped area of each Planning Area, with the exception of parks, recreation centers, and schools;

-80 percent of public and common landscape areas will use smart irrigation systems per project; and

-80 percent of public and common landscape areas will use drought-tolerant, native, and/or water-efficient plant materials per project.

(See http://www1.eere.energy.gov/femp/program/waterefficiency_ bmp5.html; see also http://www.water.ca.gov/wateruseefficiency/landscape/.)"

30.PLANNING 116

PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.24-8 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT FINAL INSPECTION, the following language shall be added to the implementing project:

Mitigation Measure 6.24-8 from EIR514 requires:

Prior to grading final for each implementing project, the applicant or their contractor shall submit to the appropriate Public Works Department for review and approval of a site construction management plan for the reuse and recycle construction and demolition waste (including soil, vegetation, concrete, lumber, metal, and cardboard). (See http://www.ciwmb.ca.gov/condemo/)."

30.PLANNING 117 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.24-9	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-9 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence to the appropriate Planning Department of reuse and recycling measures in residential, industrial, and commercial projects consistent with measures recommended in the CAP. In accordance with the CAP, the applicant shall provide evidence that the building is consistent with the following Specific Plan-wide recycling and waste reduction measures and/or does not prevent or conflict with the Specific Plan's ability to meet the following recycling and waste reduction measures:

-Provide recycling containers within all multi-family residential communities;

-Provide recycling containers within all commercial, office, and light industrial buildings;

-Provide containers for community composting within all multi-family residential communities; and

-Provide containers for community composting within all commercial, office, and light industrial buildings.

(See http://zerowaste.ca.gov; see also http://www.ca-ilg.org/wastereduction)."

30.PLANNING 118 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.24-10	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT, the following language shall be added to the implementing project:

Mitigation Measure 6.24-10 from EIR514 requires:

Prior to the issuance of each building permit, the applicant shall provide evidence to the appropriate Planning Department of the use of "smart growth" principles to reduce GHG emissions (i.e., ensure mixed-use, infill and higher density projects provide alternatives to individual vehicle travel and promote efficient delivery of goods and services) consistent with measures recommended in the CAP. In accordance with the CAP, the applicant shall provide evidence that the building is consistent with the following Specific Plan-wide "smart growth" measures and/or does not prevent or conflict with the Specific Plan's ability to meet the following "smart growth" measures:

-60 percent of building frontages will have the principal functional entry facing a public space such as a street, square, park, paseo, or plaza, but not a parking lot based on type of project;

-75 percent of mixed-use streets shall have minimum 8-foot-wide sidewalks that front primarily commercial retail uses and all other areas will have minimum 4-foot-wide sidewalks;

-60 percent of all housing with a density of 7 dwelling units per acre or more will lie within 0.5 mile of a transit stop;

(See http://www.epa.gov/smartgrowth/index.htm.)"

30.PLANNING 119

PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.24-11	Status: INEFFECT	Conditions: Outstanding

Mitigation Measure 6.24-11 from EIR514 requires:

Prior to implementing project approval for each tract map, the applicant shall preserve existing trees, to the extent feasible and encourage the planting of new trees consistent with the final landscape palette in the Specific Plan. Removed trees shall be replaced at a minimum 1:1 ratio in accordance with acceptable tree species defined in the final landscape palette.

(See http://www.epa.gov/dced/brownfields.htm)

30.PLANNING 123

PRIOR TO ANY PROJECT APPROVAL	SP - TOTAL BP/DU TRKNG	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project, the applicant shall provide a "SP375 Total Dwelling Unit Tracking Spreadsheet." This spreadsheet shall be considered part of the SPECIFIC PLAN. Over time, this spreadsheet will track per Planning Area entitled units, tentative tract map units, final map recorded units and units actually built within every Planning Area in the SPECIFIC PLAN. The purpose of this tracking sheet is to enable the Planning Department to ensure compliance with the established Planning Area development ranges as outlined in Table 3-11 of the SPECIFIC PLAN. This sheet will also be used to ensure constancy with the separate tracking spread sheet referenced in condition 10.Planning.58 DU/BUILDING PERMIT MATRIX.

This condition cannot be DEFERRED or set to NOT APPLICABLE"

30.PLANNING 124
PRIOR TO ANY PROJECT APPROVAL | SP - TILE DRAINS (1) | Status: INEFFECT | Conditions: Outstanding

PRIOR TO THE APPROVAL OF ANY IMPLEMENTING PROJECT (i.e. Tentative Map, Plot Plan, Conditional Use Permit, and/or Public Use Permit), given the high ground water table in the project area, all implementing projects must provide a letter from Coachella Valley Water District (CVWD) indicating that the subsurface drainage facilities (tile drains) in the implementing project area can accommodate the new urban drainage to the satisfaction of CVWD.

30.PLANNING 125
PRIOR TO ANY PROJECT APPROVAL | SP - TILE DRAINS (2) | Status: INEFFECT | Conditions: Outstanding

PRIOR TO THE APPROVAL OF ANY IMPLEMENTING PROJECT (i.e. Tentative Map, Plot Plan, Conditional Use Permit, and/or Public Use Permit), given the high ground water table in the project area, all implementing projects must provide a letter from Coachella Valley Water District (CVWD) indicating that the boundaries shown on the APPROVED TENTATIVE MAP and/or SITE PLAN shall become annexed, incorporated, and/or included to the satisfaction of the Colorado River Basin Water Quality Control Board into the National Pollution Discharge Elimination System Permit (NPDES) program as detailed by CVWD and as well the project shall annexed, incorporated, and/or included to the satisfaction of the Colorado River Basin Water Quality Control Board into the Waste Discharge Requirements for the discharge of stormwater into the Whitewater River Watershed, which is known as the MS4 Permit, to the satisfaction of CVWD.

30.PLANNING 126
PRIOR TO ANY PROJECT APPROVAL | SP - TILE DRAINS (3) | Status: INEFFECT | Conditions: Outstanding

PRIOR TO THE APPROVAL OF ANY IMPLEMENTING PROJECT (i.e. Tentative Map, Plot Plan, Conditional Use Permit, and/or Public Use Permit), given the high ground water table in the project area, all implementing projects must provide a letter from Coachella Valley Water District (CVWD) indicating that the boundaries shown on the APPROVED TENTATIVE MAP and/or SITE PLAN shall become annexed, incorporated, and/or included to the satisfaction of CVWD into a future district(s) for recovery of capital and operation/maintenance costs associated with any tile/subsurface drainage system, to the satisfaction of CVWD.

30.PLANNING 127
PRIOR TO ANY PROJECT APPROVAL | SP - COMM FACILITY FINC SEC | Status: INEFFECT | Conditions: Outstanding

Prior to the submittal of any implementing project within a Planning Area of the SPECIFIC PLAN, as outlined in exhibit B.6.16 of the SPECIFIC PLAN, the applicant shall provide financial securities for all community facilities improvements required within the respective Planning Area. All required improvements shall be completed within five (5) years of the approval of the first implementing project within the Planning Area. If any portion of the required community facilities improvements are not completed after five (5) years the County shall use the financial securities provided by the applicant to fund the completion of the

remaining improvements. If all community facilities improvements are completed prior to the five (5) year requirement, all financial securities shall be returned to the applicant in full. Satisfaction of this condition shall be at the discretion of the Planning Director. No implementing project shall be approved unless evidence of secured financial securities for all community facilities improvements within the Planning Area is presented.

This condition cannot be waived, DEFERRED or set to NOT APPLICABLE. The condition shall be set to MET at the project level individually for each project prior to a project approval.

30.PLANNING 128 PRIOR TO ANY PROJECT APPROVAL	MM - CVWD SPECIAL AGREEMENT	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"Prior to building final inspection for the first residential unit and/or commercial unit within the Riverside County portion of the proposed project, the applicant shall execute a Special Agreement, with for CVWD to design, permit, construct, operate, and maintain an expandable wastewater treatment plant and nonpotable water storage and distribution system that shall be sized to initially accommodate approximately 3.0 mgd, or as approved by CVWD. Wastewater treatment and reuse facilities are provided for in Planning Area 4-3 or alternately an off-site location as provided for in the Wastewater Master Plan (see Figure 3.0-21). The project applicant shall provide necessary funding for the construction of this facility. All wastewater treatment facilities will be creditable toward the facilities component of CVWD's Sanitation Capacity charge for all residential, commercial, and industrial structures within CVWD's portion of the project boundary. The applicant's financial responsibility for these facilities is only for those components of the wastewater treatment facilities necessary to provide wastewater treatment for the proposed project's and its associated effluent."

30.PLANNING 150 PRIOR TO ANY PROJECT APPROVAL	SP - ARCHAEO STUDY REQD	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO PROJECT APPROVAL, a complete archaeological study shall be submitted to the Planning Department for review and approval. Adequate archaeological investigation shall be conducted to provide significance evaluations pursuant to CEQA for all cultural resources identified. This condition shall be considered MET if the relevant study has been approved by the Planning Department. This condition may be considered as NOT APPLICABLE if the Planning Department determines that the required study is not necessary.

The submittal of this study mandates that a CEQA determination of an Addendum to a previously adopted EIR be made, at a minimum."

30.PLANNING 151	SP - PALEO M/M PROGRAM	Status:	Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMITS, the project applicant shall enter into an agreement with a qualified paleontologist. This agreement shall include, but not be limited to, the preparation of a project specific paleontological resources impact mitigation program (PRIMP) to be implemented during the process of grading. A copy of said agreement and PRIMP shall be submitted to the County Geologist for review. No grading permit will be issued until the project specific agreement and PRIMP is reviewed and approved by the County Geologist.

30.PLANNING 153
PRIOR TO ANY PROJECT APPROVAL SP - ARCHAEO M/M PROGRAM Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF GRADING PERMITS, the project applicant shall enter into an agreement with a qualified archaeologist. This agreement shall include, but not be limited to, the preliminary mitigation and monitoring procedures to be implemented during the process of grading, as found in the Master Cultural Resources Plan for this Specific Plan. A copy of said agreement shall be submitted to the Planning Department. No grading permits will be issued unless the preliminary mitigation and monitoring procedures required prior to grading permits as described in the Master Cultural Resources Plan are substantially complied with."

30.PLANNING 154
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.16-7 Status: INEFFECT Conditions: Outstanding

Prior to approval of any subsequent actions to implement the project in planning areas as defined in the specific plan located adjacent to western boundary of the site, a landscaping plan shall be developed and submitted for drainage channels along the western perimeter of the project site. The landscaping plan shall require the planting of native plant species with thorns, such as cat-claw acacia and mesquite shrubs, adjacent to walls and trails on the western boundary of the site. This plan must be reviewed and approved by the Riverside or Imperial County Planning Director for the portions of the project located in each county.

30.PLANNING 155
PRIOR TO ANY PROJECT APPROVAL SP - MITIG MEASURE 6.4-25 Status: INEFFECT Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"PRIOR TO THE ISSUANCE OF BUIDLING PERMIT FINAL INSPECTION, the following

language shall be added to the implementing project:

Mitigation Measure 6.4-25 from EIR514 requires:

Prior to building final inspection for each implementing project, a public awareness program shall be developed by the homeowners' association (HOA), or an acceptable land manager/agency, as approved by the Riverside County Environmental Programs Department, to educate residents of the proposed project about impacts to biological resources resulting from increased human and domestic animal presence in the area. The public awareness program shall address the impact domestic cats have on local wildlife populations (especially birds and small mammals), to encourage pet owners to keep their cats indoors. This program shall include supplying educational information to future residents of the project site regarding the importance of preventing unleashed domestic animals from entering ecologically sensitive areas within the proposed project (Open Space [Conservation]) or areas adjacent to the project site (such as ABDSP, SRSJM National Monument, or other state or federally protected lands) and of prohibiting off-leash domestic animals from disturbing native wildlife species. The public awareness program shall specifically address potential indirect impacts to Peninsular bighorn sheep associated with human and domestic animal presence in the rocky hills and mountains. In addition, the public awareness program will include discussion of cryptobiotic soils and their role in preserving desert soils, promoting nitrogen fixation, storing atmospheric carbon, and preventing erosion by wind and water."

30.PLANNING 156 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.3-16	Status: INEFFECT	Conditions: Outstanding

Prior to the first implementing project approval, the applicant shall provide evidence that a payment to the Salton Sea Authority in the amount of $100,000 for IFD formation has been paid.

*This Condition was added as a result of the RRDEIR.

30.PLANNING 157 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.3-17(1)	Status: INEFFECT	Conditions: Outstanding

Prior to the first implementing project approval, the applicant shall provide evidence that an arrangement has been made to provide a payment to the Salton Sea Authority the amount of $25,000 to be paid annually for a period of 10 years for use in administering the IFD.

*This Condition was added as a result of the RRDEIR.

30.PLANNING 158 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.5-6	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

"Mitigation Measure 6.5-6 from EIR514 (as revised by the RRDEIR) requires:

In order to ensure that residents of the project do not gain access through the project to the Anza Borrego State Park or other adjacent offsite open space areas the applicant shall implement the following program prior to grading final for the first implementing project: (1)Pay $25,000 annually to the Torres Martinez Desert Cahuilla Indians (TMDCI), for 10 years for the expansion of the TMDCI conservation/patrol officer program to provide supplemental patrols along the edge of the project adjacent to offsite park and open space areas to prevent project residents and visitors from accessing these adjacent areas from the project. (2)Provide authorization for the TMDCI patrols to access the applicant's property and patrol the edge of the project; (3)Create a volunteer Citizens Patrol, similar to the successful volunteer patrols in other Coachella Valley cities and communities, to supplement the TMDCI patrols along the boundary of the project with adjacent park lands. A local Community Policing office would be located on the Travertine Point Specific Plan site to support this program; and (4)Create a volunteer docent program, similar to the successful volunteer programs in other Coachella Valley cities and communities, to assist in educating residents on the importance and sensitivity of nearby cultural resources and park lands."

30.PLANNING 159 PRIOR TO ANY PROJECT APPROVAL	SP - MITIG MEASURE 6.11-11	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

Mitigation Measure 6.11-11 from EIR514 (as revised by the RRDEIR) requires:

Prior to building final inspection, permit applicants shall provide to the County Planning Department a disclosure document form, to be provided to all future property owners (residential and commercial), disclosing that the property is subject to overflight from military aircraft. The disclosure form shall be provided to all future property owners within the Project site, after review and approval by the County Planning Department."

30.PLANNING 160 PRIOR TO ANY PROJECT APPROVAL	SP - TEMP PERIM FENCING	Status: INEFFECT	Conditions: Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

PRIOR TO THE ISSUANCE OF A GRADING PERMIT temporary construction fencing (chain link) shall be installed along the projects entire western perimeter as shown in exhibit 3-30 of the SPECIFIC PLAN. If said fencing has already been installed and is in place, this condition shall be set to not apply.

*This Condition was added as a result of discussions at the December 13, 2011 Board Hearing.

30.PLANNING 161	SP - PERMANENT PERIM FENCING	Status:	Conditions:

PRIOR TO ANY PROJECT APPROVAL INEFFECT Outstanding

Prior to the approval of any implementing project within the SPECIFIC PLAN (i.e.: tract map, parcel map, use permit, plot plan, etc.), the following condition shall be placed on the implementing project:

PRIOR TO THE ISSUANCE OF A BUILDING PERMIT the temporary fencing required in Condition of Approval 30.PLANNING.160 for the area that boarders the entire planning area where this development is being proposed (regardless of the proximity of the proposed development to the actual edge of the SPECIFIC PLAN), shall be replaced with permanent fencing that shall consist of tube steel, wrought iron, block wall, or similar permanent fencing as shown in exhibit 3-30 of the SPECIFIC PLAN. If said fencing has already been installed and is in place, this condition shall be set to not apply. To be clear, it is the responsibility of the first proposed development (commercial or residential) within the Planning Area to construct all fencing for the entire Planning Area as it relates to the western edge of the SPECIFIC PLAN.

With respect to the fencing along the edge of Planning Area 1-17, permanent fencing that shall consist of tube steel, wrought iron, block wall, or similar permanent fencing as shown in exhibit 3-30 of the SPECIFIC PLAN shall be installed prior to the operation of any portion of the site that would consitute any use other than the current (as of 2012) waste management use of the site.

*This Condition was added as a result of discussions at the December 13, 2011 Board Hearing.

30.TRANS 001
PRIOR TO ANY PROJECT APPROVAL SP - SP375/IMPROVEMENTS Status: INEFFECT Conditions: Outstanding

All roads shall be improved to the recommended General Plan or Specific Plan designation, as approved by the County Board of Supervisors, or as approved by the Transportation Department. If there is a conflict between the General Plan and Specific Plan, the General Plan designation would prevail unless specific findings are made by the County that the Specific Plan improvement is consistent with the General Plan.

30.TRANS 002
PRIOR TO ANY PROJECT APPROVAL SP - SP375/PAYMENT OF FEES Status: INEFFECT Conditions: Outstanding

The project proponent shall be required to pay all applicable fees in accordance with the fee schedule in effect at the time of development.

30.TRANS 003
PRIOR TO ANY PROJECT APPROVAL SP - SP375/TS REQUIRED Status: INEFFECT Conditions: Outstanding

During the District Refinement Plan (DRP) process, the project proponent shall prepare a Traffic Impact Analysis (TIA), in accordance with Riverside County guidelines, for each "Development District" within the SP. The District-level traffic analysis will be a refinement of the SP Traffic Impact Analysis and shall determine the need and timing of improvements needed to mitigate the traffic impacts of each Development District under conditions existing at the time of the DRP. In addition, TIAs for individual implementing projects may be required for individual

implementing projects within the boundaries of SP00375, at the discretion of the Transportation Department. TIAs for individual implementing projects, if needed, shall identify the impacts of the implementing project and needed transportation system improvements to be constructed prior to each implementing project.

Site-specific focused traffic studies may be required for subsequent implementing projects within the boundaries of SP00375. These subsequent traffic studies shall identify specific project impacts and needed transportation system improvements to be constructed in conjunction with each project.

Each implementing project shall make all necessary on-site and off-site improvements to achieve/maintain adequate LOS at all locations.

If development within SP00375 occurs in a different order than stated in 10. 3 TRANS. SP - SP375/ DEFINITION OF PROJECT PHASES BY PLANNING AREA, or if phases overlap substantially, a new DRP-level or project-level TIA may be required to determine if any improvements from the prior un-built phase need to be constructed to mitigate impacts by the phase being developed.

All improvements on Caltrans facilities shall conform to Caltrans design guidelines and shall be subject to Caltrans approval.

If any improvements proposed by the applicants for individual projects are found to be infeasible, the applicants for individual projects will be required to provide alternative feasible improvements to achieve levels of service satisfactory to the County.

All intersection spacing for individual tracts, parcel maps, CUPs, or plot plans shall conform to the minimum County intersection spacing standards.

All turn pocket lengths shall conform at least to the minimum County turn pocket length standards.

30.TRANS 004 PRIOR TO ANY PROJECT APPROVAL	SP-SP375/SR-86 & SR-86S ML IMP	Status: INEFFECT	Conditions: Outstanding

Prior to the issuance of any building permit for any implementing projects within SP00375, Riverside County shall prepare a financial plan to make mainline improvements to add one lane in each direction on SR-86S/SR-86 between 62nd Avenue and Marina Drive in Imperial County and to construct interchanges at SR-86S/62nd Avenue, SR-86S/66th Avenue, SR-86S/70th Avenue, SR-86S/74th Avenue, SR-86S/81st Avenue, SR-86/Town Center Way North, SR-86/Desert Shores Drive, SR-86/Brawley Avenue, SR-86/Sea Oasis Boulevard, and SR-86/Marina Drive. The financial plan shall identify the cost of the improvements based on a Preliminary Engineering study. In addition to fair share developer contributions, the financial plan shall consider funding that may be available through CVAG, RCTC, or other agencies. The County will assist in obtaining available funding that is, or may become available, through CVAG, RCTC, and other agencies, as appropriate.

Prior to the issuance of any building permit for any implementing projects within SP00375, Riverside County shall conduct a Nexus Study, based on the financial plan, and establish an RBBD or other funding mechanism in accordance with the Nexus Study recommendations.

If the County has not formed an RBBD or other area-wide funding mechanism for SR-86/SR-86S improvements at the time the proponent of SP00375 or any subsequent implementing agencies are ready to request building permits, , the project proponent shall establish a Community Facilities District (CFD) or other funding mechanism, prior to the issuance of any building permit within SP00375, to help fund its share of the cost of SR-86S/SR-86 mainline improvements (SP00375's fair share is estimated preliminarily as 37% of the total cost of the SR86 additional lane improvements) and its share of interchange construction at SR-86S/81st Avenue and at SR-86/Town Center Way North (SP00375's share is estimated preliminarily as 95 to 100% of the total cost).

Prior to the issuance of any building permit for any implementing projects within SP00375, the project proponent shall deposit with Riverside County the funds necessary for the County to prepare the Preliminary Engineering Study, the Financial Plan, and the Nexus Study (" the studies"). The project proponent shall be eligible for fee credits, fee credits not to exceed the amount of actual costs for the Studies, after the establishment of the RBBD or other corridor-wide funding mechanism.

After building permits for 1,608 residential units have been issued, no further building permit, or permits, shall be issued for any residential or non-residential implementing project in SP00375 until the project proponent, or implementing projects within SP00375, have deposited funds for Riverside County to prepare an environmental document for adding one lane in each direction along SR-86S/SR-86 between 62nd Avenue and Marina Drive in Imperial County. The project proponent, or the implementing projects, will be eligible for fee credits, fee credits not to exceed the amount of actual costs for the Studies, after the establishment of the RBBD or other area-wide funding mechanism. Based on subsequent traffic studies and at the discretion of the Director of Transportation, the threshold number of residential units may be adjusted.

After building permits for 5,718 residential units have been issued, no further building permit, or permits, shall be issued for any residential or non-residential implementing project in SP00375 until Riverside County obtains environmental clearance to add one lane in each direction along SR-86S/SR-86 between 62nd Avenue and Marina Drive in Imperial County. Based on subsequent traffic studies and at the discretion of the Director of Transportation, the threshold number of residential units may be adjusted. TUMF credit, where eligible, shall be provided in accordance with CVAG's policies and approvals.

After building permits for 5,718 residential units have been issued, no further building permit, or permits, shall be issued for any residential or non-residential implementing project in SP00375 until SR-86 has been improved to add one lane in each direction between the northern boundary of SP00375 and Town Center Way North. Based on subsequent traffic studies and at the discretion of the Director of Transportation, the threshold number of residential units may be adjusted.

After building permits for 11,864 residential units have been issued, no further building permit, or permits, shall be issued for any residential or non-residential implementing project in SP00375 until a construction contract, or contracts shall have been let to improve SR-86S/SR-86 to add one lane in each direction between 62nd Avenue and Marina Drive in Imperial County.

After building permits for 12,788 residential units have been issued, no further building permit, or permits, shall be issued for any residential or non-residential implementing project in SP00375 until SR-86S/SR-86 shall have been constructed to provide three lanes in each direction between 62nd Avenue and Marina Drive in Imperial County. Depending on the progress of construction and at the discretion of the Director of Transportation, the threshold number of residential units may be adjusted.

30.TRANS 005 PRIOR TO ANY PROJECT APPROVAL	SP-SP375/IMPVTS SR-86 & SR86S	Status: INEFFECT	Conditions: Outstanding

Prior to the issuance of any building permit for any implementing projects within SP00375, the project proponent shall obtain Caltrans approval to install a traffic signal and construct eastbound and westbound left turn lanes at the intersection of SR-86S and 81st Avenue.

Prior to the issuance of any building permit for any implementing projects within SP00375, the project proponent shall obtain Caltrans approval to install a traffic signal at the intersection of SR-86 and Lincoln Street (between 83rd Avenue and 84th Avenue) and to provide a southbound left turn lane. The signal at this location will be temporary and shall be removed when a grade separation (no access to SR-86) is constructed at this location.

Prior to the issuance of the 659th occupancy permit within SP00375, or earlier if the need is indicated in traffic studies for implementing projects, the proponent of SP00375 and/or implementing projects shall install and activate a traffic signal at SR-86S and 81st Avenue, and shall construct eastbound and westbound left turn lanes.

Prior to the issuance of the 659th occupancy permit, or earlier if the need is indicated in traffic studies for implementing projects, the proponent of SP00375 and/or implementing projects shall install and activate a traffic signal at SR-86 and Lincoln Street, and shall provide a southbound left turn lane. Access at this location shall be temporary, and the signal at this location shall be removed when a grade separation (no access to SR-86) is constructed.

After building permits for 8,139 residential units have been issued, no further building permit, or permits, shall be issued for any residential or non-residential implementing project in SP00375 until the proponent of SP00375, and/or implementing projects within the SP, shall have constructed a new interchange on SR-86 at Town Center Way North (approximately at 85th Avenue).

Where the need is indicated in Traffic Impact Analyses (TIAs) to be conducted during the District Refinement Process (DRP) or based on TIAs for specific implementing projects, taking into consideration conditions prevailing at the time, and unless otherwise implemented by others, the proponent of SP00375 and/or implementing projects shall install and activate off-site traffic signals and construct additional turning or through lanes at intersections along SR-86S/SR-86

(between 62nd Avenue and Marina Way) when needed to mitigate the traffic impacts of implementing projects within SP00375, or shall make in lieu payments, or as approved by the Director of Transportation.

30.TRANS 006 PRIOR TO ANY PROJECT APPROVAL	SP - SP375/TRAFFIC SIGNALS	Status: INEFFECT	Conditions: Outstanding

The project proponent, or the implementing projects within the SP, shall be responsible for the design, installation and necessary modifications to all on-site traffic signals. Signals shall be installed, modified as needed, and shall be operational, or other traffic control measures, such as roundabouts shall be installed at the locations indicated in Exhibit 2.1C and Exhibits 6.2-B through 6.2-T of the TSS dated August 5, 2010.

Where the need is indicated in DRP-level or project-level TIAs and , unless the signals are designed and installed by others, the project proponent, or the implementing projects within the SP, shall also be responsible for the design, installation and necessary modifications to off-site traffic signals at the intersections listed below. Any on-site intersections on SR-86 and SR-86S are included in the "off-site" list, since they will help accommodate external traffic.

Prior to the issuance of any certificates of occupancy that would result in more than 658 dwelling units in SP00375, or sooner if the need is indicated in project-level TIAs, the following signals shall be installed and operational:

SR-86S (NS) at: 81st Avenue (EW)

SR-86 (NS) at: Lincoln Street (EW)

with no credit given for Traffic Signal Mitigation Fees

Prior to the issuance of any certificates of occupancy that would result in more than 2,600 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following signals shall be installed and operational:

81st Avenue (EW) at: Paseo Street (NS)

Prior to the issuance of any certificates of occupancy that would result in more than 2,818 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following signals shall be installed and operational, with credit toward signal mitigation fees if the signal is included in the DIF needs list at the time of installation.

Harrison Street (NS) at: 62nd Avenue (EW)

Harrison Street (NS) at: 66th Avenue (EW)

Harrison Street (NS) at: 70th Avenue (EW)

Harrison Street (NS) at: 74th Avenue (EW)

Harrison Street (NS) at: Pierce Street (EW)

Unless DRP-level or project-level TIAs indicate that one or more signals are not needed or can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 3,071 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level traffic studies, the following signals shall be installed and operational:

81st Avenue (EW) at: Harrison Street/SR-86 (NS)

with no credit given for Traffic Signal Mitigation Fees

Prior to the issuance of any certificates of occupancy that would result in more than 3,478 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level traffic studies, the following signals shall be installed and operational:

SR-86 (NS) at: Town Center Way (EW)

with no credit given for Traffic Signal Mitigation Fees

Prior to the issuance of any certificates of occupancy that would result in more than 5,284 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level traffic studies, the following signals shall be installed, or modified, and operational, with credit toward signal mitigation fees if the signal is included in the DIF needs list at the time of installation.

Harrison Street (NS) at: 72nd Avenue (EW)

Harrison Street (NS) at: 78th Avenue (EW)

SR-86S (NS) at: 70th Avenue (EW)

SR-86S (NS) at: 74th Avenue (EW)

SR-86 (NS) at: Desert Shores Drive (EW)

SR-86 (NS) at: Brawley Avenue (EW)

SR-86 (NS) at: Sea Oasis Boulevard (EW)

SR-86 (NS) at: Marina Drive (EW)

unless otherwise approved by Imperial County, or DRP-level or project-level TIAs indicate that one or more signals are not needed or can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 13,260 dwelling units in SP00375, or sooner if the need is indicated in DRP-level traffic studies, signals shall be installed, modified as needed, and shall be operational, or other traffic control measures, such as roundabouts, shall be installed at the locations indicated in Exhibit 2.1C and Exhibits 6.2-B through 6.2-T of the TSS dated August 5, 2010.

with no credit given for Traffic Signal Mitigation Fees

The modification of traffic signals to accommodate the phased improvements shall be the responsibility of the SP00375 proponent or the implementing projects.

30.TRANS 008 PRIOR TO ANY PROJECT APPROVAL	SP - SP375/GEOMETRICS	Status: INEFFECT	Conditions: Outstanding

The project proponent, or the implementing projects within the SP, shall be responsible for the necessary improvements or modifications at all on-site intersections. The improvements shall be made at the locations indicated and with the number of lanes as specified in Exhibit 2.1C and Exhibits 6.2-B through 6.2-T of the TSS dated August 5, 2010.

Where the need is indicated in DRP-level or project-level TIAs and, unless the improvements are made by others prior to the time they are needed, the project proponent, or the implementing projects within the SP, shall also be responsible for the improvements at the off-site intersections listed below. If eligible under any applicable funding programs in effect at the time of implementation, these improvements may qualify for fee credits. Any on-site intersections on SR-86 and SR-86S are included in the "off-site" list, since they will help accommodate external traffic.

While the intersection improvements, both on-site and off-site, may be made in phases as the need arises, all improvements shall be designed and constructed to be consistent with the ultimate configuration of the intersection. All improvements listed below can be deferred to a later stage, or accelerated to an earlier stage of development, subject to the approval of the Director of Transportation based on subsequent traffic studies. Depending on the progress of construction and at the discretion of the Director of Transportation, the threshold number of residential units may be adjusted.

Prior to the issuance of any certificates of occupancy that would result in more than 658 dwelling

units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following intersection improvements shall be made:

The intersection of SR-86S (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one right turn lane Southbound:One left turn lane, two through lanes, one right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of SR-86S (N/S) and Lincoln Street (E/W) shall provide the following geometrics:

Northbound:Two through lanes, one right turn lane Southbound:One left turn lane, two through lanes Eastbound:N/A Westbound:One left turn lane, one shared through/right turn lane

The intersection of Paseo Street (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One shared left turn/right turn lane - stop control Southbound:NA Eastbound:One shared through/right turn lane Westbound:One shared left turn/through lane

The intersection of Lincoln Street (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane Southbound:NA Eastbound:One right turn lane Westbound:NA

Prior to the issuance of any certificates of occupancy that would result in more than 2,818 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following offsite intersection improvements shall be made. If eligible under any applicable funding programs in effect at the time of implementation, these improvements may qualify for fee credits.

The intersection of Harrison Street (N/S) and 62nd Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one right turn lane Southbound:One left turn lane, one through lane, one right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of Harrison Street (N/S) and 66th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one right turn lane Southbound:One left turn

lane, one through lane, one right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of Harrison Street (N/S) and 70th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one shared through/right turn lane Southbound:One left turn lane, one shared through/right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of Harrison Street (N/S) and 74th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one right turn lane Southbound:One left turn lane, one through lane, one right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of Harrison Street (N/S) and Pierce Street (E/W) shall provide the following geometrics:

Northbound:One through lane, one right turn lane Southbound:One left turn lane, one through lane Eastbound:N/A Westbound:One left turn lane, one right turn lane

The intersection of SR-86S (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one right turn lane Southbound:Two left turn lanes, two through lanes, one right turn lane Eastbound:One left turn lane, one through lane, one right turn lane Westbound:One left turn lane, one through lane, one right turn lane with overlap phasing

NOTE: Signal modification will be necessary to accommodate a second southbound left turn lane, an eastbound right turn lane and a westbound right turn lane with overlap phasing.

The intersection of Paseo Street (NS) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one right turn lane Southbound:N/A Eastbound:One through

lane, one right turn lane Westbound:One left turn lane, one through lane

unless DRP-level or project-level TIAs indicate improvements at one or more intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 2,818 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following intersection improvements shall be made:

The intersection of Harrison Street/Village Way (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one right turn lane Southbound:Two left turn lanes, one shared through/right turn lane Eastbound:One shared left turn/through lane, one right turn lane Westbound:Two left turn lanes, one shared through/right turn lane

unless DRP-level or project-level TIAs indicate improvements at this intersection are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 3,478 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following intersection improvements shall be made:

The intersection of SR-86 (N/S) and Town Center Way North (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one shared through/right turn lane Southbound:One left turn lane, two through lanes, one right turn lane with overlap Eastbound:Two left turn lanes, two through lanes, one right turn lane Westbound:One left turn lane, two through lanes, one right turn lane

unless DRP-level or project-level TIAs indicate improvements at this intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 5,284 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following offsite intersection improvements shall be made. If eligible under any applicable funding programs in effect at the time of implementation, these improvements may qualify for fee credits.

The intersection of Harrison Street (N/S) and 64th Avenue (E/W) shall provide the following

geometrics:

Northbound:One shared through/right turn lane Southbound:One shared left turn/through lane Eastbound:NA Westbound:One shared left turn/right turn lane - stop control

The intersection of Harrison Street (N/S) and 72nd Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one shared through/right turn lane Southbound:One left turn lane, one shared through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

The intersection of Harrison Street (N/S) and 74th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one right turn lane Southbound:One left turn lane, one through lane, one right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

NOTE: Signal modification will be necessary to accommodate an eastbound left turn lane and a westbound left turn lane.

The intersection of Harrison Street (N/S) and Pierce Street (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one right turn lane Southbound:One left turn lane, one shared through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

NOTE: Signal modification will be necessary to accommodate a northbound left turn lane.

The intersection of Harrison Street (N/S) and 78th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one right turn lane Southbound:One left turn lane, two through lanes, one right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of Harrison Street (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, three through lanes, one right turn lane with overlap phasing Southbound:Two left turn lanes, two through lanes, one shared through/right turn lane Eastbound:One left turn lane, one through lane, one shared through/right turn lane Westbound:Two left turn lanes, one through lane, one free-flow right turn lane

NOTE: Signal modification will be necessary to accommodate three northbound through lanes, overlap phasing on the northbound approach, three southbound through lanes, and a westbound right turn lane.

The intersection of Polk Street (N/S) and 74th Avenue (E/W) shall provide the following geometrics:

Northbound:NA Southbound:One shared left turn/right turn lane - stop control Eastbound:One shared left turn/through lane Westbound:One shared through/right turn lane

The intersection of Fillmore Street (N/S) and 78th Avenue (E/W) shall provide the following geometrics:

Northbound:One shared left turn/right turn lane - stop control Southbound: NA Eastbound:One shared through/right turn lane Westbound:One shared left turn/through lane

The intersection of SR-86S (N/S) and 62nd Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one shared through/right turn lane Southbound:One left turn lane, two through lanes, one shared through/right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

NOTE: Signal modification will be necessary to accommodate three northbound through lanes, three southbound through lanes, an eastbound left turn lane, and a westbound left turn lane.

The intersection of SR-86S (N/S) and 66th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one shared through/right turn lane Southbound:One left turn lane, two through lanes, one shared through/right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:Two left turn lanes, one shared through/right turn lane

NOTE: Signal modification will be necessary to accommodate three northbound through lanes, three southbound through lanes, an eastbound left turn lane, and two westbound left turn lanes.

The intersection of SR-86S (N/S) and 70th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one shared through/right turn lane

Southbound:One left turn lane, two through lanes, one shared through/right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of SR-86S (N/S) and 74th Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one shared through/right turn lane Southbound:One shared left turn/through lane, one through lane, one shared through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

The intersection of SR-86 (N/S) and Desert Shores Drive (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one right turn lane Southbound:One left turn lane, two through lanes, one shared through/right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of SR-86 (N/S) and Brawley Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one shared through/right turn lane Southbound:One left turn lane, two through lanes, one right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

The intersection of SR-86 (N/S) and Sea Oasis Boulevard (E/W) shall provide the following geometrics:

Northbound:One shared left turn/through lane, one shared through/right turn lane Southbound:One left turn lane, one through lane, one shared through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

The intersection of SR-86 (N/S) and Marina Drive (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one through lane, one shared through/right turn lane Southbound:One left turn lane, one through lane, one shared through/right turn lane Eastbound:One left turn lane, one shared through/right turn lane Westbound:One left turn lane, one shared through/right turn lane

The intersection of Village Way (N/S) and 82nd Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes Southbound:Two through lanes, one right turn lane Eastbound:One left turn lane, one right turn lane Westbound:NA

The intersection of Travertine Estates (N/S) and Paseo Street (E/W) shall provide the following geometrics:

Northbound:One shared left turn/through/right turn lane Southbound:One shared left turn/through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

The intersection of A Street (N/S) and Desert Shores Drive (E/W) shall provide the following geometrics:

Northbound:One shared left turn/through/right turn lane Southbound:One shared left turn/through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

The intersection of Sea Oasis Drive (N/S) and Travertine Estates (E/W) shall provide the following geometrics:

Northbound:One shared left turn/through lane Southbound:One shared through/right turn lane Eastbound:One shared left turn/right turn lane Westbound:NA

The intersection of Sea Oasis Drive (N/S) and Desert Shores Drive (E/W) shall provide the following geometrics:

Northbound:One shared left turn/through/right turn lane Southbound:One shared left turn/through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

unless otherwise approved by Imperial County, or unless DRP-level or project-level TIAs indicate improvements at one or more intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 5,464 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following intersection improvements shall be made:

The intersection of Lincoln Street (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, one shared through/right turn lane Southbound:One shared left turn/through/right turn lane Eastbound:One shared left turn/through/right turn lane Westbound:One shared left turn/through/right turn lane

unless DRP-level or project-level TIAs indicate improvements at one or more intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of

development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 5,718 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following intersection improvements shall be made:

The intersection of SR-86 (N/S) and Town Center Way North (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes Southbound:One left turn lane, two through lanes, one right turn lane with overlap Eastbound:Two left turn lanes, one through lane, one right turn lane Westbound:One left turn lane, one through lane, one right turn lane

unless DRP-level or project-level TIAs indicate improvements at one or more intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 5,770 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following intersection improvements shall be made:

The intersection of SR-86S (N/S) and 81st Avenue (E/W) shall provide the following geometrics:

Northbound:One left turn lane, two through lanes, one shared through/right turn lane Southbound:Two left turn lanes, three through lanes, one right turn lane Eastbound:Two left turn lanes, two through lanes, one right turn lane Westbound:One left turn lane, two through lanes, one right turn lane with overlap phasing

NOTE: Signal modification will be necessary to accommodate three northbound through lanes, three southbound through lanes, two eastbound left turn lanes, two eastbound through lanes, and two westbound through lanes.

unless DRP-level or project-level TIAs indicate improvements at this intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

Prior to the issuance of any certificates of occupancy that would result in more than 8,139 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level TIAs, the following intersection improvements shall be made:

The intersection of Paseo Street (N/S) and 81st Avenue (E/W) shall provide the following

geometrics:

Northbound:One left turn lane, one shared left turn/through/right turn lane Southbound:One left turn lane, one shared through/right turn lane Eastbound:One left turn lane, one through lane, one right turn lane Westbound:One left turn lane, one shared through/right turn lane

unless DRP-level or project-level TIAs indicate improvements at one or more intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

NOTE: Signal modification will be necessary to accommodate a northbound left turn lane, the southbound approach, eastbound left turn and right turn lanes, and the westbound left turn lane.

The intersection of SR-86 Southbound Ramps (N/S) and Town Center Way (E/W) shall provide the following geometrics:

Northbound:NA Southbound:Two left turn lanes, two right turn lanes Eastbound:Two through lanes, two right turn lanes Westbound:Two through lanes, one right turn lane

unless DRP-level or project-level TIAs indicate improvements at one or more intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

The intersection of SR-86 Northbound Ramps (N/S) and Town Center Way (E/W) shall provide the following geometrics:

Northbound:Two left turn lanes, one right turn lane Southbound:NA Eastbound:Two through lanes, two right turn lanes Westbound:Two through lanes, two right turn lanes

unless DRP-level or project-level TIAs indicate improvements at one or more intersections are not needed, or fewer lanes are needed, or improvements can be deferred to a later stage of development, subject to approval by the Director of Transportation.

All improvements on Caltrans facilities shall conform to Caltrans design guidelines and shall be subject to Caltrans approval.

All improvements listed are requirements for interim conditions only. Full right-of-way and roadway half sections adjacent to the SP00375 property for the ultimate roadway cross-section per the County's Road Improvement Standards and Specifications must be provided.

All implementing projects within the SP00375 shall be subject to a condition of approval providing that: Any off-site widening required to provide these geometrics shall be the responsibility of the landowner/developer, consistent with Riverside County Ordinance 460 Section 3.2J.

30.TRANS 009
PRIOR TO ANY PROJECT APPROVAL | SP - SP375/PEDESTRIAN PATHS | Status: INEFFECT | Conditions: Outstanding

The project proponent and individual implementing projects within SP00375 shall implement the system of Travertine Point Walkways/Pedestrian Paths as illustrated in Exhibits 3.1-A and 3.1-B of the TSS.

30.TRANS 010
PRIOR TO ANY PROJECT APPROVAL | SP - SP375/BIKEWAYS | Status: INEFFECT | Conditions: Outstanding

The project proponent and individual implementing projects within SP00375 shall implement the system of Travertine Point Bikeways Plan as illustrated in Exhibits 3.2-A and 3.2-B of the TSS.

30.TRANS 011
PRIOR TO ANY PROJECT APPROVAL | SP - SP375/TRANSIT FEATURES | Status: INEFFECT | Conditions: Outstanding

The project proponent and individual implementing projects within SP00375 shall implement the Travertine Point Transit Features as illustrated in Exhibits 4.1-A nd 4.1-B of the TSS.

30.TRANS 012
PRIOR TO ANY PROJECT APPROVAL | SP - SP375/NEV ACCOMMODATIONS | Status: INEFFECT | Conditions: Outstanding

The project proponent and individual implementing projects within SP00375 shall implement the Travertine Point Neighborhood Electrical Vehicle Accommodations as illustrated in Exhibit 6.1-I of the TIA. State legislation will be required to allow NEVs to use roadways that have a speed limit higher than 35 mph. The applicant shall assist the County in obtaining legislative approval.

30.TRANS 013
PRIOR TO ANY PROJECT APPROVAL | SP - SP375/DRAINAGE STUDIES | Status: INEFFECT | Conditions: Outstanding

Drainage studies will be required for all subsequent development proposals within the boundaries of Specific Plan No. 375 as approved by the Transportation Department.

30.TRANS 014
PRIOR TO ANY PROJECT APPROVAL | SP - SP375/TUMF | Status: INEFFECT | Conditions: Outstanding

Prior to the issuance of a building permit, the applicant shall pay the Transportation Uniform Mitigation Fee (TUMF) in accordance with the fee schedule in effect at the time of issuance, pursuant to Ordinance No. 673.

30.TRANS 015
PRIOR TO ANY PROJECT APPROVAL | SP - SP375/ROAD IMPROVEMENTS | Status: INEFFECT | Conditions: Outstanding

Roadways internal to the project shall be developed as needed for development and as determined based on the recommendations presented in Exhibits 6.2-B through 6.2-T of the TSS dated August 5, 2010.

Prior to the issuance of any building permits within SP00375, the project proponent shall construct Lincoln Street between the northern project boundary and 81st Avenue and 81st

Avenue between SR-86 and Lincoln Street as two-lane interim roadways (34 ft traveled way).

Prior to the issuance of any building permits within Planning Areas 1-1, 1-2, or 1-9 within SP00375, the project proponent shall construct 81st Avenue between the western boundary of Planning Area 1-1 and SR-86S as a Secondary (64-ft. curb-to-curb, 100-ft. right-of-way). At the discretion of the Director of Transportation, the right-of-way requirement in the off-site portion of the facility may be reduced, so long as four through travel lanes and necessary turn lanes at intersections are provided.

Prior to the issuance of any building permits within Planning Areas 1-1, 1-2, or 1-9 within SP00375, the project proponent shall realign, as necessary, the portion of SR-86/Harrison Street north of 81st Avenue to form the four-legged intersection at 81st Avenue/ SR-86/Village Way and shall get Caltrans concurrence for the relinquishment of the portion of SR-86 between 81st Avenue and SR-86S.

Prior to the issuance of any certificates of occupancy that would result in more than 7,078 dwelling units in SP00375, or sooner if the need is indicated in DRP-level or project-level traffic studies, the project proponent, or implementing projects within SP00375, shall construct 81st Avenue between SR-86S and Paseo Street as a Major. Based on subsequent traffic studies and at the discretion of the Director of Transportation, the threshold number of residential units may be adjusted.

100.PLANNING 002 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - COUNT RES BUILD PERMITS	Status: INEFFECT	Conditions: Outstanding

This condition is applied to assist the Planning Department with tracking the build-out of the SPECIFIC PLAN by automatically counting all the issuance of all new residential building permits on the County's Land Management System which are electronically associated with the Specific Plan. Accordingly, this condition will not allow more than 16650 residential building permits to be issued within the SPECIFIC PLAN.

100.PLANNING 003 PRIOR TO ISSUE GIVEN BLDG PRMT	SP -* COUNT RES PRMTS IN DRP	Status: INEFFECT	Conditions: Outstanding

This Condition is applied to assist the Planning Department with tracking the build-out of each DISTRICT within the SPECIFIC PLAN.

Each DISTRICT within the SPECIFIC PLAN shall receive a different development level designation when the DISTRICT REFINEMENT PLAN application is filed. All subsequent implementing projects, including any processed concurrently with the DISTRICT REFINEMENT PLAN shall be attached to the development level designation for the corresponding DISTRICT REFINEMENT PLAN. This condition shall be applied to each DISTRICT REFINEMENT PLAN to automatically count the development of all new residential dwelling units for that DISTRICT on the County's Land Management System. Accordingly, this condition will not allow more than _____ residential dwelling units to be issued within DISTRICT _____.

The total dwelling unit count shall be tracked in a separate spreadsheet by the Planning Director and updated by the applicants for each new project. This is part of the application submittal requirements per the SPECIFIC PLAN.

100.PLANNING 004 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - AFFORDABILITY REQ (1)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 3,133rd building permit within the SPECIFIC PLAN, at least 117 affordable housing units shall have been constructed and operating per the requirements of SPECIFIC PLAN section 3.13.1 subsection 5.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 005 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - AFFORDABILITY REQ (2)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 6,658th building permit within the SPECIFIC PLAN, at least 317 affordable housing units shall have been constructed and operating per the requirements of SPECIFIC PLAN section 3.13.1 subsection 5.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 006 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - AFFORDABILITY REQ (3)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 9,628th building permit within the SPECIFIC PLAN, at least 833 affordable housing units shall have been constructed and operating per the requirements of SPECIFIC PLAN section 3.13.1 subsection 5.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 007 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - AFFORDABILITY REQ (4)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 15,160th building permit within the SPECIFIC PLAN, at least 1,416 affordable housing units shall have been constructed and operating per the requirements of SPECIFIC PLAN section 3.13.1 subsection 5.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 008 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - AFFORDABILITY REQ (5)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 16,405th building permit within the SPECIFIC PLAN, at least 1,666 affordable housing units shall have been constructed and operating per the requirements of SPECIFIC PLAN section 3.13.1 subsection 5.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 009 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - NONRES JOBS REQ (1)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 3,250th building permit within the SPECIFIC PLAN, at least 89,000 square feet of nonresidential development shall have been constructed and occupied per the requirements of SPECIFIC PLAN section 3.13.8 subsection 2. The intent of this condition of approval is to assure that an adequate number of jobs will be provided for the project. Shell buildings, or construction alone shall not satisfy this condition of approval. Planning Department inspection of operating uses within the 89,000 square feet may be required.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 010 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - NONRES JOBS REQ (2)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 6,500th building permit within the SPECIFIC PLAN, a cumulative total of at least 529,000 square feet of nonresidential development (an addition of 440,000 square feet over the requirement shown in condition of approval number 100.Planning.9) shall have been constructed and occupied per the requirements of SPECIFIC PLAN section 3.13.8 subsection 2. The intent of this condition of approval is to assure that an adequate number of jobs will be provided for the project. Shell buildings, or construction alone shall not satisfy this condition of approval. Planning Department inspection of operating uses within the additional 440,000 square feet may be required.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 011 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - NONRES JOBS REQ (3)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 9,500th building permit within the SPECIFIC PLAN, a cumulative total of at least 1,629,500 square feet of nonresidential development (an addition of 1,100,000 square feet over the requirement shown in condition of approval number 100.Planning.10) shall have been constructed and occupied per the requirements of SPECIFIC PLAN section 3.13.8 subsection 2. The intent of this condition of approval is to assure that an adequate number of jobs will be provided for the project. Shell buildings, or construction alone shall not satisfy this condition of approval. Planning Department inspection of operating uses within the additional 1,100,000 square feet may be required.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 012 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - NONRES JOBS REQ (4)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 13,500th building permit within the SPECIFIC PLAN, a cumulative total of at least 4,029,500 square feet of nonresidential development (an addition of 2,400,000 square feet over the requirement shown in condition of approval number 100.Planning.11) shall have been constructed and occupied per the requirements of SPECIFIC PLAN section 3.13.8 subsection 2. The intent of this condition of approval is to assure that an adequate number of jobs will be provided for the project. Shell buildings, or construction alone shall not satisfy this condition of approval. Planning Department inspection of operating uses within the additional 2,400,000 square feet may be required.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 013 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - NONRES JOBS REQ (5)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 15,000th building permit within the SPECIFIC PLAN, a cumulative total of at least 5,029,500 square feet of nonresidential development (an addition of 1,000,000 square feet over the requirement shown in condition of approval number 100.Planning.12) shall have been constructed and occupied per the requirements of SPECIFIC PLAN section 3.13.8 subsection 2. The intent of this condition of approval is to assure that an adequate number of jobs will be provided for the project. Shell buildings, or construction alone shall not satisfy this condition of approval. Planning Department inspection of operating uses within the additional 1,000,000 square feet may be required.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 014 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - FIRE STATIION REQ (1)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 2,000th building permit within the SPECIFIC PLAN, or to the satisfaction of the RCFD, a fire station for the RCFD within the Riverside County portion of the proposed project shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 015 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - FIRE STATION REQ (2)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 4,000th building permit within the SPECIFIC PLAN, or to the satisfaction of the RCFD, a second fire station for the RCFD within the Riverside County portion of the proposed project shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 016 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - SHERIFF STATION REQ (1)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 3,249th building permit within the SPECIFIC PLAN, or to the satisfaction of the RCSD, a sheriff's substation for the RCSD within the Riverside County portion of the proposed project shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 017 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - SHERIFF STATION REQ (2)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 6,857th building permit within the SPECIFIC PLAN, or to the satisfaction of the RCSD, a second sheriff's substation for the RCSD within the Riverside County portion of the proposed project shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 018 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - PARK PLANS REQ (1)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 2,250th building permit within the SPECIFIC PLAN, detailed plans for a minimum of 43 additional acres of park (representing 5 acres per thousand) shall be approved by the Planning Department. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 019 PRIOR TO ISSUE	SP - PARK CONST (1)	Status: INEFFECT	Conditions: Outstanding

GIVEN BLDG PRMT

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 3,250th building permit within the SPECIFIC PLAN a minimum of 43 acres of park land shall be constructed and opened.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 020
PRIOR TO ISSUE GIVEN BLDG PRMT — SP - PARK PLANS REQ (2) — Status: INEFFECT — Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 5,500th building permit within the SPECIFIC PLAN, detailed plans for a minimum of 48 additional acres of park (for a total of 91 acres representing 5 acres per thousand) shall be approved by the Planning Department. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 021
PRIOR TO ISSUE GIVEN BLDG PRMT — SP - PARK CONST (2) — Status: INEFFECT — Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 6,500th building permit within the SPECIFIC PLAN, detailed plans for a minimum of 48 additional acres of park (for a total of 91 acres representing 5 acres per thousand) shall be approved by the Planning Department. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 022
PRIOR TO ISSUE GIVEN BLDG PRMT — SP - PARK PLANS REQ (3) — Status: INEFFECT — Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as

enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 9,000th building permit within the SPECIFIC PLAN, detailed plans for a minimum of 47 additional acres of park (for a total of 138 acres representing 5 acres per thousand) shall be approved by the Planning Department. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

		Status:	Conditions:
100.PLANNING 023 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - PARK CONST (3)	INEFFECT	Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 10,000th building permit within the SPECIFIC PLAN a minimum of 47 acres of park land (for a total of 138 acres) shall be constructed and opened. To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

		Status:	Conditions:
100.PLANNING 024 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - PARK PLANS REQ (4)	INEFFECT	Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 12,500th building permit within the SPECIFIC PLAN, detailed plans for a minimum of 68 additional acres of park (for a total of 206 acres representing 5 acres per thousand) shall be approved by the Planning Department. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

		Status:	Conditions:
100.PLANNING 025 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - PARK CONST (4)	INEFFECT	Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 13,500th building permit within the SPECIFIC PLAN a minimum of 68 acres of park land (for a total of 206 acres) shall be constructed and opened. To

track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 026 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - LIBRARY PLANS REQ (1)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 2,500th building permit within the SPECIFIC PLAN, detailed plans for an estimated 5,000-square-foot library facility shall be approved by the Planning Department in coordination with the Riverside County Library System. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 027 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - LIBRARY CONST (1)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 3,500th building permit within the SPECIFIC PLAN for an estimated 5,000-square-foot library facility shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 028 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - LIBRARY PLANS REQ (2)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 6,000th building permit within the SPECIFIC PLAN, detailed plans for an estimated 5,000-square-foot library facility (in addition to library space previously required) shall be approved by the Planning Department in coordination with the Riverside County Library System. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 029	SP - LIBRARY CONST (2)	Status:	Conditions:

PRIOR TO ISSUE INEFFECT Outstanding
GIVEN BLDG PRMT

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 7,000th building permit within the SPECIFIC PLAN for an estimated 5,000-square-foot library facility (in addition to library space previously required) shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 030
PRIOR TO ISSUE SP - LIBRARY PLANS REQ (3) Status: Conditions:
GIVEN BLDG PRMT INEFFECT Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 9,500th building permit within the SPECIFIC PLAN, detailed plans for an estimated 5,000-square-foot library facility (in addition to library space previously required) shall be approved by the Planning Department in coordination with the Riverside County Library System. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 031
PRIOR TO ISSUE SP - LIBRARY CONST (3) Status: Conditions:
GIVEN BLDG PRMT INEFFECT Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 10,500th building permit within the SPECIFIC PLAN an estimated 5,000-square-foot library facility (in addition to library space previously required) shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 032
PRIOR TO ISSUE SP - LIBRARY PLANS REQ (5) Status: Conditions:
GIVEN BLDG PRMT INEFFECT Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as

enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 13,000th building permit within the SPECIFIC PLAN, detailed plans for an estimated 5,000-square-foot library facility (in addition to library space previously required) shall be approved by the Planning Department in coordination with the Riverside County Library System. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

This last library may be in Imperial County as opposed to Riverside County. The Plans shall be coordinated with the Riverside County Library System and/or the Imperial County Free Library System. The applicant shall execute a joint Memorandum of Understanding with both the Riverside County Library System and Imperial County Free Library System that provides for the location of this library site in either Riverside or Imperial County and that this library will provide services to both systems. Regardless of the location of this library, the applicant shall participate in development fees for library services as required by each County. In the event that the library is located in Imperial County, this condition of approval shall be set to NOT APPLY.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 033 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - LIBRARY CONST (5)	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 14,000th building permit within the SPECIFIC PLAN an estimated 5,000-square-foot library facility (in addition to library space previously required) shall be constructed and operating. This structure may, alternatively, be located in Imperial County in which case this condition of approval shall be set to NOT APPLY.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 034 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - URGENT CARE PLANS REQ	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 1,500th building permit within the SPECIFIC PLAN, detailed plans for an urgent care medical facility within the Travertine Point Specific Plan area shall be approved by the Planning Department. All designs shall substantially conform to the design criteria as specified in the DISTRICT REFINEMENT PLAN for the respective DISTRICT.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 035 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - URGENT CARE CONST	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 2,500th building permit within the SPECIFIC PLAN an urgent care medical facility shall be constructed and operating.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 037 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - HOSPITAL SITE	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 5,000th building permit within the SPECIFIC PLAN, a site for a hospital within the Travertine Point Specific Plan area or other nearby location acceptable to the Planning Director shall be identified and approved by the Planning Department. The development of such site shall be subject to an agreement with a health care provider to construct and operate a hospital at such time as a provider determines there is sufficient need to make the construction and operation of a hospital financially feasible. The design shall substantially conform to the design criteria as specified in the district refinement plan for the respective district.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

100.PLANNING 038 PRIOR TO ISSUE GIVEN BLDG PRMT	SP - HOSPITAL CONST	Status: INEFFECT	Conditions: Outstanding

Whenever a condition of approval uses the term "building permit" to trigger an event or to cause another action to take place, the condition shall be interpreted to mean "Dwelling Units" as enumerated within the TOTAL DWELLING UNIT TRACKING MATRIX.

PRIOR TO THE ISSUANCE OF THE 15,000th building permit within the SPECIFIC PLAN a structure for a hospital shall be constructed and operational.

To track total dwelling unit counts see condition "10.Planning.58 DU/BUILDING PERMIT MATRIX."

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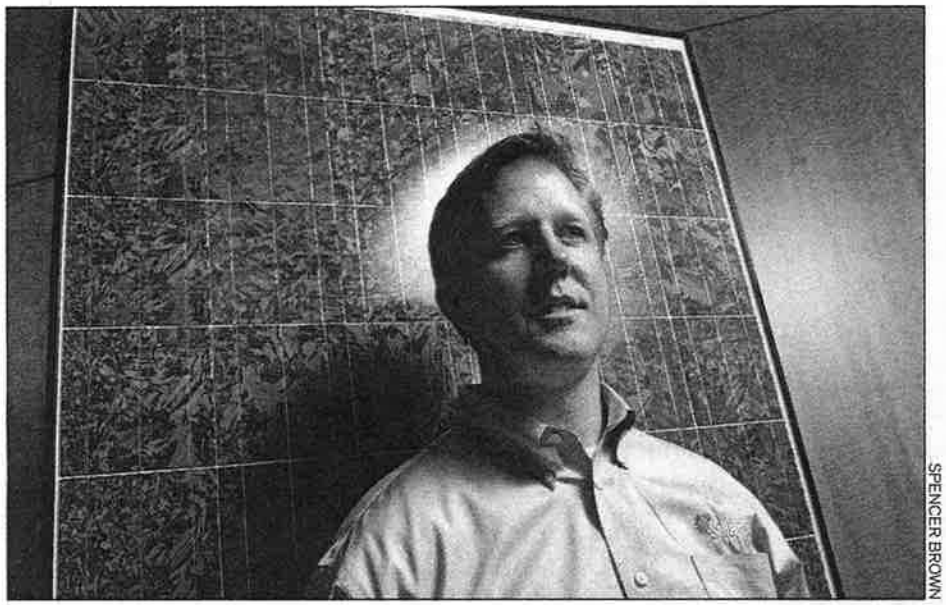
Zero-net-energy homes: More feasible, still rare

BY BLANCA TORRES
San Francisco Business Times

California lawmakers set an ambitious goal to have all new homes achieve zero net energy use by 2020. With less than a decade to go, homebuilders have a lot of catching up to do.

So far, only one developer, Shea Homes, offers its "no-electric-bill home" model through its SheaXero brand — which it launched last year, but only in communities aimed at retirees.

The technology to make homes generate more energy than they consume has been available for years. While many homebuilders boast of energy-efficient homes or solar panels as an option, getting down to zero net energy is still rare. That may change very quickly thanks to a drop in the cost of solar panels as well as growing consumer demand.



SPENCER BROWN

Solar City's Walter Cuculic says buyers have a choice about where to buy electricity.

For Shea, the goal was to help the environment, but more importantly to reduce energy bills for its buyers who tend to live on fixed incomes and want to live in sustainable homes.

"Yes, (zero net energy) increases the costs for the homebuilder, but you're saving money over time," said Jason Enos, general manager for Shea Homes. "Sometime in the future, solar will be a standard feature like a microwave or air conditioning."

Shea started offering the Xero homes in early 2012 in California, Washington, Arizona, Nevada and Florida, and has sold close to 1,000 units. In the Bay Area, Shea builds those models at its Trilogy development in Brentwood in east Contra Costa County that is restricted to homeowners age 55 and older.

The homes were designed to cut energy usage while generating energy, mostly via solar panels.

Shea spent more than a year researching how its homes could achieve zero net energy, which Enos said cost about 10 to 12 percent more to produce. Shea buyers won't notice a difference in price for a Xero home, Enos said, but will save hundreds of dollars per year on energy. In the Bay Area, buyers pay a connection fee to Pacific Gas & Electric, about $4 per month or $48 a year.

To develop its Xero line, Shea partnered with San Mateo-based SolarCity, a provider of clean energy services.

Walter Cuculic, national manager of SolarCity's homebuilding program, said the company has worked with numerous owners of custom homes to achieve zero net energy, but Shea was the first large-scale builder. The company is now developing similar programs for other builders such as Toll Brothers, Pulte Homes, Del Webb Corp. and Taylor Morrison. Shea has launched its Xero brand in 10 communities and plans six more this year.

"(Zero net energy homes) are truly giving the homebuyer more choice about where you buy power," Cuculic said. "You're either going to buy it from the builder or the utility. It's about who provides the better price for the energy."

Cuculic is surprised it has taken so long for zero-net-energy homes to gain traction with homebuilders, especially with California and the U.S. Department of Energy calling for all new homes to reach zero net energy by 2030.

Solar prices have come down. "It's much more feasible than people thought," to reach those goals, Cuculic said. "If you can incorporate (zero net energy) into new construction, the cost is much lower than retrofitting existing homes."

In Vermont, a company called Vantem just rolled out its Smarthouze line of homes built in a factory and assembled onsite that are designed to achieve zero net energy. The company produced energy-efficient insulation and walls before shifting toward complete homes — a move that attracted an investment from Transformative Energy and Materials Capital LLC.

Roger Berry, a partner with the investor, said zero-net-energy homes will do for home building what the Toyota Prius did for cars — turning a luxury or cost-prohibitive technology into an industry standard.

"(We) feel that a real paradigm shift is needed ... to get all the way to zero energy," Berry said. "Halfway steps in this market don't reallly change consumer behavior in fundamental ways."

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Polaris predicted the resurgence of condo market