

4.9 GREENHOUSE GAS EMISSIONS

This section addresses impacts related to greenhouse gas emissions and global climate change.

4.9.1 Setting

a. Global Climate Change. Global climate change (GCC) is a change in the average weather that is measured by temperature, wind patterns, precipitation, and storms over a long period of time. The baseline, against which these changes are measured, originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed an unprecedented acceleration in the rate of warming during the past 150 years.

GCC is a documented effect. Although the degree to which the change is caused by anthropogenic (man-made) sources is still under study, the increase in warming has coincided with the global Industrial Revolution, which has seen the widespread reduction of forests to accommodate urban centers and agriculture and the use of fossil fuels, primarily burning of coal, oil, and natural gas for energy. Per the United Nations Intergovernmental Panel on Climate Change (IPCC, 2007), the understanding of anthropogenic warming and cooling influences on climate has led to a very high confidence (90% or greater chance) that the global average net effect of human activities since 1750 has been one of warming. Most of the observed increase in global average temperatures, since the mid-20th century, is very likely due to the observed increase in anthropogenic greenhouse gas concentrations per the IPCC (November 2007). While some individual scientists disagree with some of the findings of the IPCC, the overwhelming majority of scientists working on climate change agree with the main conclusions, as do the vast majority of major scientific societies and national academies of science. Disagreement within the scientific community is always present for all issues; however, the current state of knowledge suggests that GCC is occurring, with eleven of the last twelve years (1995-2006) ranking among the twelve warmest years in the instrumental record of global surface temperature since 1850 (IPCC, 2007). In addition, the majority of scientists agree that anthropogenic sources are a main, if not primary, contributor to the GCC warming.

5.3.1 Greenhouse Gases (GHGs)

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG), analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O_x), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur



hexafluoride (SF₆) (Cal EPA, 2006b).

The accumulation of GHGs in the atmosphere regulates Earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (CAT, 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The following discusses the primary GHGs of concern.

Carbon Dioxide. The global carbon cycle is made up of large carbon flows and reservoirs. Billions of tons of carbon in the form of CO₂ are absorbed by oceans and living biomass (i.e., sinks) and are emitted to the atmosphere annually through natural processes (i.e., sources). When in equilibrium, carbon fluxes among these various reservoirs are roughly balanced (USEPA, April 2008). CO₂ was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the last half of the 20th century. Concentrations of CO₂ in the atmosphere have risen approximately 35%, since the Industrial Revolution. Per the IPCC (2007), the global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 parts per million (ppm) to 379 ppm in 2005. The atmospheric concentration of CO₂ in 2005 exceeds the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores. The average annual carbon dioxide concentration growth rate was larger during the last 10 years (1995–2005 average: 1.9 ppm per year) than it has been since the beginning of continuous direct atmospheric measurements (1960–2005 average: 1.4 ppm per year), although there is year-to-year variability in growth rates.

Methane. CH₄ is an effective absorber of radiation, though its atmospheric concentration is less than that of CO₂ and its lifetime in the atmosphere is limited to 10-12 years. It is approximately 20 times more effective at trapping heat in the atmosphere than CO₂ (global warming potential [GWP] 20x that of CO₂). Over the last 250 years, the concentration of CH₄ in the atmosphere increased by 148% (IPCC 2007). Anthropogenic sources of CH₄ include landfills, natural gas and petroleum systems, agricultural activities, coal mining, wastewater treatment, stationary and mobile combustion, and certain industrial processes (USEPA, April 2008).

Nitrous Oxide. Concentrations of nitrous oxide (N₂O) also began to rise at the beginning of the industrial revolution. N₂O is produced by microbial processes in soil and water, including those reactions which occur in fertilizers that contain nitrogen. Use of these fertilizers has increased over the last century. N₂O's GWP is 300 times that of CO₂.

Fluorinated Gases (HFCS, PFCS and SF₆). Fluorinated gases, such as HFCs, PFCs and SF₆, are greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are used as substitutes for ozone-depleting substances, such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons, which have been regulated since the mid-1980s because of their ozone-destroying potential and are phased out under the *Montreal Protocol* and Clean Air Act Amendments of 1990. Fluorinated gases are typically emitted in smaller quantities than CO₂, CH₄, and N₂O, but each molecule can have a much greater global warming effect. SF₆ is the most potent greenhouse gas that the IPCC has evaluated.



5.3.2 Greenhouse Gas Inventory

Worldwide anthropogenic emissions of GHGs were approximately 40,000 million metric tons of carbon dioxide equivalent (CDE¹), including ongoing emissions from industrial and agricultural sources, but excluding emissions from land use changes (i.e., deforestation, biomass decay) (IPCC, 2007). CO₂ emissions from fossil fuel use accounts for 56.6% of the total emissions of 49,000 million metric tons CDE (includes land use changes) and all CO₂ emissions are 76.7% of the total. Methane emissions account for 14.3% and N₂O emissions for 7.9% of GHGs (IPCC, 2007).

Total U.S. GHG emissions were estimated at 7,054 million metric tons CDE in 2006 (USEPA, April 2008), or about 14% of worldwide GHG emissions. U.S. emissions rose by 14.7% from 1990 to 2006, while emissions fell by 1.1% from 2005 to 2006 (75.7 MMT CDE). The following factors were primary contributors to this decrease: (1) compared to 2005, 2006 had warmer winter conditions, which reduced consumption of heating fuels, as well as cooler summer conditions, which reduced demand for electricity; (2) restraint on fuel consumption caused by rising fuel prices, primarily in the transportation sector; and (3) increased use of natural gas and renewables in the electric power sector.

The primary GHG emitted by human activities in the United States is CO₂, representing an estimated 84.8% of total GHG emissions (USEPA, April 2008). The largest source of CO₂, and of overall greenhouse gas emissions, was fossil fuel combustion. CH₄ emissions, which have declined from 1990 levels, resulted primarily from enteric fermentation associated with domestic livestock, decomposition of wastes in landfills, and natural gas systems. Agricultural soil management and mobile source fossil fuel combustion were the major sources of N₂O emissions. The emissions of substitutes for ozone depleting substances and emissions of HFC-23 during the production of HCFC-22 are the primary contributors to aggregate HFC emissions. Electrical transmission and distribution systems account for most SF₆ emissions, while PFC emissions result from semiconductor manufacturing and as a by-product of primary aluminum production.

The residential and commercial end-use sectors accounted for 20% and 18%, respectively, of CO₂ emissions from fossil fuel combustion in 2006 (USEPA, April 2008). Both sectors relied heavily on electricity to meet energy demands, with 72% and 79%, respectively, of their emissions attributable to electricity consumption for lighting, heating, cooling, and operating appliances. The remaining emissions were due to the consumption of natural gas and petroleum for heating and cooking.

California is the second largest contributor in the United States among states and if California were a country, it would be the sixteenth largest contributor among countries (AEP, 2007). Based upon the 2004 GHG inventory data (the latest year available) compiled by the California Energy Commission (CEC, December 2006), California produced 492 MMT CDE (7% of US total). The major source of GHGs in California is transportation, contributing 41% of the state's total GHG emissions. Electricity generation is the second largest source, contributing 22% of the state's GHG emissions (CEC, December 2006). Most (81%) of California's 2004 GHG emissions (in terms of CDE) were carbon dioxide produced from fossil fuel combustion, with 2.8% from other sources of CO₂, 5.7% from methane, and 6.8% from nitrous oxide (CEC, December 2006). California

¹ Carbon dioxide equivalent (CDE or CO₂E) is a quantity that describes, for a given mixture and amount of GHGs, the amount of CO₂ (usually in metric tons; million metric tons [megatonne] = MMTCO₂E = terragram [Tg] CO₂ Eq; 1,000 MMT = gigatonne) that would have the same global warming potential (GWP) when measured over a specified timescale (generally, 100 years).



emissions are due in part to its large size and large population. By contrast, California had the fourth lowest CO₂ emissions per capita from fossil fuel combustion in the country in 2001, due to the success of its energy-efficiency and renewable energy programs and commitments that have lowered the state's GHG emissions rate of growth by more than half of what it would have been otherwise (CEC, December 2006). Another factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its mild climate compared to that of many other states.

5.3.3 Effects of Global Climate Change

GCC has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions, at or above current rates, would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place, including substantial ice loss in the Arctic (IPCC, 2007).

According to the California Air Resources Board (CARB), potential impacts of global warming in California may include loss in snow pack, sea level rise, more extreme heat days per year, an increase in high ozone days, large forest fires, and drought years (CARB 2006c, 2007c). Below is a summary of some of the potential effects reported by an array of studies that could be experienced in California as a result of global warming and climate change.

Air Quality. Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CEC, February 2006).

Water Supply. Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, "considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain, until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change" (Climate Change and California Water Resources). For example, some studies identify little change in total annual precipitation in projections for California (California Climate Change Center, 2006). Other studies show significantly more precipitation (Climate Change and California Water Resources [(DWR 2006)]). Even assuming that climate change leads to long-term increases in precipitation, analysis of the impact of climate change is further complicated by the fact that no studies have identified or quantified the runoff impacts that such an increase in precipitation would have in particular watersheds (California Climate Change Center, 2006). Also, little is known about how groundwater recharge and water quality will be affected (Id.). Higher rainfall could lead



to greater groundwater recharge, although reductions in spring runoff and higher evapotranspiration could reduce the amount of water available for recharge (Ibid.).

The California Department of Water Resources (DWR 2006) report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta concludes that “[c]limate change will likely have a significant effect on California’s future water resources... [and] future water demand.” DWR also reports that “much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain” (DWR, 2006).

This uncertainty serves to complicate the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood (DWR, 2006). DWR adds that “[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future.” Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows (Kiparsky 2003; DWR 2005; Cayan 2006, Cayan, D., et al, 2006).

Hydrology. As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise may be a product of global warming through two main processes: expansion of sea water as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California’s water supply. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture. California has a \$30 billion agricultural industry that produces half the country’s fruits and vegetables. Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year conducive to certain crops, such as wine grapes, bloom or ripen; and thus affect their quality (CCCC, 2006).

Ecosystems and Wildlife. Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise as discussed previously: 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) in the next century, with substantial regional variation (EPA 2000). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as two feet along most of the U.S. coast. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species’ composition within communities;



and (4) ecosystem processes, such as carbon cycling and storage (Parmesan, 2004; Parmesan, C. and H. Galbraith 2004.)

5.3.4 Regulatory Setting

International and Federal. The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC), since it was signed on March 21, 1994. The Kyoto Protocol is a treaty, made under the UNFCCC, and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5% from 1990 levels during the first commitment period of 2008–2012. Although the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States has not bound itself to the Protocol’s commitments (UNFCCC, 2007).

The United States is currently using a voluntary and incentive-based approach toward emissions reductions in lieu of the Kyoto Protocol’s mandatory framework. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort (which is led by the Secretaries of Energy and Commerce) that is charged with carrying out the President’s National Climate Change Technology Initiative (CCTP, December 2007; <http://www.epa.gov/climatechange/policy/cctp.html>).

To date, the United States Environmental Protection Agency (USEPA) has not regulated GHGs under the Clean Air Act; however, the U.S. Supreme Court in *Massachusetts v. EPA* (April 2, 2007) held that the USEPA can, and should, consider regulating motor-vehicle GHG emissions. The USEPA has not yet promulgated federal regulations limiting GHG emissions. In December 2007, the USEPA also denied California’s request for a waiver to directly limit GHG tailpipe emissions, which prompted a suit by California in January 2008 to overturn that decision.

California Regulations. Assembly Bill (AB) 1493, requiring the development and adoption of regulations to achieve “the maximum feasible reduction of greenhouse gases”, emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State was signed into law in September 2002. Executive Order S-3-05 was issued in 2005, establishing statewide GHG emissions reduction targets. S-3-05 provides that by 2020, emissions shall be reduced to 1990 levels and by 2050, emissions shall be reduced to 80% of 1990 levels (CalEPA, 2006a).

AB 32, the “California Global Warming Solutions Act of 2006,” was signed into law in the fall of 2006. AB 32 required the CARB to adopt regulations to require reporting and verification of statewide GHG emissions. In 2008 CARB produced a Climate Change Scoping Plan that indicates how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms, and other actions. Additionally, the CARB plan outlines a comprehensive plan to reduce GHG emissions to 1990 emission levels by 2020 (essentially a 25% reduction below 2005 emission levels; same requirement as under S-3-05). Additionally, the bill requires the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions.



Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. In addition, a Low Carbon Fuel Standard ("LCFS") for transportation fuels is to be established for California.

In response to EO S-3-05, the CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report"). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the targets are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture.

In response to the requirements of AB 32, CARB produced a list of 37 early actions for reducing GHG emissions in June 2007. In October 2007, CARB expanded this list to 44 measures that have the potential to reduce GHG emissions by at least 42 million metric tons of CO₂ emissions by 2020. After completing a comprehensive review and update process, the CARB has approved a 1990 statewide GHG level and 2020 limit of 427 MMT CDE. CARB developed the 2020 target after extensive technical work and a series of stakeholder meetings. The 2020 target of 427 MMT requires the reduction of 169 MMT, or approximately 30 percent, from the state's projected 2020 emissions of 596 MMTCO₂E (business-as-usual) and the reduction of 42 MMTCO₂E, or almost 10 percent, from 2002-2004 average emissions. For more information on the Assembly Bills and Executive Orders identified above, and to view reports and research referenced above, please refer to the following websites:
www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

Regulations and CEQA Requirements. GHG emissions and their contribution to GCC have only recently been addressed in CEQA documents, such that CEQA and case law does not provide guidance relative to their assessment. Significance thresholds, quantitative or otherwise have not been adopted by the Ventura County Air Pollution Control District (APCD) or the City of Ventura.

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and GCC impacts. In addition, in an effort to guide professional planners, land use officials and CEQA practitioners, OPR prepared *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA)*. This document offers informal guidance regarding the steps lead agencies should take to address climate change in CEQA documents. This guidance was developed in cooperation with the Resources Agency, Cal EPA, and the CARB.

5.3.5 Climate Change Impact Analysis

The information provided in this section is based on recently established California goals for reducing GHG emissions, as well as a project-specific emissions inventory developed for the proposed project. How a proposed project might contribute to GCC and the overall effect of an individual project based on that contribution are still being debated. As previously discussed, no statewide thresholds or methodologies for determining the significance of a project's potential cumulative contribution to GCC have been adopted to date. An individual project (unless it is a massive construction project, such as a dam or a new freeway project, or a large fossil-fuel fired power plant) does not generate sufficient GHG emissions to directly influence GCC; therefore, the issue of global climate change typically involves an analysis of whether a project's contribution towards a cumulative impact 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.

Methodology. This analysis is based on (1) the methodologies recommended by the California Air Pollution Control Officers Association [CAPCOA] (January 2008) *CEQA and Climate Change* white paper and (2) consistency with the goals, strategies, and control measures established by AB 32 and associated guidance documents, including the 2006 Climate Action Team's report, the 2008 OPR guidance strategies, the CEQA Guidelines energy conservation measures, and the Green Guide for Health Care Program.

The Quantitative Threshold. CAPCOA's tiered approach, discussed below, is one of several discussed in their white paper, none of which are mandated by statute or regulation. The CAPCOA white paper was prepared "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." Furthermore, *CEQA Guidelines* Section 15064.4 expressly provides that a "lead agency shall have discretion to determine, in the context of a particular project," whether to "[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." A lead agency also has discretion under the *CEQA Guidelines* to "[r]ely on a qualitative analysis or [quantitative] performance based standards."

In its 2008 white paper, CAPCOA conducted an analysis of various approaches and significance thresholds that a lead agency could choose to adopt. A zero threshold approach could be considered based on the concept that climate change is a global phenomenon in that all GHG emissions generated throughout the Earth contribute to it, and not controlling small source emissions would potentially neglect a major portion of the GHG inventory. However, the *CEQA Guidelines* also 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 (*CEQA Guidelines*, Section 15130 (a)). Therefore, a threshold of greater than zero is considered more appropriate for the analysis of GHG emissions under CEQA.

CAPCOA' white paper also included a "tiered" approach to analyzing a project's impacts on climate change. Under this "tiered" approach, a lead agency would "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 following discussion relies upon the tiered approach. The first step in the “tiered” approach requires consideration of whether a project is consistent with a qualifying “green list” (a listing of projects that make “a positive contribution to California efforts to reduce GHG emissions”) or a general plan or regional plan that has already been determined to reduce GHG emissions consistent with AB 32.

If a project is not encompassed by a plan in the first step, the second step in the “tiered” approach is to determine whether a project is above or below a quantitative threshold. Possible quantitative thresholds were set forth ranging from a 900 metric tons CDE per year to 40,000 – 50,000 metric tons CDE per year. CAPCOA also includes thresholds based not on emissions output (in metric tons) but on project size (in square feet and by land use). Each is listed in Table 4.9-1 below.

**Table 4.9-1
 CAPCOA Suggested Thresholds for Greenhouse Gases**

Quantitative (900 tons)	~900 tons CDE/year
Quantitative CARB Reporting Threshold/Cap and Trade	Report: 25,000 tons CDE/year Cap and Trade: 10,000 tons CDE/year
Quantitative Regulated Inventory Capture	~40,000 - 50,000 tons CDE/year
Qualitative Unit-Based Threshold	Commercial space > 50,000 sf
Statewide, Regional or Area-wide (CEQA Guidelines 15206(b)).	Office Space > 250,000 sf

*sf = square feet

Sources: California Air Pollution Control Officers Association (CAPCOA), CEQA & Climate Change, January 2008.

The lowest threshold, based on a market capture theory that requires mitigation for greater than 90% of likely future discretionary development, would use a quantitative threshold of greater than 900 metric tons CDE/year for most projects, which would generally 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. Similarly, a unit-based market capture approach (focused on a project’s square feet rather than metric tons of emissions) discussed by CAPCOA would again try to capture 90% of future discretionary projects. CAPCOA discusses a 50,000 sq. ft. threshold for commercial development that would roughly correspond to the 900 metric ton threshold.

The conclusions in this section do not result from either of the two market capture thresholds. As CAPCOA’s white paper notes, there is often a large variance between projects and their characteristics such that unit-based measures (square feet here) cannot accurately determine



whether a project will have a significant impact on global climate change. While the 900 metric ton threshold deals with this concern, the threshold will, like a zero threshold, capture projects that do not have a considerable contribution to the cumulative impact.

The conclusions in this section also do not rely upon the CARB reporting threshold discussed in the white paper. This threshold of 25,000 metric tons is based on CARB regulations requiring mandatory reporting of emissions from industrial facilities such as cement plants, oil refineries, hydrogen plants, and other stationary sources. The 25,000 metric ton threshold is designed to cause the reporting of 94 percent of emissions associated with these stationary sources. However, because (A) the CMH Code and proposed hospital are not industrial or stationary sources like a cement plant or oil refinery, and (B) this threshold is based on a reporting objective and not necessarily determinative of the significance of the environmental effect, this threshold is not appropriate for this project. Similarly, another potential threshold of 10,000 metric tons was considered by the Market Advisory Committee for inclusion as it determines the eligibility of an entity to participate in a GHG Cap and Trade System in California. For the same reasons, that threshold does not adequately correspond to the CMH Code, which is not a single stationary source that would be subject to a cap and trade program.

The CAPCOA white paper also discusses a threshold based on unit numbers that attempt to capture projects that are regionally significant pursuant to CEQA Guidelines Section 15206. That threshold would apply to office projects greater than 250,000 sf. Because the CMH Code is not a regionally significant project, and, as noted above, because thresholds based on units are inherently inaccurate given the variances between project types and associated GHG emissions, this threshold is not utilized. It is also worth noting that thresholds based on square feet are particularly inappropriate for the hospital expansion because the expansion, while adding square feet, is not significantly expanding the services or capacity of the hospital. For the same reasons that impacts are measured by the net increase in beds rather than the net increase in square feet, reliance upon a unit-based threshold would not accurately reflect the CMH Code's GHG emissions impacts.

The remaining threshold discussed in the CAPCOA white paper analogizes GHG emissions to the emissions of ozone precursors such as NO_x and ROG. The white paper notes that 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 NO_x 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 NO_x/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 NO_x/ROG emission thresholds could be used to develop similar GHG thresholds." The ozone precursor threshold is the most analogous to the GHG emissions analysis and the most appropriate to consider the climate change impacts of the CMH Code.



To reach the numeric thresholds under the zone precursor analogy, the white paper evaluated the total inventory of ozone precursors such as NO_x and ROG emissions and determined what percentage of that inventory corresponded to a significance threshold for the ozone precursors. Examining agencies that have utilized this approach, CAPCOA determined that this methodology generally results in a GHG emissions threshold between approximately 40,000 to 50,000 metric tons per year. The CMH Code will be analyzed under that numeric threshold.

The third step in CAPCOA's "tiered" approach is to identify mitigation measures for projects that will produce GHG emissions above the selected significance threshold. These projects are subject to mitigation that correspond with the project's impacts. For example, all projects should, according to CAPCOA, be subject to "Level 1" mitigation measures regardless of CEQA. Level 1 mitigation measures include transit stops for planned routes, Energy Star appliances, Title 24 compliance, and water use efficiency measures. If a project is above a threshold, however, it must also utilize "Level 2" mitigation measures, which may include LEED Silver or Gold Certification, the exceedance of Title 24 building standards by 20 percent, and Traffic Demand Management (TDM) measures. If further mitigation is necessary to reduce emissions to below threshold levels, "Level 3" mitigation measures should be implemented according to CAPCOA. Level 3 measures include on-site renewable energy systems, LEED Platinum certification, exceedance of Title 24 building requirements by 40 percent, required recycled water use for irrigation, and zero waste/high recycling requirements.

To determine whether the CMH Code will exceed the CAPCOA threshold described above, calculations of CO₂, CH₄, and N₂O are provided below for full disclosure of the magnitude of potential project effects. The analysis focuses on CO₂, N₂O, and CH₄ as GHG emissions that the project would emit in the largest quantities, as compared to other GHGs (such as chlorofluorocarbons [CFCs]). Calculations were based on the methodologies discussed in the CAPCOA white paper (January 2008) and included the use of the California Climate Action Registry General Reporting Protocol (March 2007).

Construction-related Emissions. While construction-related GHG emissions are temporary in nature and not analyzed under the CAPCOA thresholds of significance, a quantification of construction-related emissions is provided for informational purposes. Emissions associated with construction were estimated using the California Air Resources Board's URBEMIS 2007 (Version 9.2.4) computer model and the California Climate Action Registry General Reporting Protocol (March 2007).

Emissions from Electricity Consumption. Operational emissions of CO₂ associated with space heating and landscape maintenance were quantified using the CARB's URBEMIS 2007 (version 9.2.4) computer model based on default characteristics for hospital operations. N₂O and CH₄ emissions were quantified using the California Climate Action Registry General Reporting Protocol (March 2007) emission factors for electricity use (see Appendix C for calculations). The calculations and emission factors contained in the General Reporting Protocol were selected based on technical advice provided to the Registry by the California Energy Commission. This methodology is considered reasonable and reliable for use as it has been subjected to peer review by numerous public and private stakeholders, in particular the California Energy Commission, and is recommended by CAPCOA (January 2008).



Direct Emissions from Mobile Combustion. Emissions of CO₂ from transportation sources were quantified using the CARB's URBEMIS 2007 (version 9.2.4) computer model. N₂O and CH₄ emissions were quantified using the California Climate Action Registry General Reporting Protocol (March 2007) direct emission factors for mobile combustion (see Appendix C for calculations). Total daily mileage was calculated in URBEMIS 2007 and extrapolated to derive total annual mileage. Emission rates were based on the vehicle mix output, generated by URBEMIS, and emission factors found in the California Climate Action Registry General Reporting Protocol.

It should be noted that one of the limitations to a quantitative analysis is that emission models, such as URBEMIS, evaluate aggregate emissions and do not demonstrate, with respect to a global impact, what proportion of these emissions are "new" emissions, specifically attributable to the proposed project in question. For most projects, the main contribution of GHG emissions is from motor vehicles and the total vehicle miles traveled (VMT), but the quantity of these emissions appropriately characterized as "new" is uncertain. Traffic associated with a project may be relocated trips from other locales, and consequently, may result in either a higher or lower net VMT. In this instance, it is likely that some of the proposed project-related GHG emissions, associated with traffic and energy demand, would be truly "new" emissions; but, it is also likely that some of the emissions represent diversion of emissions from other locations. Thus, although GHG emissions are associated with the project, it is not possible to discern how much diversion is occurring or what fraction of those emissions represent global increases. In the absence of information regarding the types of trips, the VMT generated by URBEMIS is used as a conservative, worst-case estimate.

Consistency with CAT Report Strategies, OPR Guidance, CEQA Guidelines, and the Green Guide for Health Care. As discussed above, the Climate Action Team, established by Executive Order S-3-05, has recommended strategies to reduce GHG emissions at a statewide level to meet the goals of the Executive Order. Similarly, the Office of Planning and Research published a guidance document regarding the analysis of GHG emissions in CEQA documents. Additionally, Appendix F to the CEQA Guidelines provides energy conservation measures which in turn reduce GHG emissions. A consistency analysis is provided for those measures as well. Finally, the hospital's compliance with the Green Guide for Health Care, a guide containing requirements similar to LEED that can be utilized for the hospital, is discussed. This section analyzes the impacts of the CMH Code by considering whether and how the Code is consistent with the goals and strategies contained in the four listed documents. The first three documents are analyzed in light of the entire project (Phases I and II of the CMH Code). The Green Guide for Health Care is analyzed against the first phase since, at this time, only the proposed hospital expansion is registered with the Green Guide program.

Impact GCC-1 **Development of Phase I and II under the CMH Code would generate GHG emissions; however, the emissions would not exceed the City's selected numeric significance threshold, derived from the January 2008 CAPCOA white paper. To further reduce GHG emissions, the project would include CAPCOA's Level 1 mitigation measures. The project's impacts on global climate change would be Class III, less than significant.**



Estimate of GHG Emissions. The project’s sources of GHG emissions are discussed below along with the quantification of each source’s emissions.

Construction-Related Emissions. Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site grading typically generates the greatest amount of emissions due to the use of grading equipment and soil hauling. Emissions associated with construction were estimated using the California Air Resources Board’s URBEMIS 2007 (Version 9.2.4) computer model and the California Climate Action Registry General Reporting Protocol (March 2007).

As discussed in Section 2.0, *Project Description*, Phase I would occur from 2010 to 2014 and Phase II would occur over a period of years. For a conservative estimate, it was assumed that construction activities would occur for approximately 260 days during each year of construction. The average CO₂ generated during construction would be 2,174 pounds per day (derived from URBEMIS 2007 version 9.2.4 computer model results). Assuming the average pounds of CO₂ per day during the construction period (260 days per year), construction activity would generate an estimated 256 metric tons of carbon dioxide equivalent (CDE) units per year at the project site, as shown in Table 4.9-2.

**Table 4.9-2
 Estimated Annual Construction Emissions
 of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂ *	282.62 tons (short, US)	256 metric tons
CH ₄	N/A	0.00 metric tons
N ₂ O	N/A	0.00 metric tons
	Total	256 metric tons

* CO₂ emission estimates are partially based on the URBEMIS model (see Appendix C)

CDE = carbon dioxide equivalents

Calculation Methodology per 30, Version 2.2, March 2007, pages 30-35.

See Appendix C for GHG emission factor assumptions.

N/A = Emissions generated for methane and nitrous oxide are not estimated by the URBEMIS model and are therefore not available.

Operational Indirect and Stationary Direct Emissions. Phase I of the Project would include a 10-bed increase in the Hospital, 104,000 square feet of medical office reuse within the old hospital, and 3,900 square feet of retail development. For the purposes of modeling, since the existing hospital is already operational, reuse of the old hospital was omitted from the emissions calculations. Such development would consume an estimated net increase of 8,200,544 kilowatt-hours [kWh]/year of electricity during Phase I (see Table 4.9-3). Phase II would include construction of an additional 162,950 sf of medical office space and construction of a 570 space parking garage. However, because there are currently 45,506 sf of existing use that would be demolished, the net increase would be 117,444 sf of medical office use. Phase II



development would generate demand for a net increase of 2,024,100 kilowatt-hours [kWh]/year of electricity (see Table 4.9-4).

**Table 4.9-3
Phase I Estimated Electricity Consumption**

Use	Square Feet	Electricity Demand Factor ¹	Annual Electricity Demand (kWH/year)
Retail	3,900	14.3 kWH/sf/year	55,770
Hospital	355,667	22.9 kWH/sf/year	8,144,774
Phase I Total			8,200,544

sf = square feet kWH = kilowatt hour

¹ Generation Factor Source: Energy Information Administration, 2008. 2003 CBECS Detailed Tables

Medical office reuse not included in electricity calculations, because the existing space is occupied and currently draws electricity.

**Table 4.9-4
Phase II Estimated Electricity Consumption**

Use	Square Feet	Electricity Demand Factor ¹	Annual Electricity Demand (kWH/year)
Medical Office	117,000	17.3 kWH/sf/year	2,819,035
Phase II Total			2,024,100

sf = square feet kWH = kilowatt hour

¹ Generation Factor Source: Energy Information Administration, 2008. 2003 CBECS Detailed Tables

The generation of electricity through combustion of fossil fuels typically yields CO₂, and to a lesser extent N₂O and CH₄. As discussed above, annual electricity emissions can be calculated using the California Climate Action Registry General Reporting Protocol, which has developed emission factors based on the mix of fossil-fueled generation plants, hydroelectric power generation, nuclear power generation, and alternative energy sources associated with the regional grid. CO₂ emission estimates using the URBEMIS model also take into account emissions from other operational sources such as natural gas use for space heating. Tables 4.9-5 and 4.9-6 show the operational emissions of GHGs associated with electricity consumption due to Phase I and Phase II development.

Transportation Emissions. Mobile source GHG emissions were estimated using the average daily trips estimate generated by the traffic report and the total vehicle miles traveled estimated in URBEMIS 2007 (v. 9.2.4). The URBEMIS 2007 model estimates that Phase I development would generate approximately 30,361 daily VMT and that Phase II development would generate approximately 31,825 VMT. Tables 4.9-7 and 4.9-8 show the estimated



emissions of GHGs that would result from the increase in VMT associated with development under Phases I and II.

**Table 4.9-5
Phase I Estimated Annual Operational Emissions
of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂ *	3,299 tons (short, US)	2,993 metric tons
CH ₄	0.03 metric tons	0.6 metric tons
N ₂ O	0.01 metric tons	4.1 metric tons
Total	3,153 metric tons	

* CO₂ emission estimates are partially based on the URBEMIS model (see Appendix C), which also take into account emissions from other operational sources, such as natural gas used for space heating.
CDE = carbon dioxide equivalents
Calculation Methodology per 30, Version 2.2, March 2007, pages 30-35.
See Appendix C for GHG emission factor assumptions.

**Table 4.9-6
Phase II Estimated Annual Operational Emissions
of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂ *	814 tons (short, US)	739 metric tons
CH ₄	0.01 metric tons	0.1 metric tons
N ₂ O	0.0 metric tons	1.0 metric tons
Total	895 metric tons	

* CO₂ emission estimates are partially based on the URBEMIS model (see Appendix C), which also take into account emissions from other operational sources, such as natural gas used for space heating.
CDE = carbon dioxide equivalents
Calculation Methodology per 30, Version 2.2, March 2007, pages 30-35.
See Appendix C for GHG emission factor assumptions.



**Table 4.9-7
Phase I Estimated Annual Mobile Emissions of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂	5,162 tons (short, US)	4,683 metric tons
CH ₄	4.7 metric tons	107 metric tons
N ₂ O	5.1 metric tons	1,517 metric tons
Total		6,307 metric tons

*CDE = carbon dioxide equivalents
Calculation Methodology per California Climate Action Registry General Reporting Protocol,
Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007, pages 30-35.
See Appendix C for GHG emission factor assumptions.*

**Table 4.9-8
Phase II Estimated Annual Mobile Emissions of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂	5,410 tons (short, US)	4,908 metric tons
CH ₄	4.9 metric tons	112 metric tons
N ₂ O	5.4 metric tons	1,590 metric tons
Total		6,610 metric tons

*CDE = carbon dioxide equivalents
Calculation Methodology per California Climate Action Registry General Reporting Protocol,
Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007, pages 30-35.
See Appendix C for GHG emission factor assumptions.*

Combined Stationary and Mobile Source Emissions. Tables 4.9-9 and 4.9-10 combine the operational and mobile GHG emissions associated with Phase I and II development. GHG emissions associated with Phase I would total approximately 9,460 metric tons per year of CDE. This total represents roughly 0.002% of California’s total 2004 emissions of 492 million metric tons. GHG emissions associated with Phase II would total approximately 7,505 metric tons per year of CDE. This total represents roughly 0.002% of California’s total 2004 emissions of 492 million metric tons.



**Table 4.9-9
Phase I Combined Annual Emissions
of Greenhouse Gases**

Emission Source	Annual Emissions
Operational	3,153 metric tons CDE
Mobile	6,307 metric tons CDE
Phase I Total	9,460 metric tons CDE

*CDE = carbon dioxide equivalents
Sources: Operational Emissions from URBEMIS 2007 (version 9.2.4).
California Climate Action Registry General Reporting Protocol, Reporting Entity-
Wide Greenhouse Gas Emissions, Version 2.2, March 2007.*

**Table 4.9-10
Phase II Combined Annual Emissions
of Greenhouse Gases**

Emission Source	Annual Emissions
Operational	895 metric tons CDE
Mobile	6,610 metric tons CDE
Project Total	7,505 metric tons CDE

*CDE = carbon dioxide equivalents
Sources: Operational Emissions from URBEMIS 2007 (version 9.2.4).
California Climate Action Registry General Reporting Protocol, Reporting Entity-
Wide Greenhouse Gas Emissions, Version 2.2, March 2007.*

The emission levels shown in Tables 4.9-9 and 4.9-10 assume that all GHG emissions associated with the CMH Code are new emissions that would not occur if the proposed CMH Code was not implemented. In reality, a majority of the emissions already occur insofar as the Hospital District is currently utilized and some of the buildout under the CMH Code encompasses development that would relocate to the District from other areas within the City.

The emissions estimates for the CMH Code are also conservative because the emissions estimates are, as discussed above, based off of the square feet of development to be added under the CMH Code. As described above, square footage is not representative of the likely impacts of the hospital expansion. In this case, the project consists of the construction of a replacement building to house an existing hospital facility with an increase in capacity of 10 beds, while providing increased square footage to accommodate changing code requirements, larger private patient rooms, and adequately accommodate outpatient services. Moreover, the Phase II analysis conservatively assumes that all uses will be medical office, the most intensive of the permissible uses for the purpose of GHG emissions.



Comparison of GHG Emissions to CAPCOA Thresholds. As discussed under *Methodology*, CAPCOA (January 2008) provides a “tiered” approach to analyzing climate change impacts of a project that has been adopted for this Recirculated DEIR. Applying the first step of CAPCOA’s “tiered” approach, there is no adopted “green list” or AB 32-consistent general or regional plan encompassing the proposed CMH Code. Consequently, the use of a quantitative threshold is appropriate. Table 4.9-1 shows CAPCOA’s suggested thresholds for GHG emissions that could be selected under the “tiered” approach. These various approaches suggested by CAPCOA are used herein to determine whether or not the proposed project’s GHG emissions are “cumulatively considerable.”

As indicated in tables 4.9-9 and 4.9-10, development facilitated by the CMH Code would increase the global GHG inventory by an estimated 9,460 metric tons CDE/year during Phase I and 7,505 metric tons CDE/year during Phase II. At buildout, the Project would emit a combined total of 16,965 metric tons of CDE/year. Based on CAPCOA-suggested threshold of 40,000 to 50,000 metric tons CDE/year, the CMH Code’s contribution of about 9,460 metric tons CDE/year for Phase I would not exceed the numeric threshold. Similarly, the contribution of 7,505 metric tons CDE/year for Phase II would not exceed the quantitative threshold of 40,000 to 50,000 metric tons CDE/year. Even when combined, the GHG emissions from the two phases would be below the threshold. Please note that GHG emissions from construction have not been added into the above total due to the fact that the significance threshold is based on an annual emission level and construction will not overlap with operational emissions (the latter of which is greater and still does not exceed the significance threshold). Still, including the construction and operational emissions would not exceed the significance threshold.

Nevertheless, the proposed project would adopt the CAPCOA “Level 1” mitigation to reduce impacts associated with GHG emissions. The following design features will be made conditions of project approval and apply throughout the CMH Code:

GCC-1 Global Climate Change. The following design features shall be incorporated.

- *New buildings within the Hospital District will have bicycle parking;*
- *The Hospital District includes transit stops for planned routes;*
- *New buildings within the Hospital District will utilize Energy Star roofs and Energy Star appliances;*
- *New buildings within the Hospital District will comply with Title 24*

Mitigation Measures. The proposed CMH Code does not produce GHG emissions above the applicable quantitative threshold, and no mitigation is required. To reduce GHG emissions, however, the project’s design features would include CAPCOA’s “Level 1” mitigation measures. In addition, mitigation measure AQ-3(a) will require a reduction in Energy Efficiency of 20% beyond Title 24, which is a CAPCOA “Level 2” mitigation measure. Other project design features discussed below in Impact GCC-2 would further reduce GHG emissions.

Significance After Mitigation. The impact with respect to GHG emissions is Class III, less than significant.



Impact GCC-2 The proposed CMH Code is consistent with the GHG reduction strategies and measures in the Climate Action team report, OPR guidance document, and CEQA Guidelines. The proposed hospital expansion is consistent with the Green Guide for Health Care. The CMH Code’s impacts related to the project’s consistency with plans designed to reduce GHG emissions are Class III, *less than significant*.

GHG reduction strategies and measures in the Climate Action team report, OPR guidance document, and the Green Guide for Health Care are discussed below. Please note that the Green Guide is discussed in the context of Phase I of the project only since it applies to the hospital expansion.

Climate Action Team Strategies Evaluation. The Climate Action Team, established by Executive Order S-3-05, has recommended strategies to reduce GHG emissions at a statewide level to meet the goals of the Executive Order (http://www.climatechange.ca.gov/climate_action_team/index.html). Several of these actions are already required by California regulations. The CMH Code’s consistency with the Climate Action Team Strategies is discussed in Table 4.9-11. It should be noted that because the CMH Code seeks to intensify development in an existing urban environment, it would be expected to reduce reliance on the drive-alone automobile. A reduction in vehicle use and vehicle miles traveled would result in a reduction in fuel consumption and in air pollutant emissions, including GHG emissions.

**Table 4.9-11
 CMH Code Consistency with Applicable Climate Action Team
 Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
California Air Resources Board	
<p>Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB in September 2004.</p>	<p>Consistent Vehicles that travel to and from the Hospital District on public roadways would be in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.</p>
<p>Diesel Anti-Idling The CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling in July 2004.</p>	<p>Consistent Current State law restricts diesel truck idling to five minutes or less. Diesel trucks operating from and making deliveries to the Hospital District are subject to this statewide law. Construction vehicles are also subject to this regulation.</p>
<p>Hydrofluorocarbon Reduction 1) Ban retail sale of HFC in small cans. 2) Require that only low GWP refrigerants be used in new vehicular systems. 3) Adopt specifications for new commercial</p>	<p>Consistent This strategy applies to consumer products. All applicable products would comply with the regulations that are in effect at the time of manufacture.</p>



**Table 4.9-11
 CMH Code Consistency with Applicable Climate Action Team
 Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
refrigeration. 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs. 5) Enforce federal ban on releasing HFCs.	
Alternative Fuels: Biodiesel Blends CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	Consistent Diesel vehicles that travel to and from the Hospital District on public roadways could utilize this fuel once it is commercially available.
Alternative Fuels: Ethanol Increased use of E-85 fuel.	Consistent People traveling to and from the Hospital District could choose to purchase flex-fuel vehicles and utilize this fuel once it is commercially available in the region and local vicinity.
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy duty vehicles and an education program for the heavy duty vehicle sector.	Consistent Heavy-duty vehicles that travel to and from the Hospital District on public roadways would be subject to all applicable CARB efficiency standards that are in effect at the time of vehicle manufacture.
Achieve 50% Statewide Recycling Goal Achieving the State's 50% waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48% has been achieved on a statewide basis. Therefore, a 2% additional reduction is needed.	Consistent The City of Ventura has already achieved the 50% Statewide Recycling Goal. It is anticipated that the Hospital District would similarly divert at least 50% of its solid waste through recycling. Development projects under the CMH Code will be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material.
Zero Waste – High Recycling Efforts to exceed the 50% goal would allow for additional reductions in climate change emissions.	Consistent It is anticipated that the Hospital District would similarly divert at least 50% of its solid waste through recycling. Projects under the CMH Code would be conditioned to provide recycling bins to promote recycling. Individual projects under the CMH Code would also be subject to all applicable State and City requirements for solid waste reduction as they change in the future.
Department of Forestry	
Urban Forestry A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	Consistent The CMH Code incorporates vegetation in the Hospital District and street trees on surrounding streets. In addition, the Hospital District would include two new open space areas.
Department of Water Resources	
Water Use Efficiency	Consistent



**Table 4.9-11
 CMH Code Consistency with Applicable Climate Action Team
 Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
Approximately 19% of all electricity, 30% of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	The CMH Code proposes to include drainage processes, such as parks, infiltration systems, and a storm water treatment system to retain runoff from the Hospital District and recharge groundwater supplies.
Energy Commission (CEC)	
<i>Building Energy Efficiency Standards in Place and in Progress</i> Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	Consistent All future development under the CMH Code would need to comply with the standards of Title 24 that are in effect at the time of development.
<i>Appliance Energy Efficiency Standards in Place and in Progress</i> Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Consistent Under State law, appliances that are purchased for any development under the CMH Code, both pre- and post-development, would be consistent with energy efficiency standards that are in effect at the time of manufacture.
<i>Fuel-Efficient Replacement Tires & Inflation Programs</i> State legislation established a statewide program to encourage the production and use of more efficient tires.	Consistent Community members traveling to and from the Hospital District site could purchase tires for their vehicles that comply with state programs for increased fuel efficiency.
<i>Municipal Utility Energy Efficiency Programs/Demand Response</i> Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by municipal utility providers.
<i>Municipal Utility Renewable Portfolio Standard</i> California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 20 percent of retail electricity sales from renewable energy sources by 2017, within certain cost constraints.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by Southern California Edison.
<i>Municipal Utility Combined Heat and Power</i> Cost effective reduction from fossil fuel consumption in the commercial and industrial sector through the application of on-site power production to meet both heat and electricity loads.	<i>Not applicable</i> since this strategy addresses incentives that could be provided by utility providers such as Southern California Edison and The Gas Company.
<i>Alternative Fuels: Non-Petroleum Fuels</i> Increasing the use of non-petroleum fuels in	Consistent People traveling to and from the Hospital District could



**Table 4.9-11
 CMH Code Consistency with Applicable Climate Action Team
 Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
California’s transportation sector, as recommended as recommended in the CEC’s 2003 and 2005 Integrated Energy Policy Reports.	purchase alternative fuel vehicles and utilize these fuels once they are commercially available in the region and local vicinity.
Business, Transportation and Housing	
<p><i>Measures to Improve Transportation Energy Efficiency</i></p> <p>Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.</p>	<p>Consistent</p> <p>The proposed CMH Code seeks to promote walkability, alternative modes of transportation, and bicycling as a mode of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p>
<p><i>Smart Land Use and Intelligent Transportation Systems (ITS)</i></p> <p>Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors.</p> <p>ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.</p> <p>The Governor is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity and a quality environment.</p> <p>Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.</p>	<p>Consistent</p> <p>Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would cut down on vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services.</p>
State and Consumer Services Agency	
<p><i>Green Buildings Initiative</i></p> <p>Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as</p>	<p>Consistent</p> <p>As discussed previously, any development under the CMH Code would be required to be constructed in compliance with the standards of Title 24 that are in effect at the time</p>



**Table 4.9-11
 CMH Code Consistency with Applicable Climate Action Team
 Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
compared with 2003 levels. The Executive Order and related action plan spell out specific actions state agencies are to take with state-owned and -leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.	of development.
Public Utilities Commission (PUC)	
<i>Accelerated Renewable Portfolio Standard</i> The Governor has set a goal of achieving 33 percent renewable in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by energy providers.
<i>California Solar Initiative</i> The solar initiative includes installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses, increased use of solar thermal systems to offset the increasing demand for natural gas, use of advanced metering in solar applications, and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	Consistent It is recommended that the developers of future projects under the CMH Code consider the installation and use of solar equipment.

The CMH Code is consistent with the measures indicated in the 2006 CAT Report. Consistency with this report illustrates that the CMH Code would coincide with the State's greenhouse legislation and would not hinder the ability to meet statewide emission reduction targets.

June 2008 OPR Technical Advisory Guidance Evaluation. OPR's guidance regarding the discussion of GHG emissions in CEQA documents may be found at <http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>. The CMH Code's consistency with the relevant OPR Guidance is discussed in Table 4.9-12.

**Table 4.9-12
 CMH Code Consistency with OPR Guidance**

Measure	CMH Code Consistency
Implement land use strategies to encourage jobs/housing proximity, promote transit-oriented development, and encourage high density development along transit corridors. Encourage compact, mixed-use projects, forming urban villages designed to maximize affordable housing and encourage walking, bicycling and the use of public transit systems.	Consistent Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would reduce vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use



**Table 4.9-12
 CMH Code Consistency with OPR Guidance**

Measure	CMH Code Consistency
	<p>and a circulation system that effectively moves people, goods and services.</p> <p>The proposed CMH Code also seeks to promote walkability, alternative modes of transportation, and bicycling as modes of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p>
<p>Encourage infill, redevelopment, and higher density development, whether in incorporated or unincorporated settings</p>	<p>Consistent The CMH Code would guide development within the already-improved Hospital District and encourage relatively high-density infill development.</p>
<p>Encourage new developments to integrate housing, civic and retail amenities (jobs, schools, parks, shopping opportunities) to help reduce VMT resulting from discretionary automobile trips.</p>	<p>Consistent Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would reduce vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services.</p> <p>The proposed CMH Code also seeks to promote walkability, alternative modes of transportation, and bicycling as modes of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p>
<p>Apply advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.</p>	<p>Consistent The CMH Code seeks to promote a planned system of transportation, including accessibility for pedestrians and cyclists. In addition, the site is oriented to encourage the use of several bus lines.</p>
<p>Incorporate features into project design that would accommodate the supply of frequent, reliable and convenient public transit.</p>	<p>Consistent The proposed CMH Code seeks to promote walkability, alternative modes of transportation, and bicycling as a mode of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p> <p>The Hospital District is sited in an existing urban area in close proximity to several bus lines and bike routes.</p>
<p>Implement street improvements that are designed to relieve pressure on a region’s most congested roadways and intersections.</p>	<p>Consistent Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would reduce vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services.</p>



**Table 4.9-12
 CMH Code Consistency with OPR Guidance**

Measure	CMH Code Consistency
	<p>The proposed CMH Code also seeks to promote walkability, alternative modes of transportation, and bicycling as modes of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p> <p>The Hospital District is sited in an existing urban area in close proximity to several bus lines and bike routes.</p>
Limit idling time for commercial vehicles, including delivery and construction vehicles.	<p>Consistent Current State law restricts diesel truck idling to five minutes or less. Diesel trucks operating from and making deliveries to the Hospital District are subject to this statewide law. Construction vehicles are also subject to this regulation.</p>
Plant trees and vegetation near structures to shade buildings and reduce energy requirements for heating/cooling.	<p>Consistent The CMH Code incorporates vegetation in the Hospital District and street trees on surrounding streets. In addition, the Hospital District would include two new open space areas.</p>
Preserve or replace onsite trees (that are removed due to development) as a means of providing carbon storage.	<p>Consistent The CMH Code incorporates vegetation in the Hospital District and street trees on surrounding streets. In addition, the Hospital District would include two new open space areas.</p>
Encourage public and private construction of LEED (Leadership in Energy and Environmental Design) certified (or equivalent) buildings.	<p>Consistent The new hospital building is registered with the Green Guide for Health Care Program. While not affiliated with LEED, this program has been developed for hospitals in collaboration with the U.S. Green Building Council (LEED). (LEED itself is not available for use with the expanded hospital.)</p>
Recognize and promote energy saving measures beyond Title 24 requirements for residential and commercial projects	<p>Consistent All future development under the CMH Code would need to comply with the standards of Title 24 that are in effect at the time of development.</p> <p>In addition to compliance with Title 24, new buildings will be consistent with the <i>CEQA Guidelines</i> Appendix F recommended mitigation strategies to conserve energy and reduce GHG impacts.</p>
Where feasible, include in new buildings facilities to support the use of low/zero carbon fueled vehicles, such as the charging of electric vehicles from green electricity sources.	<p>Consistent The project is seeking incentives to alternative fueled vehicles and will include preferred parking for fuel efficient vehicles.</p>
Educate the public, schools, other jurisdictions, professional associations, business and industry about reducing GHG emissions.	<p><i>Not applicable</i>, but the CMH Code would not preclude the implementation of this strategy by others.</p>
Replace traffic lights, street lights, and other electrical uses to energy efficient bulbs and appliances.	<p>Consistent As discussed in Section 2.0, <i>Project Description</i>, the new hospital is registered with the Green Guide for Healthcare Program. Under this program, the project would comply with the following: EA1.0 Optimize energy performance EA7 Equipment efficiency (75% of equipment equal to</p>



**Table 4.9-12
 CMH Code Consistency with OPR Guidance**

Measure	CMH Code Consistency
	"energy star")
Purchase Energy Star equipment and appliances for public agency use.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City. New buildings in the Hospital District will utilize "energy star" appliances.
Incorporate on-site renewable energy production, including installation of photovoltaic cells or other solar options.	Consistent It is recommended that the developers of future projects under the CMH Code consider the installation and use of solar equipment. The project is also seeking to purchase green power under contract to promote renewable energy.
Execute an Energy Savings Performance Contract with a private entity to retrofit public buildings.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City.
Design, build, and operate schools that meet the Collaborative for High Performance Schools (CHPS) best practices.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the school districts.
Retrofit municipal water and wastewater systems with energy efficient motors, pumps and other equipment, and recover wastewater treatment methane for energy production.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City or other agencies.
Convert landfill gas into energy sources for use in fueling vehicles, operating equipment, and heating buildings.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by public agencies.
Purchase government vehicles and buses that use alternatives fuels or technology, such as electric hybrids, biodiesel, and ethanol. Where feasible, require fleet vehicles to be low emission vehicles. Promote the use of these vehicles in the general community.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City.
Offer government incentives to private businesses for developing buildings with energy and water efficient features and recycled materials. The incentives can include expedited plan checks and reduced permit fees.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City. Note that the CMH Code seeks to reduce energy, reduce water use and encourage recycling.
Offer rebates and low-interest loans to residents that make energy-saving improvements on their homes.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.	Consistent The proposed CMH Code seeks to promote walkability, alternative modes of transportation, and bicycling. The Hospital District would include bicycle lanes and greater pedestrian access.
Offer government employees financial incentives to carpool, use public transportation, or use other modes of travel for daily commutes.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Encourage large businesses to develop commute trip reduction plans that encourage employees who commute alone to consider alternative transportation modes.	Consistent The CMH Code includes incentives that would encourage those traveling to and from the Hospital District to carpool and utilize alternative transportation to travel to the Hospital District.
Develop shuttle systems around business district parking garages to reduce congestion and create shorter commutes.	<i>Not applicable</i> , but the CMH Code would not preclude the City from considering a shuttle system in connection with the future parking garage.
Create an online ridesharing program that matches potential carpoolers immediately through email.	Consistent The CMH Code includes incentives that would encourage those traveling to and from the Hospital District to carpool. The proposed expanded hospital will consider utilizing an on-line system.



**Table 4.9-12
 CMH Code Consistency with OPR Guidance**

Measure	CMH Code Consistency
Develop a Safe Routes to School program that allows and promotes bicycling and walking to school.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Create incentives to increase recycling and reduce generation of solid waste by residential users.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Implement a Construction and Demolition Waste Recycling Ordinance to reduce the solid waste created by new development.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City, which has already achieved the 50% Statewide Recycling Goal. It is anticipated that the Hospital District would similarly divert at least 50% of its solid waste through recycling. Development projects under the CMH Code would be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material.
Add residential/commercial food waste collection to existing greenwaste collection programs.	Consistent Development projects under the CMH Code would be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material.

CEQA Guidelines Appendix F Evaluation. In addition to the above CAT and OPR GHG reduction strategies, the *CEQA Guidelines Appendix F* includes recommended mitigation strategies to conserve energy and reduce GHG impacts. According to this document, mitigation measures may include:

1. *Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal.*

As discussed in detail below, the project incorporates several energy efficiency design considerations through the Green Guide for Health Care Program, including the use of energy efficient lighting, energy efficient equipment, and building commissioning. These include credits EAP1, EAP2, EA1.0, EA5, EA6, & EA7.

2. *The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, water conservation and solid-waste reduction.*

The project is sited in an existing urban area in close proximity to several bus lines and bike routes. In addition, the project is seeking to incentivize carpooling, alternative fueled vehicles and bicycling through Green Guide for Health Care Program credits SS4.2, SS4.3, and SS4.4. In addition, the project design promotes conservation of water resources through credits WEP1, WE2.1, WE2.2, & WE2.3. Lastly, the project promotes solid waste reduction through credits MRP1, MR2.1, and MR5.1.

3. *The potential for reducing peak energy demand.*

Peak energy demand would be reduced through overall energy efficiency measures including EAP1, EAP2, EA1.0, EA5, & EA7 as described, which promote the use of equipment and fixtures that have reduced energy demands.



4. *Alternative fuels (particularly renewable ones) or energy systems.*

The project is seeking to purchase green power under contract to promote renewable energy as indicated by credit EA6.0.

5. *Energy conservation which could result from recycling efforts.*

The project promotes recycling efforts by designating recycling areas, recycling construction materials, and through the furniture reuse/recycle credit (MRP1, MR2.1, and MR5.1).

The proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would cut down on vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services. In addition, buildings would be required to be designed to comply with requirements of Part 6, Title 24 of the California Building Standards Code – California Energy Code.

Green Guide for Health Care Program Evaluation. In addition to the proposed project's consistency with Climate Action Team, OPR and CEQA Guidelines strategies, the proposed new hospital is also registered with the Green Guide for Health Care Program. The Green Guide for Health Care™ is the healthcare sector's first quantifiable sustainable design toolkit integrating enhanced environmental and health principles and practices into the planning, design, construction, operations and maintenance of healthcare facilities. The Green Guide is not a LEED® rating system and is not a product of the U.S. Green Building Council. However, the Green Guide has a history of collaboration with the U.S. Green Building Council, beginning with an agreement in 2002 to borrow the organizational structure from the USGBC's LEED Green Building Rating System. The Green Guide for Health Care adopted the LEED structure because it is a familiar and effective method used by a rapidly growing segment of the building design, construction, operations and maintenance industries. For many credits, the Green Guide directly incorporates the language of a parallel LEED credit, referencing credits in the LEED systems for New Construction, Existing Buildings – Operations and Maintenance and Commercial Interiors. In some cases, existing LEED credits have been modified to respond to the unique needs and concerns of healthcare facilities. In others, new credits have been added beyond those in current LEED products.

It is anticipated that the hospital portion of the project would achieve between 24 -40 total points. At this preliminary stage in the design process, the hospital portion of the project has been registered and numerous credits have been identified for pursuit, including the following:

- SSP1 *Erosion control plan*
- SS1 *Avoid virgin land*
- SS2 *Density of > 30ksf/acre*
- SS4.1 *Locate building within ¼ mile of two bus lines*
- SS4.2 *Incorporate bike racks and showers*
- SS4.3 *5% preferred parking for fuel efficient vehicles*
- SS4.4 *5% preferred parking for carpools*



- SS5.3 50% of parking in a structure
- SS6.1 decrease runoff by 25%
- SS6.2 Treat 90% of runoff
- SS9.1 Provide outdoor place of respite
- WEP1 Non-potable water for equipment cooling
- WE2.1 Water use measurement (separate meters for different uses)
- WE2.2 Motion sensor valves in patient sinks and public toilets
- WE2.5 Condensate reuse
- EAP1 Basic commissioning
- EAP2 Min. energy performance
- EAP3 No CFC based refrigerants in HVAC
- EA1.0 Optimize energy performance
- EA5 Electricity use measurement (separate metering for distinct uses)
- EA6.0 Green power purchase contract
- EA7 Equipment efficiency (75% of equipment equal to “energy star”)
- MRP1 Designated recycling collection areas
- MRP2 Mercury elimination I (mercury reduction plan, no mercury in equipment, No HID mercury vapor lamps, Energy Star exit signs)
- MR2.1 Recycle 50% of construction waste
- MR4.2 Mercury Elimination II (low mercury fluorescent lamps)
- MR4.3 Lead and cadmium free paints
- MR5.1 Furniture reuse/recycle
- EQP1 Minimum AIQ performance

Furthermore, water conservation measures discussed in Section 4.8, *Water Supply*, are incorporated into the CMH Code and would be utilized to reduce water use within the Hospital District.

In addition to mitigation recommended by CAPCOA and implemented through the CMH Code, the Code would be consistent with CAT strategies as demonstrated in Table 4.9-11, would implement energy conservation measures described in the *CEQA Guidelines*, and is being designed to reduce effects related to energy consumption, water consumption, waste generation pursuant to the Green Guide for Health Care. The list of project design features that obtain credits under the Green Guide (SSP1 through EQP1 above) will be made enforceable as project conditions pursuant to *CEQA Guidelines* Section 15091(d).

After implementation of the CAPCOA Level 1 mitigation measures as well as implementation of the project design features receiving credits under the Green Guide for Health Care, and because of the Code’s consistency with the Climate Action Team strategies, the CMH Code’s contribution to cumulative GHG emissions and climate change would not be cumulatively considerable.

Mitigation Measures. The proposed CMH Code is consistent with the goals, strategies, and measures contained in the 2006 Climate Action Team report, the 2008 OPR guidance document, and *CEQA Guidelines* Appendix F. Furthermore, Phase I of the project is consistent with the Green Guide for Health Care Program. Mitigation is not required.

Significance After Mitigation. The impact with respect to GHG emissions would be less than significant.



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