

Attachment 1 Public Comments

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League of women voters of Santa Barbara

May 6, 2014

Re: CEQA Thresholds for Greenhouse Gas Emissions

The League of Women Voters of Santa Barbara welcomes this opportunity to give input on a topic that is of great concern to many of us in the public. It certainly is time for the district to adopt a CEQA threshold for greenhouse gas emissions from stationary sources. A formal threshold will add an element of certainty to the environmental analysis and this will benefit both applicants and lead agencies

The League considers climate change to be an extremely serious problem, one that needs to be attacked by all means possible. In this case a threshold of zero would be ideal. However we recognize that practical considerations may be raised and consequently we would accept a somewhat higher threshold, with the proposed 10,000 metric tons/year as an upper limit. The threshold should recognize emissions from all phases of a project as a single amount.

Almost every day we read of new evidence of the harm these greenhouse gases are inflicting on us today and even more will be suffered by future generations. The League urges you to adopt as low a threshold as feasible.

Susan Shank, co-President

Molly M. Pearson

From: John Broberg
Sent: Thursday, May 22, 2014 11:13 AM
To: Molly M. Pearson
Subject: 7700 new wells

Hello Molly,

At you event at the Faulkner I brought up the prospect of 7700 new wells in the County which seemed like new information so I am attaching an article from the Pacific Coast Business times that mentions it.

As I understand it there was a permit application at Planning and Development for this which could be referenced. I think this is important regarding the threshold we use since the effect of these wells would be large. Extrapolating from the per well CO2 emissions from the Santa Maria Energy EIR for their 136 well project you get a potential CO2 emission of almost 5 million metric tons for this proposal alone.

I believe there are similar projects waiting in the wings. Please let me know if you confirm this permit application and CO2 figures. This would be the largest source in the County and thresholds should be set accordingly. Of course the other related pollutants are also of concern.

<http://www.pacbiztimes.com/2014/05/09/santa-maria-energy-drills-down-on-search-for-private-equity/>

Thank you

John Broberg

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July 17, 2014

Ms. Molly Pearson
Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110
mmp@sbcapcd.org

Re: Proposed District Environmental Review Guidelines Addressing Greenhouse Gas Emissions under the California Environmental Quality Act (CEQA)

Dear Ms. Pearson:

Thank you for the opportunity to comment on the Santa Barbara County Air Pollution Control District's (District) proposal to update its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of greenhouse gas (GHG) emissions from new or modified stationary sources. This letter is submitted by the Environmental Defense Center (EDC) and Community Environmental Center (CEC). Both of our organizations are very involved in efforts to reduce climate change impacts from our communities, and we support the need to ensure thorough analysis and disclosure of GHG emissions that will result from new or modified stationary sources. We also support identification and implementation of measures that will mitigate such emissions to the maximum extent feasible.

Our understanding is that the District's proposal is focused on stationary sources because those are the sources subject to the District's direct jurisdiction and permitting authority. We also understand that the Santa Barbara County Planning and Development Department is planning to adopt CEQA thresholds for GHG emissions, and we urge the District to coordinate closely with the County in its efforts. Notably, the County has

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already conducted an extensive analysis of the environmental impacts of GHG emissions and opportunities to mitigate such impacts.¹

EDC and CEC support a zero emission threshold approach, as is discussed in the CAPCOA white paper on CEQA and climate change² and utilized by the California State Lands Commission in its recent Environmental Impact Reports (EIRs) regarding local oil and gas projects. As there is ample opportunity for smaller projects to fully mitigate their emissions, a zero emission threshold will not force projects into environmental review solely on the basis of projected GHG emissions. If a higher threshold is adopted, we urge the District to require mitigation to the fullest extent possible, and to require Best Available Technology for smaller projects that don't trigger the adopted threshold.

Community feedback at the public workshops on this topic was overwhelmingly in favor of a zero emission threshold. We attended the Santa Barbara May 8, 2014, workshop and voiced our support for a zero emission threshold. We also noted that every other public speaker was in support of a zero emission threshold and no public speakers argued for a higher or no threshold. According to the notes and reports from the Santa Maria workshop, a zero emission threshold was widely supported there as well.

I. A Zero Emission Threshold for Stationary Sources

Recent science supports a determination that *any* net increase in GHG emissions will have a significant effect on global climate change and therefore a “zero emission” threshold should be used to evaluate project impacts. This approach is based on current evidence demonstrating that the target atmospheric level of CO₂ should be 350 ppm to achieve climate stabilization and avoid disastrous global consequences.³ Given that atmospheric levels have reached 400 ppm,⁴ we are already on a trajectory that is not sustainable, and we must decrease GHG emissions more rapidly and to a greater extent than previously thought. Thus, *any* additional contribution of CO₂ would be a step further from acceptable target levels.

¹ See attached excerpt from the Final EIR for the Santa Maria Energy Oil Drilling/Production Plan/LCSB Recycled Water Pipeline (12EIR-00000-00003; SCH#201109108), September 2013; Draft Recirculation Document – Greenhouse Gas Emissions Analysis for the Air Quality Section of the Proposed Final Environmental Impact Report for Santa Maria Energy Oil and Gas Drilling and Production Plan and Laguna Sanitation District Recycled Water Pipeline (12EIR-00000-00003; SCH#2011091085), July 2013; and EDC comment letter regarding the Draft Recirculation Document, August 15, 2013.

² CAPCOA. 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. Jan.

³ Matthews H.D., and K. Caldeira (2008), *Stabilizing climate requires near-zero emissions*, Geophys. Res. Lett., 35, L04705, doi:10.1029/2007GL032388; James Hansen, et al., *Target Atmospheric CO₂: Where Should Humanity Aim?* The Open Atmospheric Science Journal, 2008, 2, 217-231; Statements of Dr. Chris Field, Carnegie Institution for Science, *Decisive Action Needed as Warming Predictions Worsen*, Says Carnegie Scientist, available at

http://www.ciw.edu/news/decisive_action_needed_warming_predictions_worsen_says_carnegie_scientist

⁴<http://research.noaa.gov/News/NewsArchive/LatestNews/TabId/684/ArtMID/1768/ArticleID/10187/NOA-A-Carbon-dioxide-levels-reach-milestone-at-Arctic-sites.aspx>

The potential consequences of global warming further underscore the need for a zero emission threshold. The Intergovernmental Panel on Climate Change (IPCC), Union of Concerned Scientists, and the California Climate Change Center have published several studies that identify how climate change will affect the environment.⁵ These impacts include an increase in water temperatures, rise in sea level, coastal erosion, reduction of the Sierra snowpack, increase in severity and frequency of storms, increased droughts, famine, changes in ecosystems, increase in heat waves, increases in pests and diseases, flooding, retreating glaciers, ozone formation, and the potential for wildfires.⁶ More recently, the U.S. Global Change Research Program released a report on “Climate Change Impacts in the United States” that identified current and projected effects of climate change on a regional basis in the U.S.⁷ This report confirms that climate change impacts from GHG emissions are real and must be addressed without further delay.

The use of a “zero emission” threshold is one of the options discussed in CAPCOA’s white paper on CEQA and climate change.⁸ According to the CAPCOA report,

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 impacts.*** 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.***

⁵ Union of Concerned Scientists. 2006. California Global Warming Impacts and Solutions, available at http://www.ucsusa.org/clean_california/ca-global-warming-impacts.html. California Climate Change

⁶ Karl, T.R., *supra*; Levin, K., *supra*, citing Emanuel, K., *Increasing Destructiveness of Tropical Cyclones Over the Past 30 Years* (Nature, vol. 436, August 4, 2005), P.J. Webster, et al., *Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment* (Science, vol. 309, September 16, 2005), NASA Earth Observatory, *Record Low for June Arctic Sea Ice* (June 2005 at earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=16978), A.J. Cook et al., *Retreating Glacier Fronts on the Antarctic Peninsula Over the Past Half-Century* (Science, vol. 308, April 22, 2005), R.B. Alley et al., *Ice-Sheet and Sea-Level Changes* (Science, vol. 310, October 21, 2005), E.D. Domack, et al., *Stability of the Larsen B Ice Shelf on the Antarctic Peninsula During the Holocene Epoch* (Nature, vol. 436, August 4, 2005), F.S. Chapin III, et al., *Role of Land Surface Changes in Arctic Summer Warming* (Science, vol. 310, October 28, 2005), M. Hopkin, *Amazon Hit by Worst Drought for 40 Years: Warming Atlantic Linked to Both US Hurricanes and Rainforest Drought* (Nature, October 11, 2005), I.T. Stewart, et al., *Changes Toward Earlier Streamflow Timing Across Western North America* (Journal of Climate, vol. 18, April 2005).

⁷ Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., 2014: *Highlights of Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program, 148 pp.

⁸ CAPCOA. 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. Jan.

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.***⁹

A “zero emission” threshold has been used by the California State Lands Commission in its Final EIR for the Venoco Ellwood Marine Terminal, proposed Final EIR for Venoco’s Revised PRC 421 Recommissioning Project, and Draft EIR for the Venoco Ellwood Full Field Project.¹⁰ We strongly encourage the District to utilize a zero emission threshold in its evaluation of direct and indirect greenhouse gas emissions.

Other options from the CAPCOA report that would not be as strong or effective as a zero emission threshold while still addressing a majority of the GHG emissions generated by new projects would be to (1) base the threshold on Executive Order S-3-05, or (2) capture most of the expected GHG emissions.

While some operators and applicants may prefer a target based on AB 32 goals (designed to achieve 1990 GHG levels by 2020), this target is inadequate for two important reasons. First, this target is based on out-of-date data that assumed that our global target for GHG emissions was 450 ppm. Consequently, this target was designed to allow a significant increase in GHG emissions over current levels. As noted above, more recent scientific evidence indicates that 450 ppm is too high and that we instead should work to achieve a target of 350 ppm. Even at current levels, the effects of climate change are being felt throughout the globe. Thus, it is important to at least achieve the S-3-05 target (which is based on a goal of reducing GHG emissions to 80 percent below 1990 levels by 2050). Second, the S-3-05 target more closely aligns with the expected life of new or modified projects, which will undoubtedly last beyond 2020. Using the AB 32 goal will not address the full life of proposed projects, or the emissions that will occur beyond 2020. To achieve the state’s 2050 target, new projects would need to reduce GHG emissions by 90 percent below business-as-usual.¹¹

A third option would be to “capture” most new emissions. The Bay Area AQMD adopted the 10,000 MTCO₂e threshold because this threshold would capture 95% of new

⁹ CAPCOA, p. 27, emphasis added.

¹⁰ Venoco Ellwood Marine Terminal Lease Renewal Project Final Environmental Impact Report, California State Clearinghouse (SCH) No. 2004071075, CSLC EIR No. 743, April 30, 2009; Proposed Final Environmental Impact Report for Venoco’s Revised PRC 421 Recommissioning Project, California State Clearinghouse (SCH) No. 2005061013, CSLC EIR Number 732, January 2014; Draft Environmental Impact Report for the Venoco Ellwood Oil Development and Pipeline (Full Field) Project, State Clearinghouse No. 2006061146, CSLC EIR No. 738, June 2008.

¹¹ CAPCOA, p. 33.

emissions for stationary sources.¹² Information on Santa Barbara County capture rates was presented by the District at the 2011 APCD CAC meeting on GHG thresholds. This data showed that a 10,000 MTCO₂e threshold in Santa Barbara County would affect 7% of projects (six projects) and 55% of new emissions from stationary sources (198,786 MTons/yr). Additionally, while 55% of new emissions would be affected, if these six projects were required to mitigate to 10,000 MTCO₂e, that would mean 60,000 MTCO₂e would remain unmitigated, leading to a total capture rate of 138,786 Mtons/yr, or 39% of new emissions, not 55%. Thus a lower threshold is required to capture an equivalent percentage of new emissions in our County.

We understand that due to increased oil drilling in Santa Barbara County, the data presented in 2011 may be out of date, and that current, and especially future, data may skew toward more, larger projects, with a corresponding higher capture rate. The District should conduct a new analysis that looks at current and possible capture rates based upon estimated projects seeking permits at current and future rates. This analysis would show a range of activity so that the District could determine at what threshold level 95% of new emissions in Santa Barbara County would be captured. Setting the threshold at this level would capture a similar level of emissions as in other districts.

II. Scope of Review

At the workshop on February 24, 2011, staff noted that the District's analysis thus far has concentrated on combustion emissions, not indirect or fugitive emissions. We want to clarify that when analyzing potential impacts from a specific project, CEQA requires the lead agency to consider indirect¹³ and cumulative impacts.¹⁴ The District's guidance should clarify the full scope of emissions that will be subject to quantification and assessment. As methane is the second most common GHG, and has 21 times or greater impact on climate change than CO₂, particular care should be made to quantify and assess methane fugitive emissions at projects.

III. Mitigation

While our preference is for a zero emission threshold, if a larger threshold is chosen, projects should be required to mitigate to a level that is consistent with S-3-05 targets or capture of 95% of new emissions.

The District has provided three options for projects that exceed the proposed threshold: incorporating energy efficiency into the new project, reducing emissions at other applicant owned facilities in the County, and purchasing credits. The first two options should be strongly encouraged as they will lead to co-benefits of decreased Santa Barbara County pollution and increased local economic activity. Purchasing credits

¹² SBC Board of Supervisors Agenda Letter, 8/3/10, Attachment, p. 3.

¹³ CEQA Guidelines §§ 15126.2(a), 15358(a)(2).

¹⁴ CEQA Guidelines §§ 15130, 15355.

should only be allowed if the applicant demonstrates they cannot achieve emissions reductions in any other feasible manner.

Smaller projects that don't trigger the adopted threshold should be required to use Best Available Technology. By requiring such practices, impacts from the many smaller projects can be lessened.

Conclusion

In conclusion, we encourage the District to work closely with the Planning & Development Department to develop a threshold for GHG emissions for stationary sources. In doing so, we request that the District consider a threshold that will capture the most potential new GHG emissions in the County. We prefer a zero emission threshold because it is the threshold that will go furthest in meeting the targets of 350 ppm and S-3-05. This threshold will not force projects into environmental review solely on the basis of projected GHG emissions because there are ample opportunities to fully mitigate GHG emissions. As noted in the District's fact sheet and the CAPCOA report, it is entirely feasible for a project proponent to mitigate their GHG emissions to a net of zero new emissions.¹⁵

Additionally, the District should consider a policy requiring projects that exceed adopted thresholds to mitigate emissions to zero. If that is not possible they should be mitigated to a level that is consistent with the S-3-05 target. Smaller projects should be required to adopt Best Available Technology.

Thank you for your consideration of these comments. We wish you success in your endeavor to ensure meaningful consideration and mitigation of GHG emissions from stationary sources.

Sincerely,



Linda Krop,
Chief Counsel



Dave Davis
Executive Director

Attachments:

Excerpt from the Final EIR for the Santa Maria Energy Oil Drilling/Production Plan/LCSB Recycled Water Pipeline (12EIR-00000-00003; SCH#201109108), September 2013.

¹⁵ Santa Barbara County Air Pollution Control District, *CEQA Significance Thresholds for GHGs – Questions and Answers*, pp. 3-5; CAPCOA, p. 28; see also California Climate Action Registry, <http://www.climateregistry.org/>.

Draft Recirculation Document – Greenhouse Gas Emissions Analysis for the Air Quality Section of the Proposed Final Environmental Impact Report for Santa Maria Energy Oil and Gas Drilling and Production Plan and Laguna Sanitation District Recycled Water Pipeline (12EIR-00000-00003; SCH#2011091085), July 2013.

EDC comment letter regarding the Draft Recirculation Document, August 15, 2013.

Impact #	Impact Description	Phase	Residual Impact
SME AQ.3	Potential operations and drilling could create odor events.	Operations	Class II

Odor events could occur due to several different situations associated with equipment or drilling upset conditions. The equipment components could also leak and cause odors. Tanks are equipped with hatches to protect them from overpressure. If these hatches lift, due to a failure of the vapor recovery compressor, for example, odor events could occur. During drilling, drilling muds, well kicks, and releases from increased pressure up the wellbore could cause odor events. During drilling, pockets of gas can be encountered, which can be picked up by the circulating muds, brought to the surface, and released through the muds processing system. These types of releases have caused notices of violation (NOV) at other oilfields in the past, such as the Baldwin Hills Oilfield in Los Angeles. Any of these scenarios could be considered a significant impact during drilling if there is sufficient pressure in the well bore.

The release of material that contains even small amounts of sulfur compounds (H₂S) or hydrocarbons produces an odor. Several compounds associated with the oil and gas industry can produce nuisance odors. Sulfur compounds, found in oil and gas, have very low odor threshold levels. The H₂S levels in the produced gas from the Proposed Project wells are estimated to be less than a few parts per million.

Modeling conducted on a number of different oil and gas development project (Excelaron in SLO County, Baldwin Hill EIR in Los Angeles, etc) by MRS indicates that, with H₂S levels of 100 ppm, normal operations fugitive emissions could produce concentrations greater than the 50 percent odor threshold less than 1,000 feet from the project equipment. For H₂S levels higher than that, impacts would be farther.

Upset conditions that could cause a tank hatch release could produce concentrations greater than the 50 percent odor threshold 4,000 feet from the tank location, which would be far enough to reach areas outside the project parcel and would therefore be *significant*.

Odor thresholds are defined as the point at which a person can detect the substance. Below the odor threshold, a person would not smell anything. According to the American Industrial Hygiene Association, the odor detection threshold is the lowest concentration of odorant that will elicit a sensory response in the olfactory receptors of a specified percentage of a given population (AIHA 1989). The annoyance level would be a higher concentration.

Released materials that cause odors can travel a substantial distance since the odor thresholds for materials can be as low as parts per billion. Odor impacts associated with accidental releases from the oil field could impact surrounding areas.

5.1.2.4.a Cumulative Air Quality Impacts – Greenhouse Gas Emissions

Impact #	Impact Description	Residual Impact
SME AQ.4	Operational activities could increase GHG emissions.	Class II

The approach taken in this EIR to assess baseline and required mitigation levels are as follows:

1. Quantify the baseline GHG emissions associated with the current emissions (not including the 26 wells in the pilot project) at the field. CEQA Guideline Section 15125(a) states that: "The environmental setting will normally constitute the baseline physical conditions by which the lead agency determines whether an impact is significant." In this case, an exception has been made not to include the environmental impacts from the temporary 26-well pilot project as a part of the baseline, even though those wells were in operation when the Notice of Preparation for this EIR was issued. The 26-well pilot project was permitted as a temporary use with a termination date. This preliminary permitting action allowed SME the opportunity to experiment with the cyclic steaming process in order to understand the response of the oil-bearing diatomite in the Orcutt field to that process. This understanding was a necessary prelude to designing the long-term production plan. The permitting process for the pilot project did not identify and analyze the long-term emissions, whether criteria pollutants or greenhouse gases. Rather, it was understood that, once the producer was able to design the long-term production plan, the entire project of 136 wells and associated operations, including conversion of the 26 pilot wells to permanent wells, would be analyzed as the proposed project. (These long-term emissions have not been considered in a previous environmental document.) Therefore, the pilot project impacts are considered throughout this EIR to provide full disclosure of the potential impacts of the action requested of the decision-makers.
2. In order to assess the level of mitigation required, the GHG emissions from the Proposed Project are estimated with the proposed criteria pollutant mitigation measures included (Table 5.1-12 and 5.1-13).
3. The level of mitigation required is then obtained by calculating the required reduction of the Proposed Project GHG emissions (item 2 above) for the threshold used. This amount of emissions must be produced as mitigation, either from onsite or offsite sources.

The majority of the GHG emissions come from the combustion of fossil fuels associated with the steam generators. Stationary combustion equipment at the facility would create the largest percentage of GHG emissions. The steam generators would produce approximately 94 percent of the GHG emissions associated with the project.

GHG associated with operations include emissions from combustion sources (e.g., flare, steam generators, drilling engines, etc), offsite vehicles, and fugitive emissions that contain CO₂ and methane. In addition, electrical use at the facility has been included as indirect emissions. Table 5.1-12 shows the GHG emissions for operations under the Proposed Project full build-out. See Air Quality Appendix 12.2.B for detailed calculations.

Table 5.1-12 Proposed Project Annual GHG Emissions – No Mitigation

Activity	CO ₂ e Metric tonnes
Construction	
Onsite Grading and Construction	907
Pipeline Installations (Crude, Gas Connections)	139
Pipeline Installation (Water to Laguna)	531
Offsite: Grading/Construction	222
Offsite: Pipelines Crude/Gas	15
Offsite: Pipeline Water	113

Activity	CO ₂ e Metric tonnes
Total	1,926
Operations	
Processing Site Combustion Sources	82,892
Processing Site Fugitive Emissions	135
Drilling Emissions	672
Offsite: Operations	382
Offsite: Crude Hauling	470758
Offsite: Water Hauling	758470
Indirect: Electrical Generation	2,564
Total Operations	87,874
Baseline Emissions (see p. 5.1-30)	
• Combustion of Monterey Field Gas	16,444
• Electrical Generation	1,923
• Miscellaneous	528
Total Baseline Emissions	18,895
Adjusted Operations Emissions (Total Operations minus Total Baseline)	68,979

Note: GHG emissions for peak year, projected to be 2015. Assumes all crude oil and water are hauled by truck.

The emissions tabulated in Table 5.1-12 are the emissions during the peak year in 2015. Emissions of GHG would decrease thereafter due to a decrease in crude production. The allowances required to be purchased under the Cap-and-Trade program would increase over time due to the lowering “cap” and the reduced efficiency of the enhanced recovery technique as the field ages (more steam per bbl of crude produced). After a certain point, the number of allowances required to be purchased by the Applicant under the Cap-and-Trade program in combination with the onsite reductions, would exceed the GHG threshold established by the lead agency for this project, unless a threshold of zero were applied. Table 5.1-13 shows different thresholds along with the estimated year that the Cap-and-Trade purchased allowance would fulfill all of the threshold requirements, along with the average costs of the “credits” (not the Cap-and-Trade purchased allowances, as they would be required under current regulations) over that timeframe.

Figures 5.1-4 through 5.1-85.1-7 show the estimated GHG emissions through the year 2030 along with the “credits” and allowances used as part of the threshold reduction requirement under the Cap-and-Trade program and other, offsite or onsite reductions. (The 16 percent BAU threshold is not shown as, under the use of the 16 percent threshold, all reductions would be accomplished with onsite reductions). The baseline emissions are also shown in these figures. The percent reduction from BAU thresholds are calculated as percent reductions from the emissions above the baseline level. The bright line thresholds are calculated as an increase above the baseline level.

The increasing number of Cap-and-Trade purchased allowances over time shown in the graphs is based on two components: the reduction over time in the amount of allocated “free” allowances (a reduction in

the “cap”) and the reduced efficiency in the recovery of crude oil at the field, requiring more steam per bbl of crude oil recovered (the allocated “free” allowances are allocated based on the amount of crude oil produced). These two items produce the need for the Applicant to purchase an increasing amount of allowances.

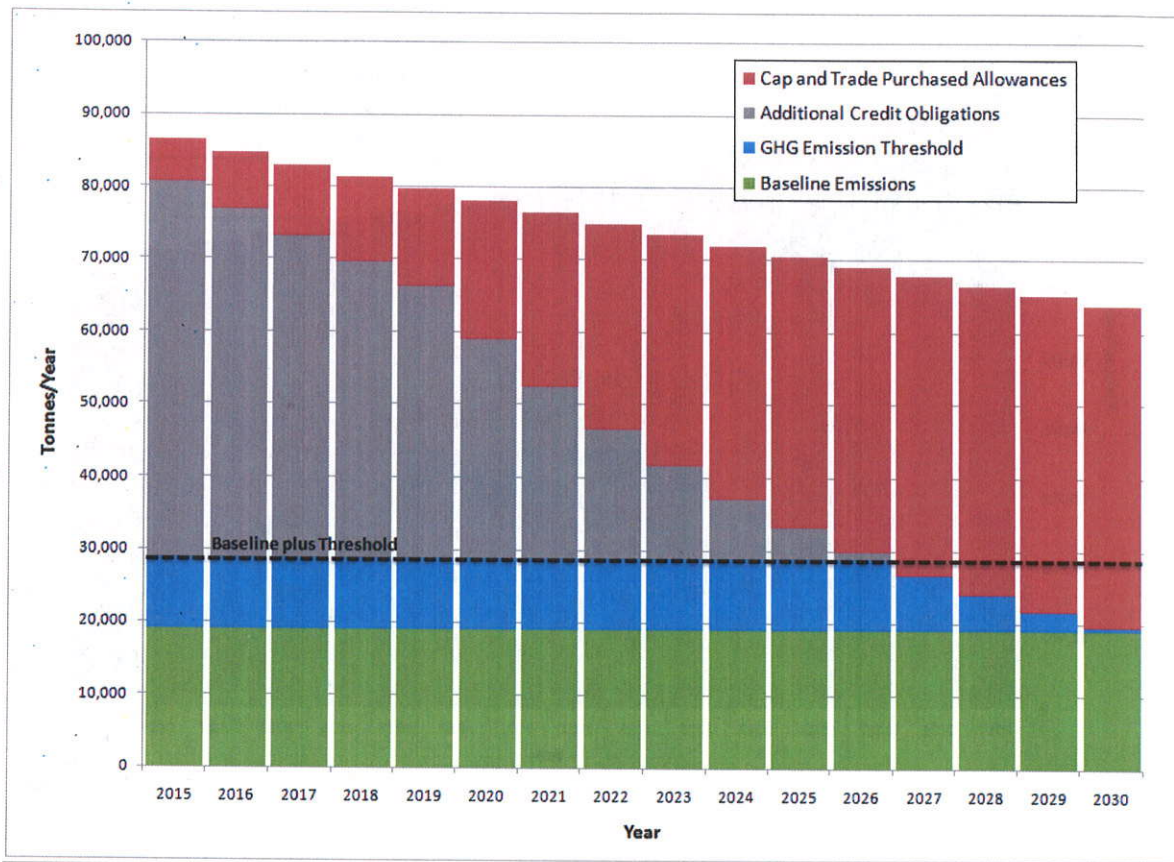
The cost estimates in the figures are based on a cost curve that would increase the costs of allowances and credits over time in a curve shape that was estimated to be similar to the curve shape that has historically been seen with the SCAQMD RECLAIM program. The RECLAIM cost curve showed an increase of 10 times in the costs per credit (for NOx and SOx in the RECLAIM program) over 15 years. The costs of GHG credits may act similarly, or could be substantially different and costs could range substantially higher or lower, depending on the market conditions and the availability of GHG credits. While the RECLAIM program is different than the Cap-and-Trade program (RECLAIM has no price floor or reserve pricing), it is a market based approach and its cost curve over time could be similar, although there is a high degree of uncertainty associated with estimating future costs. It is also assumed that the Cap-and-Trade program would continue after the year 2020, with a reduction in the cap level equal to the reduction rate seen prior to the year 2020.

Table 5.1-13 Proposed Project Credit Requirements and Costs

Threshold	Year of C&T Full Coverage	Average Costs of Credits Only, annual	Average Cost per bbl, Credits Only
Zero threshold	2030	\$889,282	\$1.17
10,000 MTCO ₂ E	20262028	\$704,981667,565	\$0.72\$0.79
16% Below BAU	20182015	\$36,207\$0	\$0.03\$0.00
29% Below BAU	20202017	\$145,158\$19,206	\$0.13\$0.02
50% Below BAU	202242021	\$347,171\$234,433	\$0.32\$0.21
90% Below BAU	2029	\$739,172\$765,450	\$0.87\$0.92

Note: These costs do not include the costs to purchase Cap-and-Trade allowances, which would be required under the Cap-and-Trade program regardless of the threshold used. Average price per bbl of crude oil \$96-\$128 EIA reference price between 2015 and 2029. BAU calculations are based on a percent reduction from the amount of emissions above the baseline level. Average costs of credits per bbl increases substantially in later years as the amount of crude oil produced drops.

Figure 5.1-4 Future GHG Emissions, Reductions with the 10,000 MTCO₂E GHG Threshold



Notes: for Figure 5.1-4 through 5.1-7, the following assumptions are made: Production estimates through the year 2020 are based on Applicant submittals. After 2020, Monterey crude production declines by 2% annually; Diatomite crude production declines by 10% annually while GHG emissions from diatomite production (for steam generation) declines by only 2% annually; and the cap adjustment factor decreases by 2% annually.

Under the 10,000 MTCO₂E threshold, initial offsite credit purchases would be substantial, but would decrease until the year 2027, when the requirements under the Cap-and-Trade program, along with the onsite reductions, would most likely provide all of the reductions needed to achieve the 10,000 MTCO₂E threshold. Average credit costs over that period would be in excess of \$668,000\$700,000 annually, with a cost per bbl of about \$0.72\$0.79. Note that the zero threshold option would be the same as the above graph, but that the additional credit obligation would extend to the baseline emissions and that the GHG threshold (blue) would be zero. Costs would also be higher, with an average annual cost of \$889,000 and a cost per bbl of about \$1.17.

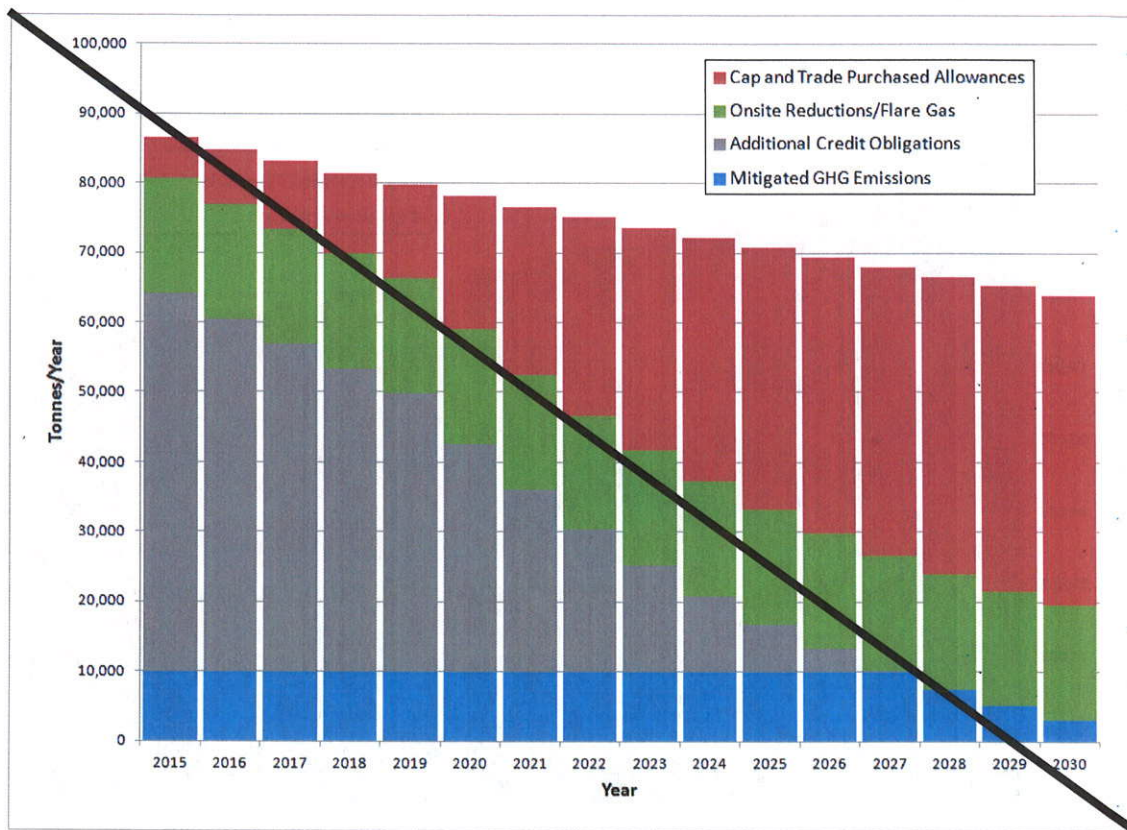
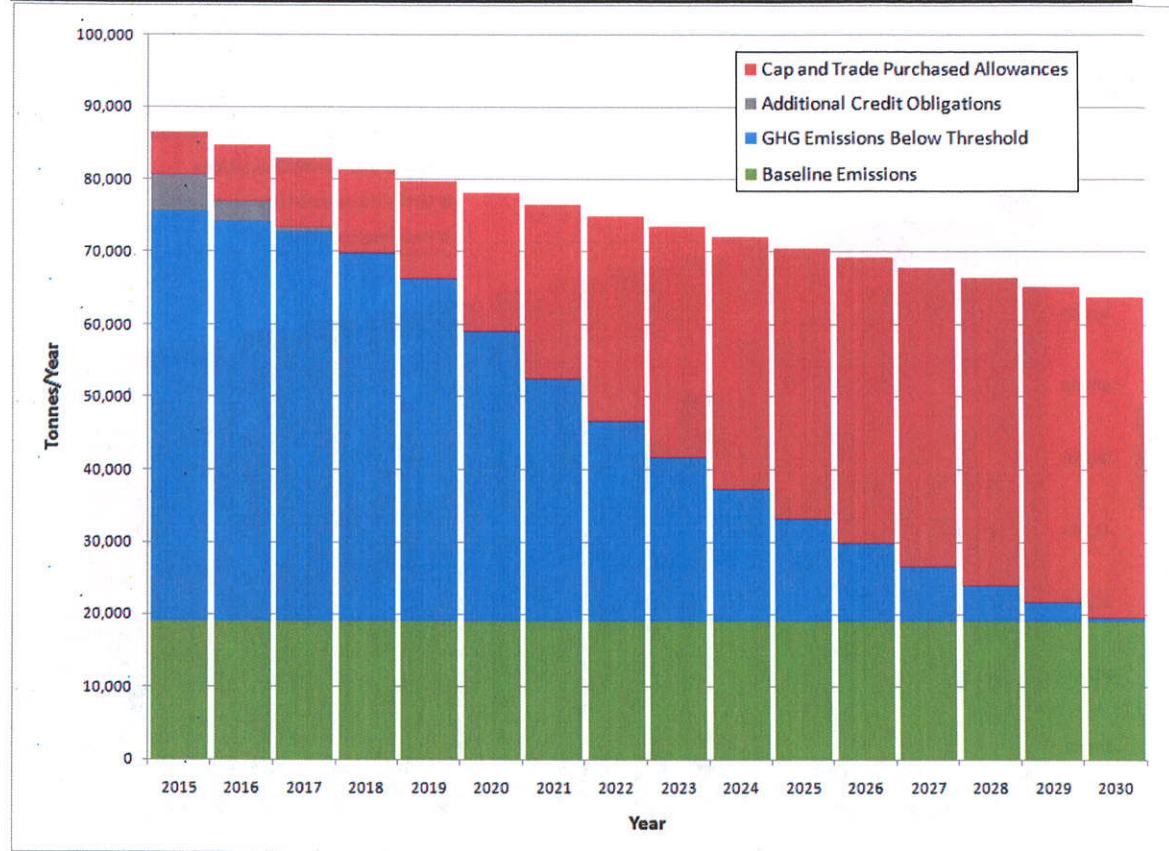
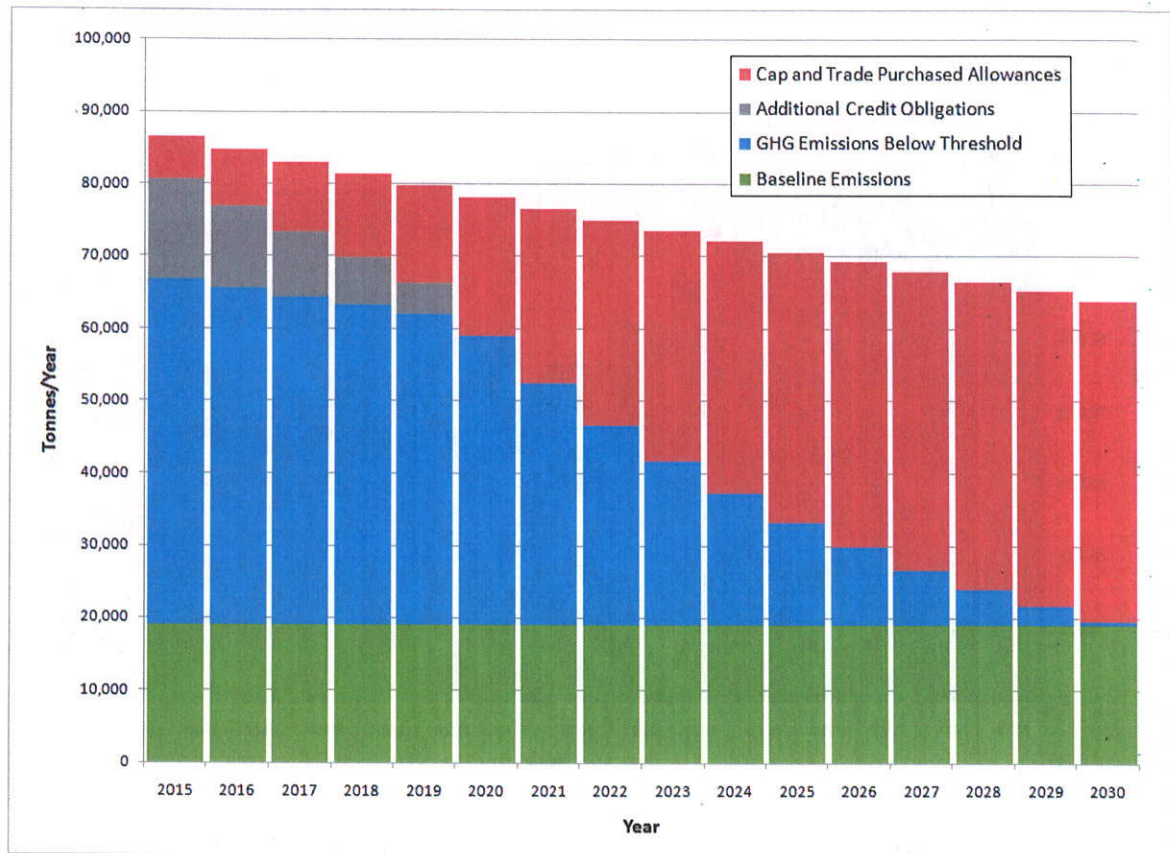
Figure 5.1.4 — Future GHG Emissions, Reductions with the 10,000 MTCO₂E GHG Threshold

Figure 5.1-5 Future GHG Emissions, Reductions with the 16% BAU GHG Threshold

Under the 16 percent BAU threshold, initial offsite credit purchases would be nominal, as most of the 16 percent reduction from the emissions above baseline would be accomplished through the Cap-and-Trade requirements. The requirements under the Cap-and-Trade program, along with the onsite reductions, would provide all of the reductions needed to achieve the threshold by 2018. Average credit costs over that period would be about \$36,000 annually, with an average cost per bbl of about \$0.03.

Figure 5.1-65 Future GHG Emissions, Reductions with the 29% BAU GHG Threshold

Under the 29 percent BAU threshold, initial offsite credit purchases would be nominal/moderate, as most of the 29 percent would be accomplished through the Cap and Trade requirements and onsite reductions. The requirements under the Cap-and-Trade program, along with the onsite reductions, would provide all of the reductions needed to achieve the threshold by 2020/2017. Average credit costs over that period would be about \$145,000/\$19,000 annually, with an average cost per bbl of about \$0.13/\$0.02.

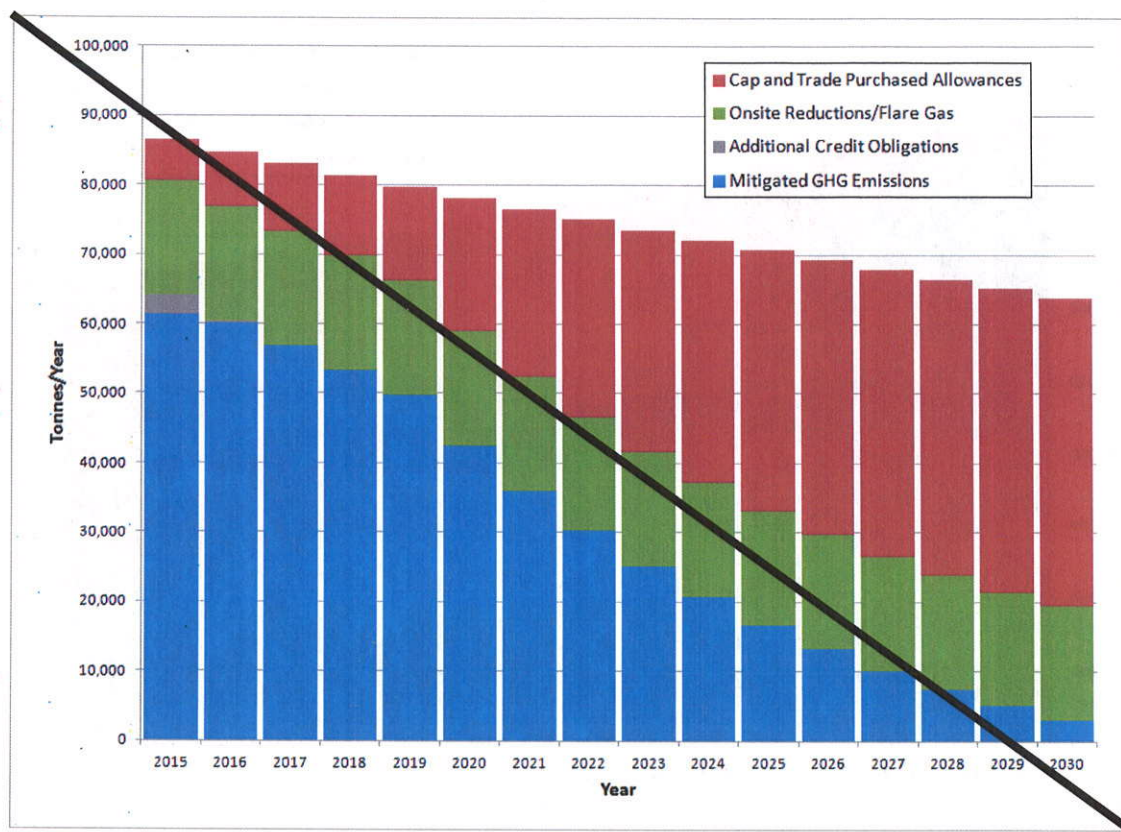
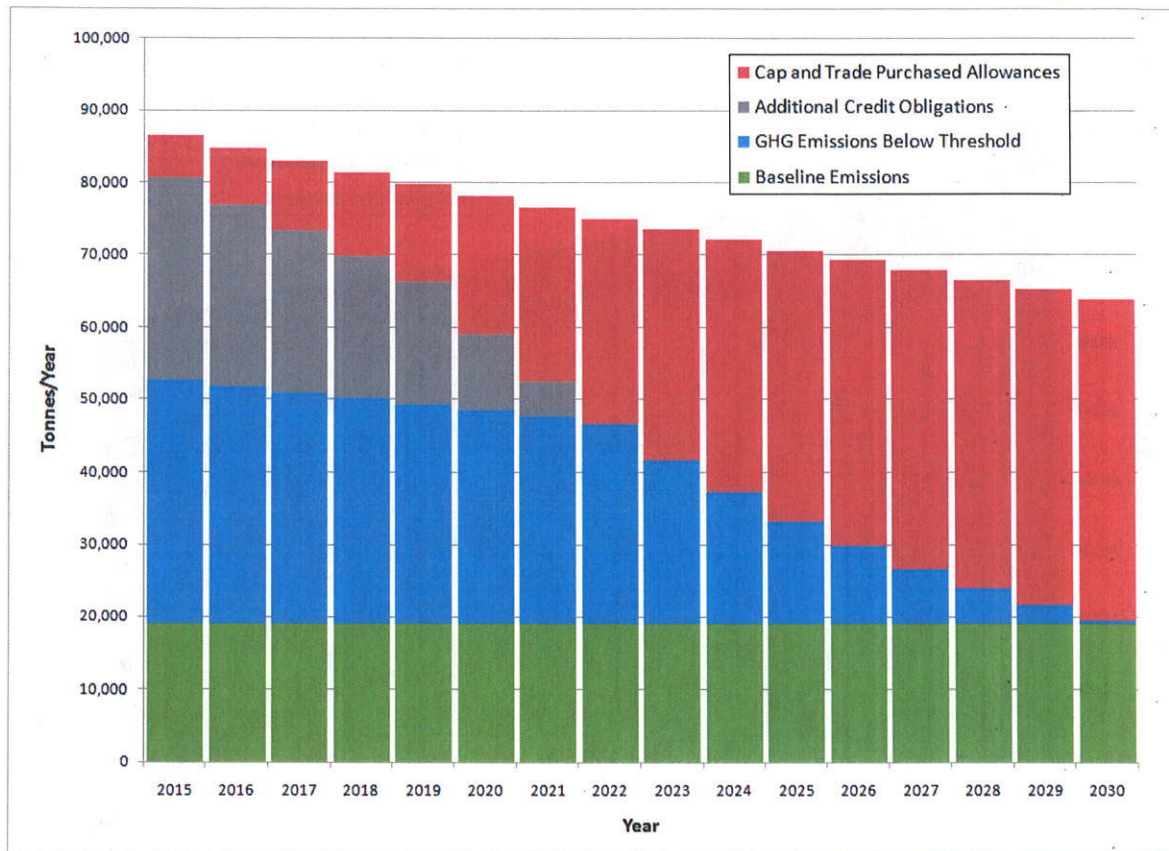
Figure 5.1-5 — Future GHG Emissions, Reductions with the 29% BAU GHG Threshold

Figure 5.1-76 Future GHG Emissions, Reductions with the 50% BAU GHG Threshold

Under the 50 percent BAU threshold, initial offsite credit purchases would be ~~moderate~~ substantial, and would decrease until the year ~~2022~~2024, when the requirements under the Cap-and-Trade program, along with the onsite reductions, would provide all of the reductions needed to achieve the threshold. Average credit costs over that period would be in excess of ~~\$347,000~~\$230,000 annually, with an average cost per bbl of about ~~\$0.32~~\$0.21.

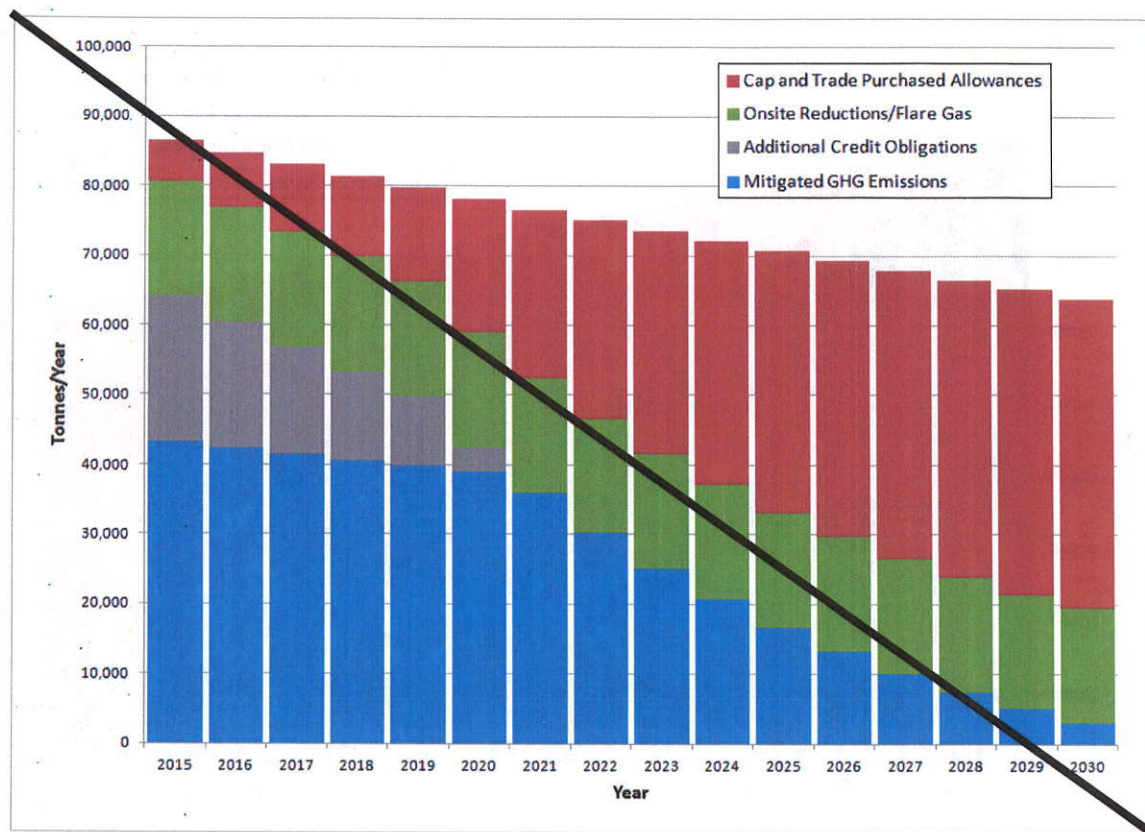
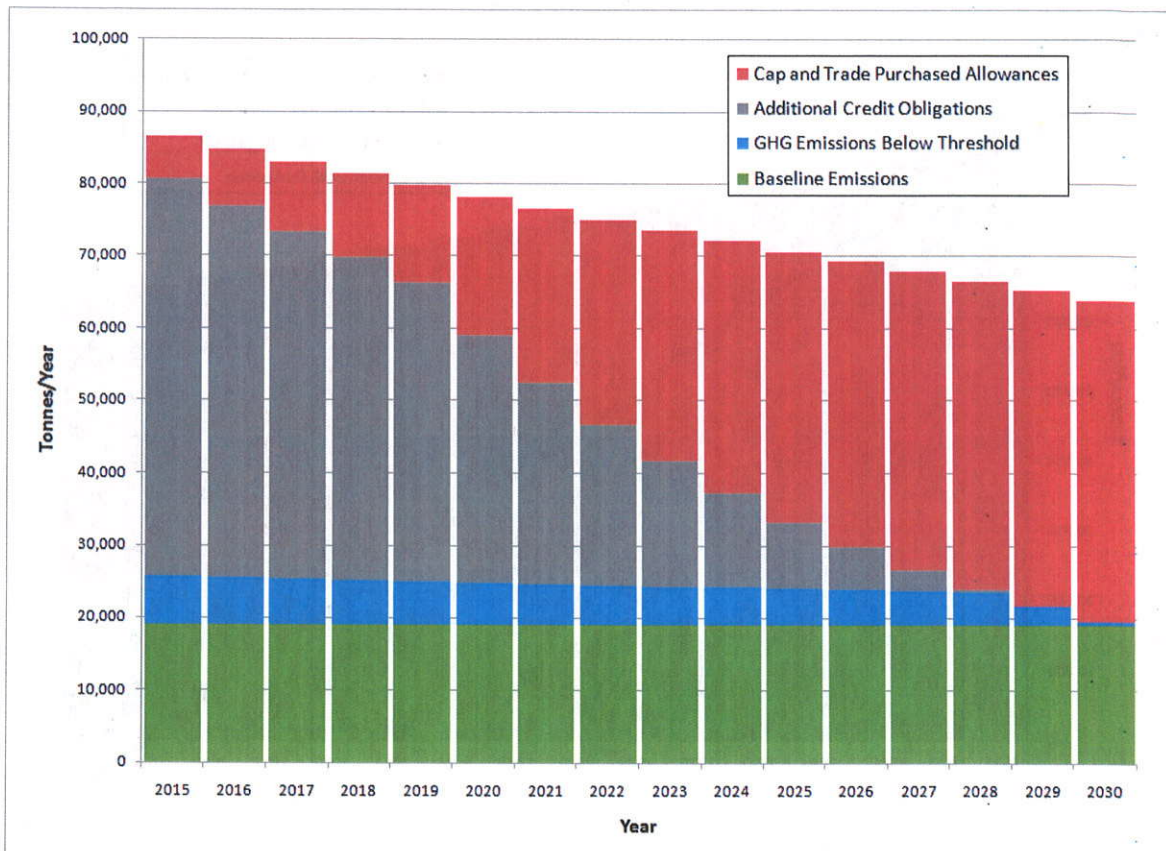
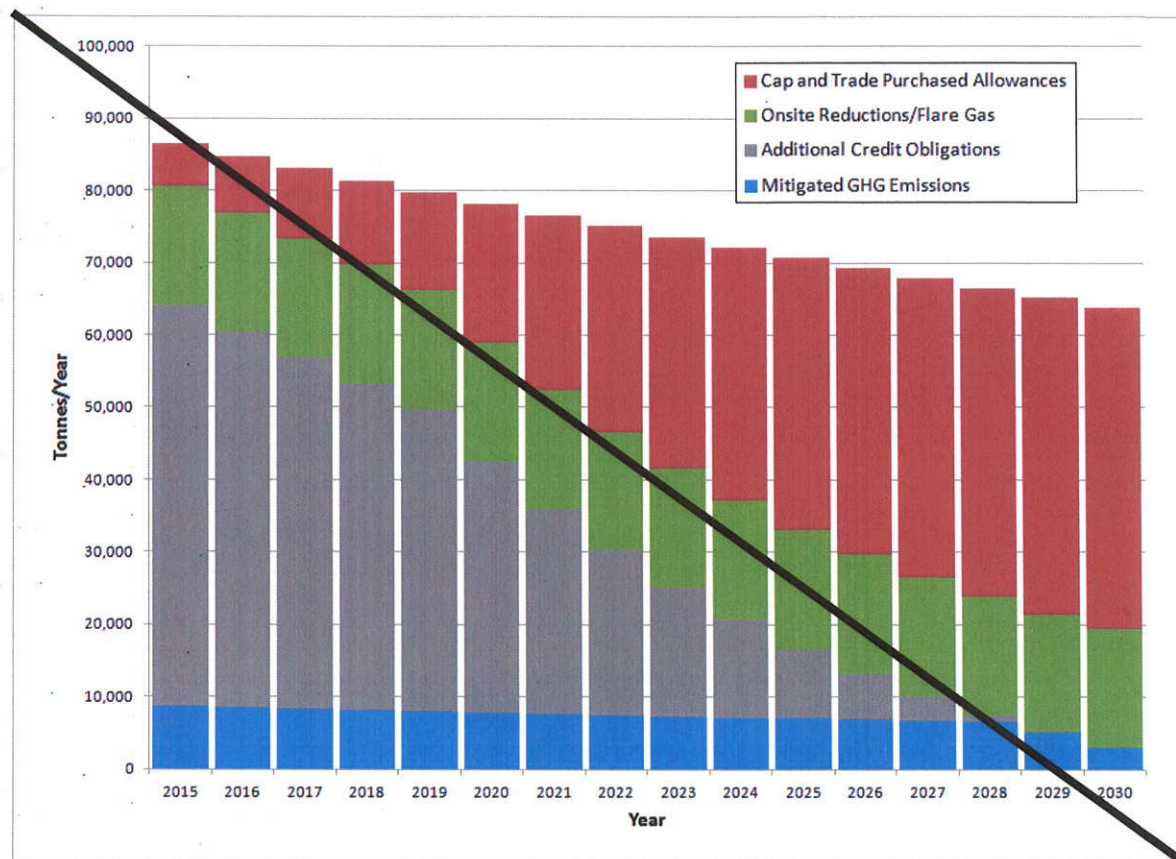
Figure 5.1-6 Future GHG Emissions, Reductions with the 50% BAU GHG Threshold

Figure 5.1-87 Future GHG Emissions, Reductions with the 90% BAU GHG Threshold



Under the 90 percent BAU threshold, initial offsite credit purchases would be substantial, and would decrease until the year 2029, when the requirements under the Cap-and-Trade program, along with the onsite reductions, would provide all of the reductions needed to achieve the threshold. Average credit costs over that period would be in excess of ~~\$739,000~~~~\$760,000~~ annually, with an average cost per bbl of about ~~\$0.87~~~~\$0.92~~.

Figure 5.1 7 — Future GHG Emissions, Reductions with the 90% BAU GHG Threshold**5.1.2.4.b Cumulative Air Quality Impacts – Criteria Pollutants**

The Santa Barbara County Environmental Thresholds Manual defines a significant cumulative impact if a project's total emissions of the ozone precursors NO_x or ROC exceed the long-term thresholds. For projects that do not have significant ozone precursor emissions or localized pollutant impacts, emissions would need to have been taken into account in the Clean Air Plan growth projections in order for cumulative impacts to be considered insignificant.

No residential projects would be constructed near the proposed Project area, so there would be no operational localized impacts associated with cumulative projects and non-GHG pollutants. Operational regional impacts from criteria pollutants could be produced, however, as multiple projects would emit into the same air basin at the same time. Although the proposed Project would produce less than significant impacts with mitigation, cumulative impacts associated with the combined projects could be significant.

Since none of the residential cumulative projects would be constructed near the proposed Project area, there would be no cumulative impacts associated with odors or toxic emissions.



COUNTY OF SANTA BARBARA

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DRAFT RECIRCULATION DOCUMENT

GREENHOUSE GAS EMISSIONS ANALYSIS FOR THE AIR QUALITY SECTION OF THE PROPOSED FINAL ENVIRONMENTAL IMPACT REPORT FOR

**Santa Maria Energy Oil and Gas Drilling and Production Plan and
Laguna Sanitation District Recycled Water Pipeline
12EIR-00000-00003; SCH#2011091085**

**County of Santa Barbara
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July 2013

EXECUTIVE SUMMARY

Impact SME AQ-4, identified in Table ES-2, Summary of Class II Environmental Impacts and Mitigation Measures of the April 2013 Proposed Final EIR, with previously approved revisions, is revised. There are no other changes to the Executive Summary.

SUMMARY OF PROJECT IMPACTS

Table ES-2 Summary of Class II Environmental Impacts and Mitigation Measures

Impact	Class II - Impact Summary	Mitigation Measures	Residual Impact
Santa Maria Energy			
SME AQ.4	Operational activities could increase Greenhouse Gas (GHG) emissions.	Quantify GHG emissions associated with operations and reduce emissions to an annual level that is equal to or less than a prescribed threshold selected by decision-makers.	Less than Significant

5.0 SIGNIFICANT ENVIRONMENTAL IMPACT DISCUSSIONS

The Air Quality Greenhouse Gas (GHG) sub-sections of Section 5.1 of the April 2013 Proposed Final EIR, have been revised and are included in their entirety. All other air quality analysis in Section 5.1 is identical to the Proposed Final EIR with previously approved revisions.

5.1.1.3 GHG Emission Thresholds

Climate Change under CEQA differs from most other types of impacts in that, by definition, it is only examined as a cumulative impact that results not from any one project under CEQA, but rather from greenhouse gas (GHG) emissions "...generated globally over many decades by a vast number of different sources." (Kostka, 2007, §20.83; Hegerl, 2007.) Accordingly, climate change is treated herein as a cumulative impact, subject to the CEQA Guidelines for conducting cumulative impact analyses. CEQA Guidelines direct that a project's contribution to a significant cumulative impact will be rendered less than significant if the project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact (§15130(a)(3)). Such determinations must be based on analysis in the environmental document with evidence to demonstrate that mitigation required of a project represents the project's "fair-share" contribution.

Recently, the California Natural Resources Agency amended the Guidelines for Implementation of the California Environmental Quality Act in 2009, placing specific requirements on CEQA lead agencies for the treatment of greenhouse gas emissions in environmental documents. Under CEQA, lead agencies must "...make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project" (Section 15064.4

was added to the CEQA Guidelines on October 23, 2009). These amendments further obligate the lead agency to consider if the estimated amount of greenhouse gas (GHG) emissions from a proposed project exceed a threshold of significance that the lead agency determines to apply to the project, and consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Neither Santa Barbara County nor the Santa Barbara County Air Pollution Control District (APCD) have adopted thresholds for determining if the projected GHG emissions of a proposed project constitute a considerable contribution to global climate change, and therefore would be classified as a cumulative significant impact. Absent such thresholds, the CEQA lead agency must make such significance determinations on a case-by case basis. California does not have one, statewide-accepted significance threshold as of yet. Several approaches have been discussed and, to some extent, implemented (CAPCOA 2008, pp. 23-57; Crockett 2011, pp. 213-245). Some have been, or are being, litigated. These approaches are numerous but generally fall into one of two categories for addressing stationary sources of GHG emissions: Numeric “Bright Line” thresholds or a specified reduction in “Business as Usual” (BAU) thresholds.

Numeric Bright-Line Thresholds

Numeric bright line thresholds are specific numeric thresholds above the baseline operations that, if exceeded, would produce a significant cumulative impact. To date, bright line thresholds have ranged from zero to 100,000 metric tonnes of CO₂ equivalent (MTCO₂E) annually. With the exception of a threshold of zero, sources that produce emissions below the threshold are considered insignificant, and thus do not have to reduce their GHG emissions, based on their relatively small individual and cumulative contributions. The Bright Line threshold approach has the advantage of being easy to apply; however, it more strictly regulates larger sources than smaller sources.

Multiple agencies/districts have applied bright line thresholds. For example, the South Coast Air Quality Management District (SCAQMD), the Bay Area Air Quality Management District (BAAQMD) and the San Luis Obispo Air Pollution Control District (SLOAPCD) have established a 10,000 MTCO₂E per year CEQA significance threshold for stationary sources.

Additionally, the California Air Resources Board (CARB) and the Federal EPA have established reporting and regulatory thresholds. These are:

- CARB has established a 10,000 MTCO₂E per year threshold for mandatory reporting for combustion and process source emissions (the mandatory reporting rule also requires reporting for certain industries regardless of emissions levels or 25,000 MTCO₂E per year for petroleum processing combined sources of stationary combustion, process, fugitive, and vented emissions)
- CARB has established a 25,000 MTCO₂E per year threshold for applying the Cap-and-Trade program for stationary sources;
- Federal EPA has established a 25,000 MTCO₂E per year threshold for mandatory reporting;
- Federal EPA has established a 100,000 ton per year permitting threshold for large stationary sources under the Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs;

Each of these is discussed below.

CARB Reporting and Cap-and-Trade Thresholds

The CARB regulation for the Mandatory Reporting of Greenhouse Gas Emissions was originally approved in 2007 and was revised in 2010 and 2012. CARB has issued reports on the reporting entities and their corresponding GHG emission levels annually. In 2010, about 85-90 percent of industrial sources were captured by the reporting rule (based on the most recent CARB Reporting Rule reports for 2010 and 2011 emissions (CARB, 2012 and CARB, 2013 excel databases) and Emission Inventory reports for 2010 available at the time of this EIR (CARB, 2013b). CARB proposed to use the 10,000 MTCO₂E for combustion and process source emissions as a reporting threshold, not as a CEQA significance threshold that would be used to define mitigation requirements.

Cap-and-Trade is designed to reduce the emissions from a substantial percentage of GHG sources (about 85% of GHG emissions will come under the program (CARB, 2011c, p. 1)) within California through a market trading system. An operator is required to participate in the Cap-and-Trade program if its facility emits more than 25,000 MTCO₂E annually.

Federal Reporting and Permit Thresholds

In 2009, the Federal EPA established a 25,000 MTCO₂E per year threshold for reporting GHG emissions to the Federal government under Title 40 CFR Part 98. The requirement applies to direct greenhouse gas emitters, fossil fuel suppliers, industrial gas suppliers, and facilities that inject CO₂ underground for sequestration or other reasons. EPA estimates that 85-90 percent of the total U.S. GHG emissions from over 8,000 facilities are covered by the reporting rule (USEPA, 2013, p.1).

The 100,000 tons of CO₂E level (note: not metric tonnes) has been adopted by the Federal EPA as the limit above which a Prevention of Significant Deterioration ("PSD") and a Title V operating permit are required. The 100,000 ton level is cited in the Mojave Air Pollution Control District CEQA Guidelines as a CEQA threshold of significance.

The 10,000 MTCO₂E CEQA Threshold

The 10,000 MTCO₂E threshold has been adopted by three air quality districts in California. It was originally adopted as an interim threshold by the SCAQMD in 2008. The SCAQMD's 10,000 MTCO₂E threshold is based on a goal of a 90 percent emission capture rate. Because most new stationary combustion sources were anticipated to utilize natural gas in SCAQMD, the 90 percent capture rate was based on combustion of natural gas at facilities that were required to report under their Annual Emissions Reporting program for the preceding 12-month period in 2006-2007. SCAQMD's interim threshold was expected to capture more than 90 percent of GHG emissions from stationary source projects. Key rationale for SCAQMD choosing a 90 percent capture rate included the following considerations:

- The policy would be consistent with Executive Order S-3-05 which required a 90 percent reduction of GHG emissions below then-current levels by 2050;
- The policy would be consistent with CARB's 2008 draft staff proposal (never adopted) that included a 90 percent capture efficiency target;
- The emission threshold is low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions;
- A 90 percent capture rate is more appropriate than a zero threshold as it will assure that all feasible GHG reductions will be implemented for a large majority of emissions, without overwhelming SCAQMD's ability to process environmental documents; and

- This approach was included in CAPCOA's 2008 CEQA and Climate Change white paper (CAPCOA, 2008, p. 33).

The SCAQMD also relied on and vetted the threshold through a stakeholder working group to receive input on establishing a GHG significance threshold. The working group recommended an interim threshold that achieved an emission capture rate of 90 percent of all new or modified stationary source projects (SCAQMD, 2008, Attachment E). Pursuant to CEQA Guidelines 15064.7, the SCAQMD Governing Board adopted the threshold for its use as a lead agency via a resolution on December 5, 2008. It was considered an interim to an anticipated CARB GHG threshold; however, a GHG threshold has not been adopted by CARB to date (SCAQMD, 2008, pp. 2, 4, & 5, and Attachment C).

Subsequent to the SCAQMD threshold adoption, the BAAQMD adopted a 10,000 MTCO₂E interim threshold based on capturing approximately 95 percent of all GHG emissions for new or modified stationary sources. (The threshold was adopted as an interim threshold that would be reevaluated once the CARB's Scoping Plan measures, including the Cap-and-Trade program, are more fully implemented at the state level.) BAAQMD staff reports (BAAQMD, 2010, pp. 27 - 28) indicated that a 95 percent emission capture rate would capture only the large, significant projects. Permit applications for projects with emissions above the 10,000 MTCO₂E threshold would account for less than 10 percent of stationary source permit applications which represent 95 percent of GHG emissions from new permits analyzed during a three year analysis period (2007-2009). BAAQMD staff concluded that compliance with the stationary source quantitative threshold of 10,000 MTCO₂E/yr would not be "cumulatively considerable" because projects would not hinder the state's ability to solve the cumulative greenhouse gas emissions problem pursuant to AB 32 (BAAQMD, 2010, pp. 30 - 31).

The BAAQMD stationary source interim thresholds were subsequently set aside by a trial court in a lawsuit, which found that the Air District had failed to comply with CEQA when it adopted the thresholds. The court did not determine whether or not the thresholds were based on substantial evidence and thus valid on the merits, only that the CEQA process should have been utilized in the adoption of the thresholds. Therefore, the BAAQMD does not recommend specific thresholds of significance for use by local governments at this time (BAAQMD, 2012, p. 2-5).

SLOAPCD established a 10,000 MTCO₂E interim threshold based on an analysis of their stationary-source emission inventory year 2009 (SLOAPCD, 2012. p. 27). (Similar to the BAAQMD interim threshold, SLOAPCD adopted its threshold as an interim threshold that would be reevaluated once the CARB's Scoping Plan measures, including the Cap-and-Trade program, are more fully implemented at the state level.) The analysis showed facilities with emissions above 10,000 MTCO₂E accounted for 94% of all combustion-related CO₂E emissions in 2009 in San Luis Obispo County (SLOAPCD, 2012. p. 27).

California does not yet have one distinct methodology for establishing a data set to determine a "percent-capture" level for the purpose of forecasting the size (i.e., the annual GHG emissions) of future projects that may be subject to CEQA review. Use of an existing emission inventory or data set is the simplest approach. Developing a data set based on historic project approvals requires a much larger effort and may require extensive primary research and refinement.

SCAQMD staff developed a GHG emissions data set based on annually reported natural gas usage, with a goal of determining a screening threshold level that would capture 90% of the GHG emissions related to new stationary source projects. The data set SCAQMD staff used was deemed to be the best information available at the time. As a result of the ongoing implementation of AB 32 requirements and other local

initiatives, other GHG emission inventories and data sets have been developed for more recent years. These more recent inventories may include combustion emissions from natural gas combustion, additional fuel types, indirect GHG emissions from electricity, mobile source emissions, and GHG from fugitive methane releases. However, some of the more recent inventories do not include smaller sources (less than 25,000 MTCO₂E/year or less than 10,000 MTCO₂E/yr). This is the case for the data set based on the CARB GHG Mandatory Reporting Rule (MRR) reported emissions data.

SCAQMD staff acknowledged in its proposal that not all GHG emissions and source types were included in the data set used to determine a screening threshold of 10,000 MTCO₂E/year as follows:

“Staff’s interim GHG significance threshold proposal for stationary sources was developed using AQMD’s AER Program ... because this is the only comprehensive data base available to SCAQMD staff. Staff then compiled reported annual natural gas consumption for 1,297 permitted facilities for 2006 through 2007 and rank-ordered the facilities to estimate the 90th percentile of the cumulative natural gas usage for all permitted facilities. Most GHG emissions from industrial facilities are generated from stationary sources, while a relatively small percent is generated by traffic, water usage, etc. Therefore, although staff’s GHG significance threshold proposal was derived without considering offsite indirect GHG emissions, staff believes the interim GHG significance threshold for stationary source projects is appropriate because it is consistent with staff’s overarching goal of capture 90 percent or more of the GHG emissions from industrial projects.” (SCAQMD, 2008, Attachment D, pp. 2 - 3)

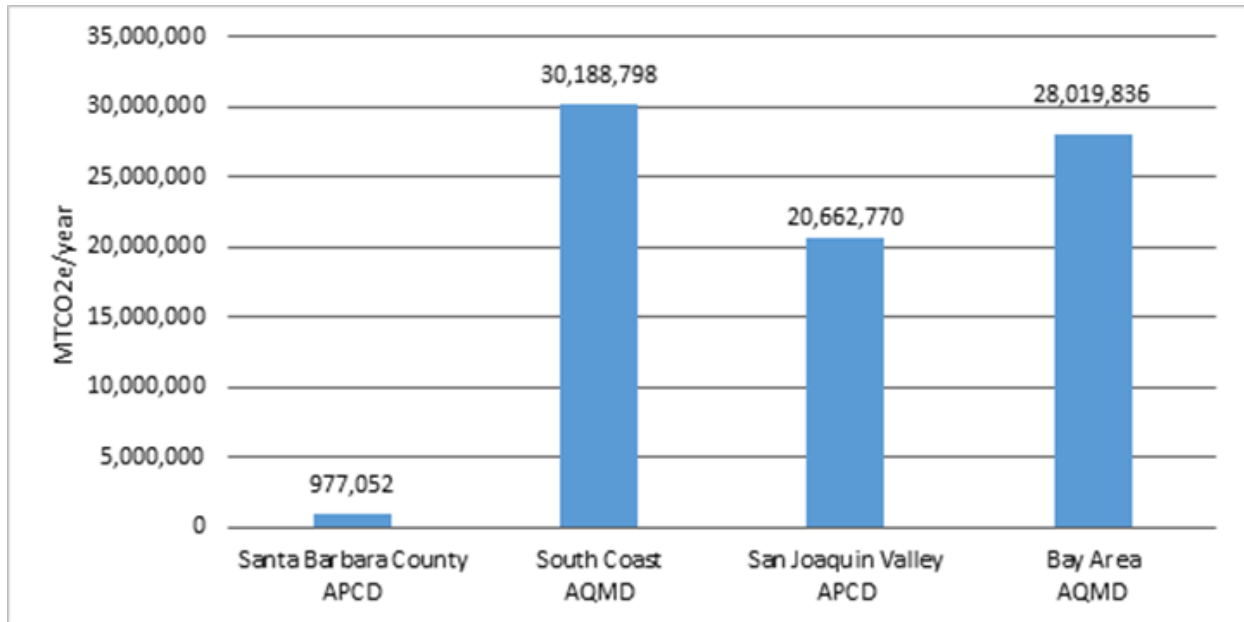
The GHG emissions that were reported to CARB for 2011 (hereafter referred to as the 2011 MRR data set), although more complete in terms of some emissions sources (fugitive methane emissions, process gas emissions, electricity emissions), is deficient for developing a threshold level as it includes very few sources that emit less than 25,000 MTCO₂E/year (only 69 for the South Coast AQMD region). The South Coast AQMD dataset includes a total of 1,297 sources, 58 of which are above 25,000 MTCO₂E/year and 1,239 of which are below 25,000 MTCO₂E/year. The CARB 2011 MRR data set includes a total of 132 sources in the South Coast AQMD region, 67 of which are above 25,000 MTCO₂E/year, and 65 of which are below 25,000 MTCO₂E/year. Both data sets have their limitations; by design, the MRR 2011 data set excludes a large portion of the projects in the region, and captures only the very largest projects.

SME has questioned the SCAQMD data set approach, contending that calculating a 90% capture rate through the use of the CARB GHG MMR (2011 date) would produce a much higher threshold – estimated by SME to be 205,299 MTCO₂E instead of 10,000 MTCO₂E. Determining a 90% capture level based on the 2011 MRR dataset essentially applies a filter to a data set that has already been filtered. SME derived a hypothetical threshold from the CARB dataset without the inclusion of approximately 1200 SCAQMD facilities.

Based on one year (2011) of Santa Barbara County stationary source GHG data (total of 246 stationary sources), the Santa Barbara County APCD has made preliminary estimates of the 90 and 95 percent capture rates. The thresholds were estimated to be 10,000 MTCO₂E and 3,000 MTCO₂E, respectively, for 90% and 95% capture. The APCD suggests using a larger data set and taking a regional view to establish a CEQA GHG threshold. For instance, inclusion of Santa Barbara County in the South Coast regional emissions inventory, which is about 33 percent of permitted sources in California, supports a 10,000 MTCO₂E threshold for Santa Barbara County because the emissions inventory in Santa Barbara County is very small compared to the South Coast regional emissions.. As described above, the interim SCAQMD threshold is based upon a 90 percent capture rate calculated by SCAQMD, using the 2008 methodology.

The figure below compares Santa Barbara County APCD's stationary source emissions from 2011 to the GHG emissions reported to the California Air Resources Board in 2011 for sources in the South Coast AQMD, San Joaquin APCD, and Bay Area AQMD regions.

Figure 5.1-1a Comparison of Air District Stationary Source GHG Emissions
Sources emitting more than 10,000 metric tons/yr



Reference: Santa Barbara County APCD and CARB, 2013a. The Santa Barbara County emissions number does not include emissions generated by biogenic fuels, such as landfill gas, wastewater treatment methane, and biomass facilities/power plants, and does not include GHG emissions that will occur from energy embedded in fuels used by consumers.

Although Santa Barbara County is a relatively large geographic region (approximately 2,700 square miles), the region is much less densely populated (2012 population estimate is 431,000) and has less commercial and industrial land uses than neighboring counties to the south. Correspondingly, the GHG emissions related to stationary sources are much smaller than other counties in the South Coast AQMD region. Using the values in the figure above, the GHG emissions in Santa Barbara County are approximately 3.2% of the GHG emissions for the South Coast AQMD region, which is made up of the most populated areas of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The collective South Coast AQMD region comprises a large and important regional economy in the United States, encompasses about 10,750 square miles, and has a population of approximately 16.8 million people. It is the second most populated urban area in the United States. The GHG emissions associated with Santa Barbara County's stationary source facilities are a very small portion of the GHG emissions in the Southern California region. If the GHG emissions from Santa Barbara County were folded into an inventory for the larger Southern California region, it is evident that the additional data would have little or no effect on the percent amount of GHG emissions "captured" by a 10,000 MT/yr stationary source threshold for that larger region.

There is no science-based reason for applying a more stringent threshold to the Santa Barbara County region than is applied in a larger region within the State of California. Rather, the stationary source threshold of 10,000 MT/yr adopted by the South Coast AQMD is a reasonable threshold to apply if a numeric, bright-line threshold were considered for this project, as allowed by CEQA Guidelines Section 15064.7(c).

BAU Thresholds

The essential rationale behind the BAU thresholds is that CEQA Guidelines Section 15064.4(b)(3) provides that when determining if cumulative impacts from GHG emissions are significant, a lead agency may consider whether a project complies with the regulations or requirements adopted pursuant to a statewide plan adopted for the reduction or mitigation of GHG. CARB's *Climate Change Scoping Plan* (hereafter "Scoping Plan") is such a plan. CARB prepared the first Scoping Plan in 2008 (with a re-approval in August 2011) as part of its mandate to implement Assembly Bill (AB) 32, the "California Global Warming Solutions Act" (Health & Safety Code sections 369500 et. seq.). AB 32 mandates a reduction in California's GHG emissions to 1990 levels by 2020 (the 1990 level that serves as the 2020 target is 427 million MTCO₂E). This reduction is viewed as an aggressive, but achievable, mid-term target toward stabilization of the planet's climate in the latter half of the 21st century (CARB, 2008, pp. 4 and 117). Prior to the adoption of AB 32 process, former-Governor Schwarzenegger's issued Executive Order S-3-05 setting a long term goal for GHG reduction, calling for an 80 percent reduction of GHG emissions from 1990 levels by the year 2050, which results in a target level of 85.4 MTCO₂E. (Ibid.) The Scoping Plan indicates how emission reductions in California will be achieved through regulations, market mechanisms, and other actions, to reach the 2020 target. AB 32 represents California's solution to global climate change in legal terms, and also represents the state's solution in policy terms when combined with S-3-05. (Crockett, 2011, pp. 7 - 8.)

To achieve the AB 32 2020 mid-term goal of reducing GHG to 1990 emission levels, the Scoping Plans projected the reasonable expected GHG emissions growth through the year 2020 which is the "business-as-usual" (BAU) scenario, and then determined the GHG emission reductions that are expected or have occurred due to the emission reduction measures required by the Scoping Plan.

Since 2008, ARB has updated the projected BAU emissions based on current economic forecasts (i.e., as influenced by the economic downturn) and GHG-reduction measures already in place. The BAU projection for 2020 GHG emissions in California was originally, in the 2008 Scoping Plan, estimated to be 596 MMTCO₂E. ARB subsequently derived an updated estimate of emissions by considering the influence of the recent recession and reduction measures that are already in place. The 2011 Scoping plan estimates the year 2020 emissions at 507 MMTCO₂E (as the BAU estimate). CARB estimates that statewide emissions have to be reduced by 80 million MTCO₂E/year from 2008 emission levels to meet the 2020 target emissions level.

The 2011 Scoping Plan concluded that achieving the 1990 levels by 2020 meant cutting approximately 16 percent, compared to the original 2008 Scoping Plan that estimated a 29% reduction (CARB, 2011a, p. 11). The 2011 Scoping Plan sets forth the expected GHG emission reductions from a variety of measures, including the Pavley I automobile standards and the Renewables Portfolio Standard, neither of which were assumed in the 2008 Scoping Plan (CARB, 2011b).

AB 32 requires that the Scoping Plan be revised every five years; the first five-year revision is scheduled to be heard by CARB for adoption in November of 2013. This first revision will provide an update on climate science and a report on progress toward the 2020 target, including achievements of the 2008 and

2011 Scoping Plans, an update on the inventory of GHG emissions, and an update of the economy and its potential influence on future emissions' forecasting. It will also address post-2020 goals, including Executive Order S-3-05.

BAU thresholds are based on a reduction from a "business-as-usual" scenario, where BAU emissions equate to the emissions that would have occurred in the absence of the mandated reductions under AB-32 programs. The definition of BAU is a critical aspect of determining the significance of a project. In the CARB Scoping Plans, the BAU case is a representation of what the State of the California economy will be in the year 2020 assuming that none of the measures recommended in the Scoping Plan are implemented. The BAU should not be confused with a CEQA baseline analysis, where, for a new housing development project, for example, the baseline would be the empty field, while the BAU would be the development project "in the absence of any AB 32 programs." CAPCOA defines BAU as emissions that would occur "in the absence of mandated reductions" and does not equate the BAU with a CEQA baseline. A recent court case provides some guidance on what a BAU project scenario would be for a proposed project (*Friends of the Northern San Jacinto Valley et al. v. County of Riverside*, 5/31/2012). This court case ruled that a BAU scenario for a project should meet the following conditions:

- It should be within the existing legal constraints;
- It should be practical and credible;
- It should include the application of local planning and zoning laws;

The decision provides guidance on the selection of the BAU scenario from which a percent reduction would be calculated.

If the projected emissions levels from a source can be reduced to a percentage below BAU that is consistent with the Scoping Plan targets (e.g., 16 percent below BAU), cumulative impacts would be found to be mitigated to less than significant because it has implemented or funded its fair share of mitigation to alleviate the cumulative impact. Options for setting thresholds at reduction rates higher than 16% have relied on the necessity of addressing the long-term 2050 emission-reduction goal set in Executive Order S-3-05, as further discussed below.

The Scoping Plan relies on several command and control measures to reduce GHG pollution, such as regulation of landfills and certain commercial refrigerant operations, Pavley I automobile standards, regional transportation measures, energy efficiency, and many other measures. (CARB, 2008, p. 15.) A key part of the program, however, is Cap-and-Trade, which is applied to a number of sources, including all stationary sources with GHG pollution in excess of 25,000 tons annually. (Cap-and-Trade is discussed in more detail below, under State GHG Regulations and Programs.)

The SME project is required to participate in the Cap-and-Trade program by virtue of its total annual emissions that would surpass the threshold of 25,000 MTCO₂E. Between now and the year 2020, the Cap-and-Trade program statewide is estimated to account for a reduction of 18 MTCO₂E (or 22.5 percent) of the 80 MTCO₂E required to meet the AB 32 mid-term target. CARB estimates that, by 2030, a reduction in California's GHG emissions to below 300 MTCO₂E is needed to stay on course toward the long-term 2050 target; CARB also estimates that the Scoping Plan measures would produce a reduction to 284 MTCO₂E by 2030. (CARB, 2008, pp. 118 - 120.) For its part, a comprehensive Cap-and-Trade program of regional or national scope could lower emissions in those sectors of the economy subject to the program from 365 MTCO₂E in 2020 to around 250 MTCO₂E in 2030. According to the Plan: "By

tightening the cap over time, it is expected that facilities in the industrial and natural gas sectors would achieve reductions well beyond those needed to meet the 2020 emissions cap.” (*Ibid*, pp. 118 - 120.)

There are multiple possibilities under the BAU approach in terms of reductions from the BAU scenario and demonstrating consistency with the AB 32’s target. These include:

- Reliance on only AB 32 Scoping Plan programs. CARB has adopted the Scoping Plan that shows the State will achieve the 1990 GHG emission levels by 2020 with the implementation of the Scoping Plan programs (i.e. for stationary sources, this would primarily be the Cap-and-Trade program). No additional reductions are needed. CARB also sees the Cap and Trade Program as an important facet in achieving the longer term State goal of reducing statewide GHG emissions to a level 80% below 1990 emission levels by 2050.
- A 29 percent reduction, as is currently the adopted approach in San Joaquin Valley APCD (SJVAPCD) and East Kern County APCD (EKCAPCD) areas, where the reduction is based on the original 2008 Scoping Plan reduction requirements to achieve the year 2020 targets. This threshold level is discussed in CAPCOA’s CEQA and Climate Change Paper (CAPCOA 2008);
- A 16 percent reduction where the reduction is based on the revised 2011 Scoping Plan reduction requirements;
- A 50 percent reduction from BAU, with an increased reduction over what is required to achieve the AB-32 target for 2020. This threshold level is discussed in the CAPCOA’s CEQA and Climate Change Paper (CAPCOA 2008) and Alexander Crockett’s “Addressing the Significance of Greenhouse Gas Emissions under CEQA: California’s Search for Regulatory Certainty in an Uncertain World,” (Crockett, 2011, p. 14); and
- A 90 percent reduction from BAU, where an even greater reduction over what is required to achieve the AB 32 target for 2020 is based on the presumption that new development should contribute an even greater percent reduction from business-as-usual.

Each of these is discussed below

Reliance on AB 32 Scoping Plan for Projects Subject to Cap and Trade

This threshold relies entirely on the Scoping Plan programs to achieve the required reductions. These programs are numerous, but for stationary sources, are composed primarily of the Cap-and-Trade program. The Cap-and-Trade program includes all stationary sources in California that emit more than 25,000 MTCO₂E per year. According to CARB, this would capture most of the GHG emissions from stationary sources in the State. Participants in the program are required to reduce emissions or purchase/obtain “allowances” so that the total GHG emissions from all covered sources in California would not increase over time, with a reduction in the “cap”, or total emissions, occurring over time as part of the regulation. This would enable the State-wide GHG emissions from the majority of stationary sources to be reduced each year until the 2020 goals are achieved. The program beyond the year 2020 has not been developed at this time, but CARB indicates that it most likely would continue and the Cap-and-Trade program would be used to achieve the 2050 goals also. More information is included in section 5.1.2.2 Regulatory Setting below.

Percent Reduction Below BAU

A number of approaches discussed below allow for an accelerated method to implement additional reductions earlier than the Scoping Plan Cap-and-Trade program prescribes. These approaches also attempt to address the need to ensure that the S-3-05 goal of an 80 percent reduction by 2050 (from 1990 emissions) is achieved.

29 or 16 Percent Reductions Below BAU

The approach stems from the CARB AB 32 Scoping Plan of 2008, which prepared and adopted a statewide greenhouse gas inventory for the years 2002 – 2004 and determined that an emission reduction of approximately 29 percent below business as usual was necessary to achieve 1990 emission levels by 2020. This is referred to as reducing emissions below the expected “BAU” scenario. Due to a lawsuit, CARB re-approved the Scoping Plan in 2011 with revisions; including new calculations that determined a lower reduction level of 16 percent rather than 29 percent was necessary to meet the goal of AB -32 by 2020. This recalculation was based on a lower statewide greenhouse gas inventory for the years 2006-2008, revised growth projections, and estimated increase of effectiveness of AB-32 greenhouse gas reduction measures already implemented (e.g., the Pavley motor vehicle standards, and the Renewable Portfolio Standards for the generation of electricity). The BAU approach has been adopted or utilized as CEQA threshold by the SJVAPCD, Eastern Kern APCD (both prescribing a 29 percent reduction) and the City of Chula Vista (and upheld by *Citizens for Responsible Equitable Environmental Development, Petitioner and Appellant, v. City of Chula Vista*).

AB 32 requires CARB to update the Scoping Plan every 5 years in order to achieve the maximum technologically feasible and cost-effective reductions of greenhouse gases. (Health & Safety Code sec. 38561(h).) CARB may consider the goals of EO S-3-05 as part of that process. Variability in the reduction percentage is anticipated as the Scoping Plan is revised multiple times between now and the year 2020, and it is anticipated that the reduction percentage would increase from 16 percent, as the economy is expected to recover over the next 5-10 years. At this time, however, the 16% threshold is identified in the revised 2011 Scoping Plan as necessary to meet the 2020 mid-term target, and the 29% threshold, which was identified in the 2008 Scoping Plan as necessary to meet the 2020 target, provides additional reductions to address the 2050 goal provided in Executive Order S-3-05.

50 Percent Reductions Below BAU

The use of a higher reduction than the Scoping Plan levels of 16 or 29 percent is based on the conclusion that new development should contribute a greater percent reduction from BAU because greater reductions can be achieved at lower cost from new projects than can be achieved from existing sources (CAPCOA 2008, pp. 33-34; Crockett, 2011, p. 14). In addition, Former Governor Schwarzenegger adopted E.O. S 3-05 which set a goal of reducing emissions to 80 percent below 1990 levels by 2050. CARB has partially addressed this goal in the Scoping Plan, which is the formal plan for implementing AB 32, as discussed later in this section. However, CARB indicates in the Scoping Plan that the programs adopted, including Cap-and Trade, would contribute to achieving the 2050 goals. It is assumed that, under Cap-and-Trade, additional reductions in allowances would continue to be required past 2020, along with land use and transportation achievements, in order to achieve the 2050 targets. “ARB believes, based on the review of emission reduction opportunities conducted for the Scoping Plan, that significant reduction opportunities exist in the industrial sector that are more readily achieved through market mechanisms than through direct measures [i.e., regulations].” (CARB, 2008, page C-17).

As the S-3-05 Executive order sets a goal of an 80 percent reduction by 2050, higher reduction levels than the 16 or 29 percent as detailed in the Scoping Plans would be required beyond 2020 in order to achieve that longer term goal. Reduction levels of between 50 percent (CAPCOA, 2008, pp. 33-34) and 90 percent could be utilized to account for a greater contribution by new development and the need to achieve these longer terms goals of S-3-05. CAPCOA specifically discusses the 50 percent reduction

threshold, determining that it would have a high level of consistency with AB-32, a medium level of effectiveness but a medium/high level of uncertainty. (CAPCOA, 2008, pp. 33-34.)

90 Percent Below BAU

Establishment of a 90 percent BAU threshold is based in part on the SCAQMD Interim Threshold development where a reduction of 90 percent over the current (at the time of SCAQMD development) emissions would be required to achieve an 80 percent reduction by 2050 as defined in the S-3-05 Executive order.

EIR Significance Determination

If the projected project emissions are mitigated to a level that will be consistent with AB 32, then the cumulative GHG impacts contributed by the project will be found to be less than significant. This method is based on CARB's implementation of AB 32, including the Scoping Plans, as the statewide program that will achieve the State's emission reduction goal of achieving 1990 emission-levels by 2020, and further the State's progress towards meeting the 2050 policy target. These targets (as established by AB 32 and the Scoping Plans) have been established as goals that will reduce impacts from climate change, and contribute to reducing global atmospheric GHG to levels that are projected to produce less than significant impacts.

An alternative approach to assess significance is based on emissions captured. If the projected project emissions fall into the category that represents the smallest projects within the lead agency's jurisdiction – i.e., those projects that collectively make up only 5-10% of new projects, then the projects contribution to climate change would not be considered to be cumulatively considerable. For those projects with projected emissions that fall into the category of larger projects, GHG emissions would be considered to be a significant contribution to the cumulative impact of climate change, and all feasible alternatives or mitigation would be required.

The original draft EIR for this project identified that a mitigation of GHG emissions to a level equating to 29% below BAU, or more, would render the project's cumulative impact to be less than significant. The public review of the draft EIR resulted in some agreement with this choice of threshold, and some opposition; the latter contending that a 29% reduction from BAU was inadequate in light of thresholds used by other lead agencies that required larger reductions of GHG emissions. Planning and Development staff prepared a proposed Final EIR and proceeded to the County's Planning Commission with a recommendation to approve the project with a required reduction in the project's GHG emissions to 29% below BAU. The County's Planning Commission, on a 3-2 vote, disagreed with staff's recommendation and directed staff to apply a 50% below BAU threshold, and to recirculate the GHG component of the Air Quality section of the proposed Final EIR for public comment, including several additional thresholds options that were described during the hearing.

Accordingly, this Draft Recirculation Document includes a range of options for establishing a CEQA threshold of significance for GHG emissions, specifically the 16, 29, 50 and 90 percent below BAU and the 10,000 MTCO₂E/year threshold. The BAU approaches, as discussed above, would be consistent with AB 32 as they would achieve similar reductions to AB 32, although at different levels and different timeframes. The use of the 10,000 MTCO₂E/yr threshold would also obtain mitigation and reduction levels comparable to the 90 percent BAU threshold for this project, and would therefore also be consistent with AB 32 (see subsequent analysis below Table 5.1-12 and 5.1-13).

Reductions, or mitigation measures, could include a wide variety of measures which could reduce GHG emissions, including:

- Onsite increased equipment efficiencies or operational modifications;
- Offsite programs implemented in the community;
- Purchased “credits” from a source that are verified by CARB or equivalent; or
- Allowances purchased as part of the Cap-and-Trade program.

The use of purchased Cap-and-Trade allowances is allowed to be counted towards the threshold in order to give credit for the reductions associated with the Cap-and-Trade program. Under the Cap-and-Trade program, these purchased allowances are estimated to, after a 5-10 year timeframe, contribute all of the required reductions under any of threshold approaches described above.

5.1.2 SANTA MARIA ENERGY 136-WELL, CYCLIC-STEAMING ODP

5.1.2.1 Environmental Setting

[No changes in this sub-section from the proposed Final EIR. This sub-section discussion on GHG has been included for reference purposes only.]

Greenhouse Gases

Greenhouse gases (GHGs) are defined as any gas that absorbs infrared radiation in the atmosphere, including water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and fluorocarbons. These GHGs lead to the trapping and buildup of heat in the atmosphere near the earth’s surface, commonly known as the “greenhouse effect”. The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without natural GHGs, the Earth’s surface would be cooler (CA 2006b). Emissions from human activities, such as electricity production and vehicles, have elevated the concentration of these gases in the atmosphere.

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere. Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as the “CO₂ equivalent”. This is the amount of GHGs emitted multiplied by the GWP. The GWP of CO₂ is defined as one, whereas the GWP of methane, for example, is 21, meaning that methane gas absorbs 21 times as much heat, and therefore has 21 times greater impact on global warming per pound of emissions, as CO₂.

Water vapor is the most abundant and variable GHG in the atmosphere. It is not considered a pollutant, however, as in the atmosphere it maintains a climate necessary for life. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from ice and snow, and transpiration from plant leaves (AEP 2007).

Carbon dioxide is an odorless, colorless GHG. Natural sources of CO₂ include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human caused) sources of CO₂ include burning fuels, such as coal, oil, natural gas, and wood. Atmospheric CO₂ concentrations are currently around 370 ppm.

Methane gas is the main component of natural gas used in homes. As discussed above, it has a GWP of about 21. Natural sources of methane arise from the decay of organic matter and from geological deposits known as natural gas fields, from which methane is extracted for fuel. Sources of decaying organic material include landfills, and manure.

Nitrous oxide is a colorless gas with a GWP of about 310 that is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N₂O. It is used in rocket engines, as an aerosol spray propellant, and in race cars. During combustion, NO_x (NO_x is a generic term for mono-nitrogen oxides, NO and NO₂) is produced as a criteria pollutant (see above), and is not the same as N₂O. Very small quantities of nitrous oxide (N₂O) may be formed during fuel combustion by reaction of nitrogen and oxygen (API 2004).

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with either chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore their production was stopped as required by the Montreal Protocol. Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs in automobile air conditioners and refrigerants. Perfluorocarbons (PFCs) are used in aluminum production and semiconductor manufacture industry. In general, fluorocarbons have a GWP of between 140 and 11,700.

Sulfur hexafluoride (SF₆) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas at 23,900. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and therefore is not global in nature. According to CARB, it is difficult to make an accurate determination of the contribution of ozone precursors (NO_x and volatile organic compounds [VOCs]) to global warming (CARB 2006b).

Table 5.1-5 shows a range of gasses that contribute to GHG warming with their associated global warming potential. The table also shows their estimated lifetime in the atmosphere and the range in global warming potential over 20 years.

Fossil fuel combustion represents the vast majority of the anthropogenic GHG emissions, with CO₂ being the primary GHG. The total U.S. GHG emissions were 7,260 million metric tons of carbon equivalents (MMTCE) in 2005, of which 84 percent were CO₂ emissions (EPA 2007). In 2005, approximately 33 percent of GHG emissions were associated with transportation and about 41 percent with electricity generation.

California's GHG emissions are large in a world-scale context and continuing to grow over time. California GHG emissions would rank 16th largest in the world. In 2004, California produced 492 million metric tons of CO₂ equivalent GHG emissions (CEC 2006). The transportation sector is the single largest category of California's GHG emissions, producing 41 percent of the State's total GHG emissions in

2004. Electrical generation produced 22 percent of GHG emissions. Most of California's emissions, 81 percent, are CO₂ produced from fossil fuel combustion (CEC 2006).

In order to quantify the emissions associated with electrical generation, the "resource mix" for a particular area must be determined. The resource mix is the proportion of electricity that is generated from different sources. Electricity generated from coal or oil combustion produces greater GHG emissions than electricity generated from natural gas combustion due to coal and oil's higher carbon content. Electricity generated from wind turbines, hydroelectric dams or nuclear power is assigned zero GHG emissions. Although these sources have some GHG emissions associated with the manufacture of the wind generators, the mining and enrichment of uranium or the displacement of forest areas for reservoirs, these emissions have not been included in the lifecycle analysis as they are assumed to be relatively small compared to the electricity generated. Estimates of nuclear power GHG emissions associated with uranium mining and enrichment range up to about 60 lbs/MWh, or about five percent of natural gas turbine GHG emissions (Canada 1998).

Table 5.1-5 Global Warming Potential of Various Gases

Gas	Life in the Atmosphere (years)	20-year GWP (average)
Carbon Dioxide	50-200	1
Methane	12	21
Nitrous Oxide	120	310
HFC-23	264	11,700
HFC-125	32.6	2,800
HFC-134a	14.6	1,300
HFC-143a	48.3	3,800
HFC-152a	1.5	140
HFC-227ea	36.5	2,900
HFC-236fa	209	6,300
HFC-4310mee	17.1	1,300
CF ₄	50,000	6,500
C ₂ F ₆	10,000	9,200
C ₄ F ₁₀	2,600	7,000
C ₆ F ₁₄	3,200	7,400
SF ₆	3,200	23,900

Note: GWP = global warming potential
Source: EPA 2007

Detailed information on the power generation plants, their contribution to area electricity "resource mix" and their associated emissions have been developed by the Federal EPA in a database called the Emissions & Generation Resource Integrated Database (eGRID). eGRID is a comprehensive inventory of environmental attributes of electric power systems and is developed from a variety of data collected by the U.S. Environmental Protection Agency (EPA), Energy Information Administration (EIA), and Federal

Energy Regulatory Commission (FERC). The most recent version released in 2012 contains information as recent as 2009.

About half of the electricity in the United States is generated from coal, producing a U.S. GHG emissions level of about 1,222 lbs/MWh (pounds per mega-watt hour). The GHG emissions rate is lower for western states, primarily due to the increased use of hydroelectric and natural gas. The California area has a GHG emission rate of about 661 lbs/MWh due to the contribution of hydroelectric, nuclear and renewable sources. Table 5.1-6 shows the resource mix and the nationwide and California GHG emission rates.

Table 5.1-6 Electricity Generation Resource Mix and Greenhouse Gas Emissions

Resource Mix^a	United States	Calif Area (CAMX)
Coal	44.5	7.3
Oil	1.1	1.4
Gas	23.3	53.0
Other Fossil	0.3	0.2
Biomass	1.4	2.7
Hydro	6.8	12.7
Nuclear	20.2	14.9
Wind	1.9	2.8
Solar	0.02	0.3
Geo	0.4	4.4
Other	0.1	0.3
Non-Renewables	69.2	62.0
Renewables	30.8	38.0
CO ₂ Rate, lb/MWh	1,222	661

a. Resource Mix is the percentage of total mega-watt hours.

Source: eGRID database with modifications and updates, EPA 2012, data for year 2009

The Pacific Gas and Electric (PG&E) GHG emission rate is slightly lower than the California average due to its reliance on the nuclear power and hydroelectric. The PG&E service area includes partial use of electricity from the Diablo Canyon nuclear power plant, the use of hydroelectric in the Sierra Nevada and the use of geothermal plants located in Nevada. The rate used in this analysis was taken from CalEEMod modeling program and is 641 lbs/MWh.

The GHG emission rate for electricity obtained from PG&E is about 45 percent less than the rate associated with direct natural gas combustion due to the electricity resource mix which includes non-GHG emission creating resources (hydroelectric, nuclear, renewables).

Calculation of Greenhouse Gas Emissions

The quantification of GHG emissions associated with a Project can be complex and relies on a number of assumptions. GHG emissions are global because emissions from one location could affect the entire planet, and they are not limited to local impacts. Therefore, offsite impacts, such as vehicle emissions and other associated transportation emissions, are included.

Emissions are generally classified as either direct or indirect. Direct emissions are associated with the production of GHG emissions at the Project Site. These include the combustion of natural gas in heaters or stoves, the combustion of fuel in engines and construction vehicles, and fugitive emissions from valves and connections, which include methane as a component.

Indirect emissions include the emissions from vehicles (both gasoline and diesel) delivering materials and equipment to the site and the use of electricity. Electricity also produces GHG emissions because fossil fuels generate some electricity.

This report utilizes the California Climate Action Registry General Reporting Protocol and the CARB Compendium of Emission Factors and Methods to Support Mandatory Reporting of Greenhouse Gas Emissions as methods to calculate GHG emissions (CCAR 2009, CARB 2007c).

Indirect GHG emissions associated with trash hauling and other services that might visit the Proposed Project Site are incorporated through the inclusion of the travel of diesel trucks that would visit and service the Project Site.

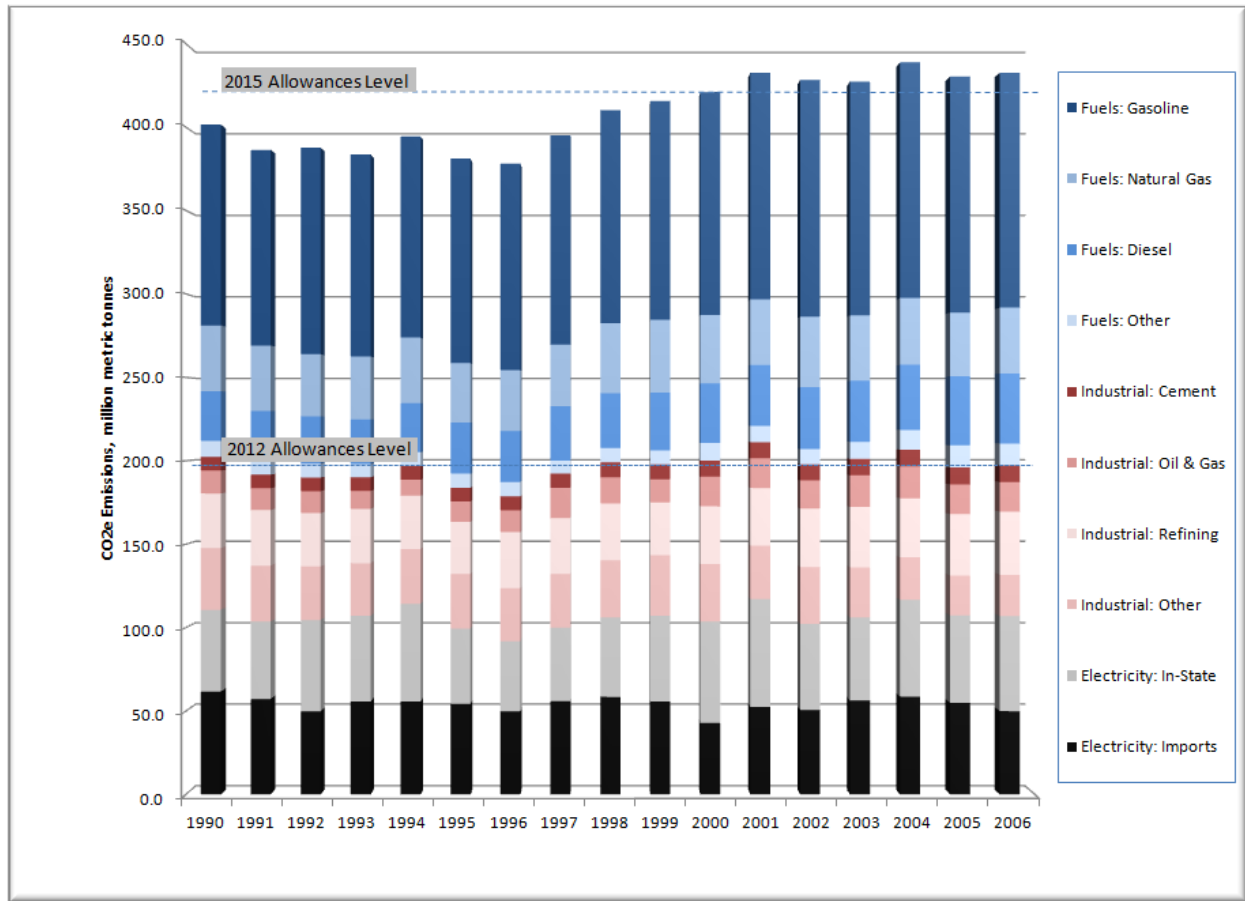
National Greenhouse Gas Emissions

Fossil fuel combustion is responsible for the vast majority of the United State's GHG emissions, and CO₂ is the primary GHG. In 2005, total US GHG emissions were 7,260 million metric tons of carbon equivalent (MMTCE); 84 percent of which were CO₂ emissions (EPA 2007). In 2005, approximately 33 percent of GHG emissions were associated with transportation and approximately 41 percent were associated with electricity generation.

Statewide Greenhouse Gas Emissions

With a population of over 37 million, California is the most populous state in the United States. In 2004, California produced 492 MMTCE of GHG emissions (CARB 2008). Overall, 81 percent of California's emissions are CO₂ from fossil fuel combustion (CARB 2008). The transportation sector is the single largest contributor of California's GHG emissions, producing 38 percent of the State's total GHG emissions in 2004. In contrast, electrical generation produced 23 percent. Nonetheless, California ranks fourth lowest of the 50 states in CO₂ emissions per capita. Figure 5.1-1 shows the historical GHG emissions in California along with the allowances levels defined in the recent cap-and-trade legislation (see below).

Figure 5.1-1b California GHG Emissions



Source: CARB 2009, Allowance levels shown for Cap-and-Trade legislation

Impacts of GHG Emissions

Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. Historical records have shown that dramatic temperature changes have occurred in the past, such as during previous ice ages. Some data indicate that the current temperature record differs from previous climate changes in both rate and magnitude (AEP 2007). These climate changes could lead to alterations in weather, rainfall patterns, and increasing sea levels leading to flooding. The worldwide scientific consensus is that global climate change is caused by anthropogenic GHG emissions. The issue of how best to respond to climate change and its effects is currently one of the most widely debated economic and political issues in the United States.

Atmospheric CO₂ concentrations are currently around 392 ppm (based on the NOAA global annual mean calculated 6/2013, NOAA 2013) and concentrations may increase to 540 ppm by 2100 as a direct result of anthropogenic sources .

A summary report from the California Climate Change Center (CARB 2009) notes that a warming California climate would generate more smoggy days by contributing to ozone formation while also fostering more large brush and forest fires. Continuing increases in global greenhouse gas emissions at business-as-usual rates would result, by late in the century, in California losing 90 percent of the Sierra snowpack, sea level rising by more than 20 inches, and a three to four times increase in heat wave days. And increases in temperature will lead to increased concentrations and emissions of harmful pollutants in California.

In the Findings and Declarations for AB 32, the Legislature found that: “The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in 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 the marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other health-related problems.”

Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level. The linear warming trend over the 50 years from 1956 to 2005 (0.13 °C per decade) is nearly twice that for the 100 years from 1906 to 2005. Global average sea level rose at an average rate of 1.8 mm per year over 1961 to 2003 and at an average rate of about 3.1 mm per year from 1993 to 2003 (IPCC 2007).

AB 32 addresses the results of studies conducted by the Intergovernmental Panel on Climate Change (IPCC 2001, 2007) that examined a range of scenarios that estimated an increase in globally averaged surface temperature of 0.5 to 11.5°F over the period 1990 to 2100 with ocean rise between 0.6 to 1.9 feet over the same timeframe.

The IPCC Studies (2007) indicate that “In order to stabilize the concentration of GHGs in the atmosphere, emissions would need to peak and decline thereafter. The lower the stabilization level, the more quickly this peak and decline would need to occur”. The studies also found that stabilization of atmospheric CO₂ concentrations at less than 450 ppm would limit temperature rise to less than 3.6°F by the year 2100 and would require global anthropogenic CO₂ emissions to drop below the year 1990 levels within a few decades (by 2020). If GHG emissions, and atmospheric CO₂ levels, were kept to this “Category I” level (producing increases in global average temperature of less than 1.8-5.4 °F above 1980-1999 levels) impacts to gross domestic product (GDP) are projected to “produce market benefits in some places and sectors while, at the same time, imposing costs in other places and sectors” (IPCC 2007). Higher levels of CO₂, ranging above 700 ppm with corresponding temperature increases of 7°F, could cause a reduction in global GDP of more than 5%, with regional losses substantially higher. Therefore, stabilizing GHG emissions levels at 1990 levels over the next 2 decades would reduce the impacts of climate change to levels that would produce nominal changes in global average GDP and would be less than significant.

Countywide Greenhouse Gas Emissions

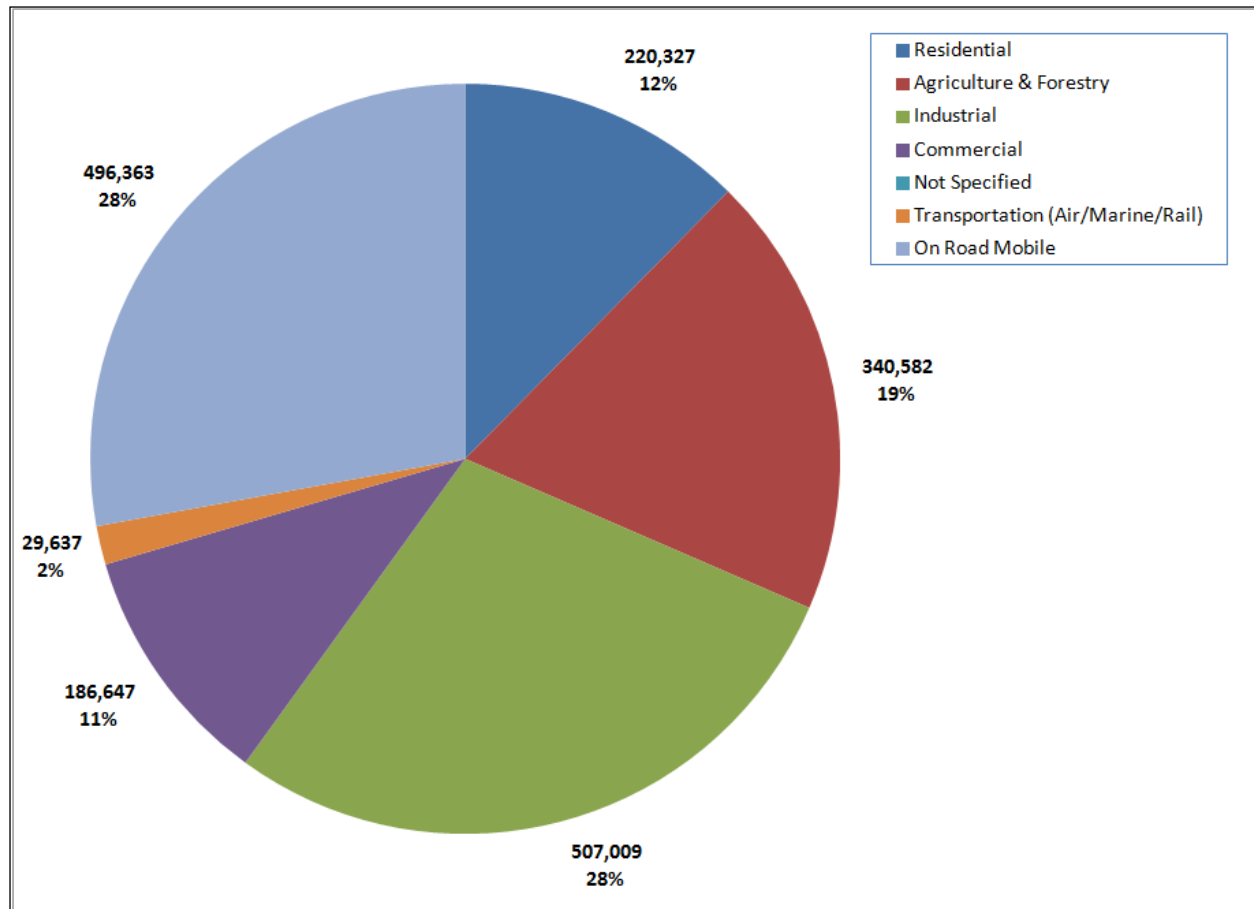
The Santa Barbara County Climate Action Strategy (CAS) is being developed to address greenhouse gas (GHG) emissions pursuant to the Board of Supervisors’ March 2009 direction (BOS Resolution 09-059) “to take immediate, cost effective, and coordinated steps to reduce the County’s collective GHG emissions.” The CAS follows a two-phase structure to reduce emissions. Phase 1 is preparation of a Climate Action Study and phase 2 is the development of an Energy and Climate Action Plan. The Study is the first phase of the CAS. It includes: a GHG inventory and forecast for the unincorporated County, a discussion of GHG emission reduction target options that the County could pursue, a list of current

County activities which reduce GHG emissions, evaluation of potential additional emission reduction measures (ERMs) the County could implement, and recommendations for implementation of the Study through a Climate Action Plan (CAP).

The Climate Action Plan would represent the second phase of the CAS and would seek to reduce the County's GHG emissions through implementation of selected programs with the goal of achieving a GHG reduction target to be selected by the Board as part of the CAP. Additionally, a CAP could allow for programmatic mitigation of GHG emissions as required under CEQA.

The Climate Action Study was released in September 2011 and addresses municipal operations, countywide operations and implementation. Total GHG emissions were estimated at about 1.8 million tons in 2007. See Figure 5.1-3 for a categorization of the County emissions.

Figure 5.1-3 Santa Barbara County GHG Emissions – 2007



Note: Total emissions equal 1,780,565 MTCO₂E. Figure shows unincorporated Santa Barbara County only. It does not include emissions from other sources in County, such as cities, state and federal lands, Native American reservations, UCSB, and offshore seeps.

Source: SBC 2011.

Current Santa Maria Energy Facility Emissions

Emissions of GHG are generated from current operations, including flaring and combustion of field gases (16,444 MTCO₂e), electrical generation (1,923 MTCO₂e), offsite sources and miscellaneous (555 MTCO₂e) annually. See the Air Quality appendix for detailed calculations.

5.1.2.2 Regulatory Setting

GREENHOUSE GAS EMISSIONS REGULATIONS AND PROGRAMS

International GHG Regulations

Kyoto Protocol

The Kyoto Protocol is a treaty made under the United Nations Framework Convention on Climate Change, which was signed on March 21, 1994. The Convention 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 would be reduced by an estimated 5 percent from 1990 levels during the first commitment period from 2008 until 2012. However, while the US is a signatory to the Kyoto Protocol, Congress has not ratified it; therefore, the US is not bound by the Protocol's commitments.

Climate Change Technology Program

In lieu of the Kyoto Protocol's mandatory framework, the US has opted for a voluntary and incentive-based approach toward emissions reductions. This approach, the Climate Change Technology Program, is a multi-agency research and development coordination effort, led by the Secretaries of Energy and Commerce, who are charged with carrying out the President's National Climate Change Technology Initiative.

Federal GHG Regulations

Clean Air Act

In the past, the US EPA has not regulated GHG under the Clean Air Act. However, in 2007 the US Supreme Court held that the EPA can, and should, consider regulating motor-vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency*, 12 states and cities, including California, in conjunction with several environmental organizations sued to force the EPA to regulate GHG as a pollutant pursuant to the Clean Air Act (US Supreme Court No. 05-1120; 127 S.Ct. 1438 (2007)). The Court ruled that GHG fit within the Clean Air Act's definition of a pollutant and that the EPA's reason for not regulating GHG was insufficiently grounded.

40 CFR Section 98 specifies mandatory reporting requirements for a number of industries. The final 40 CFR part 98 applies to certain downstream facilities that emit GHG, and to certain upstream suppliers of fossil fuels and industrial GHG. For suppliers, the GHG emissions reported are the emissions that would result from combustion or use of the products supplied. The rule also includes provisions to ensure the accuracy of emissions data through monitoring, recordkeeping and verification requirements. The mandatory reporting requirements generally apply to facilities that produce more than 25,000 MTCO₂E (or 10,000 MTCO₂E for combustion and process source emissions).

State GHG Regulations and Programs

Executive Order S-3-05

The 2005 California Executive Order S-3-05 established the following GHG emission-reduction goals for California:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Secretary of the California Environmental Protection Agency (CalEPA) is charged with coordinating oversight of efforts to meet these targets and formed the Climate Action Team to carry out the Order. Emission reduction strategies or programs developed by the Climate Action Team to meet the emission targets are outlined in a March 2006 report (CalEPA 2006). The Climate Action Team also provided strategies and input to the CARB Scoping Plan.

Assembly Bill 1493

In 2002, the legislature declared in AB 1493 (the Pavley regulations) that global warming was a matter of increasing concern for public health and the environment in the state. It cited several risks that California faces from climate change, including reduction in the state's water supply, increased air pollution due to higher temperatures, harm to agriculture, and increase in wildfires, damage to the coastline, and economic losses caused by higher food, water, energy, and insurance prices. Furthermore, the legislature stated that technological solutions for reducing GHG emissions would stimulate California's economy and provide jobs. Accordingly, AB 1493 required the CARB to develop and adopt the nation's first GHG emission standards for automobiles. The CARB responded by adopting CO₂-equivalent fleet average emission standards. The standards will be phased in from 2009 to 2016, reducing emissions by 22 percent in the "near term" (2009 to 2012) and 30 percent in the "mid-term" (2013 to 2016), as compared to 2002 fleets.

The legislature passed amendments to AB 1493 in September 2009. Implementation of AB 1493 requires a waiver from the EPA, which was granted in June 2009.

Assembly Bill 32

AB 32 codifies California's GHG emissions 2020 goal by requiring the state to reduce global warming emissions to 1990 levels by 2020. It further directs the CARB to enforce the statewide cap that would begin phasing in by 2012. AB 32 was signed and passed into law by Governor Arnold Schwarzenegger on September 27, 2006. Key milestones of AB 32 include:

- June 20, 2007 – Identification of "discrete early action GHG emission-reduction measures."
- January 1, 2008 – Identification of the 1990 baseline GHG emissions levels and approval of a statewide limit equivalent to that level. Adoption of reporting and verification requirements concerning GHG emissions.
- January 1, 2009 – Adoption of a scoping plan for achieving GHG emission reductions.
- January 1, 2010 – Adoption and enforcement of regulations to implement the actions.
- January 1, 2011 – Regulatory adoption of GHG emission limits and reduction measures.
- January 1, 2012 – GHG emission limits and reduction measures become enforceable.

Since the passage of AB 32, the CARB published Proposed Early Actions to Mitigate Climate Change in California. This publication indicated that the issue of GHG emissions in CEQA and General Plans was being deferred for later action, so the publication did not discuss any early action measures generally related to CEQA or to land use decisions.

California Senate Bill 1368

In 2006, the California legislature passed SB 1368, which requires the Public Utilities Commission (PUC) to develop and adopt a “greenhouse gases emission performance standard” by March 1, 2007, for private electric utilities under its regulation. The PUC adopted an interim standard on January 25, 2007, requiring that all new long-term commitments for base load generation involve power plants that have emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 lbs/MWh of CO₂. The California Energy Commission has also adopted similar rules.

Senate Bill 97 – CEQA: Greenhouse Gas Emissions

In August 2007, Governor Schwarzenegger signed into law SB 97 – CEQA: Greenhouse Gas Emissions stating, “This bill advances a coordinated policy for reducing greenhouse gas emissions by directing the Office of Planning and Research and the Resources Agency to develop CEQA guidelines on how state and local agencies should analyze, and when necessary, mitigate greenhouse gas emissions.” Specifically, SB 97 requires the Office of Planning and Research (OPR), by July 1, 2009, to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, including, but not limited to, effects associated with transportation or energy consumption. The Resources Agency would be required to certify and adopt those guidelines by January 1, 2010. OPR would be required to periodically update the guidelines to incorporate new information or criteria established by the CARB pursuant to the California Global Warming Solutions Act of 2006. SB 97 also identifies a limited number of types of projects that would be exempt under CEQA from analyzing GHG emissions.

On January 7, 2009, OPR issued its draft CEQA guidelines revisions pursuant to SB 97. On March 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

Office of Planning and Research Technical Advisory and Preliminary Draft CEQA Guidelines Amendments for Greenhouse Gas Emissions

Consistent with SB 97, on March 18, 2010, the CEQA Guidelines were amended to include references to GHG emissions. The amendments offer guidance regarding the steps lead agencies should take to address climate change in their CEQA documents.

According to OPR, lead agencies should determine whether GHG may be generated by a Proposed Project, and if so, quantify or estimate the GHG emissions by type and source. Second, the lead agency must assess whether those emissions cumulatively significant. When assessing whether a Project’s effects on climate change are cumulatively considerable, even though its GHG contribution may be individually limited, the lead agency must consider the impact of the Project when viewed in connection with the effects of past, current, and probable future projects. Finally, if the lead agency determines that the GHG

emissions from the Proposed Project are potentially significant, it must investigate and implement ways to avoid, reduce, or otherwise mitigate the impacts of those emissions.

The Amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. The Preliminary Amendments maintain CEQA discretion for lead agencies to establish thresholds of significance based on individual circumstances.

The guidelines developed by OPR provide the lead agency with discretion in determining what methodology is used in assessing the impacts of greenhouse gas emissions in the context of a particular Project. This guidance is provided because the methodology for assessing GHG emissions is expected to evolve over time. The OPR guidance also states that the lead agency can rely on qualitative or other performance based standards for estimating the significance of GHG emissions.

California Air Resources Board: Scoping Plan

On December 11, 2008, the CARB adopted the Scoping Plan as directed by AB 32 (CARB 2008). The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California. The numerous measures in the Scoping Plan approved by the Board are being implemented in phases with Early Action Measures that have already been implemented. Measures include a cap-and-trade system, car standards, low carbon fuel standards, landfill gas control methods, energy efficiency, green buildings, renewable electricity standards, and refrigerant management programs.

The Scoping Plan provides an approach to reduce emissions to achieve the 2020 target, and to initiate the transformations required to achieve the 2050 target. The 2008 Scoping Plan indicated that a 29 percent reduction below the estimated “business as usual” levels would be necessary to return to 1990 levels by 2020. The 2011 supplement (Functional Equivalent Document) to the Scoping Plan emission inventory revisions indicated that a 16 percent reduction below the estimated “business as usual” levels would be necessary to return to 1990 levels by 2020. This revision was due to the slowing economy between 2008 and 2010 and to reduction measures that were already in place (CARB, 2011a, p. 10). An update of the Scoping Plan is scheduled for hearing and approval in late 2013, and another update is required in 2018.

CARB underwent an extensive and rigorous process in developing and approving the Scoping Plans. (For detailed discussion of this process, see *Association of Irrigated Residents et. al. v. State Air Resources Board et. al.*, Court of Appeal of California, First Appellate District, Division Three (206 Cal. App. 4th 1487; 143 Cal Rptr. 3d 65; 2012 Cal. App. LEXIS 718; 42 ELR 20127, June 19, 2012, p. 5 – hereafter “AIR.”) Among other things, CARB considered several alternatives to achieve the mandated maximum technologically feasible and cost-effective reductions in GHGs and submitted its analyses and recommendations for peer review and public comment on many occasions (AIR p. 5). In affirming CARB’s adoption of the Scoping Plan, the Court of Appeal of California concluded as follows:

“The Governor and the Legislature have set ambitious goals for reducing the level of greenhouse gas emissions in California and to do so by means that are feasible and most cost-effective. The challenges inherent in meeting these goals can hardly be overstated. [C]ARB has been assigned the responsibility of designing and overseeing the implementation of measures to achieve these challenging goals. The scoping plan is but an initial step in this effort, to be followed by the adoption of regulations, the first of which are already in effect, and plan updates no less than every five years. As the plan itself indicates, there is still much to be learned that is pertinent to

minimizing greenhouse gas emissions. It is hardly surprising that the scoping plan leaves some questions unanswered and that opinions differ as to *[the]* many complex issues inherent in the task. After reviewing the record before us, we are satisfied that the Board has approached its difficult task in conformity with the directive from the Legislature, and that the measures that it has recommended reflect the exercise of sound judgment based upon substantial evidence. Further research and experience likely will suggest modifications to the blueprint drawn in the scoping plan, but the plan's adoption in 2009 was in no respect arbitrary or capricious." (AIR, p. 13.)

Executive Order S-03-05 sets a goal that California emit 80 percent less GHGs in 2050 than it emitted in 1990. CARB's Scoping Plan provides insight as to how it anticipates California will achieve the 2050 reduction goal in Governor Schwarzenegger's Executive Order S-03-05:

"Reducing our greenhouse gas emissions by 80 percent will require California to develop new technologies that dramatically reduce dependence on fossil fuels, and shift into a landscape of new ideas, clean energy, and green technology. The measures and approaches in this plan are designed to accelerate this necessary transition, promote the rapid development of a cleaner, low carbon economy, create vibrant livable communities, and improve the ways we travel and move goods throughout the state." (CARB, 2008, p. ES-2.)

"[T]he measures needed to meet the 2050 goal are too far in the future to define in detail . . ." (*Ibid.*) The CEC and CARB also have published an alternative fuels plan that identifies challenging but plausible ways to meet 2050 transportation goals. The majority of the measures identified by the CEC/CARB (renewable power requirements, the low carbon fuel standard, and vehicle emissions standards) relate to technology improvements beyond both the control of the Project applicant and the scope of the proposed SME Project. But these technological improvements would reduce the demand for crude oil through a reduction in demand for gasoline and diesel fuels.

In light of the uncertainties regarding the specific reduction strategies and methods needed for California to achieve the 2050 reduction goal identified in Governor Schwarzenegger's Executive Order S-03-05, the impact of the proposed Project on the 2050 reduction goal is considered too speculative to assess at this time.

California businesses are required to report their annual GHG emissions. This requirement is contained within sections 95100-95133 of Title 17, California Code of Regulations. It establishes who must report GHG emissions to the CARB and sets forth the requirements for measuring, calculating, reporting and verifying those emissions. The rule specifies a reporting threshold of 25,000 MTCO₂E or 10,000 MTCO₂E for combustion and process source emissions.

Cap-and-Trade is designed to reduce the emissions from a substantial percentage of GHG sources (about 80% of GHG emissions will come under the program) within California through a market trading system. The system would reduce GHG emissions by reducing the available GHG "allowances" over time up until the year 2020. The program beyond the year 2020 has not been designed yet, but the program is intended to extend beyond that timeframe.

Facilities are required to obtain an "allowance", either through purchasing on auction or through freely allocated "industry assistance" allowances from CARB, for each MTCO₂E of GHG they emit.

CARB issues the “industry assistance” allocations for free for a number of industries. These are based, in part, on a pre-defined “benchmark” of GHG emissions per unit of production. For the thermally enhanced oil recovery (TEOR) production sector, allowances are provided as a function of the amount of crude oil produced, thereby establishing, in effect, a level of efficiency in regards to GHG emissions for that sector. Other sectors are also allocated allowances based on their own respective activities.

If an operation within the TEOR sector operates less efficiently than the specified “benchmark”, thereby receiving an insufficient number of “free” allowances to cover their emissions, they would be required to implement efficiency improvements or purchase additional allowances from the CARB auction. Some availability of “offsets” is also included in the program which can be obtained from specific, allowable offset programs, such as GHG reduction projects related to forestry, livestock and ozone depleting chemicals. Offsets outside of these three options are not allowed at this time.

The first group of sectors began trading in allowances in 2012. That group includes the oil and gas sector as well as most stationary sources. A second group is planned to begin the program in 2015, which would include the transportation fuels sector. CARB auctioned about 23 million allowances in November 2012 to be used for the 2013 year.

For subsequent periods after the initial 2013 period, allowances are planned to be distributed freely through the “industry assistance” program or auctioned off. Industry assistance allowances would decrease each year as per a “cap adjustment factor”. The cap adjustment factor would be about 2-3% annually through 2020. The total allowances allowed to be allocated each year (either freely allocated or auctioned) are limited by the defined allowance budget, which decreases each year through 2020 and is current set at about 163 million MTCO₂e for the year 2013.

An operator is required to participate in the Cap-and-Trade program if its facility emits more than 25,000 MTCO₂e annually. Annual reporting of GHG emissions is required under the CARB Mandatory Reporting Rule. At this time, SME emits less than 25,000 MTCO₂e annually from their current operations at the field and is therefore not a part of the Cap-and-Trade program. However, if the project is implemented, emissions would exceed the threshold and they would be required to obtain allowances.

As only a limited number of allowances are issued, based on the original emissions estimates prepared by the CARB, and these allowances are reduced each year by a given percentage to achieve the year 2020 goals, any operator who commences operations after the Cap-and-Trade program is in effect would be required to obtain allowances from the given limited pool. Any increase in GHG emissions at a facility would therefore be allowed through a reduction in GHG emissions at some other location with the net GHG emissions statewide not increasing. This mechanism would serve to ensure that the goals of AB 32 are achieved and emissions statewide are reduced, even if local GHG emissions increase and that, ultimately, emissions of GHG and atmospheric CO₂ concentrations are stabilized (thereby reducing impacts). This produces, in effect, mitigation for this cumulative impact.

Note that GHG emissions produce no immediate, local health effects (such as criteria pollutants or ozone), and therefore GHG emissions reduced in another County, for example, could be used to offset the GHG emissions occurring at a project site.

The evolution of the Cap-and-Trade program past 2020 may render certain industries with higher GHG emissions economically infeasible. The SME project may no longer exist by 2050 as the remaining unextracted resources targeted by this project may no longer be economically recoverable due to the cost

of obtaining allowances. In addition, the goals of the State programs are to move the demand-side away from fossil fuels. As per the Scoping Plan, “Reducing our greenhouse gas emissions by 80 percent [by 2050] will require California to develop new technologies that dramatically reduce dependence on fossil fuels, and shift into a landscape of new ideas, clean energy, and green technology. The measures and approaches in this plan are designed to accelerate this necessary transition, promote the rapid development of a cleaner, low carbon economy... .”

California Climate Action Registry General Reporting Protocol

The California Climate Action Registry is a program of the Climate Action Reserve and serves as a voluntary GHG registry. The California Climate Action Registry was formed in 2001 when a group of chief executive officers, who were investing in energy efficiency projects that reduced their organizations’ GHG emissions, asked the state to create a place to accurately report their emissions history. The California Climate Action Registry publishes a General Reporting Protocol, which provides the principles, approach, methodology, and procedures to estimate such emissions.

California Air Resource Board Proposed Mandatory Reporting Regulation

The Air Resources Board approved a mandatory reporting regulation in December 2007, which became effective January 2009 (which appears at sections 95100-95133 of Title 17, California Code of Regulations), which require the mandatory reporting of GHG emissions for specific industries emitting more than 25,000 MTCO₂E or 10,000 MTCO₂E for combustion and process source emissions.

California Air Resource Board Proposed Cap-and-Trade Regulation

The California Air Resource Board has recently implemented a program, as per the AB-32 directed Scoping Plan, to develop a cap-and-trade type system applicable to specific industries that emit more than 25,000 MTCO₂E. The AB 32 Scoping Plan identifies a Cap-and-Trade program as one of the strategies California will employ to reduce the greenhouse gas (GHG) emissions that cause climate change. Under cap-and-trade, an overall limit on GHG emissions from capped sectors will be established by the Cap-and-Trade program and facilities subject to the cap will be able to trade permits (allowances) to emit GHGs. The program started on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions for GHG emissions from stationary sources. The petroleum and natural gas systems sector is covered starting in 2013 for stationary and related combustion, process vents and flare emissions if the total emissions from these sources exceed 25,000 MTCO₂E per year. Suppliers of Natural Gas and transportation fuels are covered beginning in 2015 for combustion emissions from the total volume of natural gas delivered to non-covered entity or for transportation fuels.

CARB’s rationale for adopting Cap-and-Trade was prominently noted by the Court of Appeals’ opinion upholding the ARB Scoping Plan as follows:

The final scoping plan explains the Board’s rationale for recommending a cap-and-trade program in combination with the so-called “complementary measures” by citing the rationale outlined by the market Advisory committee and quoting from the report of the economic and technology advancement advisory committee, in part, as follows: “ ‘A declining cap can send the right price signals to shape the behavior of consumers when purchasing products and services. It would also shape business decisions on what products to manufacture and how to manufacture them. Establishing a price for carbon and other GHG emissions can efficiently tilt decision-making toward

cleaner alternatives. This cap and trade approach (complemented by technology-forcing performance standards) avoids the danger of having government or other centralized decision-makers choose specific technologies, thereby limiting the flexibility to allow other options to emerge on a level playing field. [¶] ... Complementary policies will be needed to spur innovation, overcome traditional market barriers ... and address distributional impacts from possible higher prices for goods and services in a carbon-constrained world.' " (AIR 206 Cal.App.4th at p. 1499.)

5.1.2.3 SME Project Impact Discussion

[No changes from the proposed Final EIR to Impacts SME AQ.1 – SME AQ.3.]

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?		X			
b. The creation of objectionable smoke, ash or odors?		X			
c. Extensive dust generation?		X			
Greenhouse Gas Emissions					
d. GHG emissions reductions equal to or greater than a prescribed level from stationary , mobile, and indirect sources during long-term operations?		X			
e. Emissions equivalent to or greater than 1,100 MT of CO ₂ e per year or 4.6 MT CO ₂ e/Service Population (residents + employees) per year from other than stationary sources during long-term operations?				X	
f. Emissions equivalent to or greater than 6.6 MT CO ₂ e/Service Population (residents + employees) per year for plans (General Plan Elements, Community Plans, etc.)?				X	

The approach taken in this EIR to assess baseline and required mitigation levels are as follows:

1. Quantify the baseline GHG emissions associated with the current emissions (not including the 26 wells in the pilot project) at the field. CEQA Guideline Section 15125(a) states that: "The environmental setting will normally constitute the baseline physical conditions by which the lead agency determines whether an impact is significant." In this case, an exception has been made not to include the environmental impacts from the temporary 26-well pilot project as a part of the baseline, even though those wells were in operation when the Notice of Preparation for this EIR

was issued. The 26-well pilot project was permitted as a temporary use with a termination date. This preliminary permitting action allowed SME the opportunity to experiment with the cyclic steaming process in order to understand the response of the oil-bearing diatomite in the Orcutt field to that process. This understanding was a necessary prelude to designing the long-term production plan. The permitting process for the pilot project did not identify and analyze the long-term emissions, whether criteria pollutants or greenhouse gases. Rather, it was understood that, once the producer was able to design the long-term production plan, the entire project of 136 wells and associated operations, including conversion of the 26 pilot wells to permanent wells, would be analyzed as the proposed project. (These long-term emissions have not been considered in a previous environmental document.) Therefore, the pilot project impacts are considered throughout this EIR to provide full disclosure of the potential impacts of the action requested of the decision-makers.

2. In order to assess the level of mitigation required, the GHG emissions from the Proposed Project are estimated with the proposed criteria pollutant mitigation measures included (Table 5.1-12 and 5.1-13).
3. The level of mitigation required is then obtained by calculating the required reduction of the Proposed Project GHG emissions (item 2 above) for the threshold used. This amount of emissions must be produced as mitigation, either from onsite or offsite sources.

Impact #	Impact Description	Residual Impact
SME. AQ.4	Operational activities could increase GHG emissions.	Class II

The majority of the GHG emissions come from the combustion of fossil fuels associated with the steam generators. Stationary combustion equipment at the facility would create the largest percentage of GHG emissions. The steam generators would produce approximately 94 percent of the GHG emissions associated with the project.

GHG associated with operations include emissions from combustion sources (e.g., flare, steam generators, drilling engines, etc), offsite vehicles, and fugitive emissions that contain CO₂ and methane. In addition, electrical use at the facility has been included as indirect emissions. Table 5.1-12 shows the GHG emissions for operations under the Proposed Project full build-out. See Air Quality Appendix 12.2.B for detailed calculations.

Table 5.1-12 Proposed Project Annual GHG Emissions – No Mitigation

Activity	MTCO ₂ E
Construction	
Onsite Grading and Construction	907
Pipeline Installations (Crude, Gas Connections)	139
Pipeline Installation (Water to Laguna)	531

Activity	MTCO ₂ E
Offsite: Grading/Construction	222
Offsite: Pipelines Crude/Gas	15
Offsite: Pipeline Water	113
Total	1,926
Operations	
Processing Site Combustion Sources	82,892
Processing Site Fugitive Emissions	135
Drilling Emissions	672
Offsite: Operations	382
Offsite: Crude Hauling	758
Offsite: Water Hauling	470
Indirect: Electrical Generation	2,564
Total Operations	87,874

Note: GHG emissions for peak year, projected to be 2015. Assumes all crude oil and water are hauled by truck.

The emissions tabulated in Table 5.1-12 are the emissions during the peak year in 2015. Emissions of GHG would decrease thereafter due to a decrease in crude production. The allowances required to be purchased under the Cap-and-Trade program would increase over time due to the lowering “cap” and the reduced efficiency of the enhanced recovery technique as the field ages (more steam per bbl of crude produced). After a certain point, the number of allowances required to be purchased by the Applicant under the Cap-and-Trade program in combination with the onsite reductions, would exceed the GHG threshold established by the lead agency for this project, unless a threshold of zero were applied. Table 5.1-13 shows different thresholds along with the estimated year that the Cap-and-Trade purchased allowance would fulfill all of the threshold requirements, along with the average costs of the “credits” (not the Cap-and-Trade purchased allowances, as they would be required under current regulations) over that timeframe.

Figures 5.1-4 through 5.1-7 show the estimated GHG emissions through the year 2030 along with the “credits” and allowances used as part of the threshold reduction requirement under the Cap-and-Trade program and other, offsite or onsite reductions. (The 16 percent BAU threshold is not shown as, under the use of the 16 percent threshold, all reductions would be accomplished with onsite reductions).

The increasing number of Cap-and-Trade purchased allowances over time shown in the graphs is based on two components: the reduction over time in the amount of allocated “free” allowances (a reduction in the “cap”) and the reduced efficiency in the recovery of crude oil at the field, requiring more steam per bbl of crude oil recovered (the allocated “free” allowances are allocated based on the amount of crude oil produced). These two items produce the need for the Applicant to purchase an increasing amount of allowances.

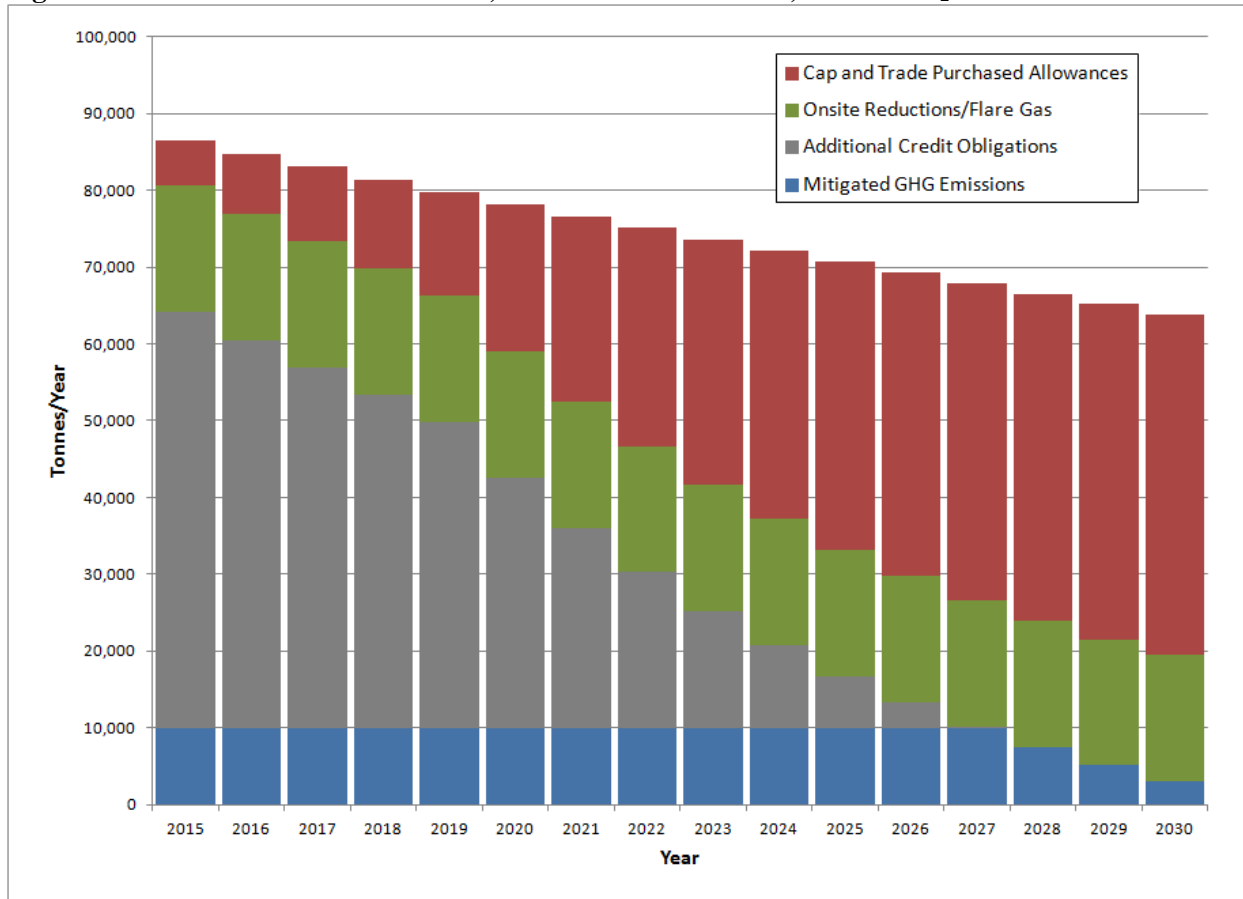
The cost estimates in the figures are based on a cost curve that would increase the costs of allowances and credits over time in a curve shape that was estimated to be similar to the curve shape that has historically been seen with the SCAQMD RECLAIM program. The RECLAIM cost curve showed an increase of 10 times in the costs per credit (for NOx and SOx in the RECLAIM program) over 15 years. The costs of GHG credits may act similarly, or could be substantially different and costs could range substantially higher or lower, depending on the market conditions and the availability of GHG credits. While the RECLAIM program is different than the Cap-and-Trade program (RECLAIM has no price floor or reserve pricing), it is a market based approach and its cost curve over time could be similar, although there is a high degree of uncertainty associated with estimating future costs. It is also assumed that the Cap-and-Trade program would continue after the year 2020, with a reduction in the cap level equal to the reduction rate seen prior to the year 2020.

Table 5.1-13 Proposed Project Credit Requirements and Costs

Threshold	Year of C&T Full Coverage	Average Costs of Credits Only, annual	Average Cost per bbl, Credits Only
10,000 MTCO ₂ E	2028	\$704,981	\$0.79
16% Below BAU	2015	\$0	\$0.00
29% Below BAU	2017	\$19,206	\$0.02
50% Below BAU	2021	\$234,433	\$0.21
90% Below BAU	2029	\$765,450	\$0.92

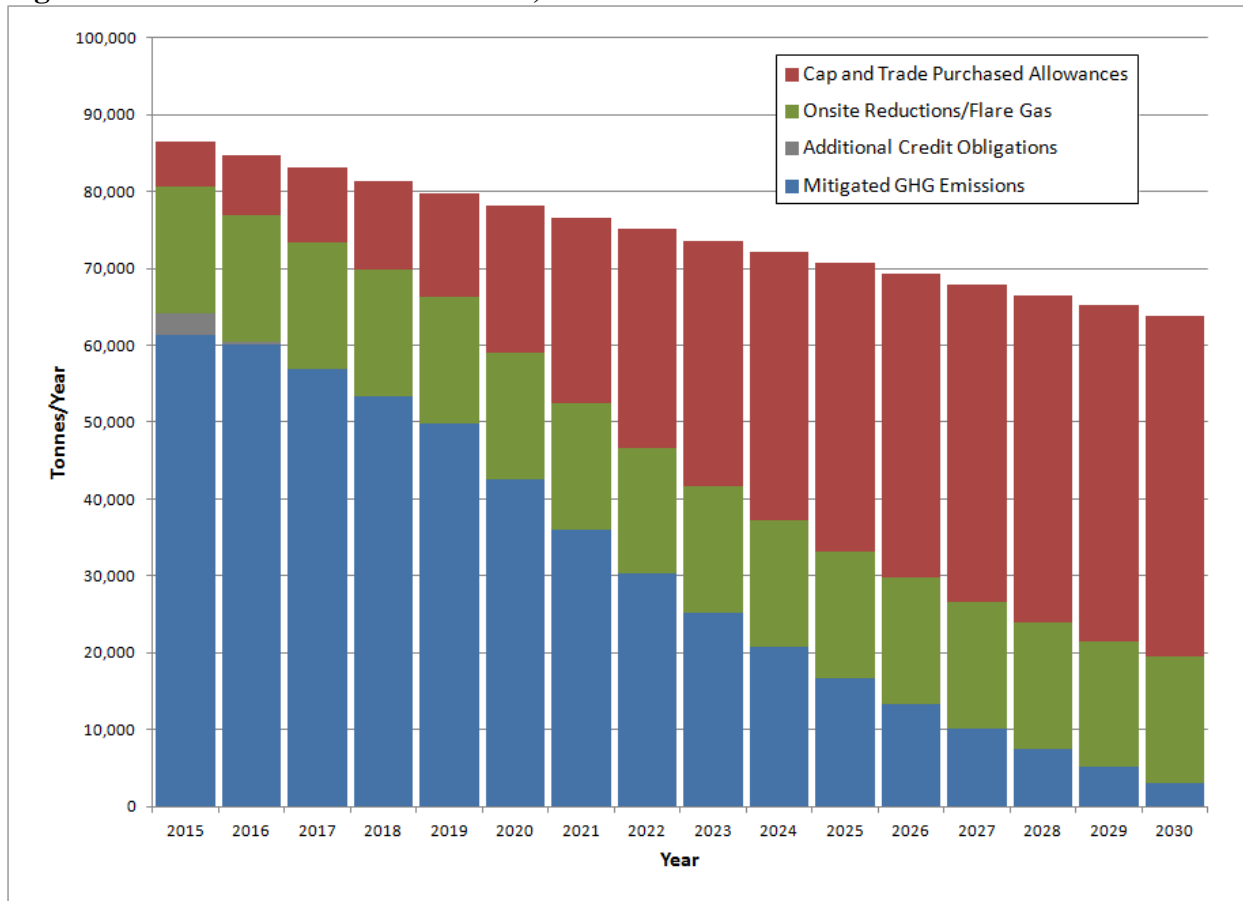
Note: These costs do not include the costs to purchase Cap-and-Trade allowances, which would be required under the Cap-and-Trade program regardless of the threshold used. Average price per bbl of crude oil \$96-\$128 EIA reference price between 2015 and 2029.

Figure 5.1-4 Future GHG Emissions, Reductions with the 10,000 MTCO₂E GHG Threshold



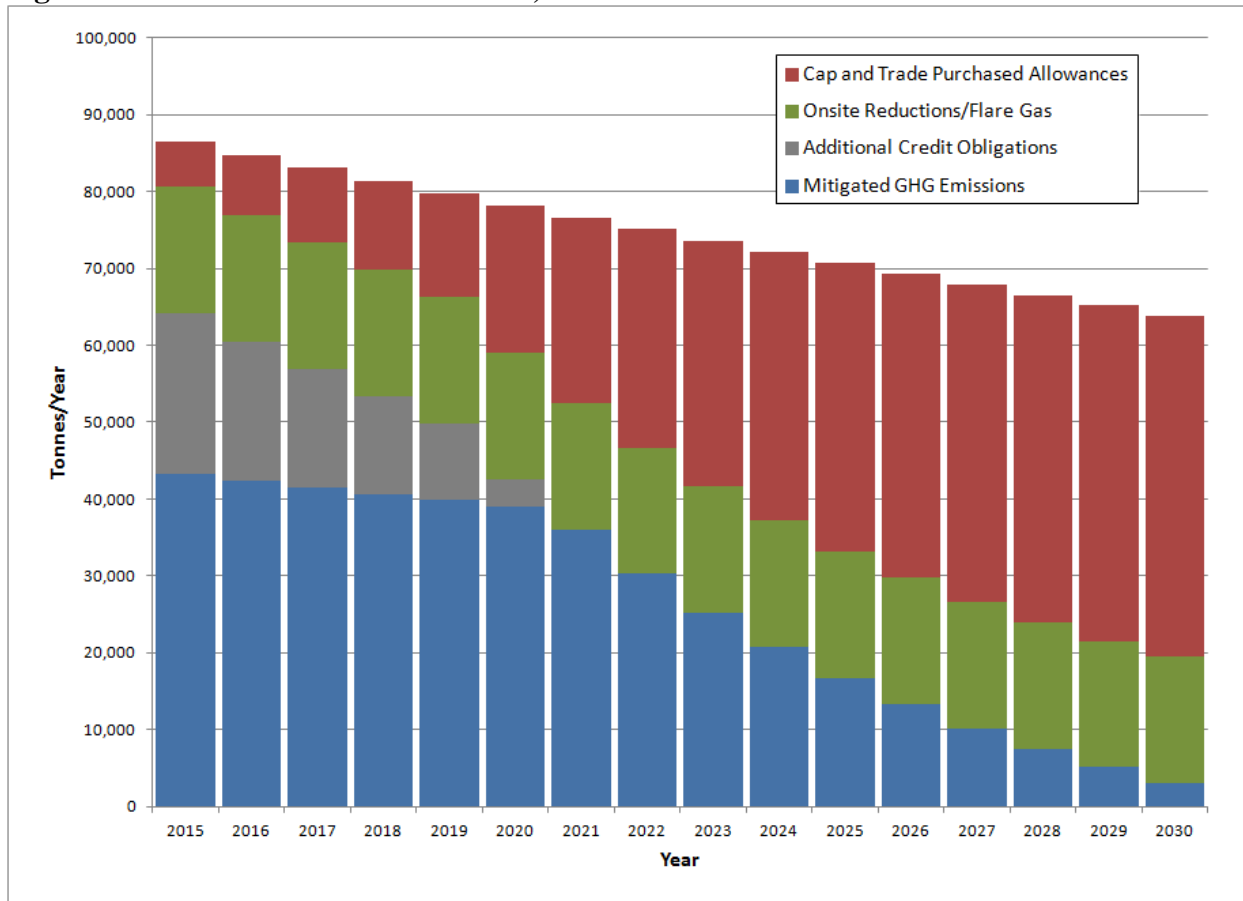
Under the 10,000 MTCO₂E threshold, initial offsite credit purchases would be substantial, but would decrease until the year 2027, when the requirements under the Cap-and-Trade program, along with the onsite reductions, would most likely provide all of the reductions needed to achieve the 10,000 MTCO₂E threshold. Average credit costs over that period would be in excess of \$700,000 annually, with a cost per bbl of about \$0.79. Note that this scenario produces similar emission reductions as the 90 percent BAU threshold.

Figure 5.1-5 Future GHG Emissions, Reductions with the 29% BAU GHG Threshold



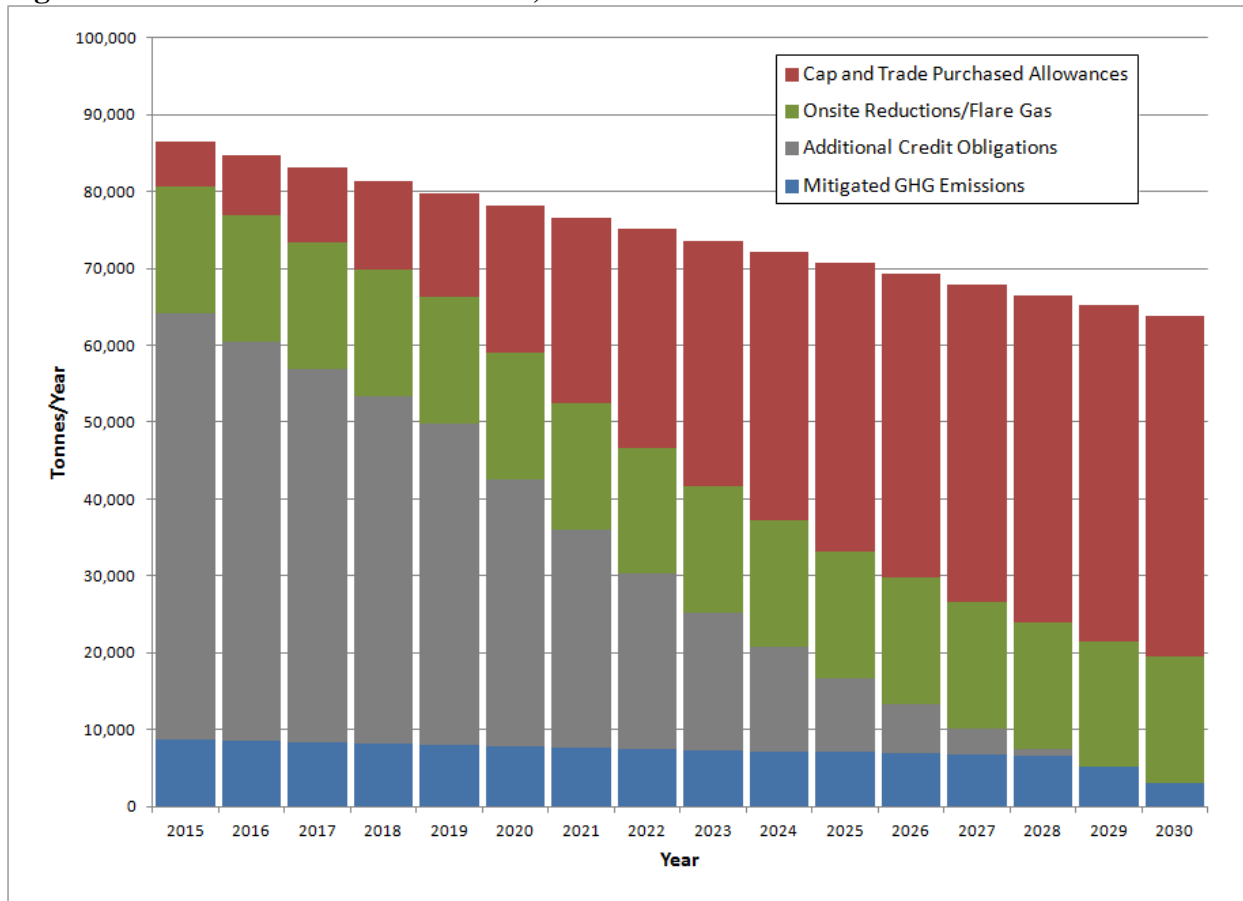
Under the 29 percent BAU threshold, initial offsite credit purchases would be nominal, as most of the 29 percent would be accomplished through the Cap-and-Trade requirements and onsite reductions. The requirements under the Cap-and-Trade program, along with the onsite reductions, would provide all of the reductions needed to achieve the threshold by 2017. Average credit costs over that period would be about \$19,000 annually, with an average cost per bbl of about \$0.02.

Figure 5.1-6 Future GHG Emissions, Reductions with the 50% BAU GHG Threshold



Under the 50 percent BAU threshold, initial offsite credit purchases would be moderate, and would decrease until the year 2021, when the requirements under the Cap-and-Trade program, along with the onsite reductions, would provide all of the reductions needed to achieve the threshold. Average credit costs over that period would be in excess of \$230,000 annually, with an average cost per bbl of about \$0.21.

Figure 5.1-7 Future GHG Emissions, Reductions with the 90% BAU GHG Threshold



Under the 90 percent BAU threshold, initial offsite credit purchases would be substantial, and would decrease until the year 2029, when the requirements under the Cap-and-Trade program, along with the onsite reductions, would provide all of the reductions needed to achieve the threshold. Average credit costs over that period would be in excess of \$760,000 annually, with an average cost per bbl of about \$0.92.

5.1.2.4 Cumulative Air Quality Impacts – Criteria Pollutants

The Santa Barbara County Environmental Thresholds Manual defines a significant cumulative impact if a project's total emissions of the ozone precursors NO_x or ROC exceed the long-term thresholds. For projects that do not have significant ozone precursor emissions or localized pollutant impacts, emissions would need to have been taken into account in the Clean Air Plan growth projections in order for cumulative impacts to be considered insignificant.

No residential projects would be constructed near the proposed Project area, so there would be no operational localized impacts associated with cumulative projects and non-GHG pollutants. Operational regional impacts from criteria pollutants could be produced, however, as multiple projects would emit into the same air basin at the same time. Although the proposed Project would produce less than

significant impacts with mitigation, cumulative impacts associated with the combined projects could be significant.

Since none of the residential cumulative projects would be constructed near the proposed Project area, there would be no cumulative impacts associated with odors or toxic emissions.

Cumulative climate change impacts are addressed under impact SME AQ.4. Because global climate change is a cumulative impact, the GHG-related analysis in Section 5.1.2.5 of this EIR (Mitigation and Residual Impact) applies to this section as well. The project would be contributing to reductions in GHG emissions through the proposed mitigation measures listed in this document. As per CEQA Guidelines §15130, 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.

Consistency with the Clean Air Plan, for the projects subject to these guidelines, means that stationary source and vehicle emissions associated with the project are accounted for in the Clean Air Plan's emissions growth assumptions. The 2010 APCD Clean Air Plan estimates that oil production within the County would decrease between 2007 and 2020 by 30 percent with the corresponding NO_x and ROC emissions decreasing by a similar amount. However, with the implementation of controls and the APCD control measures, emissions from the oil and gas sector within Santa Barbara County could be reduced even with a growth in the oil production levels and the project would not be cumulatively significant based on reasonably foreseeable projects. Due to the uncertainties of future oil and gas growth, cumulative impacts associated with future projects could be significant.

CEQA Guidelines §15130(c) (CCR Title 14) acknowledges that "[w]ith some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis." Global climate change is this type of issue, as the very causes and effects of global climate change are not determined on a local or regional scale.

Cumulative Mitigation Measures: No mitigation is required to address cumulative impacts.

Residual Cumulative Impacts: Cumulative air quality impacts would be less than significant (Class III).

5.1.2.5 Mitigation and Residual Impact

[No changes to impacts SME AQ.1- SME AQ.3 from the proposed Final EIR]

IMPACT SME AQ.4 (GHG EMISSIONS) MITIGATION MEASURES AND RESIDUAL IMPACTS

Mitigation for GHG emissions would rely on a reporting and reduction program that would require the Applicant to align their compliance periods with the Cap-and-Trade compliance periods. Reductions, or mitigation measures, could include a wide variety of measures, including onsite increased efficiency, to offsite programs implemented in the community verifiable "credits" purchased on the market, and allowances purchased as part of the Cap-and-Trade program.

Reductions not taken as part of BAU

The implementation of mitigation measures listed above for criteria pollutants and the elimination of vehicle trips associated with transportation of the project-related crude oil and water by pipelines, would reduce GHG CO₂e emissions by approximately 1,400 MTCO₂E per year. This has not been credited to the reduction target as it would be required under the normal CEQA permitting process. However, credit has been given for the reductions associated with pipeline transportation of the current production from the Monterey formation.

In addition, the Applicant has proposed the use of high efficiency steam generators, which, under the San Joaquin Valley APCD program, would be considered a best performance standard for GHG emissions. The San Joaquin Valley APCD has established a program utilizing the BAU approach that requires oil and gas producers to implement best performance standards in order to reduce GHG emissions to less than significant. However, as the use of high-efficiency steam generator technology has been proposed by the Applicant in order to avoid a net emissions increase in criteria pollutants that would trigger APCD offset for the stationary source, it is considered to be a permitting constraint, and is not credited to the reduction target. Furthermore, the applicant proposed operations of the more efficient steam generators would not result in a reduction in fuel use (as it was proposed to gain more steam), and consequently would not reduce GHG.

Also, all future GHG emissions associated with any Monterey gas produced above the amount produced in 2011 would not be credited towards the reduction targets. Most likely, future levels of Monterey gas production would increase.

MM SME AQ-4. GHG Reporting and Reduction: The Applicant shall implement a program to quantify and reduce greenhouse gas emissions associated with operations to achieve a reduction to the required level. A GHG Reporting and Reduction Plan shall be submitted to the APCD and County detailing the measures to be implemented to achieve the required reductions, updated annually, and shall include pre-qualification of any offsite mitigation component of this plan including specifications on the protocol, vintage, and registry for the offsite mitigation. The Applicant shall obtain prior approval from APCD and the County for acceptable offsite mitigation credits.

Measures to implement shall include the following:

- 1) Required use of all produced gas at the lease for steam production (if capacity allows);
- 2) Using high efficiency pumps and electrical devices to reduce field-wide electrical use,
- 3) Requiring all crude oil produced at the site to utilize pipeline transport, except during short-term pipeline outages;
- 4) Additional onsite or offsite measures, as required, that could offset greenhouse gas emissions.

Operations stationary and mobile GHG emissions levels shall be quantified and reported to the County and to the APCD as per the Cap-and-Trade reporting period and the Mandatory Reporting Rule period for the total GHG emissions. In addition to the GHG emissions, documentation shall be provided of the GHG emission reductions achieved through the above and/or additional programs/credits/allowances that would equal the required reductions.

PLAN REQUIREMENTS AND TIMING: Prior to Zoning Clearance, the GHG Reporting and Reduction Plan shall be reviewed and approved by P&D and APCD.

MONITORING: P&D monitoring staff shall ensure compliance during field inspections.

Residual Impact

Mitigation measure SME.AQ-4 requires submittal of a GHG Reporting and Reduction Plan with reported of emissions to the County and to the APCD as per the Cap-and-Trade reporting period and the Mandatory Reporting Rule period. The Plan requires documentation of the reductions obtained through increased efficiency and, if needed, offsite credits with pre-approval of any offsite credits. The State already requires reporting of GHG emissions. The total amount of reductions required to achieve different thresholds is listed in Table 5.1-13. Several measures could be implemented to reduce GHG emissions, potentially including the following measures:

Required Use of Flare Gas

The existing field operations generate flare gas that could be used in the steam generators. The Applicant indicates that some gas for the steam generators would be purchased pipeline quality gas. Current and future produced gas would require some sulfur removal in order to meet APCD specifications as well as requirements in this EIR for meeting the sulfur emissions limits. Requiring that all produced gas is cleaned and used in the steam generators would ensure that only the minimum amount of gas is purchased from the utility and would minimize increases in GHG emissions. The 2011 produced gas from the Monterrey formation (existing field activities) generated about 16,444 MTCO₂E (includes flared gas and the gas used in the pilot plant steam generator from the Monterrey wells only). This level would be applied as a GHG credit against the BAU. Future increases above this level in Monterrey or any diatomite produced gas would not be counted towards the GHG credit.

Table 5.1-14 Peak Annual GHG Emissions and Reductions

Activity	MTCO ₂ E
Total Proposed Project Operations, peak year	87,874
Effect of Criteria Pollutant Mitigation Measures (SME.AQ.2)	-1,400
Total Project Operations with Mitigation Measure SME.AQ.2	86,474
Reduction Target (16 percent below BAU)	72,628
Reduction Target (29 percent below BAU)	61,396
Reduction Target (50 percent below BAU)	43,437
Reduction Target (90 percent below BAU)	8,647
Reduction Target (10,000 MTCO ₂ E/yr)	10,000
Potential Emissions Reductions	
Use of all produced gas (based on 2011 produced gas levels)	16,444
Pipeline transport of existing crude production	265
Onsite efficiency gains	250
Total Onsite Reductions	16,958

Table 5.1-14 Peak Annual GHG Emissions and Reductions

Activity	MTCO ₂ E
Percent Reduction from BAU of Onsite Measures	19.6%
Cap-and-Trade allowances, future range (through 2030, estimated)	5,800 to 45,000
Additional Reductions Required from other Onsite or Offsite programs (through 2030, estimated)	2,800 to 55,000

***Notes:** Peak year is projected to occur in 2015. GHG emissions from project operations include mitigation measures listed for criteria pollutants. While the table above shows that thresholds above 19.6% below BAU have not been met by onsite measures, it is expected that for most compliance periods under the Cap and Trade program, SME will be required to obtain GHG allowances in amounts that would achieve substantial reductions. (For a detailed quantification of the stationary source cap-and-trade allowance obligations, see Applicants GHG emissions and reductions estimate through 2020 in the AQ Appendix 12.2.B).*

Onsite Efficiency Improvements

Reducing energy use from existing and proposed direct sources would reduce GHG emissions from fuel combustion and electrical generation. The field currently uses an estimated 1 MW of electricity. Replacing pumps and other electrical equipment with the most efficient equipment could produce a reduction in electricity use of up to 10-20 percent, depending on the equipment types and arrangements. This could reduce GHG by an estimated 250 - 500 MTCO₂e per year.

Reducing water use, raw material use, and waste generation and increasing recycling would also reduce GHG emissions by reducing the energy used to transport and pump water, produce goods, and truck trips.

Other Mitigation Measures

Emissions reductions from these onsite requirements are tabulated in Table 5.1-13. With all proposed onsite mitigation measures, the project emissions are projected to be at about a 19.6 percent reduction level. Additional reductions would have to be documented and reported to the County and the APCD as per the mitigation measure above (Cap-and-Trade purchased allowances, additional measures or offsite reductions). With additional requirements, the project would be less than significant with mitigation (Class II). Additional measure could include the following:

Additional Measures

The Applicant proposes to use a small gas fired heater to heat the crude oil tanks. The use of a best performance heater or the use of excess steam from the steam generators instead of a heater would increase the efficiency and reduce GHG emissions. The SJV APCD best performance standard for heaters indicates a savings in GHG emissions of 1.5 percent. This would produce a savings of about 10 MTCO₂E per year.

The Applicant proposes the use of a 95 percent efficient vapor recovery. The use of a higher efficiency vapor recovery (as per SJV best performance standards) of up to 99 percent would reduce GHG emissions by a few MTCO₂E per year.

Utilizing onsite co-generation could also reduce emissions of GHG by simultaneously producing electricity and steam. However, as the GHG emissions from the PG&E system are already quite low, and below the levels that could be achieved with natural gas combustion, due to the use of hydroelectric and nuclear in the PG&E mix, reductions in GHG emissions with the use of cogeneration might be minimal. In addition, the site does not use a lot of electricity.

Offsite Reductions

Offsite reduction could be used to satisfy all or a portion of the reductions that might be needed in future years. These reduction levels would vary depending on the type of program pursued. Offsite programs would most likely be managed by the Applicant but overseen and monitored by the County of Santa Barbara in coordination with the SBCAPCD. The program could tie in to the Board of Supervisors' March 2009 direction (BOS Resolution 09-059) "to take immediate, cost effective, and coordinated steps to reduce the County's collective GHG emissions" and the Counties Climate Action Strategy Phase 2: Energy and Climate Action Plan. The Climate Action Plan identifies measures that could be funded by the Applicant to reduce GHG emissions. As an example, the San Luis Obispo APCD (SLOAPCD) has established a GHG Mitigation Measure "toolbox" that includes measures municipalities could implement to reduce GHG, including

- Energy retrofit programs;
- Title 24 Incentives;
- Photovoltaic Incentive programs;
- Bicycle and pedestrian network expansions;
- Transit system expansion and retrofits;
- Tree planting; and
- Grant programs.

The reductions in GHG would be quantified for each program and credited towards the Applicant's requirements for credits. As an example, energy retrofit programs, involving auditing homes and businesses in the community and installing more efficient lighting and appliances, could save close to 2,000 MTCO_{2e} annually if 1,000 homes and business were included in the program (as per the SLOAPCD toolbox analysis). Due to the energy savings per year from a program like this, the net 5 year costs (including administrative costs) could potentially be nominal, with net capital costs per home or business being about \$500 or \$2,200 each (including rebates), with a net annual savings equaling \$100-\$1,200.

Other options for programs that could reduce GHG emissions include the following:

- Obtaining offset credit through the Climate Action Reserve or through the voluntary SCAQMD Regulation XXVII, would decrease GHG emissions impacts. This offset program establishes standards for the development, quantification, and verification of GHG emissions reduction projects; issues carbon offset credits known as Climate Reserve Tonnes generated from such projects; and tracks the transaction of credits. The CARB participates in the program. The Climate Action Reserve has issued more than 10 million Climate Reserve Tonnes.
- CAPCOA is currently developing a system that would allow for the registration of emissions GHG reductions to help sources locate and buy GHG reductions. To achieve this goal, CAPCOA is developing protocols and verification systems.

- Planting trees removes CO₂ from the atmosphere as the tree grows. Trees remove CO₂ from the atmosphere through photosynthesis and store, or sequester, the carbon in the tree trunk, branches, and leaves. Tree carbon calculators indicate that a sycamore, 20 inches in diameter (at 4.5 feet height) and 50 feet tall, stores approximately 2.2 MTCO₂E and grows at a rate that sequesters approximately 0.1 MTCO₂E per year. Protocols for forest carbon sequestration would be utilized to ensure reductions are legitimate, such as those developed by the Climate Action Reserve. The SCAQMD, through their Regulation XXVII program, current has reforestation projects available associated with the Station Fire forest-fire burn area revegetation.

Cap and Trade Allowance/Offsets

The project, as it emits more than the 25,000 MTCO₂E per year CARB threshold, would be a part of the CARB cap-and-trade program. Any project in operation in 2012 and subject to Cap-and-Trade was issued emission allowances and required to reduce the GHG emissions starting in 2013, or purchase allowances or offsets. (Because SME has not begun operation, no allowances have been issued.) These reductions would vary from year to year up to an estimated maximum of more than 26,000 MTCO₂E annually in 2020 (with potentially higher beyond the year 2020, see Appendix 12.2.B for details). The Applicant would have to obtain these credits on the open market or develop these reductions onsite. As these allowances/offsets would equal reductions in other locations, these would serve as effective credits towards meeting the reduction targets required under the adopted threshold.

Solar Installations

Emission reductions could also be achieved through the installation of solar facilities on or near the site. These types of projects would require substantial permitting and could generate significant impacts related to biological resources or to agricultural resources.

Installation of photovoltaic's to produce the required onsite electricity would reduce GHG emissions. The Applicant indicates that the field electricity demand would total about 1.0 MW. The generate that level of energy with photovoltaic's (24 MWhr per day) would require a high density array totaling an area of approximately 26 acres. This is about the size of the open field located on the south side of the creek in the same area that the water storage and treatment plant is proposed for. By covering this field in PV modules, along with electrical equipment to convert the electricity to grid power, enough electricity could be generated to supply the field electrical power during the day with enough excess to feed back to the grid and utilize the grid for nighttime electrical needs. This would reduce the GHG emissions by an estimated 2,500 MTCO₂e per year.

Installation of thermal-solar systems to produce steam could reduce GHG emissions. Utilizing mirror systems, the sun can be concentrated to produce high enough temperature to produce steam. This steam could then be used to supply steam to the project. The amount of steam that would need to be produced would equal the amount of steam that is produced from the purchased natural gas. The produced gas would continue to be utilized for steam production. Assuming 5 hours per day of steam production, a solar thermal plant covering approximately 100 acres could produce enough steam to offset the steam produced by the purchased natural gas. The area of 26 acres within the project site where the water plant is proposed could also be used to produce approximately 25 percent of the steam that would be produced by the purchased natural gas. Or, the area between the project site and Highway 135, currently agricultural fields, could be utilized for the full 100 acres. Either of these projects would reduce GHG emissions by 7,000 to 28,000 MTCO₂e per year, respectively. Emissions would still be associated with

the combustion of produced gas at the site. Chevron is currently implementing a program similar to this in Coalinga to produce some steam for their thermal wells.

Discussion

The impacts of GHG emissions are worldwide. Climate change could occur at many different locations throughout the world due to, in very small part, the additional GHG emissions from this project site. A lifecycle approach to understanding the effects of this project on global GHG emissions is very complex in nature. For example, driving a more efficient automobile would reduce GHG emissions from automobiles here, with more reductions in GHG emissions at an area refinery due to processing less crude oil to make the gasoline and fewer emissions of ocean tankers to bring the crude oil from Saudi Arabia, for example, and fewer emissions from drilling and production of the crude oil in Saudi Arabia. However, the hybrid automobile might require special batteries and more manufacturing effort and more recycling efforts, thereby increasing GHG emissions.

In addition, markets are evolving, with higher crude oil prices increasing domestic production, regulations requiring cleaner fuels and energy sources, etc, that could substantially alter the environment for fuels in the near future. It is understandably very complex.

The Applicant has proposed a number of “credit” activities in their application submittals, such as credits for producing natural gas and crude oil locally (not having to transport gas or crude oil from out-of-state or out-of-country). Although these credit activities may have some validity, they are not generally recognized when submitting GHG inventory information to the State or Federal Agencies and are not included when assessing requirements under the “cap-and-trade” system in California (see Regulatory section above). From a CEQA standpoint, generally these types of “out-of-state” credits are not assessed.

A combination of the mitigation measures reduces the GHG emissions to below any of the thresholds discussed above (depending on the level of offsite credits obtained or on onsite improvements), and, therefore, results in an impact that is less than significant. If a significance threshold more stringent than about 20 percent of BAU is adopted, the Applicant would be required to obtain offsite “credits”. Based on the cost estimates developed above, with costs generally less than \$1 per bbl, these costs appear to be feasible for oil and gas production facilities in California at the current market conditions. The listing of possible mitigation measures appears feasible and quantifiable and cost-effective for the project; therefore, the impacts would be *less than significant with mitigation, Class II*.

5.1.3 LAGUNA COUNTY SANITATION DISTRICT’S PHASE 3 RECYCLED WATER PIPELINE

[Item “d” in the Impact Discussion table below is revised and new references have been added in subsection 5.1.3.6.]

5.1.3.3 Impact Discussion

Will the proposal result in:	Potentially Significant	Less than Significant with Mitigation	Less than Significant	No Impact	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			X		
b. The creation of objectionable smoke, ash or odors?			X		
c. Extensive dust generation?			X		
d. GHG emissions reductions equal to or greater than a prescribed level from stationary , mobile, and indirect sources during long-term operations?				X	
e. Emissions equivalent to or greater than 1,100 MT of CO ₂ e per year or 4.6 MT CO ₂ e/Service Population (residents + employees) per year from other than stationary sources during long-term operations?				X	
f. Emissions equivalent to or greater than 6.6 MT CO ₂ e/Service Population (residents + employees) per year for plans (General Plan Elements, Community Plans, etc.)?				X	

5.1.3.6 New References

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9.0 MITIGATION MEASURES

Revised Mitigation Measure SME AQ-4, identified in Table I, Mitigation Monitoring Plan, sub-section 9.1, is shown below.

I. SME PROJECT

Mitigation Measure	Requirements	Method	Timing	Responsible Party
Air Quality				
SME AQ.4	Quantify GHG emissions associated with operations and reduce emissions to an annual level that is equal to or less than a prescribed threshold selected by decision-makers.	Approval of GHG plan and field inspections	Prior to operations	APCD

Revised Mitigation Measure SME AQ-4, identified in sub-section 9.2, Mitigation Measures, is shown below.

Mitigation Measure #	Mitigation
SME AQ.4	<p>GHG Reporting and Reduction: The Applicant shall implement a program to quantify GHG emissions associated with operations and reduce emissions to an annual level that is equal to or less than a prescribed threshold selected by decision. Measures to implement shall include the following:</p> <ol style="list-style-type: none"> 1) Required use of all produced gas at the lease for steam production (if capacity allows); 2) Using high efficiency pumps and electrical devices to reduce field-wide electrical use, 3) Requiring all crude oil produced at the site to utilize pipeline transport, except during short-term pipeline outages; 4) Additional onsite or offsite measures, as required, that could offset greenhouse gas emissions. <p>Operations stationary and mobile GHG emissions levels shall be quantified and reported to the County and to the APCD as per the Cap-and-Trade reporting period and the Mandatory Reporting Rule period (annually), including a quantification of the GHG emission reductions achieved through the above and/or additional programs</p> <p>PLAN REQUIREMENTS AND TIMING: Prior to Zoning Clearance, the GHG Reporting and Reduction Plan shall be reviewed and approved by P&D and APCD.</p> <p>MONITORING: P&D monitoring staff shall ensure compliance during field inspections.</p>



August 15, 2013

Nancy Minick
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RE: Draft Recirculation Document; Greenhouse Gas Emissions Analysis for the Air Quality Section of the Proposed Final Environmental Impact Report for the Proposed Santa Maria Energy Oil Drilling Production Plan And Development Plan & Laguna County Sanitation District Phase 3 Recycled Water Pipeline

Dear Ms. Minick,

The following comments on the proposed Draft Recirculation Document are submitted by the Environmental Defense Center (EDC) on behalf of Get Oil Out! (GOO!), the Los Padres Sierra Club (Sierra Club), People United for Economic Justice Building Leadership Through Organizing (PUEBLO) and the Santa Barbara County Action Network (SB CAN).

We appreciate the work that has gone into this Draft Recirculation Document, which provides additional information regarding greenhouse gas (GHG) emission thresholds that could be applied to the Santa Maria Energy Project.

As we have noted in previous correspondence and at Planning Commission hearings in April and May, some of the thresholds which are described in the Draft Recirculation Document are not appropriate for this Project, in part because they do not address the entirety (or even majority) of the Project's lifetime. For example, the threshold for a project which is expected to operate well past 2060 should be based on a longer-term planning horizon –2050 or later as opposed to 2020.¹ The Draft Recirculation Document itself acknowledges this on page 11: "As the S-3-05 Executive Order sets a goal of an 80 percent reduction by 2050, higher reduction levels than the 16

¹ "The estimated life of successful wells is 50 years." (Proposed Final EIR, at p. 1-2.) Assuming that the Project is approved in 2013 and production starts in 2014, the Project could last until approximately 2064.

or 29 percent as detailed in the Scoping Plans would be required beyond 2020 in order to achieve that longer term goal." Other options are based on air quality permitting and reporting requirements and are not relevant as thresholds of significance.

As we have asserted previously, the Project's Environmental Impact Report (EIR) should discuss and ultimately rely on a "zero emissions" threshold, as this is the only threshold that addresses all of the significant impacts of the Project's GHG emissions. The EIR should also identify alternative thresholds which address the full life of the Project (for example, thresholds which are based minimally on 2050 targets for GHG reductions) and those which, when applied across the County, capture 90 to 95 percent of the GHG emissions generated by new projects.

We offer several specific comments on the Draft Recirculation Document below. Please note that our previous comment letters regarding this Project are incorporated herein by reference.

5.1.1.3 GHG Emission Thresholds

The EIR should include a zero emissions threshold. The concentration of GHGs in our Earth's atmosphere recently crossed the 400 parts-per-million (ppm) threshold; experts predict that current trends will cause global temperatures to rise at least two degrees, causing potentially catastrophic changes.² In other words, GHG emissions must be reduced from their current global levels, and *any* new input of GHG emissions exacerbates that global problem. CAPCOA explains:

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.

² See, e.g., Neela Banerjee, "Carbon Dioxide in the Atmosphere Crosses Historic Threshold," *L.A. Times*, May 10, 2013, available at <http://articles.latimes.com/2013/may/10/science/la-sci-sn-carbon-atmosphere-440-ppm-20130510>.

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.³

According to a Los Angeles County Superior Court:

Under an analysis by [CAPCOA], the only two standards that they believe to be effective in reducing emissions and highly consistent with AB 32 are a threshold of zero, or a quantitative threshold designed to capture 90 percent or more of likely future discretionary projects.⁴

The court noted that "a 40,000 to 50,000 ton project would have low consistency with AB 32." At least one state agency, the California State Lands Commission, has used a zero emission threshold to measure the significance of GHG emissions in an EIR.⁵

This EIR should use a zero emissions threshold, as well, in order for it to be most consistent with CEQA's requirement that *all* potentially significant impacts of a proposed project be evaluated and mitigated or avoided where feasible.

Numeric Bright-Line Thresholds

The Draft Recirculation Document identifies two valid options for a "bright-line threshold" which could be applied in the County of Santa Barbara – 3,000 MTCO₂e/yr to capture 95 percent of new emissions, or 10,000 MTCO₂e/yr to capture 90 percent of new emissions.⁶

3,000 MTCO₂e/yr

While not as stringent as a zero emission threshold, a threshold that captures 95 percent of new GHG emissions would be consistent with S-3-05 and could be modeled on the approach adopted by the Bay Area Air Quality Management District.⁷

³ California Air Pollution Control Officers' Association (CAPCOA), "CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act" (2008), attached to EDC November 2012 letter, at p. 27.

⁴ *Center for Biological Diversity v. California Department of Fish and Game* (Oct. 15, 2012) Superior Court of the State of California for the County of Los Angeles, p. 30, fn. 52.

⁵ *Venoco Ellwood Marine Terminal Lease Renewal Project Final Environmental Impact Report*, California State Clearinghouse (SCH) No. 2004071075, CSLC EIR No. 743, April 30, 2009; *Draft Environmental Impact Report for the Venoco Ellwood Oil Development and Pipeline (Full Field) Project*, State Clearinghouse No. 2006061146, CSLC EIR No. 738, June 2008.

⁶ Draft Recirculation Document, p. 6.

⁷ *Id.*, at p. 6.

10,000 MTCO₂e/yr

The Draft Recirculation Document states that a 10,000 MTCO₂e/yr threshold "would be consistent with S-3-05"⁸ and "is a reasonable threshold to apply if a numeric, bright-line threshold were considered for this project."⁹

As noted in the Draft Recirculation Document, other jurisdictions have adopted a 10,000 MTCO₂e/yr threshold, including the Bay Area Air Quality Management District (intended to capture 95 percent of GHG emissions from new projects), South Coast Air Quality Management District (intended to capture 90 percent of GHG emissions from new projects) and the County of San Luis Obispo (intended to capture 94 percent of combustion-related emissions)

The EIR should also include a reference to other *County of Santa Barbara* documents which use or refer to a bright-line threshold of 10,000 MTCO₂e/yr. For example, the recently approved La Goleta Storage Field Enhancement project relied on a 10,000 MTCO₂e/yr threshold for GHG emissions.¹⁰

25,000 MTCO₂e/yr

The Draft Recirculation Document refers to California Air Resources Board (CARB) and federal reporting thresholds which are established at 25,000 MTCO₂e/yr. According to CAPCOA, however, "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."¹¹ Similarly, Federal EPA's mandatory reporting threshold is not synonymous with a CEQA threshold, and its use as such is not supported by substantial evidence.¹²

BAU Thresholds

BAU thresholds which are less than 90 percent, such as 50, 29 or 16 percent, are not appropriate for this Project. Executive Order S-3-05, signed by Governor Schwarzenegger in 2005, requires California to reduce state-wide emissions to 80 percent below 1990 emissions levels by 2050; to reach the S-3-05 *reduction target* "would require an estimated 90 percent reduction (effective immediately) of [BAU] emissions."¹³ Concomitantly, AB 32 requires California to reduce state-wide emissions to 1990 levels by 2020.¹⁴ Current (post-AB 32) models suggest that the more extensive cuts required by

⁸ *Id.*, at p. 4.

⁹ *Id.*, at p. 8.

¹⁰ Revised Draft Environmental Impact Report for the Southern California Gas Company La Goleta Storage Field Enhancement Project (Dec. 2012), p. 4.3-14.

¹¹ CAPCOA 2008, p. 45.

¹² *See, e.g.*, California Natural Resources Agency, "Final Statement of Reasons for Regulatory Action," p. 26 (2009).

¹³ CAPCOA, *supra*, at p. 33.

¹⁴ *Id.*, at p. 32.

S-3-05 will be necessary to effectively combat climate change.¹⁵ Courts have agreed that local governments are “obligated to discuss impacts beyond the 2020 horizon” of AB 32.¹⁶

A Los Angeles County Superior Court stated that the use of BAU is “contrary to the Guidelines and to CEQA” in part because it relies on an improper baseline:

When looking at greenhouse gas emissions and asking whether the project may result in a significant cumulative contribution to climate change, a lead agency must consider the “extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.” Guidelines § 15064.4(b)(1). This baseline must focus on impacts to the existing environment, not hypothetical situations. *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 955.

. . . .

In the context of global climate change analysis, lead agencies shall also consider “the extent to which the project may increase or reduce [greenhouse gas] emissions as compared to the *existing* environmental setting.” CEQA Guidelines § 15064.4(b)(1) (emphasis added). It is only against this baseline that any significant environmental effects can be determined. *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 955.¹⁷

As indicated by the court, one critical flaw in the BAU approach is that it skews the baseline determination of “existing environmental conditions.” Under CEQA, an EIR “must focus on impacts to the existing environment, not hypothetical situations.”¹⁸ This tenet was confirmed in *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 320-21.

The County is required to issue discretionary land use approvals before this Project can proceed; therefore, it will not be built as a matter of right or as a matter of course. “Business as usual” should only be defined by the existing operational emissions

¹⁵ Shortly after AB 32 was signed into law in 2006, climate scientists began to assess the long-term climate implications of the various emission targets. In *Long Term Climate Implications of 2050 Emission Reduction Targets*, Andrew J. Weaver, et al. used a coupled atmosphere-ocean-carbon cycle model to demonstrate the global climate response to given emission targets. Weaver A., Zickfeld K., Montenegro A., and Eby M. “Long term climate implications of 2050 emission reduction targets” *Geophysical Research Letters*, October 6, 2007: 1-4. Their results confirmed that preventing significant global climate change would require not only drastically reducing emissions, but also carbon sequestration. As scientists learn more about the earth systems and their ability to process carbon dioxide, estimates of the natural limitations become more accurate, and less optimistic than previously envisioned.

¹⁶ *Cleveland National Forest Foundation, v. San Diego Association of Governments* (Dec. 3, 2012) Superior Court of the State of California for San Diego County at pp. 11-12 (citations omitted).

¹⁷ *Center for Biological Diversity, supra*, at pp. 25-30.

¹⁸ *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale* (2010) 190 Cal.App.4th 1351, 1373.

from the SME pilot project, and all new emissions should be counted against that measure.

50 Percent Below BAU

The Draft Recirculation Document discusses approaches based on 50 and 90 percent reduction from BAU on pages 11 and 12. The discussion of a 50 percent reduction scenario references the 2008 CAPCOA report, which determined that "it would have a high level of consistency with AB 32, a medium level of effectiveness but a medium/high level of uncertainty."¹⁹ As noted above, however, the AB 32 2020 target is not appropriate for this Project, which will have impacts for decades thereafter. Therefore, this approach must be eliminated from the EIR.

90 Percent Below BAU

According to CAPCOA, the 90 percent reduction target scores "high" on "GHG emissions reduction effectiveness," "medium" on "economic feasibility," "high" on consistency with AB 32 and S-3-05" and "medium" on "cost effectiveness."²⁰

EIR Significance Determination

The Draft Recirculated Document states on page 12 that if "project emissions are mitigated to a level that will be consistent with AB 32, then the cumulative GHG impacts contributed to by the project will be found to be less than significant." This statement ignores the fact that AB 32 does not address a majority of the Project's expected lifetime; it ignores the mandates of Executive Order S-3-05 and lacks evidentiary support on its own. The EIR *must* consider and address the cumulative impacts of GHG emissions which will occur throughout the life of the Project.

Conclusion

We continue to assert that a zero emissions threshold is most appropriate for this Project and for other projects in the County of Santa Barbara. If a zero emissions threshold is not applied, the County should follow the Bay Area Air Quality Management District (BAAQMD) and adopt a threshold based on a 95 percent market capture rate. If it is too complicated to apply the market capture calculus to this project, without going through a larger public process, the County could use a 90 percent reduction from BAU target; this approach is predicated on requirements found in Executive Order S-3-05. For this Project, a 90 percent reduction is approximately commensurate with the 10,000 MT/yr threshold which the County has used as an "interim threshold" and for at least one recently approved project.

¹⁹ CAPCOA 2008, pp. 33-34.

²⁰ *Id.*

August 15, 2013

EDC re: Draft Recirculation Document for the Santa Maria Energy Oil Drilling Production Plan
Page 7 of 7

There is no rational reason for the County to prefer a BAU approach predicated on the outdated AB 32 reduction target. As we have noted, that approach will only address a portion of the Project's impacts in the first 8 of 50 years of its expected life. It is critical that the EIR address (and mitigate) *all* of the Project's impacts for the entirety of its operations.

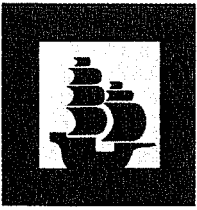
Thank you for making these requested revisions and additions. Please do not hesitate to contact us with any questions or concerns.

Sincerely,



Nathan G. Alley
Staff Attorney

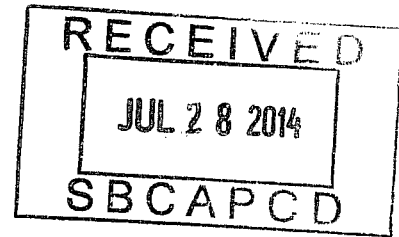
Cc: Get Oil Out!
Los Padres Sierra Club
People United for Economic Justice Building Leadership Through Organizing
Santa Barbara County Action Network
Community Environmental Council



110 S. PINE STREET #101 (ON HERITAGE WALK) • SANTA MARIA, CALIFORNIA 93458-5082 • 805-925-0951 • TDD 925-4354

July 22, 2014

Molly Pearson
Santa Barbara County APCD
260 N. San Antonio Road, Ste. A
Santa Barbara, CA 93110



Dear Ms. Pearson:

The City of Santa Maria supports the APCD's work to establish GHG thresholds for the region, because it would provide consistency for the region, improve the defensibility of our CEQA determinations, and reduce uncertainty for the development community.

Of the options provided, the City supports:

Consistency with AB 32 Scoping Plan and Goals. The City of Santa Maria supports this option because it is consistent with State mandates and spreads the burden of reduced emissions across most projects. Any of the proposed approaches is acceptable (or a combination thereof). This option also may be most adaptable to a new State threshold for 2050, if the State elects to enact one.

Comments on Other Options

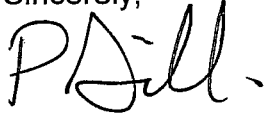
No Threshold. The City of Santa Maria does not support this option. We appreciate APCD's work toward a threshold that can be uniformly applied throughout the region.

Zero. The City of Santa Maria does not support this option. This is an extreme approach that is entirely inconsistent with State legislation. The very concept of a 2020 target in AB 32 means that the State legislature considers there to be an accepted level of GHG emissions, which is contrary to a zero threshold. A zero threshold could lead to a conclusion that no project that might add GHG could qualify for an exemption, which would have dramatic detrimental impacts to all local governments in the regions, and their economies. To justify a zero threshold that goes beyond the State mandate would likely result in litigation that would further delay a uniform threshold for the region, which is not in the best interest of the region.

Bright line. The City of Santa Maria does not object to this option, but does not consider this to be the best option.

Thank you for your consideration of our opinions and concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "PGilli", with a stylized flourish at the end.

Peter Gilli, Planning Division Manager
COMMUNITY DEVELOPMENT DEPARTMENT



*California Independent Petroleum Association
Blair Knox, Director of Regional Affairs
1200 Discovery Drive, Suite 100
Bakersfield, CA 93309
Phone: (661) 395-5287
E-Mail: blair@cipa.org*

August 14, 2014

Via email: ceqa@sbcapcd.org

Attn: Molly Pearson
Santa Barbara County Air Pollution Control District
260 N. San Antonio Rd, Ste. A,
Santa Barbara, CA 93110

RE: Industry Comments on SBCAPCD Greenhouse Gas (GHG) Policy Recommendation

Dear Ms. Pearson,

Thank you for the opportunity to comment on the SBCAPCD Greenhouse Gas Policy Recommendation. This letter is being submitted on behalf of both the California Independent Petroleum Association (CIPA) members and the Santa Barbara County Onshore Oil and Gas Operators Group (aka. the Coastal Operators Group or COG), which includes many of our members in addition to the majority of companies producing oil and gas onshore Santa Barbara County. CIPA is a non-profit, non-partisan trade organization representing over 170 oil and gas producers throughout the state and a total membership north of 550, including a wide variety of people and companies that make up the petroleum economy in California. The Santa Barbara Onshore Oil and Gas Operators Group is a coalition of onshore oil and gas operators that works to address regulatory issues in the local industry.

This letter provides our recommendations on the appropriate significance threshold for the Santa Barbara County Air Pollution Control District's ("District") greenhouse gas (GHG) impact evaluation for projects subject to the California Environmental Quality Act (CEQA). Our recommendations coincide with policy options presented and identified under "Option Four" by the District at the recent May 6th and May 8th workshops.

Specifically, we support a "hybrid" policy approach to evaluating GHG impacts in CEQA documents. The hybrid approach would first establish a bright line (quantitative) value CEQA significance screening level **and** second, evaluate potential emission reduction requirements for compliance with the adopted statewide GHG reduction plan, California's Global Warming Solutions Act of 2006 ("AB 32") Climate Change Scoping Plan ("[Scoping Plan](#)"). The Scoping Plan is California's approved plan for reducing GHG emissions in the state in a cost effective manner that reduces carbon and retains California businesses.

We recommend the District set a **10,000 metric tons CO₂e significance screening level** to avoid causing unnecessary review of projects with limited emissions. For projects with emissions that exceed the screening level, the lead agency would then evaluate the project's emission reductions to determine whether those reductions comply with specific provisions of the Scoping Plan or are consistent with its performance standards. The methodological steps for this hybrid approach are the following:

- **Step No. 1:** If the project's *total new emissions* (projected emissions from the new project after taking into account any baseline emissions) are below the 10,000 metric tons CO₂e significance screening level, then the impact is deemed insignificant and no further GHG CEQA analysis or mitigation is necessary.
- **Step No. 2:** If the project's *total new emissions* are above the 10,000 metric tons CO₂e significance screening level, the lead agency would then evaluate whether the project meets one of the following metrics resulting in a finding of insignificance:

Step 2 (a): Does the project comply with an approved GHG emission reduction plan or GHG mitigation program (e.g. Cap-and-Trade Program)? If yes, then no further GHG CEQA analysis is necessary. The project is deemed as less than significant for the GHG CEQA review. If no, then proceed to Step 3.

Or:

Step 2 (b): Does the project achieve the most recent target percentage emission reduction level as determined by the California Air Resources Board (CARB) in the Scoping Plan "BAU -" (percent reduction from business as usual case) to comply with California's GHG reduction goals set by AB 32 or future legislation setting goals beyond 2020? If yes, then no further GHG CEQA analysis is necessary. The project is deemed as less than significant for the GHG CEQA review. If no, then proceed to Step 3.

The current AB 32 Scoping Plan target reduction is BAU - 15.3 %. For purposes of this analysis, the percentage reduction is measured against total stationary source emissions from the project.

Step 3: Where the project's *total new emissions* are above the 10,000 metric tons CO₂e significance screening level, but not compliant with Step 2(a) or (b), then emissions are deemed significant and mitigation is necessary. Or, the lead agency can approve the project by adopting findings of overriding consideration for the approval of the project.

The CEQA Guidelines encourage CEQA lead agencies to develop significance thresholds. The significance thresholds need to be supported by substantial evidence. CEQA Guidelines Section 15064.7 states:

(a) Each public agency is encouraged to develop and publish thresholds of significance of environmental effects . . . compliance with which means the effect normally will be determined to be less than significant.

(b) Thresholds of significance . . . must be adopted by ordinance, resolution, rule, or regulations, and developed through a public review process and be supported by substantial evidence.

(c) When adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.

Your current process allows the District to gather the information needed to support setting a standard of significance for GHG emissions increases. Our recommendations for the hybrid approach are solidly grounded in the regulatory framework of both AB 32, California's solution to the problem of global climate change and also, CEQA, California's landmark act requiring analysis and disclosure of potential environmental impacts to the public and decision makers prior to approval of a project. Thus, the discussion below first provides key aspects of AB 32 relevant to and in support of the district's consideration of the hybrid GHG compliance policy. Next, the discussion provides CEQA based support for our recommendation that compliance with AB 32 is compliance with CEQA.

AB 32: Charting California's Path to GHG Reductions

AB 32 is California's solution to the problem of global climate change. Essentially, AB 32 mandates a return to 1990 GHG (CO₂e) emissions levels by 2020. To achieve this mandated goal, AB 32 directs CARB to take a variety of actions to reduce California's GHG emissions. Of primary concern to the specific policy we recommend is that CARB **"shall prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases by 2020 (Health and Safety Code (HSC) §38561)."**

The [Scoping Plan](#), approved by CARB Board December 12, 2008, specifies the actions CARB found necessary to reduce GHG emissions in California to meet the mandated reductions in AB 32. The approved [Scoping Plan](#) indicates how these emission reductions will be achieved from "significant" GHG sources via [regulations](#), market mechanisms and [other actions](#). The Scoping Plan was initially adopted by the CARB in 2008. The Scoping Plan must be updated every five years to ensure California remains on track to reach the mandated GHG emission reduction goals of AB 32. Pursuant to the update requirement, CARB adopted the [First Update to the Climate Change Scoping Plan](#) in May 2014.

Business as Usual Reductions

In order to determine the amount of reductions required to meet the 2020 goal, CARB created a business as usual (BAU) case to predict the amount of GHG emissions the state would produce in 2020 without implementing any specific controls. Then, CARB calculated the percentage reduction from this BAU case that would be required to meet 1990 emissions levels in 2020. CARB has continued to refine the percentage reduction based upon the actual statewide GHG emissions. Initially, CARB calculated California needed to reduce emissions by 29% from BAU to meet the 2020 goal. In 2011 CARB reduced the percent reduction needed to 16% to reach the 2020 goal because the State's emissions have been lower than forecast.

Scoping Plan Command and Control Measures

The Scoping Plan contains several command and control measures, including:

- Regulation of landfills and certain commercial refrigerant operations
- Pavley I automobile standards
- Regional transportation measures
- Energy efficiency
- Renewables portfolio standard

Cap-and-Trade Market Based Measure

CARB also adopted a market based approach, cap-and-trade, to reduce emissions from most of the California economy. Projects subject to AB 32's cap-and-trade program are required to decrease or offset emissions to meet AB 32's GHG reduction goals in 2020 and beyond. The cap-and-trade reductions are adaptive, in that they become more stringent as longer term GHG reduction goals may require. The cap is also subject to adjustment as CARB calculates the reductions from command and control measures such that cap-and-trade picks up any reductions not achieved through command and control measures. Furthermore, cap-and-trade applies to all capped sources regardless of whether they are existing or new sources ensuring that all capped sources participate in achieving California's GHG reduction goals. Currently, only phase 1 of the program is in effect, which includes all major industrial sources and electric utilities. Phase 2 will start in 2015, and will encompass distributors of transportation fuels, natural gas and other fuels.

CARB has stated unequivocally that the cap and trade program will put the state, including the industrial sector, on a path to satisfy emission reduction goals through 2050 (See CCARB AB32 Scoping Plan, at 15, December 2008). Furthermore, the First Update to the Climate Change Scoping Plan states, "The Cap-and-Trade Program will continue to be a vital component in achieving California's longer-term climate change goals." (At 87.)

CARB's implementation of the Scoping Plan is working. "The State's progress on measures included in the Scoping Plan and other complementary activities have put California on the path to achieve the statewide GHG emission limit of 1990 levels by 2020, and to achieve the maximum technologically feasible and cost-effective reductions over the long-term." (First Update to Climate Change Scoping Plan at 88.) California is on a downward trend on both overall emissions and emissions per person. (*Id.* At 90.) CARB has designed the system such that the cap-and-trade program's cap adjusts, picking up any lost reductions to ensure California meets the 2020 goals. (*Id.* At 93.)

In addition, CARB is looking to the future by identifying the next steps toward further reductions in GHG emissions. CARB not only continues reductions from the sectors identified in the initial Scoping Plan but is also including many additional sectors in its efforts to further reduce GHG emissions beyond 2020. For the energy sector, CARB plans to work with State energy agencies to develop by the end of 2016 a comprehensive and enforceable GHG emission reduction requirements for electric and energy utilities to achieve near-zero GHG emissions by

2050. (First Update to the Climate Change Scoping Plan at 45, 2014.) For the transportation sector CARB plans to reduce transportation GHG emissions by addressing all of the following:

- Adopt vehicle standards to achieve five percent emission reductions per year through at least 2030.
- Strengthen and extend the low carbon fuel standard
- Continue to develop resources for electric and hydrogen vehicles
- If needed, expand regional targets for emission reductions under SB 375
- Build and expand high speed rail and other transit options
- Complete the sustainable freight strategy, and
- Leverage public money to scale-up clean technology markets.

(*Id.* At 55.) CARB also plans to create midterm and 2050 targets for GHG reductions from the agriculture sector. (*Id.* At 61.) CARB will continue efforts toward water and energy conservation programs to reduce water use and energy used to move and treat water. (*Id.* At 65.) For the waste sector, CARB is looking to eliminate disposal of organic materials and control methane at landfills, increase composting and anaerobic digestion, and further increase recycling. (*Id.* At 69.) For natural and working lands, CARB is working toward developing forest carbon plans and further understand the carbon life cycle in wood products. (*Id.* At 76.) CARB plans to develop a comprehensive strategy for mitigation of short-lived climate pollutants by 2015 with a focus on reducing smog-forming pollutants by 90% by 2032 to meet ozone standards. (*Id.* At 81.) CARB also plans to expand upon green building programs for new construction, existing building retrofits, and operations and maintenance. (*Id.* At 85.) Finally, CARB plan to continue using cap-and-trade to further reduce emissions beyond 2020. (*Id.* At 87.)

Thus, CARB's comprehensive and statewide program to reduce GHG emissions is California's program for addressing global climate change. Compliance with CARB's programs and emission reduction metrics provide a solid foundation for a defensible GHG significance threshold.

Mitigating Cumulative Impacts under CEQA: Everyone's "Fair Share"

CEQA recognizes climate change is a global problem wherein the concern is not about an individual project on its own but about a project's contribution to the cumulative problem of climate change. Thus, for GHG impacts a lead agency is evaluating whether a project's impacts could exacerbate this global impact through its incremental contribution combined with the cumulative impacts of all other sources of GHGs. In order to determine whether a project's incremental contribution to global climate change is significant under CEQA, we recommend the District rely upon programs established by and percent reductions found by CARB in the Scoping Plan and First Update to the Climate Change Scoping Plan to meet California's GHG emission reduction goals.

Consistency with Scoping Plan Programs Satisfies CEQA's Requirement for Projects to Fund their Fair Share of the Solution to a Cumulative Problem like Global Climate Change

According to CEQA Guidelines § 15064.4(b) when assessing the significance of Greenhouse Gas impacts under CEQA,

A lead agency should consider . . .

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

According to the CEQA Guidelines if a project complies with California's adopted GHG plan, the Scoping Plan including programs such as cap-and-trade, the project's impacts should be found to be less than significant. A project complying with the Scoping Plan and its updates would not have a significant impact because it is already involved in a program providing the necessary reductions to meet California's goals and requirements for reducing GHG emission statewide. The project would already be contributing to the solution to global climate change.

Finding a stationary source required to comply with cap-and-trade as not causing a significant cumulative GHG impact is consistent with the CEQA Guidelines. In June of this year the San Joaquin Valley Air Pollution Control District approved a policy wherein projects subject to cap-and-trade (covered entities) are determined to have a less than significant impact on global climate change under CEQA. (APR-2030, dated June 25, 2014.) Consistent with this action by San Joaquin, the CEQA Guidelines limit allowable mitigation for cumulative impacts such that a project is only responsible for its contribution to the cumulative problem. Under CEQA a project cannot be required to mitigate the cumulative impacts of other projects. As set forth in the District's presentation and CEQA Guidelines §15130(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. (Emphasis added.)

Cumulative impacts can be mitigated to a less than cumulatively significant level by implementing its fair share of a mitigation measure or measures. The Scoping Plan contains control measures for the reduction of all California GHG emissions. Therefore, by definition, any implemented AB 32 control measure satisfies an essential (fair share) CEQA criteria for mitigation.

The South Coast Air Quality Management District (SCAQMD) recently determined that a cogeneration project, within its jurisdiction and subject to cap-and-trade, was in compliance with CEQA GHG requirements. SCAQMD did not require any additional mitigation for this project. In addition, SCAQMD's current adopted policy is if a project is subject to cap-and-trade, then that project is deemed compliant with CEQA GHG requirements by the SCAQMD. It is also our understanding that the District has confirmed with CARB that any stationary sources subject to the cap-and-trade program are in compliance with CEQA GHG requirements and require no further mitigation.

District reliance upon the programs and metrics from the Scoping Plan as a significance threshold is also consistent with constitutional limitations on exactions from development projects. Requiring project applicants to mitigate their GHG emissions beyond what is determined to be necessary by the Scoping Plan programs such as cap-and-trade or the reduction percentages discussed below would violate constitutional and “fair share” requirements. The additional mitigation would be disproportionate to the project’s contribution and not tied to an evaluation of a project’s actual impacts on global climate change.

The constitutional limitations on land-use related exactions are established in two well-known Supreme Court decisions. In *Nollan v. California Coastal Commission* (“Nollan”), the Supreme Court held that an “essential nexus” must exist between the “legitimate state interest” (in this Case, AB 32) and the permit condition exacted by the city. (*Nollan v. California Coastal Commission* [1987] 483 U.S. 825 at 837.) And, Nollan’s companion case *Dolan V. City of Tigard* ([1994] 512 U.S. 374) clarified that an exaction is legitimate only if the mitigation requirement is roughly proportional to the project’s impact. Thus, a project cannot be required to provide mitigation in excess of its contribution to the impact.

Meeting CARB’s BAU Reduction Percentage Means the Project has Contributed its Fair Share to the Solution to the Cumulative Problem of Climate Change and Does Not Create a Significant Cumulative GHG Impact

As shown above, CARB has calculated the percent reduction from BAU needed to meet California’s established requirements for GHG reductions statewide. If a project reduces its GHG emissions by this same percentage, the project should also be considered to have contributed its fair share contribution to this global problem. Project GHG emission reductions consistent with BAU levels would thus, not create a significant cumulative impact. Note that the Santa Barbara County Energy and Climate Action Plan states the County emission goals can be met by a 15% below BAU criteria. Furthermore, the CEQA Guidelines Section 15064.4(a)(2) support using performance standards to determine significance of GHG emissions:

The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have the discretion to determine, in the context of a particular project, whether to:

(2) Rely on a qualitative analysis or **performance based standards**. (Emphasis added.)

The approach of using a reduction from BAU to address cumulative GHG impacts has been supported by the courts in a published appellate court decision in *CREED v. City of Chula Vista* (197 Cal. App. 4th 327 2011). In August 2013, the Third District Court of Appeal affirmed the holding in *CREED*, and held that a city properly used consistency with AB 32 goals as a threshold of significance for a retail store expansion. (See *Friends of Oroville v. City of Oroville et al.*

[2013] 219 Cal.App.4th 832.) In *Friends of Oroville*, the agency selected consistency with AB 32 as a significance threshold. The court expressly affirmed that the decision in *CREED* “exemplifies the model, showing us a proper way to apply the Assembly Bill 32 threshold-of-significance standard.” (Id., slip op. at 8.) The *Friends of Oroville* court explained the methodology used in *CREED*, and explained how the EIR in that case applied a percentage below BAU approach to conclude that the project would achieve reductions of 29% below BAU. The court held that such a project would, therefore, be consistent with AB 32. (Id.; *CREED*, 197 Cal.App.4th at 336-337.)

This approach has also been used by all of the following jurisdictions: San Diego County, City of Los Angeles, Port of Los Angeles, Santa Cruz County, Fresno County, San Bernardino County, City of Shasta, Napa County, City of Carlsbad, City of Corona, Merced County, San Joaquin Valley Air Pollution Control District (SJVAPCD), Eastern Kern Air Pollution Control District, City of Temple City. As an example, the SJVAPCD program deems a project to be not significant for GHG emissions if it meets any of the following criteria:

- Complies with equipment-specific SJVAPCD GHG Best Performance Standards (BPS); or
- Projected project emissions would be 29% or more below the emissions expected under the BAU criteria; or
- The stationary source complies with any California AB 32 Scoping Plan control measure, including but not limited to compliance with the Cap and Trade Program.

The District Should Adopt the Hybrid Approach for Determining the Significance of GHG Emissions

Thus, we recommend the District adopt a hybrid CEQA GHG significance threshold wherein the District would set an initial screening level of 10,000 MT CO₂e. Projects with emissions exceeding the threshold must show either: A) compliance with a program included in the Scoping Plan as updated, or (b) reductions consistent with the current reduction level required to meet statewide reduction requirements. If the project complies with a program or meets the reduction percentage, the project’s GHG emissions would be less than significant. Projects that do not meet these requirements would be required to provide additional mitigation to be found to have a less than significant impact on global climate change. This hybrid significance standard would ensure projects contribute their fair share to the reducing GHG emissions and meet the constitutional requirements of rough proportionality of the mitigation to the impacts.

Thank you in advance for your consideration of our comments. Please feel free to contact me should you have any questions.

Sincerely,



Blair Knox
CIPA Director of Regional Affairs



Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Sandra Burkhart
Senior Coastal Coordinator

August 15, 2014

Ms. Molly Pearson
Planning and Grants Supervisor
Santa Barbara County Air Pollution Control District
260 N. San Antonio Rd, Suite A
Santa Barbara, CA 93110

Subject: WSPA Comments - SBCAPCD CEQA GHG Significance Threshold Development

Dear Ms. Pearson:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing 27 companies that explore for, refine, transport, and market petroleum, petroleum products, natural gas and other energy supplies for California and five other western states. WSPA appreciates this opportunity to provide comments on the development of Santa Barbara County Air Pollution Control District (SBCAPCD) guidance for evaluating the significance of the impacts of greenhouse gas (GHG) emissions from new or modified stationary sources pursuant to the California Environmental Quality Act (CEQA).

On April 6, 2014, the SBCAPCD provided a public notice of their intention to revise their Environmental Review Guidelines to include methods for evaluating the significance of the impacts of GHG emissions from new or modified stationary sources. At public workshops held on May 6, 2014 and May 8, 2014, SBCAPCD staff indicated that the District would be assessing several options and requested input from stakeholders. On August 7, 2014, WSPA met with SBCAPCD staff at a Consultation Meeting. In response to these meetings and SBCAPCD requests for comments, WSPA suggests a step-wise approach for determining the significance of GHG emissions from stationary sources that is consistent with and complimentary to the comprehensive statewide GHG emission reduction program pursuant to AB 32 (Global Warming Solution Act of 2006) as implemented by the California Air Resources Board.

The following proposed approach is suggested for discussion purposes as a step-wise, integrated method which considers state and local CEQA objectives:

- **Step 1 - 10,000 MT/yr CO₂e Screening.** If a project's total GHG emissions are below a 10,000 metric ton per year (MT/yr) significance screening level, then the project would be determined to have a less than significant individual and cumulative impact for GHG emissions.

If a project has GHG emissions greater than 10,000 MT/yr CO₂e, then proceed to Step 2.

- **Step 2 - Approved GHG Emission Reduction or Mitigation Plan.** If a project is in compliance with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially

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reduces GHG emissions, the project would be determined to have a less than significant individual and cumulative impact for GHG emissions.

Such plans or programs must have provisions that are: (1) consistent with State law (i.e., AB 32) or (2) approved by the lead agency with jurisdiction over the affected resource, and supported by a CEQA compliant environmental review document adopted by the lead agency. For example, stationary sources subject to the AB 32 Cap & Trade requirements pursuant to Title 17, Article 5 (California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms) would meet the criteria of this step.

If a project does not have an approved GHG emission reduction or mitigation plan, then proceed to Step 3.

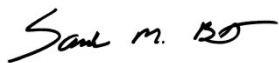
- **Step 3 - GHG Emission Reduction compared to BAU.** A project can demonstrate that project-specific GHG emissions would be reduced or mitigated by a percentage consistent with the AB 32 Scoping Plan, compared to “Business as Usual” (BAU) baseline (i.e., 3-year period prior to AB 32 promulgation in 2006). Thus, the project GHG emissions (which would be subject to current SBCAPCD rules and regulations) would be compared to project GHG emissions if the project had been permitted during the baseline period under the requirements in place during the baseline period. The most recent AB 32 Scoping Plan indicated a 15% target. Projects achieving designated GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

If a project does not meet the GHG emission reduction criteria compared to BAU, then proceed to Step 4.

- **Step 4 - CEQA Review.** If a project does not meet any of the criteria set forth in Steps 1 through 3, then the project is deemed significant for GHG emissions and subject to CEQA review.

WSPA would again like to express our appreciation to SBCAPCD staff for meeting with us at the August 7 Consultation Meeting and the opportunity to provide input regarding this very important regulatory item. As discussed in the Consultation Meeting, this comment letter was intended to serve as an outline of a CEQA GHG approach. WSPA is committed to providing further details and rationale for the approach outlined above (specifically to demonstrate how this approach complies and is consistent with AB 32 and CEQA regulatory requirements and objectives). If you have any questions regarding the approach described in this letter, please contact me at (805) 966-7113.

Sincerely,



Sandra Burkhardt

CC: David Van Mullem - SBCAPCD

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August 15, 2014

VIA ELECTRONIC MAIL
VIA FEDERAL EXPRESS

Dave Van Mullem
Director and Air Pollution Control Officer
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110
VanMullemD@sbcapcd.org
ceqa@sbcapcd.org

File No. 043492-0007

Re: SBCAPCD Consideration of a California Environmental Quality Act
Significance Threshold for Greenhouse Gas Emissions

Dear Mr. Van Mullem:

On behalf of Pacific Coast Energy Company, we respectfully offer recommendations to the Santa Barbara County Air Pollution Control District (District) in response to the District's solicitation of comments regarding its development of a California Environmental Quality Act (CEQA) significance threshold for greenhouse gas (GHG) emissions.

We understand that the District is proposing to update its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of GHG emissions from new or modified stationary sources. The Environmental Review Guidelines provide procedures for the District to use when acting as a CEQA lead agency (e.g., issuance of air permits, adoption of rules and plans, etc.), but other agencies reviewing projects under CEQA also may choose to utilize the District's Environmental Review Guidelines.

This letter contains specific recommendations for a GHG significance threshold. Enclosed hereto is an Appendix containing legal support for our recommended threshold. Section I of the Appendix provides the legal framework for the analysis of GHG emissions under CEQA. Section II explains that a project's GHG emissions subject to the Cap-and-Trade Program should neither count against a project when assessing its significance under CEQA nor require further mitigation. Section III sets forth the precedent that would support the District's adoption of a significance threshold based on compliance with Assembly Bill (AB) 32. Section

IV of the Appendix describes how District projects could mitigate climate change impacts. Finally, there are two attachments to the Appendix (Attachments A and B) that contain relevant court decisions.

We recommend that the District adopt the following CEQA significance threshold for GHG emissions:

- **Step 1:** If a project's GHG emissions are below 10,000 metric tons of carbon dioxide equivalent (MTCO₂e), then the project's GHG emissions are deemed insignificant and no further analysis or mitigation is necessary. Step 1 is a screening tool that would result in an approximate 90% project capture rate.
- **Step 2:** If a project's total emissions are equal to or above 10,000 MTCO₂e, then the project's GHG emissions are considered insignificant if the project meets either of the following performance standards:
 - **Step 2(a):** Does the project comply with an approved GHG emission reduction plan or GHG mitigation program (e.g., the Cap-and-Trade Program, Climate Action Plan, etc.)? If yes, then the project's GHG emissions are deemed insignificant and no further analysis or mitigation is necessary. If no, then proceed to Step 2(b).
 - **Step 2(b):** Will the project reduce its GHG emissions consistent with the reduction below business as usual (BAU) required by AB 32?¹ If yes, then the project's GHG emissions are deemed insignificant and no further analysis or mitigation is necessary. If no, then proceed to Step 3.
- **Step 3:** If a project's total emissions are equal to or above 10,000 MTCO₂e and the project does not comply with an approved GHG emission reduction plan or GHG mitigation program or reduce its GHG emissions consistent with the reduction below BAU required by AB 32, the project's GHG emissions will constitute a significant impact. Accordingly, either mitigation to reduce the impact to a level of insignificance is necessary or the lead agency must make a finding of overriding considerations to approve the project.

We believe that the alternative significance thresholds proffered by other stakeholders are not pragmatic, and we urge the District to give due consideration to the threshold above. Please see the Appendix for further information.

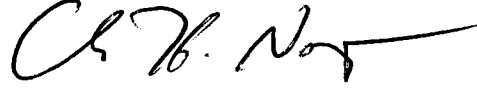
We appreciate the opportunity to submit comments on the District's planned update to its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of GHG emissions from new or modified stationary sources. Accordingly, we respectfully offer the recommendations contained in this letter (including the Appendix hereto)

¹ The First Update to the Climate Change Scoping Plan's target reduction is 15.3 % below BAU.

LATHAM & WATKINS^{LLP}

to guide the District's development of a CEQA significance threshold for GHG emissions. We are available to further discuss our recommendations at your convenience.

Very truly yours,

A handwritten signature in black ink, appearing to read "Ch. H. Norton", with a long horizontal flourish extending to the right.

Christopher H. Norton
of LATHAM & WATKINS LLP

Enclosures

cc: Greg Brown, PCEC

Appendix

Legal Support For Recommended Threshold

I. LEGAL FRAMEWORK FOR ANALYSIS OF GHG EMISSIONS UNDER CEQA

Until the passage of AB 32, CEQA documents generally did not evaluate GHG emissions or impacts on global climate change. Rather, the primary focus of air pollutant analysis in CEQA documents was the emission of criteria pollutants or those identified in the California and federal Clean Air Acts as being of most concern to the public and government agencies (e.g., toxic air contaminants). With the passage of AB 32 and Senate Bill 97, discussed in more detail below, CEQA documents generally contain a more detailed analysis of GHG emissions. However, the analysis of GHGs temporally is different from the analysis of criteria pollutants. For example, since the half-life of CO₂ is approximately 100 years, GHGs potentially affect the global climate over a relatively long timeframe. Conversely, for criteria pollutants, significance thresholds/impacts are based on daily emissions and the determination of attainment or non-attainment is based on the daily exceedance of applicable ambient air quality standards (e.g., one-hour and eight-hour exposures). Also, the scope of criteria pollutant impacts is local and regional, while the scope of GHG impacts is potentially global.

These distinctions between criteria pollutant and GHG emissions warrant a different approach for assessing the significance of GHG emissions. In particular, as the predicted effects of GHG emissions are purely cumulative, a CEQA analysis need only focus on whether a project's GHG emissions are cumulatively considerable. Accordingly, if a project accepts its fair share of measures designed to alleviate the cumulative impact at issue (here, climate change), then that project's GHG emissions are not significant under CEQA.

A. CEQA Guidelines

1. Senate Bill 97 (Dutton)

California Senate Bill 97, passed in August 2007, was designed to work in conjunction with CEQA and AB 32. Senate Bill 97 required the California Office of Planning and Research (OPR) to prepare and develop guidelines for the mitigation of GHG emissions or the effects thereof, including, but not limited to, effects associated with transportation and energy consumption. These guidelines were required to be transmitted to the Resources Agency by July 1, 2009, to be certified and adopted by January 1, 2010.

On June 19, 2008, OPR released a technical advisory on addressing climate change. This guidance document outlines suggested components to CEQA disclosure: quantification of GHG emissions from a project's construction and operation; determination of significance of the project's impact to climate change; and if the project is found to be significant, the identification of suitable alternatives and mitigation measures.

On April 13, 2009, the OPR submitted the Proposed Draft Guideline Amendments for Greenhouse Gas Emissions to the Secretary for Natural Resources. The California Natural

Resources Agency conducted formal rulemaking in 2009 and adopted the Guideline Amendments on December 30, 2009, which address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment.

2. Guidance For Lead Agencies

As indicated above, the CEQA Guidelines were specifically amended to assist lead agencies in determining the significance of the impacts of GHGs.² However, neither a GHG emissions threshold of significance nor any specific mitigation measures for GHG emissions are included or provided in the CEQA Guidelines.³ Rather, the Guidelines require a lead agency to "make a good-faith effort, based on the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project."⁴ The Guidelines give discretion to the lead agency "whether to: (1) Use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use ... ; and/or (2) Rely on a qualitative analysis or performance-based standards."⁵ The Guidelines also identify three factors that should be considered in the evaluation of the significance of GHG emissions: (1) the extent to which a project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.⁶

3. GHG Emissions Represent A Cumulative Impact

The emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. According to the California Air Pollution Control Officers Association, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective."⁷ It is global GHG emissions in their aggregate that contribute to climate change, not any single source of GHG emissions alone.

Importantly, the CEQA Guidelines amendments clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative

² 14 CCR § 15064.4.

³ When establishing a significance threshold, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, so long as any threshold chosen is supported by substantial evidence. 14 CCR § 15064.7(c).

⁴ 14 CCR § 15064.4.

⁵ *Id.*

⁶ *Id.*

⁷ California Air Pollution Control Officer's Association, CEQA and Climate Change, (2008).

impact analysis.⁸ The administrative record of the promulgation of the GHG emissions amendments to the CEQA Guidelines also make clear “that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of California Environmental Quality Act’s requirements for cumulative impact analysis.”⁹

4. Regulatory Compliance Renders GHG Emissions Not Significant

Per CEQA Guidelines Section 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.¹⁰ To qualify as adequate mitigation, such a plan or program 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.¹¹ Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] **plans or regulations for the reduction of greenhouse gas emissions.**”¹² Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with the California Cap-and-Trade Program or other regulatory scheme to reduce GHG emissions.

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has done precisely that via recent adoption of a policy to provide guidance to SJVAPCD staff on how to determine significance of GHG emissions from projects subject to the Cap-and-Trade Program or occurring at entities subject to the Cap-and-Trade Program.¹³ By its terms, this policy applies both when the SJVAPCD is the lead agency and when it is a responsible agency under CEQA. The SJVAPCD “has determined that GHG emissions increases that are covered under ARB’s Cap-and-Trade regulation cannot constitute significant increases under CEQA....”¹⁴ Other pertinent statements in the SJVAPCD policy are as follows:

Consistent with [14] CCR §15064(h)(3), the District finds that compliance with ARB’s Cap-and-Trade regulation would avoid or substantially lessen the impact of project-specific GHG emissions on global climate change. ... The District therefore concludes that

⁸ See generally 14 CCR § 15130(f).

⁹ Letter from Cynthia Bryant, Director of the Office of Planning and Research, to Mike Chrisman, Secretary for Natural Resources (April 13, 2009).

¹⁰ 14 CCR § 15064(h)(3).

¹¹ *Id.*

¹² *Id.* (emphasis added).

¹³ San Joaquin Valley Air Pollution Control District, *CEQA Determinations of Significance for Projects Subject to ARB’s GHG Cap-and-Trade Regulation*, APR – 2030 (June 25, 2014).

¹⁴ *Id.* at 4.

GHG emissions increases subject to ARB's Cap-and-Trade regulation would have a less than significant individual and cumulative impact on global climate change.¹⁵

In short, the SJVAPCD pragmatically has modified its existing CEQA significance threshold for GHG emissions to acknowledge the progress being made by the state in regulating and reducing such emissions.

a. Supportive Case Law

The court in *Tracy First v. City of Tracy (Tracy First)*¹⁶ considered whether an EIR had adequately studied the energy impacts of a new store.¹⁷ That EIR's analysis of energy issues included a discussion of the environmental setting, the regulatory framework applicable to energy resources, the standards for determining whether there was a significant energy impact, and a discussion of the energy impact of the project. The EIR concluded mitigation was not required because there was no significant energy impact.¹⁸ A local business group challenged the EIR, arguing that it was improper for the City of Tracy to rely on state building standards in determining whether an energy impact was significant.¹⁹ The Court of Appeal disagreed, saying, "[t]he California Building Energy Efficiency Standards [found in title 24 of the California Code of Regulations] are meant to promote energy efficiency, as the name implies. In other words, they 'reduce the wasteful, inefficient, and unnecessary consumption of energy.' (§ 21100, subd. (b)(3).)"²⁰

The *Tracy First* decision is helpful for the District's update to its Environmental Review Guidelines because, as the Court of Appeal clarified, the issue before them was "whether the EIR can rely on compliance with state building standards in finding whether there are significant impacts."²¹ *Tracy First* supports the District's adoption of a significance threshold that authorizes reliance on a project's compliance with existing laws or regulations, here an approved GHG emission reduction plan or GHG mitigation program (e.g., the Cap-and-Trade Program), to make a finding of insignificance for GHG emissions. In other words, *Tracy First* indicates that compliance with existing regulations, such as the Cap-and-Trade Program, properly addresses climate change impacts under CEQA and justifies a finding of non-significance.

II. GHG EMISSIONS SUBJECT TO CAP-AND-TRADE PROGRAM DO NOT REQUIRE CEQA MITIGATION

¹⁵ *Id.* at 4-5.

¹⁶ 177 Cal. App. 4th 912 (2009) (*Tracy First*).

¹⁷ *Id.* at 916, 930.

¹⁸ *Id.* at 930-931.

¹⁹ *Id.* at 933.

²⁰ *Id.* at 933-934 (citing to CEQA's requirement that an EIR include mitigation "measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.").

²¹ *Id.* at 934.

As described in more detail below, the design of the Cap-and-Trade Program assures reductions in GHG emissions. Accordingly, a project's GHG emissions subject to the Cap-and-Trade Program should neither count against a project when assessing its significance under CEQA nor require further mitigation. In its recently adopted policy, the SJVAPCD has taken the same position on the mitigation provided by the Cap-and-Trade Program:

[I]t is reasonable to conclude that implementation of the Cap-and-Trade program will and must fully mitigate project-specific GHG emissions for emissions that are covered by the Cap-and-Trade regulation. ... [T]he District finds that, through compliance with the Cap-and-Trade regulation, project-specific GHG emissions that are covered by the regulation will be fully mitigated.²²

Further, the South Coast Air Quality Management District (SCAQMD) has taken this position on at least two separate occasions in CEQA documents.

A. Overview Of Cap-and-Trade Program

The Cap-and-Trade Program²³ is designed to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors²⁴ (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the Program's duration. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported.²⁵ Accordingly, we would expect almost all, if not all, of the GHG emissions associated with the District's CEQA projects to be covered by the Cap-and-Trade Program (i.e., stationary source GHG emissions, GHG emissions attributable to electricity use, etc.).

Under the Cap-and-Trade Program, the California Air Resources Board (ARB) issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities, including stationary sources like those permitted by the District, that emit more than 25,000 MTCO₂e per year must comply with the Cap-and-Trade Program.²⁶ Triggering of the 25,000 MTCO₂e per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule or

²² San Joaquin Valley Air Pollution Control District, *CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation*, APR – 2030, at 5 (June 25, 2014).

²³ 17 CCR §§ 95800 to 96023.

²⁴ See generally 17 CCR §§ 95811, 95812.

²⁵ 17 CCR § 95811(b).

²⁶ 17 CCR § 95812.

“MRR”).²⁷

Each covered entity with a compliance obligation is required to surrender “compliance instruments”²⁸ for each MTCO₂e of GHG they emit. Covered entities are allocated free allowances in whole or part (if eligible), buy allowances at auction, purchase allowances from others, or purchase offset credits. A “compliance period” is the time frame during which the compliance obligation is calculated. The years 2013 and 2014 are the first compliance period, the years 2015–2017 are the second compliance period, and the third compliance period is from 2018–2020. At the end of each compliance period, each facility will be required to surrender compliance instruments to ARB equivalent to their total GHG emissions throughout the compliance period. There also are requirements to surrender compliance instruments covering 30% of the prior year’s compliance obligation by November of each year. For example, by November 2014, a covered entity must submit compliance instruments to cover 30% of its 2013 GHG emissions.

1. Emissions Reductions Achieved

a. Climate Stabilization

It is important to place in a scientific context AB 32’s mandate that the State’s GHG emissions be returned to 1990 levels by 2020. The 2020 mandate is a critical and necessary step in the State’s efforts to combat climate change. The end-game for California is climate stabilization, as reflected in the State’s 2050 emissions reduction goal:

The State’s 2050 objective of reducing emissions to 80 percent below 1990 levels, as reflected in Executive Order S-3-05 and Governor Brown’s Executive Order B-16-2012 (which is specific to the transportation sector), is consistent with an Intergovernmental Panel on Climate Change (IPCC) analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million carbon dioxide equivalent (CO₂e) and reduce the likelihood of catastrophic climate change.²⁹

The Climate Change Scoping Plan recognizes that AB 32 establishes an emissions reduction trajectory (i.e., 1990 emissions levels by 2020) that will allow California to achieve the 2050 target:

These [greenhouse gas emission reduction] measures also put the state on a path to meet the long-term 2050 goal of reducing California’s greenhouse gas emissions to 80 percent below 1990

²⁷ 17 CCR §§ 95100-95158.

²⁸ Compliance instruments are permits to emit, the majority of which will be “allowances,” but entities also are allowed to use ARB-approved offset credits to meet up to 8% of their compliance obligations.

²⁹ ARB, *First Update to the Climate Change Scoping Plan: Building on the Framework*, at 1 (May 2014).

levels. This trajectory is consistent with the reductions that are needed globally to help stabilize the climate.³⁰

...

Climate scientists tell us that the 2050 target represents the level of greenhouse gas emissions that advanced economies must reach if the climate is to be stabilized in the latter half of the 21st century. Full implementation of the Scoping Plan will put California on a path toward these required long-term reductions. Just as importantly, it will put into place many of the measures needed to keep us on that path.³¹

In short, the Cap-and-Trade Program is scientifically linked under California's regulatory framework to ultimate stabilization of the climate. This linkage shows how compliance with the Cap-and-Trade Program leads to real mitigation of a CEQA project's potential climate change impact.

b. 2020 Emissions Limit

AB 32 required ARB to determine California's 1990 statewide GHG emissions level, which would become California's near-term statewide emissions limit to be achieved by 2020. ARB developed a California statewide GHG emission inventory for years 1990–2004 to support the effort of determining the 1990 level and 2020 emissions limit. In December 2007, the ARB Board approved a total statewide GHG 1990 emissions level and 2020 emissions limit of 427 million MTCO₂e, based on the global warming potential (GWP) of GHGs set forth in the IPCC's Second Assessment Report. The IPCC's Fourth Assessment Report updated the GWP of GHGs, in particular methane and hydrofluorocarbons. Accordingly, in its First Update to the Climate Change Scoping Plan, ARB staff is proposing to update the 2020 limit, weighting the 1990 emissions with 100-year GWPs from the IPCC's Fourth Assessment Report. The new 2020 statewide limit is proposed to be 431 million MTCO₂e.

³⁰ ARB, *Climate Change Scoping Plan - A Framework For Change*, at 15 (December 2008)(available at www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm).

³¹ *Id.* at 117.

c. Role of the Cap-and-Trade Program

To determine the amount of GHG emission reductions needed to reduce to 1990 emissions, ARB developed a forecast of 2020 emissions in a “business-as-usual” scenario (2020 BAU), which is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. ARB subtracts the estimated reductions from adopted and anticipated measures in 2020 to determine whether the 2020 limit is within reach. The Cap-and-Trade Regulation provides a firm cap, ensuring that the 2020 statewide emission limit will not be exceeded. Thus, the estimated emission reductions attributed to the Cap-and-Trade Program depend on the emissions forecast. For example, if the emissions forecast increases, the reductions associated with the Cap-and-Trade Program will increase. ARB’s First Update to the Climate Change Scoping Plan summarizes this regulatory architecture in a table:

Table 5: Meeting the 2020 Emissions Target³²

Category	2020 (MMTCO ₂ e)**
AB 32 Baseline 2020 Forecast Emissions (2020 BAU)	509
Expected Reductions from Sector-Based Measures	
Energy	25
Transportation	23
High-GWP	5
Waste	2
Cap-and-Trade Reductions	23*
2020 Limit	431

*Cap-and-Trade emission reductions depend on the emission forecast.

**Based on AR4 GWP values.

d. Emissions Reductions Occur at Macro Scale

An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by ARB in its First Update to the Climate Change Scoping Plan:

³² ARB, *First Update to the Climate Change Scoping Plan: Building on the Framework*, at 93 (May 2014).

The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. **But as the cap declines, aggregate emissions must be reduced.**³³

In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program. However, as climate change is a global phenomenon and the effects of GHG emissions are considered cumulative in nature, a focus on aggregate GHG emissions reductions is warranted.

Further, the reductions in GHG emissions that will be achieved by the Cap-and-Trade Program inherently are variable and, therefore, impossible to quantify with precision:

The Cap-and-Trade Regulation is different from most of the other measures in the Scoping Plan. The [R]egulation sets a hard cap, instead of an emission limit, so the emission reductions from the program vary as our estimates of “business as usual” emissions in the future are updated. In addition, the Cap-and-Trade Program works in concert with many of the direct regulatory measures—providing an additional economic incentive to reduce emissions. Actions taken to comply with direct regulations reduce an entity’s compliance obligation under the Cap-and-Trade Regulation. So, for example, increased deployment of renewable electricity sources reduces a utility’s compliance obligation under the Cap-and-Trade Regulation.³⁴

If California’s direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California’s direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In other words, the Cap-and-Trade Program functions sort of like an insurance policy for meeting California 2020’s GHG emissions reduction mandate:

The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the “capped sectors.” Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to

³³ *Id.* at 86 (emphasis added).

³⁴ *Id.*

bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap.³⁵

...

[T]he Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions.³⁶

In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by ARB under AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.

2. Extension of Cap-and-Trade Program Post-2020

While the 2020 cap would remain in effect post-2020,³⁷ the Cap-and-Trade Program is not currently scheduled to extend beyond 2020 in terms of additional GHG emissions reductions. However, in the First Update to the Climate Change Scoping Plan, ARB has expressed its intention to set a mid-term GHG emissions reduction target:

[A] key step needed to build on California's framework for climate action is to establish a mid-term statewide emission reduction target. Cumulative emissions drive climate change, and a continuum of action is needed to reduce emissions not just to stated limits in 2020 or 2050, but also every year in between. The target will ensure that the State stays on course and expands upon the successes we have achieved to date so that we can achieve our long-term objective of reducing California's greenhouse gas emissions to the scientifically recognized level necessary for climate stabilization. A mid-term target, informed by climate science, will be critical in helping to frame the additional suite of policy measures, regulations, planning efforts, and investments in clean technologies that are needed to continue driving down emissions.³⁸

...

³⁵ *Id.* at 88.

³⁶ *Id.* at 86-87.

³⁷ Health & Safety Code § 38551(a) ("The statewide greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed.").

³⁸ ARB, *First Update to the Climate Change Scoping Plan: Building on the Framework*, at ES6 (May 2014).

California will develop a mid-term target to frame the next suite of emission reduction measures and ensure continued progress toward scientifically based targets. This target should be consistent with the level of reduction needed in the developed world to stabilize warming at 2°C (3.6°F) and align with targets and commitments elsewhere.³⁹

ARB has not identified a year for the mid-term target, but it is widely expected to be set for 2030 given the discussion of mid-term targets in the First Update to the Climate Change Scoping Plan:

On February 19, 2014, California Senators Fran Pavley (D) and Ricardo Lara (D) introduced Senate Bill 1125 to extend California's GHG targets past 2020:

On or before January 1, 2016, the state board shall, in consultation with the Climate Action Team, other relevant state and local agencies, and interested stakeholders, in an open and public process, develop and submit to the Governor and Legislature a report containing recommendations on a timetable of reduction targets of greenhouse gas emissions and short-lived climate pollutants with high global warming potentials beyond 2020.⁴⁰

Further, ARB has expressed its intention to extend the Cap-and-Trade Program beyond 2020 in conjunction with setting a mid-term target. The "recommended action" in the First Update to the Climate Change Scoping Plan for the Cap-and-Trade Program is: "Develop a plan for a post-2020 Cap-and-Trade Program, including cost containment, to provide market certainty and address a mid-term emissions target."⁴¹ The "expected completion date" for this recommended action is 2017.⁴²

However, the lack of formal extension of the Cap-and-Trade Program does not prohibit, and should not otherwise dissuade, the District from relying on the Cap-and-Trade Program when determining the significance of a project's GHG emissions or requiring mitigation of GHG emissions. With regard to significance determinations, based on the available evidence, it is a reasonable expectation that the Cap-and-Trade Program will be extended. With regard to mitigation, the District could impose a back-up mitigation measure that would be triggered in the event the Cap-and-Trade Program is not extended (e.g., requiring a certain annual reduction in GHG emissions via surrender of offset credits).

³⁹ *Id.* at 34.

⁴⁰ SB 1125 (Pavley).

⁴¹ ARB, *First Update to the Climate Change Scoping Plan: Building on the Framework*, at 98 (May 2014).

⁴² *Id.*

3. Cap-and-Trade Program Expands in 2015 to Cover Transportation Fuels

The Cap-and-Trade Program covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.⁴³ While the Cap-and-Trade Program technically already covers fuel suppliers, they will not have a compliance obligation (i.e., they will not be fully regulated) until 2015:

Suppliers of natural gas, suppliers of RBOB [Reformulated Gasoline Blendstock for Oxygenate Blending] and distillate fuel oils, suppliers of liquefied petroleum gas, and suppliers of liquefied natural gas specified in sections 95811(c), (d), (e), (f), and (g) that meet or exceed the annual threshold in section 95812(d) **will have a compliance obligation beginning with the second compliance period.**⁴⁴

In 2015, the Cap-and-Trade Program will cover approximately 85% of California's GHG emissions.

The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce). However, transportation fuels that are "supplied" in California, but can be demonstrated to have a final destination outside California, do not generate a compliance obligation. The underlying concept here is that ARB is seeking to capture tailpipe GHG emissions from the combustion of transportation fuels supplied to California end-users. Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, we would expect almost all, if not all, of GHG emissions from the District's CEQA projects associated with vehicle-miles traveled (VMT) to be covered by the Cap-and-Trade Program. The SJVAPCD has taken this position in its recently adopted policy, effectively concluding that GHG emissions associated with VMT cannot constitute significant increases under CEQA starting in 2015.⁴⁵

B. South Coast Air Quality Management District Negative Declarations

The SCAQMD, as the CEQA lead agency, prepared two Negative Declarations in April and September 2013 that demonstrate the SCAQMD has applied its 10,000 MTCO₂e significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. Accordingly, if the District ultimately adopts a 10,000 MTCO₂e significance threshold, then it similarly should

⁴³ 17 CCR §§ 95811, 95812(d).

⁴⁴ *Id.* at § 95851(b)(emphasis added).

⁴⁵ San Joaquin Valley Air Pollution Control District, *CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation*, APR – 2030, at 6 (June 25, 2014).

not count a project's GHG emissions covered by the Cap-and-Trade Program against the significance threshold.

The first Negative Declaration analyzes the proposed installation of a new 35-megawatt Cogeneration Unit, including a gas turbine, heat recovery steam generator, a selective catalytic reduction unit, an evaporative cooler, and connections to an existing aqueous ammonia tank at the Ultramar Inc. Wilmington Refinery.⁴⁶ The Negative Declaration states that the project's increase in GHG emissions of 43,813 MTCO₂e does not exceed the District's 10,000 MTCO₂e significance threshold because the Cap-and-Trade Program offsets those emissions:

When the Cogen Unit is expected to be operational in 2014, GHG offsets would be required. As such, the GHG emissions associated with the proposed Project would be required to be offset, so that there would be no net increase in GHG emissions from the Refinery. Therefore, the proposed Project with regulatory required GHG offsets would have a no net GHG emissions increase. GHG emissions from the proposed Project would be less than the interim SCAQMD GHG significance threshold of 10,000 metric tons per year (see Table 2-10). Thus, the GHG emissions from the proposed Project are considered less than significant.⁴⁷

The SCAQMD Staff was not using "offset" as a legal term, but rather in a more general sense. As a point of clarification, the surrender of compliance instruments (i.e., allowances and offset credits) to ARB under the Cap-and-Trade Program does not equate to "offsetting" a project's emissions. Nonetheless, this Negative Declaration is instructive and precedential because it indicates the SCAQMD has applied its 10,000 MTCO₂e significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not count against a project.

The second Negative Declaration analyzes a proposed increase in crude oil storage capacity at Phillips 66's Los Angeles Refinery Carson Plant.⁴⁸ This Negative Declaration addresses the Cap-and-Trade Program in a more precise fashion:

⁴⁶ SCAQMD, Negative Declaration, Ultramar Inc. Wilmington Refinery Proposed Cogeneration Project, SCH No. 2012041014 (April 2013)(available at http://www.aqmd.gov/ceqa/documents/2013/nonaqmd/Ultramar_Neg_Dec.pdf).

⁴⁷ *Id.* at 2-31, 2-32.

⁴⁸ SCAQMD, Negative Declaration, Phillips 66 Los Angeles Refinery Carson Plant - Crude Oil Storage Capacity Project, SCH No. 2013091029 (September 2013)(available at http://www.aqmd.gov/ceqa/documents/2013/nonaqmd/Draft_ND_Phillips_66_Crude_Storage.pdf). The project would involve installation of one new 615,000 barrel crude oil storage tank with a geodesic dome, increasing the annual permit throughput limit of two existing 320,000 barrel crude oil storage tanks, and installing geodesic domes on the same two existing 320,000 barrel crude oil storage tanks. Two new feed/transfer pumps and one 14,000 barrel water draw surge tank with associated pumps and pipelines would also be installed. Tie-ins to the Pier "T" crude oil delivery pipeline from Berth 121 would be installed and one new electrical power substation would be constructed.

In December 2010, CARB adopted regulations establishing a cap and trade program for the largest sources of GHG emissions in the state that altogether are responsible for about 85 percent of California's GHGs. Among these are fossil-fuel fired power plants, including both plants that generate power within California's borders, and those located outside of California that generate power imported to the state. GHG emissions from this universe of sources were capped for 2013 at a level approximately two percent below the emissions level forecast for 2012, and the cap will steadily decrease at a rate of two to three percent annually from now to 2020. Sources regulated by the cap must reduce their GHG emissions or buy credits from others who have done so. This means that the additional power utilized at the LARC [Carson Refinery] as a result of the proposed project cannot result in an increase in GHG emissions from the increased use of third-party power, compared to GHG emissions at the time of issuance of the [Notice of Preparation] NOP. The proposed project does not affect compliance with the requirements of AB32, since no change in GHG emissions at LARC from operation of the proposed project are expected. Therefore, the proposed project would not conflict with AB32, the applicable GHG reduction plan, policy, and regulations that have been adopted to implement AB32. Thus, the SCAQMD's GHG significance threshold for industrial sources would not be exceeded.⁴⁹

This Negative Declaration is also instructive and precedential because it indicates the SCAQMD has applied its 10,000 MTCO₂e significance threshold in such a way that indirect GHG emissions associated with electricity usage do not count against a project's GHG inventory.

In sum, if the District ultimately adopts a 10,000 MTCO₂e significance threshold, then it should adhere to the SCAQMD's approach to implementation and not count a project's GHG emissions covered by the Cap-and-Trade Program against the significance threshold.

III. LEGAL SUPPORT FOR SIGNIFICANCE THRESHOLD BASED ON COMPLIANCE WITH AB 32

An illustrative method to determine consistency with AB 32 and thereby the significance of a project's GHG emissions, and one that has the co-benefit of being based on a quantification of emissions, is to compare a project's emissions as proposed to that project's emissions if it were to be built using BAU design, methodology, and technology. If a project constitutes an equivalent or larger break from BAU than has been determined by CARB to be necessary to meet AB 32's goals for 2020 (approximately 15 percent as explained below), then that project can be considered consistent with AB 32 and, therefore, will not have a significant impact on the environment due to its GHG emissions. While not project-specific, this is the average level of

⁴⁹ *Id.* at Page 2-28.

emissions reduction performance that would need to be achieved across all sectors of the economy to meet AB 32 goals (i.e., applied to both new and existing GHG emissions sources). This approach mirrors the concepts used in ARB's Climate Change Scoping Plan for the implementation of AB 32 and commonly has been referred to as "break-from-Business As Usual."

The appropriateness of this threshold had been a subject of controversy and dispute by project opponents and some Superior Court decisions. However, this approach has been approved in three Court of Appeal decisions and widely used across California. There are published cases rejecting this standard. It constitutes an appropriate approach to analyzing GHG emissions under CEQA.

A. ARB Scoping Plan

In 2008, ARB approved a Climate Change Scoping Plan as required by AB 32.⁵⁰ The Climate Change Scoping Plan proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."⁵¹ The Climate Change Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

The Climate Change Scoping Plan calls for a "coordinated set of solutions" to address all major categories of GHG emissions. Transportation emissions will be addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard, and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations will be encouraged and, sometimes, required to use energy more efficiently. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard. Additionally, the Climate Change Scoping Plan emphasizes opportunities for households and businesses to save energy and money through increasing energy efficiency.

Subsequent to adoption of the Climate Change Scoping Plan, a lawsuit was filed challenging ARB's approval of the Climate Change Scoping Plan Functional Equivalent Document (FED to the Climate Change Scoping Plan). On May 20, 2011, the court found that the environmental analysis of the alternatives in the FED to the Climate Change Scoping Plan was not sufficient under CEQA.⁵² ARB staff prepared a revised and expanded environmental analysis of the alternatives, and the Supplemental FED to the Climate Change Scoping Plan was approved on August 24, 2011 (Supplemental FED). The Supplemental FED indicated that there

⁵⁰ The Climate Change Proposed Scoping Plan was approved by ARB on December 11, 2008.

⁵¹ California Air Resources Board, Climate Change Scoping Plan, December 2008, <http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>.

⁵² *Association of Irrigated Residents v. California Air Resources Board* (Superior Court of California, San Francisco County, Case No. CPF-09-509562).

is the potential for adverse environmental impacts associated with implementation of the various GHG emission reduction measures recommended in the Climate Change Scoping Plan.

Forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the scope of the reductions California has to make to return to the 1990 emissions level by 2020 as required by AB 32. The no-action scenario is known as “business-as-usual” or BAU. ARB originally defined the BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the Climate Change Scoping Plan.

As part of the Supplemental FED, ARB updated the projected 2020 BAU emissions inventory based on current economic forecasts (i.e., as influenced by the economic downturn) and emission reduction measures already in place, replacing its prior 2020 BAU emissions inventory. ARB staff derived the updated emissions estimates by projecting emissions growth, by sector, from the state’s average emissions from 2006-2008. Specific emission reduction measures included are the million-solar-roofs program, the AB 1493 (Pavley I) motor vehicle GHG emission standards, and the Low Carbon Fuels Standard.⁵³ In addition, ARB has factored into the 2020 BAU inventory emissions reductions associated with 33 percent Renewable Energy Portfolio Standard (RPS) for electricity generation. The updated BAU estimate of 507 million MTCO₂e by 2020 requires a reduction of 80 million MTCO₂e, or a 15.8 percent reduction below the estimated BAU levels to return to 1990 levels (i.e., 427 million MTCO₂e) by 2020.^{54,55}

The ARB 2020 BAU projection for GHG emissions in California was originally estimated to be 596 million MTCO₂e. The updated CARB 2020 BAU projection in the Supplemental FED is approximately 545 million MTCO₂e.^{56,57} Considering the updated BAU estimate of 545 million MTCO₂e by 2020, ARB estimated a 21.7-percent reduction below the estimated statewide BAU levels is necessary to return to 1990 emission levels (i.e., 427 million MTCO₂e) by 2020, instead of the approximate 28.4-percent BAU reduction previously reported under the original 2008 Climate Change Scoping Plan. ARB also provided a lower 2020 BAU inventory forecast of approximately 507 million MTCO₂e, which took credit for certain GHG

⁵³ Pavley I are the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 to 2016. Pavley I could potentially result in 27.7 million MTCO₂e reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 million MTCO₂e.

⁵⁴ California Air Resources Board, Supplement to the AB 32 Scoping Plan FED, Table 1.2-2, Updated 2020 Business-as-Usual Emissions Forecast, www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf.

⁵⁵ The emissions and reductions estimates found in the Supplemental FED to the Climate Change Scoping Plan fully replace the estimates published in the 2008 Climate Change Scoping Plan. See ARB, Resolution 11-27 (Aug. 24, 2011)(setting aside approval of 2008 Climate Change Scoping Plan and associated emissions forecasts, and approving the Supplemental FED). The estimates in the 2008 document are: 596 MMTCO₂e under 2020 BAU and a required reduction of 169 MMTCO₂e (28.4 percent).

⁵⁶ California Air Resources Board, Attachment D, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (Aug. 19, 2011), http://www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf.

⁵⁷ California Air Resources Board, Status of Scoping Plan Measures (2011), http://www.arb.ca.gov/cc/scopingplan/sp_measures_implementation_timeline.pdf.

emission reduction measures already in place. When this lower forecast is used, the necessary reduction from BAU is approximately 15.8 percent as discussed above.

ARB is required to update the AB 32 Scoping Plan every five years. On May 22, 2014, ARB approved the First Update to the Climate Change Scoping Plan (First Update) that highlights California's progress toward meeting the 2020 GHG emission reduction mandate and builds upon the original 2008 Climate Change Scoping Plan with new strategies and recommendations. The First Update also defines ARB's climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals.⁵⁸ The First Update indicates that ARB will propose to revise both the 2020 BAU emissions inventory (to 509 million MTCO₂e) and 2020 emissions limit (to 431 million MTCO₂e) to account for updates to calculations of GWP.⁵⁹ If ARB were to revise said inventory and limit as proposed, a 15 percent reduction below the estimated BAU levels would be necessary to return to 1990 levels.

With regard to the target set by Executive Order S-3-05 of reducing greenhouse gases to 80 percent below 1990 levels by 2050, in contrast to AB 32's mandate to return to 1990 emission levels by 2020, the 2050 target is not mandated by law and constitutes an aspirational goal set by the California Executive Branch. However, the Climate Change Scoping Plan recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the 2050 target: "These [greenhouse gas emission reduction] measures also put the state on a path to meet the long-term 2050 goal of reducing California's greenhouse gas emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to help stabilize the climate."⁶⁰

The disclosure of a project's mass GHG emissions, while necessary under CEQA, generally does not provide lead agencies with enough relevant data to permit informed decision-making. Given the global nature of climate change, adoption of a mass-based GHG emissions significance threshold, including a zero emissions threshold, would be speculative and not supported by substantial evidence.

As population growth appears inevitable and economic growth is both likely and desirable, a comparison to BAU is a valuable tool for lead agencies to assess the relative carbon

⁵⁸ California Air Resources Board, First Update to the Climate Change Scoping Plan (May, 2014), http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

⁵⁹ California Air Resources Board, First Update to the Climate Change Scoping Plan, at 92-93 (May, 2014) (available at http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf) ("[M]ost national and international climate change organizations are moving to the IPCC's Fourth Assessment Report, which updated the global warming potential of GHGs, especially methane and HFCs. ARB is proposing to update the number for the 2020 limit, weighting the 1990 emissions with 100-year GWPs from the IPCC's Fourth Assessment Report. The new 2020 statewide limit is 431 MMTCO₂e—an approximately 1-percent increase from the 427 MMTCO₂e limit adopted by the Board in 2007. In addition, to assess progress toward the limit in a consistent manner, ARB is using GWPs from the Fourth Assessment Report to update projections of the emission reductions that adopted and anticipated Scoping Plan measures will achieve.").

⁶⁰ Climate Change Scoping Plan at 15.

intensity and efficiency of a particular project. Use of AB 32's GHG emissions reduction mandate provides a carefully crafted tool supported by substantial evidence (e.g., studies and analyses relied on by ARB in the adoption of the Climate Change Scoping Plan) to assess the contribution to climate change of a particular project. BAU project GHG emissions do not constitute an improper hypothetical CEQA baseline that has not occurred or is unlikely to occur in the future. Rather, proper calculation of BAU project GHG emissions represent a reliable projection of emissions that accounts for Climate Change Scoping Plan emission reduction measures already in place (e.g., Pavley I Standards and the 33 percent RPS).

B. Case Law Supporting Significance Threshold Based On Compliance With AB 32

Two different California Appellate Districts have published opinions upholding a significance threshold defined as the reduction below the BAU level of GHG emissions calculated by ARB as necessary to achieve AB 32's mandate.⁶¹ The Second Appellate District Court also has upheld the use of this threshold of significance and has noted that the legality of this methodology has been clearly established by the aforementioned cases: "Standards concerning baseline determinations are clearly established. Already, two Court of Appeal decisions have held Health and Safety Code section 38550 may serve as the basis for a significance determination. Health and Safety Code section 38550 is part of Assembly Bill No. 32 (2005-2006 Reg. Sess)."⁶²

1. The *Friends of Oroville* and *Citizens* Cases

In *Friends of Oroville*, the proposed project was to replace an existing Wal-Mart store with a superstore (retail plus grocery). The City used a break-from-BAU significance threshold derived from AB 32. In its AB 32 Scoping Plan, originally adopted in 2008 (the "2008 AB 32 Scoping Plan"), ARB forecast the GHG emissions that would occur in 2020 if reduction actions are not taken. The no-action scenario is known as BAU. This forecast was necessary to assess the scope of the reductions California must achieve to return to 1990 statewide GHG emissions levels by 2020 (i.e., 427 million metric tons CO₂e), as mandated by AB 32. ARB initially defined the BAU scenario as GHG emissions in the absence of any GHG emissions reduction measures discussed in the 2008 AB 32 Scoping Plan. ARB forecast 2020 BAU GHG emissions of 596 million metric tons CO₂e. Accordingly, per the 2008 AB 32 Scoping Plan, a reduction of 169 million metric tons CO₂e was needed (596 - 427 = 169), or approximately 28.4 percent from BAU.

⁶¹ See *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista*, 197 Cal. App. 4th 327 (Cal. App. 4th Dist. 2011), review denied by CA Supreme Ct. in *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (Target Corporation), 2011 Cal. LEXIS 10785 (Cal. Oct. 19, 2011); see also *Friends of Oroville v. City of Oroville*, 218 Cal. App. 4th 1352 (Cal. App. 3rd Dist. 2013) (finding that a threshold achieving AB 32's mandate, or a reduction of approximately 15.8 percent from BAU, was a valid method to judge the significance of the project's GHG emissions impacts).

⁶² Court of Appeal of California, Second Appellate District, Recommendation Against Publication (April 7, 2014) (recommending to California Supreme Court that unpublished portion of opinion in *Center for Biological Diversity v. California Department of Fish and Wildlife* (Case Number B245131) remain unpublished). This Recommendation Against Publication and the related opinion are attached hereto as Attachments A and B.

In *Friends of Oroville*, the Wal-Mart Environmental Impact Report (EIR) utilized a significance threshold of “about 30 percent from business-as-usual emission levels projected for 2020,” indicating reliance on the 2008 AB 32 Scoping Plan. However, the *Friends of Oroville* Court acknowledged that other courts have approved of analyses with different calculations of the percent reduction from BAU that is necessary under AB 32. In particular, the Court noted that the Mitigated Negative Declaration (MND) in *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista*, 197 Cal.App.4th 327 (2011) (*Citizens*) used a “25 percent figure.” The *Friends of Oroville* Court’s implicit approval of flexibility for EIRs in calculating the necessary break-from-BAU is noteworthy because both the calculations are now outdated – as explained above.

The *Friends of Oroville* Court found this threshold was a valid method to judge the significance of the project’s GHG emissions impacts, citing with approval the *Citizens* case. In *Citizens*, the court deemed the same significance threshold proper to analyze replacing a Target store with a newer, larger store. The *Friends of Oroville* Court found *Citizens* on point and used the MND discussed in that case as a template for what should have been done by the Wal-Mart EIR.

2. The Newhall Ranch Case

The strongly worded opinion in *Center for Biological Diversity v. California Department of Fish and Wildlife* (Case Number B245131)(*CBD v. CDFW*) by the Court of Appeal of California, Second Appellate District confirmed that analyzing a project’s GHG emissions under CEQA via a significance threshold derived from California’s GHG emissions reduction goals is appropriate. *CBD v. CDFW* concerns the California Department of Fish and Wildlife’s (Department) certification of an EIR for the Newhall Ranch Specific Plan, which encompasses approximately 11,999 acres in the Santa Clarita Valley and represents Los Angeles County’s plan to develop a new community of residential, mixed-use, and non-residential uses within interrelated villages. Build-out would occur over 20 years and the Specific Plan authorizes up to 21,308 residential units, 629 acres of mixed use development, 316 acres of commercial and business park uses, and associated community facilities and open space.

The Department used a break-from-BAU significance threshold derived from AB 32. Specifically, the EIR inquired whether “the proposed [project’s] [greenhouse gas] emissions impede compliance with the [greenhouse gas] emission reductions mandated in [AB 32]?” The EIR relied upon ARB’s assessment in its 2008 AB 32 Scoping Plan that statewide GHG emissions must be reduced approximately 29 percent below BAU in order for California to return to 1990 levels of GHG emissions by 2020. The EIR found that the project’s GHG emissions would be reduced by 31 percent compared to a BAU project and, therefore, were not significant. The *CBD v. CDFW* Court found the EIR’s significance threshold was a valid method to judge the significance of the project’s GHG emissions impacts, citing to both the 2011 *Citizens* and the 2013 *Friends of Oroville* cases: “As we have explained, utilizing this form of environmental analysis has been expressly approved on two occasions by two different Courts of Appeals.”

As we discuss in more detail above, there are multiple emission reductions percentages that both have been used in similar CEQA documents and could be justifiably used in future CEQA documents. The variance in such percentages results from ARB's on-going revision of future year inventories of GHG emissions, consistent crediting of statewide GHG emissions reduction measures (e.g., the Renewables Portfolio Standard), and recent, minor modifications in GWP values of certain GHGs by the IPCC. Accordingly, it is critical that CEQA lead agencies retain flexibility to calculate and apply the necessary break-from-BAU. The *CBD v. CDFW* opinion beneficially acknowledges that "inherent in the department's analysis are some projections involving uncertainty in evaluating greenhouse gas emissions" and that any EIR "necessarily involves a degree of forecasting." The Court concludes that the Department made "a good-faith effort" to "describe, calculate or estimate" the project's GHG emissions and did not contravene CEQA.

Finally, the Court went out of its way to address a November 4, 2009 letter penned by Deputy Attorney General Timothy E. Sullivan (AG Letter), perhaps because the trial court opinion cited to it. Notably, the AG Letter forms the foundation of a critique by some groups that the break-from-BAU approach to analyzing GHG emissions inevitably results in use of an impermissible "hypothetical" baseline. This critique was raised at the February 5, 2014 oral argument repeatedly by counsel for CBD, which was not well-received by the Court. In its decision, the Court expressed a similar sentiment: "The project as originally conceived was not hypothetical. It consisted of anticipated real construction on and development of presently open space. Plaintiffs' repeated characterizations [that] some hypothetical project was analyzed have no merit." The Court's opinion demonstrates an understanding that the break-from-BAU approach when properly applied does not alter the traditional CEQA baseline; rather, it uses the concept of BAU as a measurement tool to assess the significance of a project's GHG emissions "because the scientific community could not quantify when a particular increase [in GHG emissions] was significant." The Court agreed with the Department that "the trial court's ruling, as do some aspects of plaintiffs' analysis, conflated the baseline with the significance determination."

On July 9, 2014, the California Supreme Court granted a petition for review regarding *CBD v. CDFW*. As such, the California Supreme Court may provide guidance on the selection of methodology by a lead agency for determining the significance of GHG emissions from a project under CEQA. The progression of this matter and California Supreme Court's final decision in *CBD v. CDFW* may be particularly relevant for the District's development of a CEQA significance threshold for GHGs.

IV. COMPLIANCE WITH CAP-AND-TRADE PROGRAM AS CEQA MITIGATION

In the event that the District adopts a significance threshold other than the one recommended by this comment letter, the District must recognize that projects exceeding the adopted significance threshold can mitigate their climate change impact via compliance with the Cap-and-Trade Program.

A. Duty To Identify And Mitigate Significant Impacts

A fundamental purpose of an EIR is to identify ways in which a proposed project's significant environmental impacts can be mitigated or avoided.⁶³ To implement this statutory purpose, an EIR must describe all feasible mitigation measures that can minimize a project's significant environmental effects.⁶⁴ "A gloomy forecast of environmental degradation is of little or no value without pragmatic, concrete means to minimize the impacts and restore ecological equilibrium."⁶⁵ Notably, a mitigation measure may reduce or minimize a significant impact without avoiding the impact entirely.⁶⁶

B. Mitigation of Cumulative Impacts

As explained above, GHG emissions impacts are purely cumulative. An EIR must discuss a project's cumulative impacts when they are cumulatively considerable.⁶⁷ An EIR discussion of cumulative impacts must examine reasonable, feasible options for reducing or avoiding the project's contribution to significant cumulative environmental effects.⁶⁸ An EIR may find that a project's contribution to a significant cumulative impact will be mitigated through adoption of project-specific mitigation measures. However, the CEQA Guidelines recognize that, for "some projects, the **only** feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis."⁶⁹ Also, the mitigation required of a project must be "roughly proportional" to its impacts, so a lead agency may not insist that the developers of a single project shoulder the bulk of the expense for mitigating a significant cumulative impact: "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."⁷⁰ California's Cap-and-Trade Program is designed in such a fashion that the

⁶³ California Public Resources Code (Pub Res C) §§ 21002.1(a), 21061.

⁶⁴ California Code of Regulations (CCR), tit. 14, §§15121(a), 15126.4(a)(1) ("An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy.").

⁶⁵ *Environmental Council of Sacramento v City of Sacramento*, 142 Cal. App. 4th 1018, 1039 (2006).

⁶⁶ 14 CCR § 15370(b); *see also* Pub Res C §§21002.1(a), 21081(a)(1) (both referring to mitigating or avoiding impacts).

⁶⁷ Pub Res C § 21083(b)(3); 14 CCR §15130.

⁶⁸ 14 CCR § 15130(b)(5) ("The following elements are necessary to an adequate discussion of significant cumulative impacts: ... (5) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects."); *see Fort Mojave Indian Tribe v California Dep't of Health Servs.*, 38 Cal. App. 4th 1574, 1603 (1995).

⁶⁹ 14 CCR § 15130(c) (emphasis added).

⁷⁰ 14 CCR § 15130(a)(3) (emphasis added); *Napa Citizens for Honest Gov't v Napa County Bd. of Supervisors*, 91 Cal. App. 4th 342, 364 (2001); *Environmental Council of Sacramento v City of Sacramento*, 142 Cal. App. 4th 1018, 1040 (2006); *see* 14 CCR § 15126.4(a)(4)(B); *see also Dolan v City of Tigard*, 512 US 374 (1994) (when dedication of land is required as condition of approval, agency has burden of showing "rough proportionality" between required exaction and burden created by development).

expense of mitigating impacts associated with GHG emissions is spread proportionally among those that emit because compliance instruments must be surrendered on a per-ton-emitted basis.

The CEQA Guidelines provide several examples of mitigation measures that may be considered to mitigate significant effects of GHG emissions associated with a project:

(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. 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.⁷¹

CEQA Guidelines Section 15126.4(c), set forth above, support the District allowing projects to mitigate GHG emissions via compliance with the Cap-and-Trade Program. Subpart (c)(1) suggests that the Cap-and-Trade Program would be considered "an existing ... mitigation program for the reduction of [GHG] emissions" that would "mitigate the significant effects of greenhouse gas emissions." Further, subpart (c)(3) suggests that "off-site measures" can "mitigate a project's [GHG] emissions," which is commonsensical given the global nature of climate change.

⁷¹ 14 CCR § 15126.4(c).

C. Compliance With Regulations As Mitigation

Case law recognizes that compliance with specific laws or regulations may serve as adequate mitigation of environmental impacts in appropriate situations. In *Oakland Heritage Alliance v City of Oakland*⁷², the court upheld the city's reliance on standards in the building code and city building ordinances to mitigate seismic impacts of a project to convert a maritime and industrial area into residential, retail/commercial, open space, and marina uses:

We agree with the City that compliance with the Building Code, and the other regulatory provisions, in conjunction with the detailed Geotechnical Investigation, provided substantial evidence that the mitigation measures would reduce seismic impacts to a less than significant level. We will not interfere either with the City's findings or with its policy decision to rely on the relevant codes and ordinances.⁷³

In *Oakland Heritage Alliance*, the appellate court approved of a revised EIR that was supplemented due to an adverse trial court ruling. The original EIR, which similarly relied on standards in the building code and city building ordinances to mitigate seismic impacts, was found to be inadequate by a trial court because, among other reasons:

[T]he EIR contained no meaningful analysis to support the findings that the risks of ground shaking and liquefaction would be reduced to a less than significant level, and the findings were not supported by substantial evidence in the record. ... [N]or was there an **analysis of how the mitigation measure would reduce the impact** to a less than significant level.⁷⁴

Accordingly, the "trial court directed the City to void its certification of the EIR, CEQA findings and statement of overriding considerations, and the approval of the project, and remanded the matter to the City."⁷⁵

In response to the trial court's order, the City revised the EIR. The City explained in the revised EIR that:

[t]he significance criteria do not require elimination of the potential for structural damage from seismic hazards. ... State and local code requirements ensure buildings are designed and constructed in a manner that, although the buildings may sustain damage during a major earthquake, will reduce the substantial risk

⁷² 195 Cal. App. 4th 884 (2011) (*Oakland Heritage Alliance*).

⁷³ *Id.* at 904.

⁷⁴ *Id.* at 890-891 (emphasis added).

⁷⁵ *Id.* at 891.

that buildings will collapse resulting in a potential for injury or death. As discussed below, the potentially significant seismic impacts on the Oak to Ninth project site could be reduced to less than significant through conformance to existing state laws, City ordinances, and application of accepted, proven construction engineering practices.⁷⁶

“The Revised EIR included an extensive discussion of the mandates of various state and City laws bearing upon seismic safety, ... the [state] Building Code ... , and various City ordinances.”⁷⁷ The City revised the two pertinent mitigation measures, for seismic ground shaking and for liquefaction and earthquake-induced settlement, to require submission of “‘site-specific, design level geotechnical investigation’ for each parcel, which would comply with all applicable state and local code requirements.”⁷⁸

The Oakland Heritage Alliance submitted a comment letter on the revised EIR, notably arguing that the project should commit to exceeding code requirements: “According to the Alliance, higher performance standards are already mandated in California for schools, hospitals, police, and emergency response buildings, and such standards could be specified for this project, though at a higher cost than ‘code’ performance standards.”⁷⁹ The City approved and recertified the EIR as revised. The City moved the trial court for an order discharging the writ and terminating the suspension of the project approvals. The trial court granted the motion. The Oakland Heritage Alliance appealed.

The appellate court noted: “Whether these mitigations were in fact sufficient to reduce seismic risks to a less than significant level is a factual question subject to review for substantial evidence.”⁸⁰ The court then elaborated on its role in reviewing the EIR:

A court’s task is not to weigh conflicting evidence and determine who has the better argument when the dispute is whether adverse effects have been mitigated or could be better mitigated. We have neither the resources nor scientific expertise to engage in such analysis, even if the statutorily prescribed standard of review permitted us to do so.⁸¹

⁷⁶ *Id.* at 891-892 (citing the revised EIR).

⁷⁷ *Id.* at 892.

⁷⁸ *Id.* at 893.

⁷⁹ *Id.* at 894.

⁸⁰ *Id.* at 898-899.

⁸¹ *Id.* at 900 (citing *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal. 3d 376, 393 (1988)).

The court seemed persuaded by two facts. First, the court noted that “the relevant provisions of the Building Code **are intended to** promote structural safety in the event of an earthquake.”⁸² As such, the purposes of code and regulations were critical. Second, in response to arguments by the Oakland Heritage Alliance that “compliance with regulations is not a substitute for compliance with CEQA’s mitigation requirements” because such regulations cannot account for site-specific conditions, the court noted: “Here, on the other hand, the site-specific seismic and soil investigation and mitigation do account for the specific conditions on the project site.”⁸³ As such, the EIR’s application of general regulations to the project’s site-specific concerns was equally critical.

Regarding the first fact that persuaded the *Oakland Heritage Alliance* court, the Cap-and-Trade Program was designed to address the climate change impacts associated with GHG emissions. Regarding the second fact, site-specific conditions are irrelevant for GHG emissions because climate change is a global phenomenon – there are no GHG “hot spots.” Accordingly, reliance on the Cap-and-Trade Program to mitigate GHG emissions under CEQA would pass muster under *Oakland Heritage Alliance*.

1. Deferred Mitigation

It is important to note that deferral of mitigation measures is closely related to compliance with specific regulations as adequate mitigation. Other stakeholders may seek to characterize the District’s GHG emissions mitigation strategy (i.e., compliance with the Cap-and-Trade Program) as improper deferral. While CEQA generally does not allow mitigation measures to simply defer environmental assessment until a future date, it is well settled that mitigation measures can be deferred when the efficacy of implementation is uncertain during the planning process and the agency has committed to specific performance criteria.⁸⁴ Feasible mitigation 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.”⁸⁵

In *Oakland Heritage Alliance v. City of Oakland*, the City’s reliance on compliance with regulations as mitigation was challenged by the Oakland Heritage Alliance as improper deferral of mitigation of the project’s seismic impacts. At the outset of its lengthy analysis, the court stated that “a condition requiring compliance with regulations is a common and reasonable mitigation measure, and may be proper where it is reasonable to expect compliance.”⁸⁶ Ultimately, the court concluded that “the City did not improperly defer mitigation.”⁸⁷ The court

⁸² *Id.* at 904 (emphasis added).

⁸³ *Id.* at 904.

⁸⁴ See *Riverwatch v. County of San Diego*, 76 Cal. App. 4th 1428, 1448-49 (1999) (upholding deferred analysis in an EIR for a quarry project because it was impractical during the planning stage); *Nat’l Parks & Conservation Ass’n v. County of Riverside*, 42 Cal. App. 4th 1505, 1520 (1996) (upholding deferred analysis in an EIR for a landfill project where meaningful information was not currently available).

⁸⁵ 14 CCR § 15126.4(a)(1)(B).

⁸⁶ *Oakland Heritage Alliance* at 906.

⁸⁷ *Id.* at 907.

was persuaded that the construction plans that would be submitted for the project would be “subject to a host of specific performance criteria imposed by various ordinances, codes, and standards, as well as other mitigation conditions.”⁸⁸ The court concluded by asserting: “It is reasonable to expect that these environmental regulations will be followed.”⁸⁹

The *Oakland Heritage Alliance* court distinguished *Communities for a Better Environment v. City of Richmond*,⁹⁰ which considered whether an EIR for a project to permit Chevron Products Company (Chevron) to replace and upgrade certain manufacturing facilities at an oil refinery had improperly deferred identification of measures to mitigate the project’s contribution to GHG emissions until after the EIR process. In *CBE*, the EIR at issue found that the project’s incremental increases in GHG emissions would result in significant effects on global warming, and proposed mitigation measures for this impact.⁹¹ The “centerpiece of the mitigation plan,” which the city council adopted when approving the project, was a measure requiring Chevron, within one year of approval of the conditional use permit, to submit to the city a plan for achieving complete reduction of GHG emissions.⁹² The *Oakland Heritage Alliance* court summarized the holding in *CBE* as follows:

The court concluded this mitigation plan was deficient, noting that the EIR proposed only a general goal of no net increase in greenhouse gas emissions, and then “set[] out a handful of cursorily described mitigation measures for future consideration,” with no effort to calculate what, if any, reductions in greenhouse gas emissions would result from each measure. Indeed, the court continued, the measures were “nonexclusive, undefined, untested and of unknown efficacy.”⁹³

The *Oakland Heritage Alliance* court then distinguished *CBE*:

Here, in contrast, the Revised EIR proposes compliance with a regulatory scheme designed to ensure seismic safety. Although final design of the structures, including seismic safety design, is deferred until a later date, the Revised EIR gives adequate assurance that seismic impacts will be mitigated through engineering methods known to be feasible and effective.⁹⁴

⁸⁸ *Id.* at 910 (internal citations omitted).

⁸⁹ *Id.* at 910 (citing *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296, 308-309 (1988)).

⁹⁰ 184 Cal.App.4th 70 (2010) (*CBE*).

⁹¹ *Id.* at 91.

⁹² *Id.*

⁹³ *Oakland Heritage Alliance* at 911-912 (citing *CBE*)(internal citations omitted).

⁹⁴ *Id.* at 912.

The relevance of this analysis for the District is that while Chevron's 100% offsetting of GHG emissions was a laudable performance standard, the EIR did not: (1) detail *how* those emissions reductions would be achieved – for example, by quantification of GHG reductions attributable to particular measures; or (2) explain *why* it was feasible and realistic to expect the GHG reductions would be achieved.

A mitigation strategy of reliance on projects' compliance with the Cap-and-Trade Program (a reasonable expectation) would not constitute deferral of mitigation at all, improper or not, because the Cap-and-Trade Program is already in place and functioning. Nonetheless, if the District were to establish such a mitigation strategy, the District should take care to include in its administrative record how the Cap-and-Trade Program mitigates GHG emissions and why it is realistic to expect that the associated GHG reductions will be achieved.

Attachment A

**Opinion in Center for Biological Diversity v. California
Department of Fish and Wildlife (Case Number B245131)**

CERTIFIED FOR PARTIAL PUBLICATION*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

DIVISION FIVE

CENTER FOR BIOLOGICAL
DIVERSITY et al.,

Plaintiffs and Respondents,

v.

DEPARTMENT OF FISH AND
WILDLIFE,

Defendant and Appellant;

THE NEWHALL LAND AND FARMING
COMPANY,

Real Party in Interest and Appellant.

B245131

(Super. Ct. No. BS131347)

APPEAL from a judgment of the Superior Court of Los Angeles County, Ann I. Jones, Judge. Reversed with directions.

Office of the General Counsel, Thomas R. Gibson, General Counsel and John H. Mattox, Senior Staff Counsel; Thomas Law Group, Tina A. Thomas, Ashle T. Crocker and Amy R. Higuera, for Defendant and Appellant Department of Fish and Wildlife.

Gatze Dillon & Balance, Mark J. Dillon and David P. Hubbard; Morrison & Foerster and Miriam A. Vogel; Nielsen Merksamer Parinello Gross & Leoni and Arthur

* Pursuant to California Rules of Court, rules 8.1100 and 8.1110 this opinion is certified for publication except for part IV(G).

G. Scotland; and Downey Brand and Patrick G. Mitchell, for Real Party in Interest and Appellant The Newhall Land and Farming Company.

John Buse and Adam Keats; Chatten-Brown and Carstens, Jan Chatten-Brown and Doug Carstens, for Plaintiffs and Respondents Center for Biological Diversity, Friends of the Sara Clara River, Santa Clarita Organization for Planning and the Environment, and California Native Plant Society.

Jason Weiner; Chatten-Brown and Carstens, Jan Chatten-Brown and Doug Carstens, for Plaintiffs and Respondents Wishtoyo Foundation/Ventura Coastkeeper.

I. INTRODUCTION

Defendant, California Department of Fish and Wildlife (the department), and real party in interest, The Newhall Land and Farming Company (the developer), appeal from a judgment granting a mandate petition. The judgment, entered October 15, 2012, was granted in favor of plaintiffs: Center for Biological Diversity; Friends of the Santa Clara River; Santa Clarita Organization for Planning the Environment; Wishtoyo Foundation/Ventura Coastkeeper; and California Native Plant Society. The litigation and appeal arise from the department's December 3, 2010: certification of the revised final environmental impact statement and impact report; approval of the Newhall Ranch Resource Management and Development Plan (resource management plan); the adoption of the Spineflower Conservation Plan (conservation plan) and Master Streambed Alteration Agreement (streambed alteration agreement); and issuance of two incidental take permits.

The environmental impact statement and report and other documents were jointly prepared by the department and the Army Corps of Engineers (the corps). For reasons we will explain, both federal and state environmental review were necessitated for the project. For clarity's sake, the environmental impact statement and report will be referred to as the environmental impact report as we are only reviewing the relevant state law issues.

For environmental impact report purposes, there are two components to the project. First, the environmental impact report assesses the effect of the resource management plan. The resource management plan includes the streambed alteration agreement. And the resource management plan necessarily resulted in the required issuance of two incidental take permits. Second, the environmental impact report evaluates the effects on the environment of the conservation plan. Both the resource management and conservation plans are stand-alone planning documents. We reverse.

II. FACTUAL MATTERS

A. Newhall Ranch Specific Plan (the specific plan)

On March 23, 1999, the County of Los Angeles Board of Supervisors (the county) specific plan: approved a final environmental impact report; adopted findings; approved a mitigation plan; and approved various aspects of the proposed development. For environmental review purposes, the project included a water reclamation plant. None of the issues relating to the water reclamation plant construction is pertinent to our discussion. The specific plan was challenged in Kern County Superior Court. (*United Water Conservation Dist. v. County of Los Angeles* (Super. Ct., Kern County, 2000, No. 239324RDR).) On August 1, 2000, Judge Roger W. Randall issued a writ of mandate. The county was ordered to void its certification of the final environmental impact report with respect to five different issues. In addition, the county was ordered to vacate the project approvals. In this regard, the county was directed to ensure consistency of the specific plan with broader general plan policies as they relate to natural resources and water supplies.

On May 27, 2003, the county approved the specific plan and an 85-page document entitled, "Additional [California Environmental Quality Act] Findings and Statement of Overriding Considerations Regarding The Newhall Ranch" The final additional findings and overriding considerations statement was necessitated by Judge Randall's judgment. According to the May 27, 2003 findings: "As approved by the Board of Supervisors, the revised Specific Plan (May 2003) would include a broad range of residential, mixed-use and non-residential land uses within five villages. As revised by the Board of Supervisors, the Specific Plan allows for up to 21,308 dwelling units (including 423 second units), 629 acres of mixed-use development, 67 acres of commercial uses, 249 acres of business park land uses, 37 acres of visitor-serving uses, 1,014 acres of open space, including 181 acres of community parks and 833 acres in other open spaces, 5,157 acres in special management areas, 55 acres in 10 neighborhood

parks, 15-acre lake, public trail system, an 18-hole golf course, two fire stations, a public library, an electrical station, reservation of five elementary school sites, one junior high school site and one high school site, a 6.8 million gallon per day water reclamation plant and other associated community facilities. The build-out of the Specific Plan is projected to occur over approximately 25 to 30 years, depending upon economic and market conditions. Build-out of the Specific Plan would eventually result in an on-site resident population of 57,903 persons.” The specific plan contemplated the need for future federal, state and other governmental agency environmental review, permits, agreements and authorizations.

After the May 27, 2003 approval of the specific plan as amended, the county filed a return in the Kern County litigation. Judge Randall approved the county’s May 27, 2003 determination and discharged the August 1, 2000 writ of mandate. There was an appeal which resulted in a settlement. On April 1, 2004, the appeal was dismissed. Judge Randall had no further contact with any of the issues in this case. The remainder of our discussion focuses on decisions made by Los Angeles Superior Court Judge Ann I. Jones. For clarity’s sake, we refer to Judge Jones as the trial court.

B. The Approval Of The Final Environmental Impact Report

1. The specific plan and adjoining areas

The documents at issue resulted in environmental decisions affecting the specific plan and adjoining areas. According to the environmental impact report, the following is the project area: “The [project] area is located in a portion of the Santa Clara River Valley within northwestern Los Angeles County, between the city of Santa Clarita to the east and the Los Angeles County/Ventura County jurisdictional boundary line to the west. The Los Padres National Forest is located to the north of the [project] area, the Angeles National Forest is to the north and east, and the Santa Susana Mountains are to the south.” One of the documents promulgated as part of the environmental review and

approval process was the resource management plan. The boundary of the resource management plan includes the 11,999 acre specific plan site. Also, the resource management plan area includes the 1,517-acre Salt Creek conservation area in Ventura County. The Salt Creek conservation area adjoins the specific plan area and is southeast of the area to be developed. A component of the resource management plan is the conservation plan which we will discuss later in greater detail. The conservation plan's boundary encompasses two other planning areas. They are the Entrada and Valencia Commerce Center Planning Areas which are located to the east and northeast of the development area respectively. Thus, the environmental planning and certification process extends beyond the development and specific plan areas.

2. Environmental documents

a. agencies

The department's approval of the project is predicated on a series of interrelated documents described in the first paragraph of this opinion: the environmental impact report; the resource management plan; the conservation plan; the streambed alteration agreement; and the two incidental take permits. The documents resulted from a joint action of the project by the department and the corps as permitted by the Guidelines for Implementation of the California Environmental Quality Act. (Cal. Code Regs., tit. 14, § 15052¹.) The department is the lead agency under the California Environmental Quality Act. (Pub. Resources Code, § 21067²; Guidelines, §§ 15050-15051.) The corps is the lead agency under the National Environmental Policy Act. (40 C.F.R.

¹ Future references to the Guidelines are to Guidelines for Implementation of the California Environmental Quality Act. (Cal. Code of Regs., tit. 14, § 15000 et seq.)

² Unless otherwise noted, future statutory references are to the Public Resources Code.

§ 1501.5(a)(2) (2013); see *Save Our Ecosystems v. Clark* (9th Cir. 1984) 747 F.2d 1240, 1249.)

b. precertification and issuance events

As noted, the specific plan contemplated further environmental review. The initial process for preparation of the environmental impact report commenced on February 9, 2000. But the scoping process was held in abeyance pending the outcome of the Kern County litigation concerning the specific plan. The scoping process for the environmental impact report began on February 9, 2000, and ended on August 24, 2005. On July 19, 2005, the corps issued a notice of intent to prepare a draft environmental impact report. (70 Fed.Reg. 41380 (Jul. 19, 2005).) On July 25, 2005, the department issued a notice of preparation of a draft environmental impact report. The project was described in the preparation notice as: the streambed alteration agreement; incidental take permits; and the conservation plan. The department's July 25 draft environmental impact report preparation notice requested that any comments be sent no later than September 5, 2005. The final public scoping meeting was held on August 24, 2005. On April 27, 2009, the corps and the department released the draft environmental impact report. The 60-day public comment period concluded on June 26, 2009. The public comment period was then extended for another 60 days to August 25, 2009. On June 18, 2010, the department and the corps released the final environmental impact report. As required by federal, but not state law, an additional 45-day comment period was provided by the corps. The additional federally mandated comment period ended on August 3, 2010. The corps drafted responses to the comments. The department deferred certification until after the corps completed the additional comment period. On December 3, 2010, the department certified the environmental impact report.

c. environmental impact report and adoption of findings

The department and the corps jointly prepared the 5,828-page project level environmental impact report. For purposes of the California Environmental Quality Act, the project is defined as follows: “[T]his document will also function as a project-level [environmental impact report] for the proposed [resource management plan] and [conservation plan] project components. The [environmental impact report] identifies and discloses the proposed [project’s] significant environmental impacts and identifies feasible mitigation measures and project alternatives. [The department] has determined that certification of the [environmental impact report] in compliance with [the California Environmental Quality Act] is required before it may decide whether to issue the requested [streambed alteration agreement] and [incidental take permits] for the proposed [project] activities.” When finally certified, the project was defined as follows, “Newhall Ranch Resource Management and Development Plan (RMDP) and Spineflower Conservation Plan (SCP), and associated Master Streambed Alteration Agreement (No. 1600-2004-0016-RS) (MSAA) and Incidental Take Permits (ITPS) (Nos. 2081-2008-012-05 and 2081-2008-013-05).” In other words, the environmental impact report relates to general planning and conservation steps resulting from the county’s specific plan. Depending on economic conditions and the like, it is anticipated that within the specific plan area there will be several residential and commercial developments. The environmental impact report does not authorize any specific future construction and the like apart from that discussed the resource management plan. Rather, the focus of the environmental impact report is on two steps in the pre-residential and commercial construction environmental planning--the resource management and conservation plans. Additionally, the environmental impact report was a necessary precondition to the issuance of the streambed alteration agreement and incidental take permits. And, as noted, the streambed alteration agreement and incidental take permits are part of the resource management plan.

The environmental impact report consists of: an executive summary and introduction; a project description; an account and comparison of project alternatives and cumulative impacts including irreversible changes; consideration of growth inducing and federal impacts; a evaluation of global climate change impacts; an environmental impact analysis of alternatives and mitigation; an examination of surface water hydrology and flood control; a discussion of geomorphology and riparian resources; an evaluation of issues related to water quality; an analysis of jurisdictional waters and streams; a discussion of traffic and noise; an assessment of questions involving visual, cultural, paleontological, agricultural, water and biological resources; a description of land use, parks, recreation, trails, hazards, hazardous materials, solid waste services and public safety services related issues; and an evaluation of socioeconomics and environmental justice. Finally, the revised final version of the environmental impact report identifies the preparers and agencies consulted and references cited.

The environmental impact report analyzes the developer's proposed project and seven alternatives. Chapter 5 of the environmental impact report details the department's consideration of seven different alternatives. Alternative No. 1 is the so-called no-action/no project option. Alternative No. 2 is the project as proposed in the draft environmental impact report. The final environmental impact report made changes to Alternative No. 2 from that discussed in the draft version. The project consists of this final version of Alternative No. 2. The changes reduced the significant environmental impacts of the project.

d. resource management plan

In order to comply with the county's specific plan, the resource management plan was developed. The resource management and development plan was prepared by Dudek, a Valencia, California environmental consulting firm. (Dudek is referred to in planning documents as "Dudek" and "Dudek and Associates." We will refer to the consultant utilizing its title in the document we are discussing.) Dated December 3,

2010, the 337-page resource management plan (some pages are blank) is described in the environmental impact report as a conservation, mitigation and permitting plan. The resource management plan will be used in the future to obtain federal and state permits. These permits will be used to implement infrastructure and other improvements required to facilitate future build-out of the county's specific plan.

e. conservation plan

The San Fernando Spineflower (*Chorizanthe parryi* ssp. *Fernandina*) (spineflower) is listed as an endangered species under the California Endangered Species Act (endangered species act). (Fish & G. Code, § 2050 et seq.) The 162-page December 3, 2010 conservation plan permanently expands the existing spineflower preserve system. The spineflower is identified as a candidate species under the federal Endangered Species Act of 1973. (16 U.S.C. § 1531 et seq.; Pub. L. No. 93-205 (Dec. 28, 1973) 87 Stat. 884.) The preserve system is designed to maximize long-term persistence of the spineflower.³

f. permitting and other actions

Also on December 3, 2010, four other actions were taken. The first action consisted of a "dredge and fill permit." In order for the department to implement the management and development plan, it was necessary to secure a dredge and fill permit from the corps. Such a permit was mandated by title 33 United States Code section 1344(b), which is part of the Clean Water Act. (33 U.S.C. § 1251 et seq.) As part of the issuance of the dredge and fill permit, the corps and the department conducted joint environmental review. The second action consisted of the streambed alteration

³ For clarity's sake we will refer to our state's endangered species act as the "endangered species act." We will refer to federal act as the "federal Endangered Species Act."

agreement. The developer entered into the streambed alteration agreement with the department. (Fish & G. Code, §§ 1602-1603, 1605.)

A third action consisted of the issuance of two incidental take permits. (Fish & G. Code, §§ 86, 2080, 2081, subd. (b).) One permit is for the spineflower. A separate multispecies incidental take permit was issued for the: western yellow-billed cuckoo (*Coccyzus americanus occidentalis*); southwestern willow flycatcher (*Empidonax traillii extimus*); and least Bell's vireo (*Vireo bellii pusillus*). The developer's request for an incidental take permit in connection with six species not listed in the endangered species act was denied. Fourth, a Mitigation and Monitoring and Reporting Program (mitigation program) was established for the streambed alteration agreement and the two incidental take permits. The mitigation program is to be used by the department to track compliance with the mitigation requirements. (§ 21081, subd. (a)(1); Guidelines, § 15097.)

g. findings

Also, on December 3, 2010, the department issued its 213-page California Environmental Quality Act factual findings and overriding considerations statement in connection with: the streambed alteration agreement; the incidental take permits; and the conservation plan. And the department issued its 43-page factual findings as required by title 14 California Code of Regulations section 783.5, subdivision (d)(2)(B)(5) for the incidental take permits for the: spineflower; Western yellow-billed cuckoo; Southwestern willow flycatcher; and Least Bell's vireo.

III. POST-CERTIFICATION EVENTS

On January 3, 2011, plaintiffs filed their Code of Civil Procedure sections 1085 and 1094.5 mandate petition. The mandate petition challenges the: certification of the project's environmental impact report; conservation plan; streambed alteration

agreement; and issuance of two incidental take permits. The first cause of action challenges the department's certification of the environmental impact report. The first cause of action also alleges the environmental impact report fails to comply with statutory and regulatory requirements in 10 respects: the description of the project and the affected environment; water quality; biological resources; greenhouse gas emissions; cultural resources; air quality; traffic; punitive impacts; alternatives; and inadequate response to public comments.

The second cause of action alleges a failure to recirculate the draft environmental report requires the certification be set aside. After the draft environmental impact report was prepared, comments were submitted to the department which provided significant new information within the meaning of section 21092.1 and Guidelines section 15088.5. The comments described project impacts relating to biological and cultural resources and greenhouse gas emissions. Despite the development of significant new information on the severity of the project impacts, the department failed to recirculate any portion of the draft environmental impact report. As a result, the petition alleges the failure to recirculate the draft environmental impact report is not supported by substantial evidence and its approval must be set aside.

The third cause of action challenges the spineflower and multi-species incidental take permits. According to plaintiffs, the department's determinations concerning the spineflower and multi-species incidental take permits are not based upon the best reasonably available scientific and other information. The mandate petition alleges the issuance of the incidental take permits was an abrogation of the department's affirmative duty to protect public trust resources.

The fourth cause of action, filed pursuant to Code of Civil Procedure section 1085, alleges the department's findings are not supported by substantial evidence. The defective findings are required by applicable environmental laws including the endangered species and California Environmental Quality Acts. According to the mandate petition, substantial evidence did not support the department's findings in connection with: significant environmental impacts; the overriding considerations

statement; feasible alternatives or mitigation measures; whether environmentally superior alternatives were infeasible due to costs; the damage done to the spineflower species; the continued existence and take of other species including the Southwestern willow flycatcher, and the Least Bell's Vireo and Yellow-billed Cuckoo; and the incidental take permits.

The fifth cause of action challenges the issuance of the streambed alteration agreement. No issue has been raised on appeal concerning the propriety of the streambed alteration agreement. The sixth cause of action alleges a violation of Fish and Game Code section 5515. Fish and Game Code section 5515 provides, except in limited exceptions, that "fully protected fish or parts thereof" may not be taken or possessed under any circumstances. The department's project authorization will result in the prohibited take of the Unarmored Threespine Stickleback (stickleback). This would result from: the direct destruction of its habitat; localized alterations in streamflow; other hydrological and fluvial geomorphological changes; and facilitation of hybridization of other stickleback species that could result in the extinction of the native population.

On September 20, 2012, the hearing was held on plaintiff's mandate petition. At the conclusion of the hearing, the trial court issued its tentative statement of decision. We need not detail the contents of the tentative statement of decision. The trial court's final statement of decision materially modified the September 20, 2012 document. On October 11, 2012, the department and the developer filed objections to the tentative statement of decision.

On October 15, 2012, the trial court's final statement of decision was filed. In its final statement of decision, the trial court ruled that the department abused its discretion in six aspects: First, the trial court ruled that environmental impact report failed to adequately discuss the impact of dissolved copper discharged from the project area on steelhead smolt. The trial court ruled, "The [environmental impact report] fails to consider . . . whether the dissolved copper discharged from the [p]roject [a]rea . . . would adversely affect restored habitat for endangered steelhead smolt." Second, the trial court ruled the department's analysis of the spineflower mitigation measures was legally

impermissible. And, in a related vein, the trial court ruled there was no substantial evidence the mitigation matters were adequate. Third, the trial court ruled the environmental impact report's selection of a baseline for assessing the cumulative impacts of the project's greenhouse gas emissions was, as a matter of law, inappropriate. In addition, the trial court ruled that certain aspects of the department's baseline analysis in the environmental impact report were not supported by substantial evidence. Fourth, the trial court ruled that the environmental impact report's assessment of the project's impact on Native-American cultural resources was not supported by substantial evidence. Fifth, the trial court ruled the department failed to prevent the taking of the stickleback, a fully protected fish under Fish and Game Code section 5515, subdivision (a)(1). Sixth, the trial court ruled the department unduly relied upon the specific plan and failed to conduct an independent review of project impacts. The trial court rejected all of plaintiffs' other numerous contentions.

On October 15, 2012, judgment was entered in plaintiffs' favor. The judgment ordered the department to set aside the approvals of the: resource management plan; conservation plan; incidental take permits; and streambed alteration agreement. Further, the department was ordered to set aside its certification of the final environment impact report. Finally, the department was ordered to set aside its findings, overriding interests statement and mitigation program. As noted, the findings, overriding interests statement and mitigation program related to the: resource management plan; spineflower conservation plan; incidental take permits; and streambed alteration agreement. Further, pursuant to section 21168.9, subdivision (a)(2), the department and the developer are enjoined from implementing any of the activities specified in the: resource development and spineflower conservation plans; incidental take permits; and streambed alteration agreement. The injunction expires once the department certifies an environmental impact report that complies with the deficiencies identified in the statement of decision. The peremptory writ of mandate, filed on October 15, 2012, paralleled the requirements imposed by the judgment.

On November 13, 2012, the developer filed its notice of appeal. On November 20, 2012, the department filed its notice of appeal. On November 21, 2012, the department filed an amended notice of appeal. All appeals have been considered together.

IV. DISCUSSION

A. Standards Of Review For Environmental Impact Report Issues

An environmental impact report's fundamental purpose is to inform public officials and the people they serve of any significant adverse effects a project is likely to have on the environment. (§ 21061; *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority* (2013) 57 Cal.4th 439, 447; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428.) Reviewing courts presume the correctness of an agency's decisions in the environmental impact report context. (*San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th 1, 11; *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674, 723.) Our Supreme Court has described the limited nature of judicial review: "In reviewing agency actions under [the California Environmental Quality Act], . . . section 21168.5 provides that a court's inquiry 'shall extend only to whether there was a prejudicial abuse of discretion. 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.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; see *Mount Shasta Bioregional Ecology Center v. County of Siskiyou* (2012) 210 Cal.App.4th 184, 195.)

Thus, our standard of review depends upon the nature of the challenge to an environmental impact report. Our Supreme Court explained this dichotomy: "In evaluating an [environmental impact report] for [California Environmental Quality Act] compliance, then, a reviewing court must adjust its 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. For example, where an agency failed to require an applicant to provide certain information mandated by [the California Environmental Quality Act] and to include that information in its environmental analysis, we held the agency ‘failed to proceed in the manner prescribed by [the California Environmental Quality Act].’ (*Sierra Club v. State Bd. of Forestry* (1994) 7 Cal.4th 1215, 1236; see also *Santiago County Water Dist. v. County of Orange* [(1981)] 118 Cal.App.3d [818], 829 [[environmental impact report] legally inadequate because of lack of water supply and facilities analysis].) In contrast, in a factual dispute over ‘whether adverse effects have been mitigated or could be better mitigated’ (*Laurel Heights[Improvement Assn. v. Regents of University of California* (1988)] 47 Cal.3d [376,] 393), the agency’s conclusion would be reviewed only for substantial evidence.” (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.)

In terms of the correctness of the department’s environmental conclusions, our Supreme Court has explained: “Thus, the reviewing court “does not pass upon the correctness of the [environmental impact report’s] environmental conclusions, but only upon its sufficiency as an informative document.”” [Citations.] We may not set aside an agency’s approval of an [environmental impact report] on the ground that an opposite conclusion would have been equally or more reasonable.” (*Citizens of Goleta Valley v. Board of Supervisors, supra*, 52 Cal.3d at p. 564, quoting *Laurel Heights Improvement Assn. v. Regents of University of California, supra*, 47 Cal.3d at p. 392 and *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 189.) Thus, we defer to an agency’s resolution of conflicting opinions and evidence. (*Western States Petroleum Assn. v. Superior Court* (1995) 9 Cal.4th 559, 572; accord *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1042.) Virtually every contention (with exceptions we shall discuss) posited by plaintiffs contravene the foregoing standard of review for an environmental conclusion. With little exception, plaintiffs’ analysis requires reweighing of conflicting opinions and evidence.

Our standard of review is the same as that of the trial court. We do not review the trial court’s decision; rather, we examine the department’s adherence to the law and

environmental conclusions as specified above. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, *supra*, 40 Cal.4th at pp. 426-427; *Melom v. City of Madera* (2010) 183 Cal.App.4th 41, 47-48.) We will refer to the trial court's analysis because it serves as the basis for much of the parties' analysis. However, with one exception (the admissibility of a post-environmental impact statement certification document), we are not reviewing the trial court's decision but the agency's determinations.

B. Stickleback Take Issues And The Endangered Species Act

1. Stickleback

The stickleback's presence in the resource management plan's area was described in a report prepared by Entrix, Inc., one of the developer's environmental consultants. The Entrix, Inc. "Special Status Aquatic Species Habitat Assessment for the Santa Clara River" describes the stickleback presence in the resource management plan area in part thusly: "Populations of [stickleback] are restricted to three sections of the upper Santa Clara River including the Newhall Ranch reach, which represents the downstream demarcation of the [stickleback] species. . . . The [stickleback] is a small, largely annual fish that requires shallow, slow, marginal stream flows with abundant aquatic vegetation for cover. The male guards territories and builds a small nest of decaying vegetation where he guards the eggs until they hatch. Large numbers of stickleback can exist in the summer and fall with the long breeding season in southern California, and breeding can be almost all year in dry years when a stream is minimally disrupted by storm flows. Under optimum conditions, up to a few hundred stickleback can exist within approximately [10] meters of stream. Strong storm flows can severely reduced localized populations until the streams stabilize in spring and the numbers can build up again. Backwater habitats within the Santa Clara River are utilized by [stickleback] as refugia during storm events." According to an Entrix, Inc. study, in the resource management

plan area, the stickleback is abundant. The stickleback's population is dependent on interannual hydrological conditions which includes the frequency and intensity of flood events.

Dr. Camm Swift, a biologist whose qualifications we will relate shortly, reported that in occasional dry years when no peak storms occur, reproduction occurs virtually year-round. But generally, the greatest numbers of stickleback are present from around mid-summer to late fall. This occurs because reproduction has increased the number of juvenile as well as adult stickleback. These large numbers are usually decimated by peak storm flows generally beginning in late November. In other words, in normal or heavy rainfall years, the stickleback population is typically at its nadir in late fall and winter.

A United States Forest and Wildlife Service (federal wildlife service) summary describes the stickleback as a small scale freshwater fish inhabiting slow-moving reaches or quiet-water micro-habitats of streams and rivers. The stickleback primarily feed on insects, small crustaceans and snails. To a lesser degree, the stickleback feed on nematodes, flatworms and terrestrial insects.

2. Development related activities

The resource management plan contemplates bridge, road and other construction as a precursor to future development: "The [resource management plan] consists of development-related infrastructure improvements in or adjacent to the Santa Clara River and tributaries located in the [resource management plan] area to implement the County-approved Specific Plan. The [resource management plan] infrastructure components are comprised of bridges/road crossing culverts, bank stabilization, drainage facilities, water quality control facilities, tributary drainage modification and conversion, utility corridor and crossings, temporary haul routes for grading equipment, the discharge outfall of the previously-approved Newhall Ranch Water Reclamation Plant, roadway improvements to [State Route]-126, and recreation facilities." The resource management plan contemplates that two bridges will be constructed.

3. Mandatory mitigation requirements designed to insure no stickleback take occurs

We turn now to the mitigation measures imposed on the developer. The mitigation measures are attached to the department's factual findings of fact and are discussed in the environmental impact report. The mitigation measures relate to the biological resources discussion in the environmental impact report. Therefore, the mitigation measures are identified by the letters "BIO" followed by a number. We describe them in great detail.

BIO-43 sets forth requirements for preconstruction surveys by qualified biologists: "Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities that result in any disturbance to the banks or wetted channel, aquatic habitats within construction sites and access roads, as well as all aquatic habitats within 300 feet of construction sites and access roads, shall be surveyed by a qualified biologist for the presence of . . . stickleback. . . . The [c]orps and [the department] shall be notified at least 14 days prior to the survey and shall have the option of attending. The biologist shall file a written report of the survey with both agencies within 14 days of the survey and no later than 10 days prior to any construction work in the riverbed. If there is evidence that fish spawn has occurred in the survey area, then surveys shall cease unless otherwise authorized by [the federal wildlife service]. If surveys determine that gravid fish are present, that spawning has recently occurred, or that juvenile fish are present in the proposed construction areas, all activities within aquatic habitat will be suspended. Construction within aquatic habitats shall only occur when it is determined that juvenile fish are not present within the [project] area." In addition, BIO-43 imposes mitigation measure monitoring requirements. The fish surveys must be completed prior to construction and documented in a written report. The department must be notified at least 14 days prior to the survey. The survey report is to be filed with the department within 14 days of the survey. At the latest, the biologist's report must be delivered to the department no sooner than 10 days prior to construction.

BIO-44 requires the developer to prepare a "Stream Crossing and Diversion Plan" to protect stickleback during construction. BIO-44 imposes the following requirements: "Temporary bridges, culvert crossings, or other feasible methods of providing access across the river shall be constructed outside of the winter season and not during periods when spawning is occurring. Prior to the construction of any temporary or permanent crossing of the Santa Clara River, the applicant shall develop a Stream Crossing and Diversion Plan. The plan shall include the following elements: the timing and methods for pre-construction aquatic species surveys; a detailed description of the diversion methods (*e.g.*, berms shall be constructed of on-site alluvium materials of low silt content, inflatable dams, sand bags, or other approved materials); special-status species relocation; fish exclusion techniques, including the use of block netting and fish relocation; methods to maintain fish passage during construction; channel habitat enhancement, including the placement of vegetation, rocks, and boulders to produce riffle habitat; fish stranding surveys; and techniques for the removal of crossings prior to winter storm flows. The Plan shall be submitted to the [federal wildlife service] and [the department] for approval at least 30 days prior to implementation."

BIO-44 further requires that if stickleback are present and spawning has not occurred, they are to be relocated prior to streambed diversion or any crossing of the stream. To prevent stickleback from entering construction areas, block nets of 1/8 inch "woven mesh" are to be set up both up and down stream. In terms of high temperature or low humidity conditions, BIO-44 imposes additional requirements. "On days with possible high temperature or low humidity (temperatures in excess of 80 [degrees] F), work will be done in the early morning hours, as soon as sufficient light is available, to avoid exposing fishes to high temperatures and/or low humidity. If high temperatures are present, the fishes will be herded to downstream areas past the block net. Once the fishes have been excluded by herding, a [federal wildlife service] staff member or his or her agents shall inspect the site for remaining or stranded fish. A [federal wildlife service] staff member or his or her agents shall relocate the fish to suitable habitat outside the [project] area (including those areas potentially subject to high turbidity). During the

diversion/relocation of fishes, the [federal wildlife service] or his or her agents shall be present at all times.”

BIO-44, as in the case of other mitigation measures, is subject to specified monitoring requirements. The Stream Crossing and Diversion Plan must be prepared and submitted to the federal wildlife service and the department. Any follow-up procedures are to be conducted prior to the commencement of construction. The crossing and diversion plan must be submitted to the department at least 30 days prior to implementation.

BIO-45, the lengthiest and most comprehensive of the mitigation measures, identifies standards for stream diversion bypass channels. The diversion bypass channels are to be constructed in compliance with BIO-44. BIO-45 states: “The diversion channel shall be of a width and depth comparable to the natural river channel. . . . [T]he bypass channel will be constructed prior to diverting the stream, beginning in the downstream area and continuing in the upstream direction. Where feasible and in consultation with [the department/federal wildlife service], the configuration of the diversion channel will be curved (sinuous) with multiple sets of obstructions (i.e., boulders, large logs, or other [department/federal wildlife service]-approved materials) placed in the channel at the point of each curve (i.e., on alternating sides of the channel.) If emergent aquatic vegetation is present in the original channel, the applicant will transplant suitable vegetation into the diversion channel and on the banks prior to or at the time of the water diversion. A qualified restoration ecologist will supervise the construction of the diversion channels on site. The integrity of the channel and diversion shall be maintained throughout the intended diversion period. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area.” No construction of diversion channels is to commence if surveys indicate that: gravid fish are present; spawning has recently occurred; or juvenile fish are present in the construction areas.

Once the need for diversion has concluded, either at the commencement of winter or completion of construction, BIO-45 imposes additional requirements on the developer. Under those circumstances, the developer is required to coordinate with the department

and the federal wildlife service to determine if the diversion should be left in place. In the alternative, the developer, the department and the federal wildlife service may conclude that the original stream course should be reinstated. If the original stream course is to be reinstated, BIO-45 requires the following: "If [the department/federal wildlife service] determine the stream should be diverted to the original channel, the original channel will be modified prior to re-diversion (*i.e.*, while dry) to construct curves (sinuosity) into that channel, including the placement of obstructions (*i.e.*, boulders, large logs, or other [department/federal wildlife service]-approved materials). The original channel will be replanted with emergent vegetation as the diversion channel was planted."

BIO-45 also imposes dewatering requirements. Many of the dewatering requirements do not relate to the stickleback or other fish. However, in terms of fish, which includes the stickleback, BIO-45 states: "Fish shall be excluded from any artificial flowing channels from dewatering discharge. Methods to ensure separation may include, but are not limited to: block netting at the confluence; creation of a physical drop greater than four inches at the confluence; or maintaining a velocity range unsuitable for fish passage, such as a berm at the confluence with small diameter pipes for discharge."

All dewatering and diversion activities are to fully comply with BIO-45 throughout the entire construction period. All diversion channels are to be approved by the department and the federal wildlife service prior to construction. In addition, all proposed channels that are to be in existence at the conclusion of construction activities are subject to approval by the department and the federal wildlife service. BIO-45 contains monitoring requirements. Field monitoring is to be conducted daily by a qualified restoration ecologist. And the developer is required to submit reports annually by April 1 to the department until all success criteria have been met.

BIO-46 imposes requirements for a biologist to be present during any stream diversion or culvert installation activity. BIO-46 states: "During any stream diversion or culvert installation activity, a qualified biologist(s) shall be present and shall patrol the areas within, upstream and downstream of the work area. The biologists shall inspect the

diversion and inspect for stranded fish or other aquatic organisms. Under no circumstances shall the . . . stickleback be collected or relocated, unless [federal wildlife service] personnel or their agents implement this measure. Any event involving stranded fish shall be recorded and reported to [the department] and [the federal wildlife service] within 24 hours.” BIO-46 contains its own mitigation measure monitoring requirements. There are to be follow-up procedures conducted during the construction period. The department is to receive reports from the developer annually by April 1.

BIO-47 imposes requirements on the developer in connection with stream alterations: “Slow moving water habitats shall be constructed upstream and downstream of any river crossing or bridge construction area to provide refuge for special-status fishes during construction. Where feasible and in consultation with [the department] and [the federal wildlife service], the applicant shall enhance slow moving water habitats for each linear foot disturbed by hand-excavating shallow side channels and placing multiple sets of obstructions (*e.g.*, boulders, large logs, or other [department] and [federal wildlife service]-approved materials) in the channel.” The mitigation measure monitoring requirements for BIO-47 are: required habitat areas are to be in place prior to the commencement of stream crossings or bridge construction; field inspections are to occur prior to beginning construction operations; the department must approve all preconstruction materials; the developer must consult with the department and the federal wildlife service when enhancing slow-moving water habitats; and the developer must submit reports to the department annually by April 1 until success criteria are met.

Finally, BIO-48 states: “Installation of bridges, culverts, or other structures shall not impair the movement of fish and aquatic life. Bottoms of temporary culverts shall be placed at or below channel grade. Bottoms of permanent culverts shall be placed below channel grade. Culvert crossing shall include provisions for a low flow channel where velocities are less than two feet per second to allow fish passage.” The BIO-48 mitigation measure monitoring requirements are: the “[g]rading/construction plans” are to implement the specified drainage design measures; drainage plans are to be reviewed prior to the start of construction; the drainage plans are to be provided in conjunction

with the construction notification to the department and the corps; and reports are to be provided to the department annually by April 1.

4. Findings concerning the stickleback and the endangered species act

a. environmental impact report findings

The environmental impact report makes various findings concerning the effect of the construction related activities. As a general matter, the environmental impact report specifies that there would be direct and indirect impacts on special status species such as the stickleback. The environmental impact report specifies that there will be temporary impacts resulting from implementation of the resource management plan. The environmental impact report states: "Although no substantial permanent impacts to . . . stickleback habitat would occur through implementation of the [resource management plan], the [project] would temporarily affect habitat when construction occurs directly in aquatic habitat, such as the active stream channel. Bridge construction, in particular, could directly affect aquatic habitat occupied by . . . stickleback through direct impacts to the flowing stream, stream diversion, and dewatering when construction is occurring within the [Santa Clara] River corridor. Direct impacts from temporary construction would be significant absent mitigation primarily due to permanent and temporary disturbance to aquatic habitat from construction of [resource management plan] facilities within the Santa Clara River." At another point in the environmental impact report, the department relates the following anticipated activities will cause direct but temporary impacts on the stickleback during construction: stream diversion; species exclusion; unauthorized entry of equipment into ponded or flowing waters; placement of fill in occupied waters; dewatering activities; discharge of pollutants; and unauthorized entry of personnel into occupied waters. These activities, according to the environmental impact report, can result in the following impacts: inadvertently directing fish to unsuitable habitats; blocking fish passage; stranding stickleback in unsuitable water

quality conditions; crushing or entombment of stickleback; unauthorized collection of stickleback; or physical disturbance of river edge habitats. In terms of short term construction related impacts, the environmental impact report identifies hydrologic and water quality effects. According to the environmental impact report, *absent mitigation*, these construction related direct and temporary impacts to individual stickleback would be significant.

The environmental impact report identifies other impacts on the stickleback as significant absent mitigation: alterations in base flows; timing and duration of flood flows; biochemical changes; condition and composition of the substrate; aquatic and riparian vegetation (including exotic species); water temperatures; increased pollutants from irrigation runoff; increased runoff from roadways; the effects of increased human presence; and increased predation by exotic predators, such as bullfrogs and non-native fish. Finally, the environmental impact report considers the potentiality of downstream stickleback outside the project area moving upstream. The department's concern is that this could lead to genetic introgression. However, given the unlikely prospect of such occurring, the department categorizes this risk as less than significant. In terms of permanent post-construction impacts on the stickleback, the developer's consultant, Entrix, Inc., concluded there would be less than significant or no impacts as result of the bridge construction.

We turn now to the construction issue raised in a comment and the department's and the corps' responses thereto. The comment and the department's and the corps' responses directly relate to the issue of whether a take of the stickleback is expected to occur. During the comment period, the department and the corps received an August 8, 2010 letter from Dr. Jonathan N. Baskin. Dr. Baskin is a Professor Emeritus of Biological Sciences at California State Polytechnic University, Pomona. Much of Dr. Baskin's letter comments on inadequacy of the discussion concerning impacts from the bridge construction portions of the project. In the middle of his letter Dr. Baskin's notes: "Also, it is clear that there will be a large amount of construction in the river channel,

which will require impacts to the flowing water that could contain the [stickleback]. How will this be implemented without 'take' of the [stickleback]?"

The staff of the department and the corps clearly understood Dr. Baskin was raising the issue of whether a take within the meaning of Fish and Game Code section 86 will occur. The responses of the department and the corps to the comments directly address Dr. Baskin's concerns. The department and the corps note the potential adverse impacts on the stickleback. The department and the corps jointly conclude the implementation of the mitigation measures discussed above will "avoid take" of the stickleback. Later in their responses to Dr. Baskin's letter, the department and the corps explain: "Note that these mitigation measures were designed with input and direction from [Dr. Swift]. Based on the [environmental impact statement/environmental impact report] analysis presented, with implementation of the applicable mitigation measures, there is a high degree of confidence that the proposed [project] and alternatives would not cause a take of [the stickleback]." We will discuss Dr. Swift's analysis in greater detail shortly.

b. incidental take permit findings

As noted, the department issued two incidental take permits. The department made factual findings under the endangered species act in connection with the spineflower and multispecies incidental take permits. Those factual findings also refer to other endangered species including the stickleback. The department expressly bars any taking of any other endangered species in the findings as well as the streambed alteration agreement. In the incidental take findings, the department found: "The Spineflower [incidental take permit] and Multi-species [incidental take permit] do not authorize the take of any fully protected species. (See Fish & G. Code §§ 3511, 4700, 5050, 5515.) [The department] has advised [the developer] of the requirement to avoid take of fully protected species and believes that [the developer] can carry out Covered Activities pursuant to the Spineflower [incidental take permit] and Multi-species [incidental take

permit] in a manner consistent with the Fish and Game Code provisions governing fully protected species. [The department's] determination regarding consistency with Fish and Game Code provisions governing fully protected species is based on [the department's] preparation and certification of the [final environmental impact statement/environmental impact report], which considered the environmental effects related to the issuance of the Spineflower [incidental take permit] and Multi-species [incidental take permit] and recommended avoidance, minimization and mitigation measures related to fully protected species documented to occur within the vicinity of the [project] area or that have some potential to occur due to the presence of suitable habitat. These fully protected species include . . . the [stickleback]."

In the next paragraph of its factual findings, the department explains the federal wildlife service may be issuing an opinion which may authorize a take of the stickleback. In that regard, the department notes that the federal wildlife service may conclude there is possibility of a take of the stickleback under the federal Endangered Species Act. Nonetheless, the department concluded the project could be completed in a manner consistent with the Fish and Game Code provisions governing the take of fully protected species such as the stickleback.⁴

⁴ The full finding is as follows: "There are a few species that are fully protected under the Fish and Game Code and that are also listed species under the Federal [Endangered Species Act]. For federally-listed species on the [project] site, the [c]orps and [the developer] have requested a biological opinion from the [federal wildlife service], which, when issued, may or may not include take authorization for federally listed species, including [stickleback] and California condor. It is possible the [federal wildlife service] may conclude in an abundance of caution that there is some potential for federally-defined 'take' of these species. (See 50 C.F.R. § 17.3 ('harm' component of take definition can include habitat modification under certain circumstances).) However, whether or not the [federal wildlife service] takes such a conservative approach consistent with the federal definition of 'take,' based on the analysis set forth in the [environmental impact statement/environmental impact report], and as discussed above, [the department] finds that the [project] can be carried out in a manner consistent with the Fish and Game Code provisions governing fully protected species."

5. Evidence re: take

The department's conclusion that no take of the stickleback would occur was based upon multiple scientific studies. The department relied upon 10 different reports which extensively discuss: the status of the stickleback between 1989 and 2010; the location of the stickleback in relation to portions of the Santa Clara River; the habitat of the stickleback in the Santa Clara River area; and the characteristics of Santa Clara River flows including after recent and future projected flooding. The studies indicate there are times and places in the project area where stickleback are absent or rarely observed in the Santa Clara River in the resource management plan area. After the 2005 flooding, the stickleback were not observed in the Santa Clara River at all in the resource management plan area. Two separate studies indicate that the resource management plan activities will not alter the general morphology of the Santa Clara River or the adjacent rearing and flood refuge areas. According to a multi-year survey by Entrix, Inc. scientists, the proposed project will result in changes in refuge for the stickleback: "Implementation of [the proposed project] is expected to result in a gain in natural refugia acreage under two, five, ten, and [one-hundred-year] flood conditions. A loss of 6.9 and 0.4 acres is expected under twenty and [fifty-year] flood conditions, respectively. Disturbed refugia acreage is expected to increase during a five, ten or [one-hundred-year] flood event. Two, twenty, and [fifty-year] flood events are predicted to result in a loss of small amounts of disturbed refugia acreage under the proposed alternative." The Entrix, Inc. study concluded: no impacts to fish species, which includes the stickleback, would occur in the Santa Clara River tributaries; there will be no alteration in the general morphology of the Santa Clara River or adjacent habitat; under flood conditions there will be no discernible difference in the marginal stickleback habitat under the various alternatives; and the resource management plan would not interfere with the persistence and overall survival of the stickleback.

Dr. Swift, one of the leading authorities in the field of stickleback protection, prepared a technical discussion of issues, including relocation of the stickleback. Dr.

Swift prepared the analysis for Entrix, Inc. Dr. Swift possesses department and federal wildlife service collecting permits for the stickleback. Dr. Swift co-authored the federal wildlife service recovery plan for the stickleback. He did so as a member of the federal stickleback recovery team between 1972 and 1995. He conducted habitat surveys in the upper Santa Clara River and nearby lower Santa Paula creek. In connection with a project in the City of Valencia, Dr. Swift participated in the relocation of stickleback. In addition, Dr. Swift surveyed and participated in trapping of stickleback at Vandenberg Air Force Base. Dr. Swift has participated both in federal and state assessment and survey programs and helped draft restoration and mitigation plans for freshwater fish.

Dr. Swift described methods for monitoring and moving the stickleback:

“Stickleback are often monitored and/or moved from the areas of stream subject to a variety of construction activities. These methods have been utilized numerous (probably hundreds) of times for . . . stickleback in the Santa Clara River and tributaries, San Antonio Creek, Santa Barbara County, and in Shay Creek, San Bernardino County. These various projects have been approved numerous times by the [department] and the [federal wildlife service]. This typically involves utilizing biologists that have proper collecting permits from both the [federal wildlife service] and [the department] (State Scientific Collecting Permit with a Memorandum of Understanding covering collecting, handling, holding, and transferring live specimens of the fully protected . . . stickleback).” Typically, these projects utilize biologists who were trained in collecting, handling and transferring live stickleback.

Dr. Swift described the methodology for use of nets and relocation of stickleback away from construction areas. We only briefly discuss Dr. Swift’s extensive analysis. The key elements of stickleback protection in construction areas are as follows. To begin with, the river construction area is isolated with block nets of specified dimensions. Dr. Swift characterizes the zones above and below the construction zone as buffer areas. The buffer areas are 50 to 100 meters above and below the construction area. Once the blocking nets are secured, fish are removed from the construction area. This is accomplished by using seine netting to herd the fish until they can be placed in containers

for movement beyond the buffer areas. An option is to move the fish a greater distance than just beyond the buffer nets. Dr. Swift indicated that the stickleback should be kept in containers temporarily.

Safe movement of stickleback can best be accomplished after the first peak storm has passed. This is because the stickleback population will be at its lowest level. This will reduce the necessity of handling larger numbers of stickleback. Dr. Swift specified the temperatures when stickleback should not be moved and stated these activities should be scheduled early in the morning when the water is cool.

Another option is to reroute an existing river channel. In this scenario, two rescues occur. First, the fish in the current channel are captured with the seine netting. Second, the channel gradually becomes dry and the remaining fish are exposed and picked up by the biologists. Another technique in an area consisting of a relatively wide, flat floodplain would be simply to dig the new channel. Then the current channel would be blocked and the fish in it rescued.

If the riverbed is rerouted, Dr. Swift identified requirements specific to the stickleback. Dr. Swift specified: the passage area in the rerouted streambed should be greater or equal in width to maintain normal stream processes; a natural watercourse bottom and hydraulic condition is preferable; a minimum water depth of eight inches (six inches is probably adequate for the stickleback); appropriate water velocities and methods of increasing the speed of water in the rerouted stream; no waterfalls or baffles should be present in stickleback passages; and the water surface in the rerouted stream must blend smoothly with the up and downstream edges of the passage area.

Another option is simply to install a bridge-like platform across the river channel to be used as a structure from where work is performed. Under these circumstances, the river would never be entered by biologists or construction employees. This will result in shading of the river channel as will eventually occur once bridge construction has been completed. Construction crews in this scenario would have to take precautions to prevent leakage of fluids from the project into the river.

Yet another option is to avoid any encroachment on the river channel. Dr. Swift explained: “[S]ome projects never encroach entirely on the wetted channel thus maintaining habitat and passage between the up and downstream parts of the floodplain. With this method a berm or access route would follow the construction footprint out on to the floodplain. The bridge would be built outward from scaffolding or other temporary support on each side of the wetted channel. Each of the outward extensions would join over the stream such that work could all be done from over the river without going into it. Such a method should allow year round work and should get very favorable response from the regulatory agencies. This method was utilized when the additional bridge was built by Cal Trans over Malibu Lagoon. A berm encroached out a short distance into the lagoon from one side and all work was done outward from it. Later this berm was removed and another was built extending from the opposite side. Thus the Malibu Lagoon was never entirely blocked and stream and tidal flow was always possible during the project.” In Dr. Swift’s view, any such design that maintains the natural river channel in the low flow season and allows for the passage of fish is a more desirable construction option.

6. Trial court’s ruling

The trial court ruled the department failed to prevent the taking of the stickleback, a fully protected fish under Fish and Game Code section 5515, subdivision (a)(1). Before setting forth the trial court’s ruling, it is necessary to provide some background concerning incidental take permits. The endangered species act was originally adopted in 1982. (Stats. 1984, ch. 1240, § 2, pp. 4243-4249.) When originally adopted, the endangered species act did not permit the department to authorize a take of a protected animal. Fish and Game Code section 2081 was adopted in 1997. (Stats. 1997, ch. 567, § 2, pp. 3440-3441.) Fish and Game Code section 2081, subdivision (b) permits the department to issue incidental take permits under specified circumstances. Such permits may be issued if the take is incidental to otherwise lawful activity. As will be noted, the

trial court ruled that an environmental impact report could not be certified without the issuance of an incidental take permit.

The trial court ruled that the department agreed the resource management area construction, if unmitigated, would have a significant effect on the stickleback. The trial court ruled: "In response, therefore, the [environmental impact report] recommended a number of mitigation measures, including surveys to identify the presence of [stickleback] and other protected fish, suspending construction [if] spawn or juvenile fish are present, and providing alternative diversion flows and methods to maintain fish passage for aquatic species and other methods. However, the very 'mitigation' methods recommended to be conducted with supervision by a [federal fish and wildlife service] biologist, such as block netting and fish relocation, falls within the meaning of [an] illegal 'taking' under the . . . Fish and Game Code. Accordingly, while the proposed mitigation strategies designed by [Dr. Swift] may not occasion a take under federal law, it would cause a taking of the [stickleback] under California law. [¶] Thus, where there is a mitigation proposal that by its very terms constitutes an illegal taking of the [stickleback] under state law, the strategy fails to be a reasonable and realistic alternative. Without the issuance of an [incidental take permit], the mitigation measure cannot be implemented. Therefore, there is no substantial evidence to support the mitigation strategy on which [the department] relies to conclude that the construction processes associated with the [project] will not result in an illegal taking of the [stickleback]."

The trial court in a footnote briefly adverted to the public trust doctrine. The trial court never ruled that a violation of the public trust doctrine had occurred. Rather, the trial court's ruling addresses the issue of whether the mitigation techniques constitute a taking of the stickleback within the meaning of Fish and Game Code section 86. The trial court stated: "[T]he principal issue which is currently ripe for adjudication is whether the proposed mitigation of the[project's] impacts on the [stickleback] will result in the taking of a fully protected species without first obtaining [an incidental take] permit. This issue is a well-defined and concrete controversy that goes to the heart of the adequacy of the [environmental impact report]."

7. Overview of the endangered species act and the definition of take

a. definition of take

The Fish and Game Code was originally adopted in 1933. (31 West's Ann. Fish and Game Code (1984) "California Codes," p. VI.) In 1933, the Legislature defined "take" in former Fish and Game Code section 2, "As used in this code: [¶] . . . e. 'Take' means hunt, pursue, catch, capture, or kill." (Stats. 1933, ch. 73, § 2, p. 394.) In 1947, former Fish and Game Code section 2, subdivision (e) was amended to state: "As used in this code: [¶] . . . e. 'Take' means hunt, pursue, catch, capture, kill, or possess, or attempt to hunt, pursue, catch, capture, kill, or possess." (Stats. 1947, ch. 590, § 1, p. 1588.) In 1957, Fish and Game Code section 2 was recodified in section 86 and amended to state, "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Stats. 1957, ch. 456, § 2, p. 1310.) The pertinent statutory change in 1957 was to delete the term "possess" or an attempt to do so from the definition of take. The definition of take today remains the same as it was when Fish and Game Code section 2, subdivision (e) was recodified in section 86 in 1957. Thus, today the term take is defined in Fish and Game Code section 86, "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (See Rep. prepared for Sen. Com. on Natural Resources on Assem. Bill No. 3309 (1983-1984, Reg. Sess.) as amended Jun. 26, 1984, p. 4 ["For the purpose of these provisions, 'take' would be defined as the usual acts to hunt, pursue, catch, capture, or kill and would additionally embrace acts to harass, harm, shoot, wound, destroy, trap, or collect, which would conform to federal law."].) The reference to federal law is to the federal Endangered Species Act which was enacted on December 28, 1973. (16 U.S.C. § 1531 et seq.)

b. Assembly Bill No. 2395 (1970 Reg. Sess.)--1970 legislation concerning endangered species and fully protected status for the stickleback

We turn now to the 1970 adoption of Assembly Bill No. 2395 (1970 Reg. Sess.). Assembly Bill No. 2395 (1970 Reg. Sess.) consisted of new provisions and amendments to the Fish and Game Code designed to protect endangered or rare species. There are three aspects to the 1970 legislation. Section 1 enacted Fish and Game Code sections 900 through 903. (Stats. 1970, ch. 1036, § 1, pp. 1847-1848.) The second portion of the 1970 legislation, sections 3 through 8, either amended or adopted provisions providing special protections for specified birds, mammals, reptiles and amphibians, and fish. (Stats. 1970, ch. 1036, § 1, pp. 1848-1850.) The third aspect of Assembly Bill No. 2395 (1970 Reg. Sess.) was the amendment to former Fish and Game Code section 12004, subdivision (f) which specified penalties for illegal takes of protected species. (Stats. 1970, ch. 1036, § 9, p. 1850.)

In the first part of Assembly Bill No. 2395 (1970 Reg. Sess.), the Legislature enacted former Fish and Game Code sections 900 through 903. Former Fish and Game Code sections 900 through 903 required the department to: establish criteria for establishing if a species or subspecies is endangered or rare (former Fish & G. Code, § 901); biennially inventory and enumerate this state's threatened birds, fish, mammals, amphibia and reptiles; make a determination concerning a specie's condition "with respect to its being endangered or rare" or becoming so (former Fish & G. Code, § 902); and biennially report the foregoing inventory. (Former Fish & G. Code, § 903.) In addition, the department was to make recommendations concerning adding or deleting species from the "fully protected" category. (Former Fish & G. Code, § 903, subd. (a).⁵)

⁵ Former Fish and Game Code section 903, subdivision (a) stated in part: "The department shall submit to the Governor and the Legislature biennially, not later than January 1, the first of which shall be submitted no later than January 1, 1972, a full and accurate report of the inventory, including recommendations for: [¶] (a) The addition or deletion of endangered and rare species under the fully protected category when necessary."

Article 1 of the 1970 legislation is entitled, “California Species Preservation.” (Stats. 1970, ch. 1036, § 1, p. 1847.) Former Fish and Game Code section 900 stated, “The intent of the legislature and the purpose of this article is to preserve, protect and enhance the birds, mammals, fish, amphibia, and reptiles of this state.” (Stats. 1970, ch. 1036, § 1, p. 1847.) In 1984, Fish and Game Code sections 900 through 903 were repealed and replaced with the endangered species act. Some, but not all, 1984 legislative documents refer directly or indirectly to the 1970 legislation as the endangered species act. (Enrolled Bill Report prepared by Department of Fish and Game, Sep. 11, 1984, pp. 1-2 [“The California Endangered Species Act became law in 1970.”]; Rep. prepared for Assem. Com. on Water, Parks and Wildlife on Assem. Bill No. 3309 as amended April 23, 1984, p. 2 [“The 1970 Endangered Species Act expressed the Legislature’s concern over California’s threatened fish and wildlife, defined ‘rare’ and ‘endangered’, and granted the Fish and Game Commission authority to declare certain animals rare or endangered.”]; Legislative Analyst, analysis of Assem. Bill No. 3309 (1983-1984 Sess.) as amended Apr. 23, 1984, May 18, 1984, p. 1 [“This bill recasts existing law and adds new provisions to the California Endangered Species Act of 1970”].)

As noted, former Fish and Game Code section 903, subdivision (b) referred to adding or deleting endangered and rare species from the “fully protected” category. The second portion of Assembly Bill No. 2395 (1970 Reg. Sess.) involved the “fully protected” category of endangered species. The “fully protected” category referred to species identified in Fish and Game Code sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians) and 5155 (fish). (Stats. 1970, ch. 1036, §§ 4-8, pp. 1848-1850.) The 1970 legislation established designations of fully protected fish. (Legis. Counsel’s Dig., Assem. Bill No. 2395 (1969-1970 Reg. Sess.); 2 Stats. 1970, Summary Dig., p. 142; Stats. 1970, ch. 1036, § 8, p. 1849.) New Fish and Game Code section 5515, subdivision (a)(1)⁶ provided specified protections for the stickleback and other fish. Fish and Game

⁶ As adopted in 1970, Fish and Game Code section 5515, subdivision (i) stated in part: “Fully protected fish . . . may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of

Code section 5515, is relied upon by plaintiffs to support their contention that an unlawful take of the stickleback will occur. Finally, former Fish and Game Code section 12004 was amended to clarify the circumstances where violations of specified statutes were punishable as misdemeanors. (Stats. 1970, ch. 1036, § 9, p. 1850; Stats. 1969, ch. 1043, § 1, p. 2028.)

c. the endangered species act and provisions relating to live trapping and transplantation carried out for purposes of conservation

In 1984, the Legislature adopted the endangered species act. The endangered species act repealed Fish and Game Code section 900 et seq. which, as noted, some legislative documents referred to as the “Endangered Species Act of 1970.” In its place, the endangered species act adopted Fish and Game Code sections 2050 through 2085. The endangered species act is supported by a series of legislative findings and declarations including: certain species are threatened with extinction; this threat arises because the species’ habitats are endangered with “destruction, adverse modification, or severe curtailment, or because of overexploitation, disease, predation, or other factors”; such species are of ecological, historical, recreational, esthetic, economic and scientific value to Californians; and the conservation and protection of endangered species is a matter of statewide concern. (Fish and Game Code section, § 2051⁷, subds. (b) and (c).)

permits or licenses to take any fully protected fish and no such permits or licenses heretofore issued shall have any force or effect for any such purpose; except that the commission may authorize the collecting of such species for necessary scientific research. Legally imported fully protected fish . . . may be possessed under a permit issued by the department. [¶] The following are fully protected fish: [¶] (i) Unarmored threespine stickleback . . .” (Stats. 1970 ch. 1036, § 8, pp. 1849-1850.)

⁷ Fish and Game Code section 2051 states in its entirety: “The Legislature hereby finds and declares all of the following: [¶] (a) Certain species of fish, wildlife, and plants have been rendered extinct as a consequence of man’s activities, untempered by adequate concern and conservation. [¶] (b) Other species of fish, wildlife, and plants are in danger of, or threatened with, extinction because their habitats are threatened with destruction, adverse modification, or severe curtailment, or because of overexploitation,

The endangered species act reflects the state policy to conserve and protect endangered species. (Fish & Game, Code § 2052.) State agencies are obligated to seek to conserve endangered species and further the purposes of the endangered species act. (Fish & Game, Code § 2055⁸.) Conserving a species has as its goal the use of methods and procedures which are necessary to make a species no longer in need of the protections of the endangered species act. (Fish & G. Code, § 2061⁹.) Among the legislatively approved *conservation* methods is the use of live trapping and transplantation. (Fish & G. Code, § 2061.) We shall discuss Fish and Game Code section 2061 with its approval of live trapping and transplantation as it applies to this case later in this opinion.

The endangered species act prohibits the taking of endangered species. Fish and Game Code section 2080 states in part, “No person shall . . . take . . . any species . . . that the commission determines to be an endangered species . . . , or attempt any of those acts, except as provided in this chapter” As noted, the term take is defined in Fish and Game Code section 86. The prohibition against taking any endangered species in Fish and Game Code section 2080 is central to the endangered species act. (*Environmental*

disease, predation, or other factors. [¶] (c) These species of fish, wildlife, and plants are of ecological, educational, historical, recreational, esthetic, economic, and scientific value to the people of this state, and the conservation, protection, and enhancement of these species and their habitat is of statewide concern.”

⁸ Fish and Game Code section 2055 states, “The Legislature further finds and declares that it is the policy of this state that all state agencies, boards, and commissions shall seek to conserve endangered species and threatened species and shall utilize their authority in furtherance of the purposes of this chapter.”

⁹ Fish and Game Code section 2061 states in its entirety: “‘Conserve,’ ‘conserving,’ and ‘conservation’ mean to use, and the use of, all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary. These methods and procedures include, but are not limited to, all activities associated with scientific resources management, such as research, census, law enforcement, habitat acquisition, restoration and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.”

Protection Information Center v. California Dept. of Forestry and Fire Protection (2008) 44 Cal.4th 459, 507; *Watershed Enforcers v. Department of Water Resources* (2010) 185 Cal.App.4th 969, 974.)

As noted, the department has imposed extensive mitigation requirements on the developer. The endangered species act also specifies requirements for mitigation measures. Directly pertinent to the approval of the environmental impact report, Fish and Game Code section 2053 states in part: “The Legislature further finds and declares that it is the policy of the state that state agencies should not approve projects . . . which would jeopardize the continued existence of any endangered species . . . if there are reasonable and prudent alternatives available consistent with conserving the species [¶] Furthermore, it is the policy of this state and the intent of the Legislature that reasonable and prudent alternatives shall be developed by the department, together with the project proponent and the state lead agency, consistent with conserving the species, while at the same time maintaining the project purpose to the greatest extent possible.” The term “project” in Fish and Game Code section 2064 is defined for purposes of the endangered species act, “‘Project’ means project as defined in Section 21065 of the Public Resources Code.”

The role of mitigation requirements imposed by the department is discussed in Fish and Game Code section 2052.1: “[I]f any provision of this chapter requires a person to provide mitigation measures . . . to address a particular impact on a . . . endangered species, the measures or alternatives required shall be roughly proportional in extent to any impact on those species that is caused by that person. Where various measures or alternatives are available to meet this obligation, the measures or alternatives required shall maintain the person’s objectives to the greatest extent possible consistent with this section. All required measures or alternatives shall be capable of successful implementation. This section governs the full extent of mitigation measures or alternatives that may be imposed on a person pursuant to this chapter” Fish and Game Code section 2052.1 does not affect the aforementioned state policy to conserve,

protect, restore and enhance endangered species. Fish and Game Code section 2052.1 states, "This section shall not affect the state's obligations set forth in Section 2052."

The endangered species act was adopted as part of an amalgamation of Assembly Bill Nos. 3270 and 3309 (1983-1984 Reg. Sess.) in 1984. (4 Stats. 1984, ch. 1240, § 5, p. 4249; Leg. Counsel's Dig., Assem. Bill No. 3309 (1983-1984 Reg. Sess.) 4 Stats. 1984, Summary Dig., pp. 426-427.) The 1984 endangered species act replaced statutes prohibiting the importation, take, possession or sale of rare or endangered species as determined by the department. (Stats. 1970, ch. 1510, §§ 1-4, pp. 2998-2999; Leg. Counsel, Rep. on Assem. Bill No. 3309 (1983-1984 Reg. Sess.) Sep. 17, 1984, p. 4.) Documents prepared in connection with Assembly Bill No. 3309 (1983-1984 Reg. Sess.) discussed several of its purposes. One important purpose was to provide for more careful deliberation during California Environmental Quality Act review. (Leg. Counsel, Rep. on Assem. Bill No. 3309, *op. cit.*, p. 6.) The Legislative Counsel explained: "This legislation would provide a greater degree of protection for endangered and rare [threatened] species through that part of the [California Environmental Quality Act] process involving State lead agencies, without substantially impairing the ability of state agencies to carry out their statutory missions." (*Ibid.*) The relationship between the endangered species and California Environmental Quality Acts find both direct and indirect references in Fish and Game Code sections 2053 through 2055 and 2063 through 2065. Section 3 of the 1984 endangered species act enacted section 21104.2¹⁰ which requires a state lead agency to consult with the department in preparing an environmental impact report. (Stats. 1984, ch. 1240, § 3, p. 4248.) Other legislative documents note that both the endangered species and California Environmental Quality Acts impose mitigation requirements in connection with projects. (Legislative Analyst, analysis of Assem. Bill No. 3309 as amended Apr. 23, 1984, May 18, 1984, pp. 2-3; Assem. Ways

¹⁰ Section 21104.2 states, "The state lead agency shall consult with, and obtain written findings from, the Department of Fish and Game in preparing an environmental impact report on a project, as to the impact of the project on the continued existence of any endangered species or threatened species pursuant to Article 4 (commencing with Section 2090) of Chapter 1.5 of Division 3 of the Fish and Game Code."

and Means Republican Analysis prepared for Assem. Bill No. 3309, May 21, 1984, p. 1.) Thus, the endangered species act is tethered to the California Environmental Quality Act. We construe them together. (*Baker v. Workers' Comp. Appeals Bd.* (2011) 52 Cal.4th 434, 446; *Dyna-Med, Inc. v. Fair Employment & Housing Com.* (1987) 43 Cal.3d 1379, 1387.)

The endangered species act is to be liberally construed. (*California Forestry Assn. v. California Fish & Game Commission* (2007) 156 Cal.App.4th 1535, 1545; *San Bernardino Valley Audubon Society v. City of Moreno Valley* (1996) 44 Cal.App.4th 593, 601.) This state's endangered species act is largely patterned on the federal Endangered Species Act. (16 U.S.C. § 1531 et seq.; Letter concerning Assem. Bill No. 3309 (1983-1984 Reg. Sess.) by Assemblymember Jim Costa to Governor George Deukmejian, Aug. 30, 1984, pp. 1-2; Rep. prepared for Assem. Com. on Water, Parks and Wildlife on Assem. Bill No. 3309 (1983-1984 Reg. Sess.) as amended Apr. 23, 1984, p. 1.) And decisional authority concerning that federal endangered species act is typically given great weight. (*San Bernardino Valley Audubon Society v. City of Moreno Valley*, *supra*, 44 Cal.App.4th at p. 603.)

8. Forfeiture

The department and the developer argue that plaintiffs failed to exhaust their administrative remedies during the comment period as required by section 21177, subdivisions (a) and (b).¹¹ After a draft environmental impact report is prepared, the

¹¹ Section 21177, subdivisions (a) and (b) state: "(a) An action or proceeding shall not be brought pursuant to Section 21167 unless the alleged grounds for noncompliance with this division were presented to the public agency orally or in writing by any person during the public comment period provided by this division or prior to the close of the public hearing on the project before the issuance of the notice of determination. [¶] (b) A person shall not maintain an action or proceeding unless that person objected to the approval of the project orally or in writing during the public comment period provided by this division or prior to the close of the public hearing on

public is entitled to make comments on its contents. The lead agency then prepares a final environmental impact report which incorporates the comments to the document. (*Laurel Heights Improvement Assn. v. Regents of University of California*, *supra*, 47 Cal.3d at p. 391; *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1220-1221.) As a general rule, a commenter's failure to raise an issue during the comment period prevents its relitigation in a subsequent mandate proceeding. (*Tomlinson v. County of Alameda* (2012) 54 Cal.4th 281, 289-291; see *Environmental Protection Information Center v. Department of Forestry & Fire Protection* (2010) 190 Cal.App.4th 217, 237.) No plaintiff sufficiently directly raised any issue concerning whether a take was expected to occur which violated the endangered species act. However, the take issue was raised in Dr. Baskin's August 8, 2010 letter. An exception to the exhaustion of administrative remedies rule in the environmental impact report preparation context arises when the issue is presented to the lead agency by a non-litigant. Here the take issue was raised by Dr. Baskin during the comment period. Thus, it can now be asserted by plaintiffs. (*Gilroy Citizens for Responsible Planning v. City of Gilroy* (2006) 140 Cal.App.4th 911, 920; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1118-1121.)

9. The department's argument that a taking can only involve mortal injury to an endangered species

At issue here is whether there is substantial evidence that department's approval of the project will not result in a "take" of the stickleback. The department and the developer argue a take can *only* occur if an endangered species is killed. We disagree.

As noted, the term take is defined in Fish and Game Code section 86. The term has been defined depending in part upon context. For example, in *Environmental*

the project before the filing of the notice of determination pursuant to Sections 21108 and 21152."

Protection Information Center v. California Dept. of Forestry & Fire Protection, *supra*, 44 Cal.4th at page 507, our Supreme Court explained: “Central to [endangered species act] is its prohibition on the taking of an endangered or threatened species. (Fish & G. Code, § 2080.) To ‘take’ in this context means to catch, capture or kill. (Fish & G. Code, § 86.)” (See *Watershed Enforcers v. Department of Water Resources*, *supra*, 185 Cal.App.4th at p. 974.) The department relies upon language in a Third Appellate District opinion, *Environmental Council of Sacramento v. City of Sacramento*, *supra*, 142 Cal.App.4th at page 1040 (*Environmental Council*): “We reject any insinuation that the definition of “take” under Fish and Game Code section 2081, subdivision (b)(2) encompasses the taking of habitat alone or the impacts of the taking. As section 86 of the Fish and Game Code makes clear, proscribed taking involves mortality.”

We disagree with the argument that a take must *always* involve mortality on the part of an endangered species. Here, context supplies the proper analysis. Fish and Game Code section 86 uses the disjunctive, to describe a take; to “hunt, pursue, catch, capture, or kill” not merely mortality. Moreover, Fish and Game Code section 86 includes an attempt to “hunt, pursue, catch, capture, or kill” not merely completing any of the proscribed conduct. The *Environmental Council* opinion discusses whether a taking of habitat alone or the impact of a take can be unlawful. The *Environmental Council* opinion arose in the context of the adequacy of a mitigation measure requiring the purchase of a half-acre for habitat reserves for every acre that is developed. (*Environmental Council*, *supra*, 142 Cal.App.4th at pp. 1038-1041.) At issue was whether habitat loss equated with a take of an endangered hawk and snake. That is the context in which the mortality issue arose. And, our Supreme Court made clear in *Environmental Protection Information Center* that a take involves the “catch, capture or kill” of an endangered species. (*Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection*, *supra*, 44 Cal.4th at p. 507.) Neither the department’s environmental impact report, mitigation findings, nor comment responses assert a take only occurred when a species member died. Thus, we respectfully reject the department’s position that a take can only occur when there is mortality.

Our view in this regard is consistent with the federal courts' discussions of a take under the federal Endangered Species Act. As noted, we can examine federal decisions in evaluating the scope this state's endangered species act. (*San Bernardino Valley Audubon Society v. City of Moreno Valley*, *supra*, 44 Cal.App.4th at p. 601; Assem. Com. on Water Parks and Wildlife, Analysis of Assembly Bill No. 3309 as amended April 23, 1984, p. 2 ["This bill would clarify and strengthen the California Endangered Species Law by incorporating key provisions and concepts of the federal Endangered Species Act into state law."]) Ninth Circuit Judge Diarmuid O'Scannlain described the scope of a take under the federal Endangered Species Act: "The [federal Endangered Species Act] makes it illegal to 'take any such [listed endangered] species within the United States.' 16 U.S.C. § 1538(a)(1)(B). The statute defines 'take' to mean 'harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct[.],' *id.* § 1532(19), and includes federal agencies, officers, and employees among those defined as 'persons' liable for a taking, *id.* § 1532(13). Implementing regulations promulgated by the Secretary of the Interior further define 'harass' as 'an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.' 50 C.F.R. § 17.3." (*Cold Mountain v. Garber* (9th. Cir. 2004) 375 F.3d 884, 889 [but for causation required to show a violation of the federal Endangered Species Act]; see *Babbitt v. Sweet Home Chapter Of Communities For A Great Ore.* (1995) 515 U.S. 687, 696, fn. 9.) Similarly, Ninth Circuit Judge Harry Pregerson explained: "16 U.S.C. § 1532(19) defines 'take' as any action that, *inter alia*, 'harms' wildlife. While Congress did not define 'harm,' it explicitly intended the term 'take' to be construed broadly: 'Take' is to be 'defined in the broadest possible manner to include every conceivable way in which a person can "take" or attempt to "take" any fish or wildlife.' S.Rep. No. 307, 93d Cong., 1st Sess. (1973), *reprinted* in 1973 U.S.C.C.A.N. 2989, 2995. [¶] It is clearly conceivable that one can inflict great harm on a protected species by creating an imminent threat of harm to that species. Such a threat therefore falls easily within the broad scope of Congress'

definition of ‘take.’” (*Forest Conservation Council v. Rosboro Lumber Co.* (9th Cir. 1995) 50 F.3d 781, 784.) Nothing in the judicial interpretation of the federal Endangered Species Act imposes the strict mortality requirement asserted by the department and the developer in our case.

10. There is substantial evidence no take or possession within the meaning of Fish and Game Code sections 86 and 5515, subdivision (a)(1) respectively will occur

- a. stickleback mortality

The most difficult issue to us is whether there will be a take by reason of a killing of a stickleback. To us, this is a very close question. As noted, Dr. Swift described the process as using nets to keep the stickleback away from the construction areas. In addition, Dr. Swift described placing the stickleback in temporary containers from construction areas.

However, there is substantial evidence no death will occur given the extraordinary measures taken by the department to ensure the sticklebacks’ safety. The department has undertaken extensive surveys of stickleback habitat and the Santa Clara River. The developer retained Dr. Swift, who the record indicates is one of the leading authorities in the field of stickleback protection, to conduct surveys and mitigation strategies. We have already extensively described the mitigation measures in BIO 43-48. (See part IV(B)(3), *supra*.) We will not repeat them here. The department has expressly prohibited the developer from taking stickleback; i.e., killing any of them. Dr. Swift has explained in considerable detail how to relocate the stickleback or to build a temporary river channel to bypass the bridge construction sites. Nothing in Dr. Swift’s discussion indicates any stickleback will be killed. Plaintiffs argue there will be stickleback deaths. However, the extensive mitigation measures coupled with Dr. Swift’s expertise constitute substantial evidence no deaths will result.

- b. the parties' contentions concerning whether the mitigation measures themselves constitute a taking

Plaintiffs argue that the mitigation measures themselves constitute a take as prohibited by Fish and Game Code sections 86 and 5515, subdivision (a)(1). Plaintiffs' argument is as follows: "[T]he Department's mitigation measure for permanent and temporary crossings and diversions of the River (BIO-44) provides that special status fish, including stickleback, will be 'relocated' from the construction area by U.S. Fish and Wildlife Service staff or their agents. . . . Here 'relocation' would require 'capture,' which is expressly prohibited as take under the Fish and Game Code. (Fish & G. Code[,], § 86.) Mitigation measure BIO-44 further provides that any remaining fish after the initial relocation will be relocated 'to suitable habitat outside the [project] area (including those areas potentially subject to high turbidity).' Although the Department suggests that relocation would be accomplished by 'a herding technique' with 'block net' in order to 'relocate' fish, any such relocation of stickleback—especially stranded fish—outside the [project] area would be impossible without physically capturing them. Similarly, mitigation measure BIO-46 specifically contemplates collection and relocation of stickleback by "[federal wildlife service] personnel or their agents.' . . . Like BIO-44, this mitigation measure purports to authorize the capture of stickleback in contravention of the express terms of section 5515." Fish and Game Code section 5515, subdivision (a)(1)¹² states in part: "Except as provided in Section 2081.7 or 2835, fully protected fish

¹² The current pertinent provisions of Fish and Game Code section 5515 are: "(a)(1) Except as provided in Section 2081.7 or 2835, fully protected fish or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected fish, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species. Prior to authorizing the take of any of those species, the department shall make an effort to notify all affected and interested parties to solicit information and comments on the proposed authorization. The notification shall be published in the

or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected fish, and no permits or licenses heretofore issued shall have any force or effect for that purpose.” As explained earlier, plaintiffs reason placing a stickleback in a container, moving it and placing it back into a stream constitutes possession of a fully protected species.

By contrast, the department and the developer argue the use of live trapping and transplantation techniques approved in Fish and Game Code section 2061 do not constitute a prohibited take or possession. They reason the entire statutory scheme must be construed together. To prohibit the use of live trapping and transplantation techniques, they assert, would render the language appearing in Fish and Game Code section 2061 surplusage. And, they argue that Fish and Game Code section 2055 requires the department to utilize its authority to further the purposes of the endangered species act. One of the purposes of the endangered species act, according to the developer and the department, is to engage in conservation actions which may include live trapping and transplantation. (Fish & G. Code, § 2061.) .

The department and the developer have the better argument for reasons we shall specify. Unlike the parties who present their cases in largely absolutist terms, we see the issue as more subtle. The subtlety arises from the ambiguity of the statutory language. On one hand, Fish and Game Code section 5150, subdivisions (a)(1) and (b)(9), enacted effective January 1, 1971, prohibits a take or possession of the stickleback. On the other

California Regulatory Notice Register and be made available to each person who has notified the department, in writing, of his or her interest in fully protected species and who has provided an e-mail address, if available, or postal address to the department. Affected and interested parties shall have 30 days after notification is published in the California Regulatory Notice Register to provide any relevant information and comments on the proposed authorization. [¶] (2) As used in this subdivision, ‘scientific research’ does not include any actions taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code. [¶] (3) Legally imported fully protected fish or parts thereof may be possessed under a permit issued by the department. [¶] (b) The following are fully protected fish: [¶] . . . (9) Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*).”

hand, the subsequently enacted endangered species act permits live trapping and transplantation techniques if performed for conservation purposes. Such techniques, as explained by Dr. Swift, can involve the possession and movement of the stickleback in containers to other parts of the Santa Clara River. That ambiguity, as we will explain, requires an analysis of the legislative histories of the endangered species act and Fish and Game Code section 5515.

c. no unlawful taking result from the live trapping and transplantation of the stickleback

At the outset, it is appropriate to clarify the *fully protected nature* of the species listed in Fish and Game Code section 5515, subdivision (a)(1). Although designated as fully protected, the enumerated species in Fish and Game Code section 5515, subdivision (b) are subject to a taking or possession under specified circumstances. The department is expressly authorized to permit a take or possession of a stickleback in order to conduct scientific research. (Fish & G. Code, § 5515, subd. (a)(1).) (However, the department is expressly prohibited from characterizing a project's mitigation measure as scientific research. (Fish & G. Code, § 5515, subd. (a)(2).)) Even a fully protected fish may be taken or possessed if it is part of a specified settlement agreement relating to water-related issues in the southern portion of the state. (Fish & G. Code, §§ 2081.7, subd. (a), 5515, subd. (a)(1).) And, a take or possession of a fully protected fish is authorized under specific circumstances pursuant to the Natural Community Conservation Planning Act. (Fish & G. Code, §§ 2821, subd. (a), 5515, subd. (a)(1).) Although characterized in 1970 as fully protected, the Legislature has authorized the take or possession of fully protected fish in these enumerated circumstances.

We now turn to whether an unlawful take or possession of the stickleback will occur under the department's mitigation measures. One aspect of the mitigation measures issue is easy to resolve. Placing nets up and downstream from a construction site does not effectuate a take or possession under any rational definitional theory. Placing nets to protect the stickleback from swimming into a construction area does not

constitute an effort to “hunt, pursue, catch, capture, or kill” or attempt to do so. (Fish & G. Code, § 86.) Nor does it constitute possession within the meaning of Fish and Game Code section 5515, subdivision (a)(1).

A closer argument is whether efforts to herd the stickleback beyond the netted area or place them in containers for movement constitute pursuing, catching or possession-related conduct. Fish and Game Code section 86 classifies pursuing or an attempt to pursue an endangered species as a take. A sound argument can be made that the herding techniques constitute pursuing within the meaning of Fish and Game Code section 86. Plaintiffs’ strongest argument is premised upon both Fish and Game Code sections 86 and 5515, subdivision (a)(1). Plaintiffs argue that placing the stickleback in a container and moving it constitutes catching or capturing within the meaning of Fish and Game Code section 86. And, as noted, Fish and Game Code 5515, subdivision (a)(1) prohibits possession of a fully protected fish.

However, when the pertinent provisions of the Fish and Game and Public Resources Codes are construed together, no unlawful take will occur. This is largely an issue of statutory interpretation. Our Supreme Court has specified the standards of statutory construction applicable here: “As in any case involving statutory interpretation, our fundamental task here is to determine the Legislature’s intent so as to effectuate the law’s purpose. [Citation.] We begin by examining the statute’s words, giving them a plain and commonsense meaning. [Citation.]’ (*People v. Murphy* (2001) 25 Cal.4th 136, 142.) “When the language of a statute is clear, we need go no further.” [Citation.] But where a statute’s terms are unclear or ambiguous, we may “look to a variety of extrinsic aids, including the ostensible objects to be achieved, the evils to be remedied, the legislative history, public policy, contemporaneous administrative construction, and the statutory scheme of which the statute is a part.” (*In re M.M.* (2012) 54 Cal.4th 530, 536.)” (*People v. Harrison* (2013) 57 Cal.4th 1211, 1221-1222.) We construe all the provisions of a statute as a whole: “The statutory language is not read in isolation, however. Rather, we consider its terms ‘in the context of the statutory framework as a whole in order to determine its scope and purpose and to harmonize the

various parts of the enactment. If the language is clear, courts must generally follow its plain meaning unless a literal interpretation would result in absurd consequences the Legislature did not intend.’ (*Coalition of Concerned Communities, Inc. v. City of Los Angeles* (2004) 34 Cal.4th 733, 737.)” (*Los Angeles Unified School Dist. v. Garcia* (2013) 58 Cal.4th 175, 186.) And we must give meaning to every word of a statute so as to avoid a construction making any language surplusage. (*Briggs v. Eden Council for Hope & Opportunity* (1999) 19 Cal.4th 1106, 1118; *Reno v. Baird* (1998) 18 Cal.4th 640, 658.) Finally, we have a duty to harmonize statutes which cover the same subject area. (*Sierra Club v. Superior Court* (2013) 57 Cal.4th 157, 165-166; *Pacific Palisades Bowl Mobile Estates, LLC v. City of Los Angeles* (2012) 55 Cal.4th 783, 805.)

We turn now to the statutory language. Fish and Game Code section 2052 expressly states it is this state’s policy to conserve endangered species. Conservation includes “the use of, all methods or procedures” which are necessary to bring any endangered species to the point that it no longer needs protection. (Fish & G. Code, § 2061.) Among the methods and procedures which may be used to conserve a species are “live trapping” and “transplantation.” (Fish & G. Code, § 2061.) Further, it is this state’s policy of this state that “reasonable and prudent alternatives” shall be developed by the department and the project proponent which are consistent with conserving an endangered species. (Fish & G. Code, § 2053.) Fish and Game Code section 2055 expressly requires state agencies to “conserve endangered species” and utilize their authority to further the purposes of the endangered species act. Thus, we conclude: Fish and Game Code section 2061 expressly permits the use of live trapping and transplantation if done for purposes of conservation; Fish and Game Code section 2055 requires the department use its authority to further the endangered species act’s purposes which includes conservation; and all of this has occurred in the context of the imposition of mitigation measures. Hence, the live trapping and transplantation techniques used in this case do not constitute an unlawful take or possession.

Construed as a whole, the statutory scheme permitted the department to approve live trapping and transplantation for purposes of conservation under these circumstances.

Both the endangered species provisions and Fish and Game Code section 5515, subdivision (a)(1) protections for the stickleback were enacted at the same time in 1970. These provisions were enacted together as part of Assembly Bill No. 2395 (1970 Reg. Sess.). (Stats. 1970, ch. 1036, §§ 1, 8, pp. 1847-1848, 1849-1850; Leg. Counsel's Dig., Assem. Bill No. 2395 (1970 Reg. Sess.) 2 Stats. 1970, Summary Dig., p. 142.) In 1984, the Legislature intended to change the state of the law resulting from the 1970 adoption of Assembly Bill 2395 (1970 Reg. Sess.). According to the Legislative Analyst, Assembly Bill No. 3309 recast existing law and added new provisions to the 1970 act. (Leg. Analyst, analysis of Assembly Bill No. 3309 as amended Apr. 23, 1984, pp. 1-2.) The report prepared for the Senate Committee on Natural Resources stated that Assembly Bill No. 3309 repealed the 1970 law and replaced it with the endangered species act. (Rep. prepared for Sen. Com. on Natural Resources on Assem. Bill No. 3309 (1983 Reg. Sess.) as amended Jun. 26, 1984, p. 2.) According to the Legislative Counsel, "Both this bill and Assem. Bill No. 3270 . . . would repeal Chapter 1.5 . . . as added by Chapter 1510 of the Statutes of 1970, and each bill would enact a new Chapter 1.5 which is different." According to the Legislative Counsel, the new legislation enacted the endangered species act which provided for "the regulation of specified acts" relating to endangered species. (Legis. Counsel, Rep. on Assem. Bill No. 3309 (1983-1984 Reg. Sess.) p. 1.) The Department of Fish and Game Enrolled Bill Report for Assembly Bill No. 3309, states the legislation was intended to amend existing endangered species provisions adopted in 1970. (Dept. of Fish and Game, analysis of Assem. Bill No. 3309 (1983-1984 Reg. Sess.) Sep. 11, 1984, p. 1.) The parks and recreation department explained the legislation clarified California's laws regarding the protection of endangered species and their habitats. (Dept. of Parks and Recreation analysis of Assem. Bill No. 3309 (1983-1984 Reg. Sess.) p. 2.) Thus, the 1984 legislation, which includes for the first time the use of live trapping and transplantation for conservation purposes, materially changed state of the law from that in 1970.

Furthermore, there are two other reasons why plaintiffs' take or possession contention is unpersuasive. To begin with, we cannot read Fish and Game Code sections

86 and 5515, subdivision (a)(1) in isolation. Rather, as noted, we must construe them in light of the entire statutory scheme. The entire statutory scheme includes the use of live trapping and transplantation as a conservation measure. Plaintiffs' analysis treats Fish and Game Code section 2061 and its related provisions as surplusage. We cannot accept this line of analysis. (*Briggs v. Eden Council for Hope & Opportunity*, *supra*, 19 Cal.4th at p. 1118; *Reno v. Baird*, *supra*, 18 Cal.4th at p. 658.) Further, we have a duty to harmonize conflicting statutes to the extent rationally possible. The 1984 enactment of the endangered species act grants the department the authority, when pursuing a strategy of conservation, to use live trapping and transplantation techniques. That is consistent with a prohibition on the possession or take of the stickleback when other non-legislatively approved conservation techniques are utilized. In this way, in the context of a mitigation measure, Fish and Game Code sections 86 and 5515, subdivision (a)(1) and Fish and Game Code section 2061 can be harmonized. (*Sierra Club v. Superior Court*, *supra*, 57 Cal.4th at pp. 165-166; *Pacific Palisades Bowl Mobile Estates, LLC v. City of Los Angeles*, *supra*, 55 Cal.4th at p. 805.)

11. Other arguments

Two final comments are in order concerning the taking or possessing issue. First, plaintiffs in the trial court requested and here ask that we rely upon a post-environmental impact report certification opinion prepared by the wildlife service. The document at issue is a 2011 Biological Opinion issued by the federal wildlife service. The opinion was issued after the environmental impact report's certification. Such post-administrative agency decision papers are typically inadmissible under these circumstances. (*Western States Petroleum Assn. v. Superior Court*, *supra*, 9 Cal.4th at p. 579; *Outfitter Properties, LLC v. Wildlife Conservation Bd.* (2012) 207 Cal.App.4th 237, 251.) We decline to consider the post-environmental impact report certification wildlife service opinion concerning whether a take occurs under the federal Endangered Species Act.

Second, plaintiffs argue that the department has violated its public trust doctrine duties. The public trust doctrine provides that fish and wildlife resources are held in trust for the people of California by the department. (Fish & G. Code, § 711.7, subd. (a); see *Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection*, *supra*, 44 Cal.4th at p. 515.) No public trust violation has occurred. The department has not authorized any unlawful take or possession of the stickleback. And the department has properly documented the pertinent analysis in the environmental impact report and other planning documents. (*Ibid.* [“[T]he duty to protect wildlife is primarily statutory.”]; Fish & G. Code, § 1801, subd. (h) [state policy concerning “preservation, conservation, and maintenance of wildlife resources” limited to situations “specifically provided [for] by the Legislature”].) We are not imposing a strict statutory straightjacket on the public trust doctrine. Here, the department fully complied with its obligation to prevent an unauthorized take or possession of an endangered species and suitably documented its decisionmaking process. Under these circumstances, where an endangered species is in fact protected by extensive mitigation measures under properly documented department regulation, no public trust violation has occurred. (See *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 447, fn. 27 [“the noncodified public trust doctrine remains important both to confirm the state’s sovereign supervision and to require consideration of public trust uses in cases filed directly in the courts”]; *Center for Biological Diversity, Inc. v. FPL Group, Inc.* (2008) 166 Cal.App.4th 1349, 1363 [public trust doctrine applies to protection of wildlife].)

C. Cultural Resources

1. The environmental impact report’s analysis.

The cultural resources discussion relating to Native-American affairs consumes 45 pages of mainly single-spaced analysis. This discussion draws upon extensive portions of the approved specific plan environmental impact report. The specific plan

environmental impact report concludes: the area had a very low density of archaeological sites; with but two exceptions, the sites were concentrated in the Santa Clara River; its implementation would result in a significant impact on Native-American cultural resources; and the mitigation measures would be sufficient to reduce the effects of development to less-than-significant levels. The specific plan mitigation requirements require: mitigating damage to three sites by avoidance and preservation; mitigating disturbance of one site and, if infeasible, to "relocate, utilize and reinter the disturbed" remains; and, if during construction additional artifacts were uncovered, an archaeologist must take specified corrective action.

The specific plan environmental impact report describes in detail the steps taken to identify Native-American cultural resources. That 297-page discussion is part of the administrative record in our case. The December 3, 2010 environmental impact report synthesizes the analysis in the specific plan environmental impact report.

In 1994, a consulting firm, W&S Consultants of Simi Valley, California was retained by the developer to evaluate Native-American resources in the specific plan area. Phase I of the Native-American environmental process began with an archival records search at the University of California at Los Angeles Archaeological Information Center. In addition, W&S Consultants reviewed other published records and maps in an effort to define the zones most likely to contain Native-American sites. Previous studies had only uncovered two archaeological sites within the specific plan area.

The Phase I archaeological study was conducted in June and July of 1993 and February through April of 1994. The Phase I survey of the 12,000-acre study area was conducted by Dr. David S. Whitley, Dr. George Gumerman, Dr. Robert Rechtman, Joseph M. Simon, Tamara Whitley, and Thomas Haile. Survey crew members spaced themselves at approximately 15 to 20 meter intervals and walked the property in transects. Using their expertise, the staff identified areas for potential Native-American habitats.

In August and September, 1994 W&S Consultants undertook a Phase II study of the eight sites within the specific plan area. The purpose of the Phase II study was to

determine the size, nature and significance of the eight archaeological sites. The environmental impact report describes the Phase II study process: "During the Phase II study, test pits were excavated to ascertain the presence or absence of any subsurface archaeological deposit and, where present, the depth and horizontal extent of such deposits. Excavation units were then placed in areas where the probability of deposition was deemed highest on each site. Conversely, areas of exposed bedrock and erosional ridges, hilltops, and slopes were tested less intensively because of the very limited likelihood that they could accumulate subsurface archaeological deposits. Excavation units were sufficiently dispersed across the general area of each site to insure that accurate site boundaries could be established. All artifacts and archaeological indicators were collected and bagged by unit level, and stratigraphic profiles were prepared." The results of the Phase II excavations and determinations are documented in a 220-page mostly single spaced report prepared for the developer by W&S Consultants.

The W&S Consultants staff involved in the August and September Phase II archaeological test excavations included: Dr. Whitley who served as one of the principal investigators; Dr. Rechtman who acted as the field director; and Mr. Simon, who acted as one of the principal investigators. Dr. Glenn Russell of the University of California at Los Angeles Institute of Archaeology provided chronometric analyses. Dr. Paul Bouey conducted obsidian source tracing. Dr. Whitley and Ms. Whitley conducted laboratory analyses. Assisting as Native-American monitors of the Phase II testing were Richard and Anthony Angulo of the California Indian Foundation.

During the Phase II investigation, the W&S Consultants staff conducted an investigation of a site identified as CA-LAN-2233. As will be noted, the circumstances of the discovery and recovery of human remains at the CA-LAN-2233 site serves as a basis for the parties' contentions. The report prepared for the developer dated October 14, 1994, discusses the discovery of the human remains at the CA-LAN-2233 site. During the Phase II investigation, the W&S Consultants staff uncovered a human burial in the CA-LAN-2233 site. The W&S Consultants report details discovery of the human remains and the notification of both Native-American and coroner's staff: "Inspector

Nils Linder of the Los Angeles County Coroner's Office was notified of this discovery, while the California Indian Council Foundation was consulted with regards to its disposition, and provided monitoring services during its exposure and recording. At the request of this last group, it was decided to expose and record as much of the burial as possible, but to leave it in place” The area where human remains were discovered in the CA-LAN-2233 site was along the highway right-of-way and therefore outside of the project area. As will be noted, the human remains were discovered by Caltrans employees along the right-of-way for State Route 126. This was outside the project area as will be discussed. There is no basis for concluding that W&S Consultants had authority to dig Phase II pits outside of the project area. And, as explained previously, the decision to leave the remains in place in consultation with California Indian Council Foundation was an entirely reasonable course of action.

In October 1996, during a widening project of State Route 126, human remains were discovered at the CA-LAN-2233 archaeological site. Caltrans staff then proceeded in accordance with Guidelines section 15064.5, subdivision (e),¹³ which applies to the

¹³ Guidelines section 15064.5, subdivision (e) states: “(e) In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps should be taken: [¶] (1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: [¶] (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and [¶] (B) If the coroner determines the remains to be Native American: [¶] 1. The coroner shall contact the Native American Heritage Commission within 24 hours. [¶] 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. [¶] 3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or [¶] (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. [¶] (A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being

accidental discovery of human remains. After consultation with other responsible agencies, the environmental impact report describes what occurred: "In December 1996, an archaeological investigation was undertaken by Caltrans environmental staff in accordance with the Treatment Plan. In the course of locating the burial, Caltrans staff encountered four additional interments. (Waugh, 1999). The undertaking was then terminated until a revised plan could be formulated and consultation could be effected with all appropriate persons. Subsequently, archaeological excavations were conducted at the site from February 2 to 28, 1997. During highway construction in August 1997, six additional burials were encountered and an emergency excavation was conducted by staff and graduate students under the direction of Dr. Philip Walker of the Department of Anthropology at the University of California, Santa Barbara . . . , who was contracted to serve on a standby basis in case of late discovery. Additional burials were removed during this phase of the emergency excavation. A total of 45 burials were recovered during the three excavation sessions." All human remains and the accompanying grave goods were interred in accord with the wishes of a designated tribal representative.

In January, 2004, a second Phase I archaeological study of a portion of the specific plan area was conducted by W&S Consultants. This was done in order to update the results of the prior 1993 and 1994 field surveys. A total of eight prehistoric archaeological sites were identified during the Phase I surveys in 1993 and 1994.

The department concluded there were no direct impacts as a result of the approval of Alternative No. 2. Of the eight archeological sites, only two were subject to the resource management plan related construction impacts. (One site, CA-LAN-982H, where there was a potential impact, had been removed from development under the resource management plan. CA-LAN-982H was donated to the Archaeological Conservancy and was no longer subject to any aspect of the project components.) No

notified by the commission. [¶] (B) The descendant identified fails to make a recommendation; or [¶] (C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner."

archeological sites were located in areas where the spineflower preserves are located. The two sites were labeled CA-LAN-2133 and CA-LAN-2233. Only these two sites were subject to potential indirect impacts.

The northern portion of the CA-LAN-2233 site was located in one area of potential development which is referred to for planning purposes as the Homestead Project. That area would be capped with two feet of sterile dirt and no excavations in the archeological site would be permitted. As to CA-LAN-2133, the property must be left in its current state. A corps' document prepared by Santa Barbara consulting firm, URS, explains: "The proposed treatment for CA-LAN-2133 is avoidance and burial-in-place with a public exclusion overlay. The site is located in an area of the project that is not planned for urban land uses and is within a natural open space designation within the Specific Plan's designated River Corridor area. The River Corridor is a restricted access area, which will exclude the public and potential for vandalism to maintain the site's integrity. Because the site lies within a natural open space area, and habitat for numerous sensitive species, no capping is proposed. The grading related to a major roadway is expected . . . but should avoid impacts to the site altogether. However, should the road engineering require disturbance to the site, then a data recovery program will be implemented"

2. Procedural aspects

The mandate petition alleges the project area contains the Chumash and Tataviam Tribes' ancestral homes. The petition alleges: "[T]he [project] area is rich with these tribes' historic and cultural resources. To the Tataviam and Chumash, any area with historic value such as their burial sites, village sites, or sacred sites have deep religious, spiritual, and cultural significance. The Tataviam and Chumash thus retain strong cultural and religious attachment to the lands and cultural resources within the [project] area." According to the mandate petition: these tribal areas will be subject to excavation, earthmoving and other disturbance; the project's development envelope contains tribal

burial sites, sacred grounds, village sites, and unearthed cultural artifacts; for these tribes, the condor is of cultural and religious significance; the Chumash Tribe has collected condor feathers in the project area which are used for ceremonial offerings and regalia and wishes to do so in the future; the project will have an adverse effect on wildlife components including condors which are critical components of the tribes' cultural landscape; and the project will have adverse impacts on other Native-American resources; the earthmoving would have "devastating and irreversible impacts" on the historic, cultural and religious resources to the Tataviam and Chumash burial and buried cultural artifacts. Finally, the mandate petition alleges the environmental impact report does not discuss the effects on the Chumash cultural resources.

The developer's and department's answers allege the Native-American cultural resources discussion and mitigation environmental impact report complied with the law. In their oppositions to the mandate petition, the developer and the department asserted that all Native-American cultural resources issues had been forfeited. They reasoned no Native-American cultural resources issues had been raised within the applicable comment periods. The forfeiture objections were reiterated at the hearing on the petition.

The trial court agreed in part with plaintiffs' contentions. The trial court ruled the environmental impact report's assessment of the project's impact on Native-American cultural resources was not supported by substantial evidence. First, the trial court ruled that there was no attempt by the developer's consultant to perform random test pit sampling or engaging in any other inquiry in the specific plan area. Second, the trial court ruled that the developer's consultants' archaeological exhumations were inaccurate, incomplete and partial. The trial court adverted to studies conducted by Caltrans archaeologists including artifacts not uncovered by the developer's consultant. The statement of decision extensively refers to the studies of the Caltrans archaeologists. Third, the trial court questioned the reliability of the developer's consultants' conclusions in light of a corrected misapprehension as to whether a tribe was extinct. Fourth, the trial court found the cultural impact mitigation measures were insufficient.

3. No grounds exist to set aside the environmental impact certification because of errors in connection with the Native-American cultural resources discussion

a. forfeiture

The department and the developer argue that plaintiff's Native-American cultural resources were not preserved for presentation in the mandate petition. The public comment period for the draft environmental impact report commenced on April 27 and closed on August 25, 2009. Section 21117, subdivision (a) states, "An action or proceeding shall not be brought pursuant to Section 21167 unless the alleged grounds for noncompliance with this division were presented to the public agency orally or in writing by any person during the public comment period provided by this division or prior to the close of the public hearing on the project before the issuance of the notice of determination." There is no pertinent statutory or regulatory requirement of a public hearing in connection with an agency's decision to certify an environmental impact report. The comment period must be for a minimum of 30 days. (§ 21091, subd. (a); see *Ross v. California Coastal Com.* (2011) 199 Cal.App.4th 900, 935.) The exact issue raised in a mandate petition must have been presented to the lead agency during the comment period. (*North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th 614, 623; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 535-536.) In order for the comments to preserve the right to utilize an environmental impact report, they must be raised during the comment period. (*Mount Shasta Bioregional Ecology Center v. County of Siskiyou*, *supra*, 210 Cal.App.4th at pp. 215-216; *Sierra Club v. City of Orange*, *supra*, 163 Cal.App.4th at p. 537.) The lead agency, although it has the discretion to do so, is not obligated to respond to untimely comments. (§ 21091, subd. (d)(1); Guidelines, § 15088, subd. (a); *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1110.) Court of Appeal authority holds a failure to exhaust administrative remedies contention is reviewed de novo. (*Sierra Club v. City of Orange*, *supra*, 163 Cal.App.4th at p. 535; *Citizens for Open Government v. City of*

Lodi (2006) 144 Cal.App.4th 865, 873.) Even if we were to apply a more deferential standard of review, we would reach the same conclusion.

None of the Native-American cultural resources issues which served as the basis for the writ of mandate was preserved during the comment period which concluded on August 25, 2009. Thus, they may not be utilized as grounds for judicial review. Plaintiffs argue that these issues were raised in August 2010 in letters to the department by Chumash Ceremonial Elder Mati Waiya and the Wishotoyo Foundation. However, these letters were sent after the conclusion of the comment period as extended until August 25, 2009. There is no merit to the argument that otherwise generalized criticisms regarding the draft environmental impact report were sufficient to preserve the issues relied upon by the trial court.

b. the merits

None of plaintiffs' contentions may serve as a basis for disapproving the environmental impact report because of its failure to adequately address issues relating to Native-American cultural resources. First, the department's cultural impact analysis is supported by substantial evidence. As noted, an extensive pre-onsite survey archival analysis was conducted by the W&S Consultants' professionals. The entire project area was walked in an ordered manner to determine the existence of Native-American cultural resources. Thereafter, excavations occurred in areas which the archival research, prior studies and the extensive intensive onsite survey indicated Native-American cultural resources were potentially present.

Plaintiffs argue it is necessary that further testing be done in the project area to determine if there were additional Native-American cultural assets present. There was no requirement that further random selection test pits be dug. As it was, the limited amount of water in the project area made it unlikely that Native-American cultural resources could be found in significant quantities. Further, the intensive survey conducted by W&S Consultants was consistent with that recommended by the United States Department of

the Interior. (48 Fed. Reg. 44716, 44722 (Sep. 29, 1983).) There was no requirement additional research be conducted before certifying the environmental impact report. (*Association of Irrigated Residents v. County of Madera* (2003) 167 Cal.App.4th 1383, 1396; *Gray v. County of Madera, supra*, 167 Cal.App.4th at p. 1125.)

Second, there is insufficient evidence that W&S Consultants failed to uncover burial grounds. Plaintiffs argue human remains were found in an area bisected by State Route 126. The area where the human remains were found in 1996 during a Caltrans widening project on State Route 126 was the subject of 1994 test pits dug by W&S Consultants. This is reflected in the documentation prepared in connection with the county specific plan. This documentation was prepared after the conclusion of the Phase II investigation conducted by W&S Consultants. However, the undisputed evidence indicates that the remains are not within the project area. The discovery of human remains in the CA-LAN-2233 site resulted from the W&S Consultants testing in 1994. The discovery of human remains during the 1996 Caltrans State Route 126 widening project did not require the department to conduct new surveys and the like.

Third, during the extended comment period provided for by federal law, Mr. Waiya and the Wishtoyo Foundation provided documentation concerning past Native-American occupancy of the project site. None of the evidence cited in the two letters may serve as a basis for setting aside the environmental impact report certification. As noted, it was not presented during the comment period mandated by California law.

Fourth, in any event, section 4.10 of the environmental impact report constitutes a stand-alone assessment of the Native-American cultural impacts of the project. This stand alone assessment, relying on the W&S Consultants analysis, was prepared by department staff. The environmental impact report references the prior analysis of the Native-American cultural impacts developed in connection with the final approval of the specific plan. As noted, the specific plan environmental review concluded there was a very low density of archeological sites. The environmental impact report extensively recites the historical evidence of Native-Americans in the project area and the results of the Phase II test pits. In addition, the environmental impact report details the results of

the discovery of probable Native-American remains during the State Route 126 widening project discussed previously. There is no merit to plaintiffs' argument that the department ignored the state of the evidence.

Fifth, the mitigation measures discussed in the environmental impact report comply with Guidelines section 15126.4, subdivision (b)(3)(A). Section 21002¹⁴ explains that projects should be disapproved, as proposed, if there are feasible mitigation alternatives to serious environmental impacts. (See *Sierra Club v. State Bd. of Forestry*, *supra*, 7 Cal.4th at p. 1229; *Citizens of Goleta Valley v. Board of Supervisors*, *supra*, 52 Cal.3d at p. 565.) An environmental impact report must identify how significant impacts to the environment can feasibly be mitigated. (§ 21002.1, subs. (a)-(c)¹⁵; Guidelines, §

¹⁴ Section 21002 states in part, "The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects."

¹⁵ Section 21002.1, subdivisions (a) through (c) state: "In order to achieve the objectives set forth in Section 21002, the Legislature hereby finds and declares that the following policy shall apply to the use of environmental impact reports prepared pursuant to this division: [¶] (a) The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided. [¶] (b) Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so. [¶] (c) If economic, social, or other conditions make it infeasible to mitigate one or more significant effects on the environment of a project, the project may nonetheless be carried out or approved at the discretion of a public agency if the project is otherwise permissible under applicable laws and regulations."

15126.4, subd. (a)(1)¹⁶; *City of Marina v. Board of Trustees of California State University* (2006) 39 Cal.4th 341, 359.)

In the case of cultural resources, Guidelines section 15126.4, subdivision (b)(3) states in part: “Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an [environmental impact] report for a project involving such an archaeological site: [¶] (A) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site. [¶] (B) Preservation in place may be accomplished by, but is not limited to, the following: [¶] 1. Planning construction to avoid archaeological sites; [¶] 2. Incorporation of sites within parks, greenspace, or other open space; [¶] 3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site; [¶] 4. Deeding the site into a permanent conservation easement.” (See *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 279-280.)

The environmental impact report provides for appropriate mitigation under these standards. There are two burial sites at issue; CA-LAN-2233 and CA-LAN-2133. As to both locations, the mitigation plan bars development and preserves the archaeological sites. Further, as to CA-LAN-2133, a 100-foot buffer has been imposed around the site. And to the extent feasible, proposed road construction activities are to avoid CA-LAN-2133 and the buffer area. Additionally, the URS Corporation Treatment Plan explains why the proposed road should not affect the resources at CA-LAN-2133. The environmental impact report and the specific plan provide contingency strategies if the roadway unexpectedly intrudes on CA-LAN-2133 or the buffer zone: if preservation is

¹⁶ Guidelines section 15126.4, subdivision (a)(1) states in part, “An [environmental impact report] shall describe feasible measures which could minimize significant adverse impacts”

infeasible, a Phase III data collection (salvage excavation) operations are to be completed; if additional artifacts are unexpectedly uncovered during grading, an archaeologist is to be notified to “stabilize, recover and evaluate such finds”; the site is to be preserved by placing water permeable netting and two feet of sterile fill material over the area; in the event that a Phase III excavation must occur, it will be done in consultation with the Tataviam community; any earth disturbance within 300 feet will result in fencing and an additional 50-foot buffer; the discovery of any cultural resources will result in the immediate cessation of grading to be followed by an evaluation with a Native-American representative; and the discovery of any human remains must be handled or treated consistent with section 5097.98 and Guidelines section 15064.5, subdivision (e).

Sixth, plaintiffs fault the 1994 W&S Consultants’ report because it erroneously states that the Tataviam Tribe is extinct. The erroneous 1994 statement that the Tataviam Tribe was extinct was *not* a finding by W&S Consultants’ staff. Rather, as explained in the environmental impact report, it was a citation to the conclusions of a 1978 article. As explained in the environmental impact report: “[T]he assertion that the Tataviam Tribe is extinct was not a finding of W&S Consultants, but instead was a citation to a statement made by Chester King and Thomas C. Blackburn, 1978, on page 536 of the scholarly article ‘Tataviam,’ in *The Handbook of North American Indians, Volume 8: California*, edited by Robert F. Heizer, pp. 535-537 (Washington, D.C.: Smithsonian Institution).” As the environmental impact report explains, this error, based on a scholarly source, was corrected by W&S Consultants in an apology letter to the tribe. In any event, the environmental impact report, although citing to the W&S Consultants’ analysis, is the product of department staff preparation. The error in the article is attributable not to W&S Consultants but to the article’s authors. Nothing in the citation to a scholarly article as occurred here may serve as a basis for disapproving an environmental impact report.

D. The Specific Plan And Alternative 6

The trial court ruled the department unduly relied upon the county's specific plan and failed to conduct an independent review of project impacts. The department analyzed eight alternatives; seven (Alternatives 2-7) proposed by the developer. As required by Guidelines, section 15126.6, subdivision (e), the department considered a so-called "No project" alternative. Under Alternative 1, none of the contemplated development under the resource management plan would occur including establishment of the new spineflower preserves. Further, none of the dedicated space in the project area would be managed as proposed by the project. In addition, the environmental impact report analyzes seven additional alternatives that permit development in the project area.

Alternative 6 is described in the environmental impact report and findings of fact and overriding considerations statement as: eliminating a planned Commerce Center Drive bridge; expanding the size of major tributary channels; significantly increasing the acreage of the spineflower preserve; facilitating development within the Entrada Planning Area; and facilitating no development within the Valencia Commerce Center Planning Area. The department's findings of fact and overriding considerations statement discusses 19 different environmental categories. In its findings and overriding considerations statement, the department found that Alternative 6 was infeasible. There were two core grounds for the department's infeasibility findings as to Alternative 6. To begin with, the department found Alternative 6 did not meet the project objectives. In addition, the department found the costs rendered Alternative 6 infeasible.¹⁷

¹⁷ The project's factual findings and overriding considerations statement sets forth the following findings concerning Alternative 6: "Based on the whole of the record, [the department] finds that Alternative 6 does not meet the project's objectives and is not feasible due to the costs associated with the alternative. Alternative 6 fails to facilitate the development of interrelated villages that provide a balance of land uses similar in size and proportion to those approved in the Specific Plan. In addition, Alternative 6 precludes additional commercial development at [Valencia Commerce Center]. Therefore, it would not achieve the project objectives. Additionally, the costs for Alternative 6 would be much greater than the normal costs for a project of this type and

The mandate petition alleges that the department has a duty to consider all reasonable alternatives. The mandate petition alleges: the environmental impact report utilizes an impermissibly narrow set of alternatives; the environmental impact report contains no substantial evidence “regarding the infeasibility of alternatives”; the environmental impact report fails to evaluate “a genuine environmentally superior alternative that combines elements of Alternative 7 with a [conservation plan] and no fill of Potrero Canyon”; and the absence of “a true environmentally superior alternative” prevents a meaningful consideration of project alternatives.

The statement of decision materially differs from the allegations in the mandate petition. The trial court found that Alternative 6 would result only in a small reduction in residential units. The trial court ruled, “Nor does such a minor reduction in the number of residential units increase costs so significantly as to render this alternative economically infeasible.” The trial court found that the department failed to independently assess mitigation measures that would reduce the significant environmental impacts. Rather, the trial court ruled the department remained “wedded” to the specific plan.¹⁸ These findings were not the result of a direct challenge to the project based on a theory articulated by plaintiffs in the mandate petition.

would, therefore, not be reasonable overall. Alternative 6 is, therefore, not practical economically feasible. Finally, Alternative 6 results in some impacts exceeding the Draft LEDPA Project, specifically with regards to Traffic and Land Use, and as such, it is not a feasible alternative.”

¹⁸ The trial court ruled: “[T]he law requires not only that a public agency decision-makers document and consider the environmental implications of their actions, but also that [they] refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid these effects. Thus, the agency must first identify the significant environmental effects and then mitigate those adverse effects to the imposition of mitigation measures or through the selection of feasible alternatives. And, public agencies must deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects. When, as in this case, the agency failed to perform an independent analysis and assessment of mitigation measures that could substantially lessen or avoid these of facts – electing instead simply to remain

An environmental impact report must describe alternatives to the proposed project. (§ 21100, subd. (b)(4); Guidelines, § 15126.6, subds. (a)-(d); *Stockton Citizens for Sensible Planning v. City of Stockton* (2010) 48 Cal.4th 481, 498.) Additionally, the environmental impact report must identify and assess whether a proposed alternative is infeasible. (*The Flanders Foundation v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 620-621; *Preservation Action Council v. City of San Jose* (2006) 141 Cal.App.4th 1336, 1353.) Among the factors an agency must consider is the economic feasibility of a project alternative and consistency with a specific plan. (Guidelines, § 15126.6, subd. (f)(1)¹⁹; *The Flanders Foundation v. City of Carmel-by-the-Sea*, *supra*, 202 Cal.App.4th at p. 622-623.) In assessing economic infeasibility, an agency must determine the following, “[W]hether the marginal costs of the alternative as compared to the cost of the proposed project are so great that a reasonably prudent property owner would not proceed with the rehabilitation.” (*Uphold Our Heritage v. Town of Woodside*

wedded to an existing Specific Plan configuration – the agency has failed to conduct the analysis and to proceed in a manner required by law.”

¹⁹ Guidelines, section 15126.6, subdivision (f)(1) states: “Rule of reason. The range of alternatives required in an [environmental impact report] is governed by a ‘rule of reason’ that requires the [environmental impact report] to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the [environmental impact report] need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. [¶] (1) Feasibility. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives. (*Citizens of Goleta Valley v. Board of Supervisors*, *supra*,] 52 Cal.3d 553; see *Save Our Residential Environment v. City of West Hollywood* (1992) 9 Cal.App.4th 1745, 1753, fn. 1).”

(2007) 147 Cal.App.4th 587, 600; see *The Flanders Foundation v. City of Carmel-by-the-Sea*, *supra*, 202 Cal.App.4th at p. 622.) We review an infeasibility finding for substantial evidence. (*Id.* at p. 621; § 21081.5, subd. (a)(3); Guidelines, § 15091, subd. (a)(3).)

As noted, at issue here is whether there was improper reliance upon the specific plan. The department was authorized by Guidelines section 15126.6, subdivision (f)(1) to consider an extant specific plan in assessing infeasibility. More to the point, all development, including the assessment of alternatives in an environmental impact report, must proceed in a fashion consistent with the specific plan. (*Citizens of Goleta Valley v. Board of Supervisors*, *supra*, 52 Cal.3d at pp. 570-573; see *A Local & Regional Monitor v. City of Los Angeles* (1993) 16 Cal.App.4th 630, 644-645.) The ambitious specific plan calls for transforming currently open space into: a broad range of residential mixed-use and non-residential land uses; the construction of up to 21,308 dwelling units; 629 acres of mixed-use development; 67 acres of commercial uses; and up to 5 elementary, 1 junior high and 1 high schools sites; 55 acres of neighborhood parks; a 15-acre lake; an 18-hole golf course; and public safety and infrastructure facilities sufficient to support the contemplated 5 new villages including a 6.8 million gallon per day water reclamation plant.

Substantial evidence supports the department's economic infeasibility finding as to Alternative 6. The department determined in assessing the costs of the project to use a standard industry metric such as cost per developable acre. The department relied on the following: "For a master-planned development project, it is appropriate to use standard industry metrics such as cost per developable acre, that capture the relationship of costs of development potential. Like the cost metrics endorsed by the courts in *Friends of the Earth* [*v. Hintz* (9th Cir. 1986) 800 F.2d 822, 831-834] and *Sierra Club v. Flowers* [(S.D. Fla. 2006) 423 F.Supp.2d 1273, 1333], cost per developable acre is an objective measure that is not tied to any subjective or unique characteristic of the applicant. . . . Cost per net developable acre is based on verifiable information that is neither proprietary nor applicant-specific. In addition, it allows a direct and meaningful comparison of the relative costs associated with alternatives of different sizes or different amounts of

development potential, in a way that the total project cost does not. Therefore, it is well-suited to evaluating whether the costs associated with additional avoidance are reasonable, compared either to the typical costs for that type of project or to the applicant's proposed project." Further, the corps found: "Including residential, commercial and industrial development, Alternative 6 would result in approximately 2,310.7 acres of total development area (of the 2,310.7 acres approximately 1,976.4 acres would be residential development area). Alternative 6 would yield a total of 2,310.7 net developable acres at a total development cost of \$2,757,365,000, which yields a substantial increase in the average development cost of \$1,193,303 [\$1,193,148] per net developable acre (approximately a 15.0 percent [13.4 percent] increase compared to the proposed project). When compared to the modified version of Alternative 3 [Draft LEDPA], Alternative 6 would provide approximately 6 acres of additional avoidance of waters of the United States (66.3 acres compared to 60.7 acres). Based on the above comparison, avoidance of approximately 6 additional acres of waters of the United States under Alternative 6 would require a substantial increase in cost per net developable acre when compared to the modified version of Alternative 3. In consideration of the relatively high cost for the proposed project, a 15% [13.4%] increase in cost per net developable acre would not be practicable and, therefore, Alternative 6 would not represent the least environmentally damaging practicable alternative." The department quite reasonably could reject Alternative 6 as economically infeasible because of its substantially increased costs.

Additionally, substantial evidence supports the department's finding that Alternative 6 was infeasible because it did not meet the project's objectives. The department identified the project's basic objectives, based upon the specific plan, as follows: creating a major new community of interrelated villages consisting of industrial, commercial and residential uses; creating various land uses with a wide range of housing; designating sites for public facilities for schools, fire stations, parks and a water reclamation project; permitting the development of medical care, child care, commercial

recreation, worship and cultural facilities; providing for flexibility to respond to changing market conditions; and providing a tax base to fund public services.

The department concluded Alternative 6 eliminated all new commercial development in the Valencia Commerce Center Planning Area. This would lead to a loss of 3.4 million square feet of commercial use in the Valencia Commerce Center Planning Area. Further, Alternative 6 would only allow for “partial buildout” of the specific plan area. The environmental impact report explains in terms of the specific plan area, “[T]he Specific Plan’s approved 20,885 residential units would be reduced by 1,098 units to 19,787 units, and the approved 5.55 [million square feet] of commercial uses would be reduced by 216,000 square feet.” Likewise there would be a reduction in the number of residential units in the Entrada Planning Area of 1,300 to 425 residences. A comparison of Figures 8-1 and 8-5 illustrates the material reduction in development between Alternatives 2 and 6; thereby increasing per residence costs and reduced tax base. Moreover, Alternative 6 would delete the plan to build a bridge across the Santa Clara River at Commerce Center Drive thereby: reducing development in the easternmost portion of the project area; prohibiting the development of a coherent village in the project’s eastern sector; and impeding the construction of interrelated villages. The corps found that the failure to construct the Commerce Center Drive bridge by itself would cause Alternative 6 to fail to meet the specific plan objective of creating interrelated villages.

Plaintiffs assert that projected population growth in Los Angeles County did not justify a need for future development. As a result, they argue the department improperly rejected unspecified alternatives. However, there is substantial evidence by 2040 population in the county will increase to 12,491,606 persons. This will constitute an increase of 2,098,421 residents as compared to the county’s 2009 population. These projections, from the California Department of Finance, constitute substantial evidence of long-term population growth and a corresponding need for increased housing. Nothing that occurred during the corps’ and department’s evaluation of the project alternatives permits the environmental impact report to be set aside.

E. Steelhead smolt

The mandate petition alleges in varying ways that the environmental impact report fails to analyze the impacts of runoff from the Santa Clara River. More particularly, there are two paragraphs in the mandate petition which relate directly to steelhead smolt. For example, plaintiffs allege the environmental impact report fails to analyze and mitigate water quality impacts below the “dry gap” in the Santa Clara River and coastal marine waters. At another point, the mandate petition alleges: “The [environmental impact report] fails to identify the [project]’s significant water quality impacts to southern steelhead smolt residing in the Santa Clara River estuary, migrating adult steelhead in the Santa Clara River, or migrating steelhead smolt in the Santa Clara River, nor does it provide measures to mitigate those impacts to a less than significant effect.” Plaintiffs argued in their papers, “The [environmental impact report] fails to analyze the sub-lethal impacts of the[project’s] discharges of dissolved copper on juvenile steelhead.” The trial court ruled that the environmental impact report failed to adequately discuss the impact of dissolved copper discharged from the project area on steelhead smolt. The trial court ruled, “The [environmental impact report] fails to consider . . . whether the dissolved copper discharged from the [p]roject [a]rea . . . would adversely affect restored habitat for endangered steelhead smolt.”

First, this entire sub-lethal copper discharge/steelhead smolt issue has been forfeited because it was not raised during the comment period for the environmental impact report. As noted, the public comment period for the draft environmental impact report ended on August 25, 2009. Section 21177, subdivision (a) bars consideration of that issue unless it raised it during the public comment period or prior to the close of the public hearing on the project. (*Mount Shasta Bioregional Ecology Center v. County of Siskiyou*, *supra*, 210 Cal.App.4th at p. 215; *Sierra Club v. City of Orange*, *supra*, 163 Cal.App.4th at p. 537.) As previously discussed, the exact issue raised in a mandate petition must have been presented to the lead agency during the comment period. (*North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors*, *supra*, 216

Cal.App.4th at p. 623; *Sierra Club v. City of Orange*, *supra*, 163 Cal.App.4th at pp. 535-536.) The issue concerning the steelhead smolt was not raised until almost one year after the comment period closed. The first time the issue was raised was in an August 3, 2010 letter from Jason Weiner, an associate director and staff counsel for Ventura Coastkeeper. The comment period expired on August 25, 2009. Here, the steelhead smolt issues were not raised during the statutory and regulatory prescribed comment period. Thus, they have been forfeited and may not serve as a basis for setting aside the environmental impact report.

Second, even if the issue had been preserved, there is substantial evidence that the project's impacts on the steelhead smolt would be less than significant. The environmental impact report describes the Santa Clara River and the so-called "dry gap." The Santa Clara River is described as a perennial stream which extends to about 3.5 miles downstream of the Los Angeles and Ventura Counties jurisdictional boundary line. This area of the Santa Clara River is dry most of the year with water present only when rainfall creates stormwater runoff. This is an area where with the Santa Clara River goes underground. The dry gap extends downstream to the confluence of the Santa Clara River with the Piru River. The confluence occurs between the area of the communities of Piru and Fillmore.

The Biological Resources' discussion in the environmental impact report references the steelhead smolt. The environmental impact report states steelhead smolt have never been reported in Reach 5. This was because all of the steelhead smolt's habitat was below the dry gap. In the Water Quality discussion in the environmental impact report, department scientists analyzed copper runoff. In terms of dissolved copper runoff, projections are regulated by the California Toxics Rule criteria. The California Toxics Rule Threshold for dissolved copper is 32 micrograms per liter. In May 2000, the federal Environmental Protection Agency enacted water quality standards for certain toxic pollutants. The federal agency action was necessitated because California had failed to adopt water quality standards for certain toxic pollutants including dissolved copper. (40 C.F.R. § 131.38 (2014); 65 Fed.Reg. 31682, 31711 et seq. (May 18, 2000);

see 33 U.S.C. § 1313(c)(4); *Waterkeepers Northern California v. State Water Resources Bd.* (2002) 102 Cal.App.4th 1448, 1455.) The California Toxics Rule thresholds establish ambient water quality objectives. Dissolved copper is often found in urban runoff. The environmental impact report concludes, after considerable specific scientific analysis: “Although the trace metal loadings are predicted to increase . . . , comparison of post-development conditions . . . , to the [California Toxics Rule] shows that the dissolved copper . . . concentrations are below the benchmark [California Toxics Rule] criteria. The estimated dissolved copper and total lead concentrations are within the range of observed concentrations in Santa Clara River Reach 5.” After mitigation, department scientists calculate that dissolved copper will be discharged into the Santa Clara River in concentrations of 8.4 micrograms per liter. This contrasts with the existing copper concentrations in Reach 5 of the Santa Clara River which range from 3.3 to 22.6 micrograms per liter. The environmental impact report concludes: “With the implementation of regulatory requirements, Mitigation Measures SP-4.2-7 and WQ-1, comprehensive [project design features], including site design, source control [best management practices], treatment [best management practices], and the comparison with instream water quality monitoring data and benchmark water quality criteria, Specific Plan build-out would not have significant water quality impacts resulting from trace metals under Significance Criteria 1 through 3.” As can be noted, after the comment period, there was little discussion of the steelhead smolt downstream from the dry area.

This makes sense because nothing in the comments referenced any issue regarding steelhead smolt. Further, the discussion concerning water quality indicates the buildout would not produce significant environmental impacts. This was because the copper levels would be below the California Toxics Rule threshold. The foregoing constitutes: a discussion of the environmental consequences sufficient to provide informed environmental review; a finding that copper levels would produce no significant environmental impact; and a finding that copper levels would be below the California Toxics Rule threshold. This constitutes substantial evidence the project impacts on steelhead smolt would be less than significant.

After the department approved the environmental impact report and while the corps was receiving comments, the issue of steelhead smolt and copper levels was raised by Mr. Weiner. In response during the federal comment period, the department and the corps provided additional details. Those comments constitute part of the administrative record which we review for substantial evidence.

The additional discussion after the department issued (but did not certify) the environmental impact report reaches the same conclusions. The additional discussion verifies that steelhead smolt had been found in Santa Paula Creek. The department concluded: “[T]he predicted concentration of dissolved copper in runoff from the [project] site after the implementation of proposed project design features . . . would be well within the range of concentrations observed within Reach 5 of the River under existing conditions. As a result, the proposed [project] would not result in a substantial change to existing dissolved copper concentration conditions. Furthermore, the predicted concentration of copper and other metals in runoff water would be substantially below California Toxics Rule thresholds, which establish ambient water quality objectives for protection of aquatic life. The analysis provided by the [environmental impact report] concluded that with the implementation of proposed mitigation measures, the proposed [project] and alternatives would not result in substantial changes to existing water quality conditions. Furthermore, the proposed [project] and alternatives would not substantially alter the existing concentrations of dissolved copper that currently exist in the Santa Clara River; and, therefore, the [project] would not result in significant impacts to steelhead or other special-status fish species.” Finally, the additional comments discussed other environmental impacts that were unlikely during wet and dry years and during storms. The corps agreed with the department’s assessment that the discharge of dissolved copper would not have a significant impact on steelhead smolt even during storm events.

The department and the developer argue the trial court ruled the threshold assessment standard utilized in the environmental impact report process was improper. The department and the developer cite to the following language in a footnote of the statement of decision, “The [environmental impact report] fails to consider, much less

evaluate, whether the dissolved copper discharged from the [project area] (which is four times over the steelhead smolt sub-toxicity levels) over the Dry Gap and into the lower reaches of the Santa Clara [River] would adversely affect restored habitat for endangered steelhead smolt.” We do not believe this constitutes any finding concerning the department’s selection of a significance threshold. In any event, substantial evidence supports the department’s selection of a threshold for evaluating toxicity issues for steelhead smolt. The department relied upon applicable water quality standards including the California Toxics Rule.

F. Spineflower Mitigation Measures And Incidental Take Permit

1. Spineflower

The conservation plan describes the spineflower as a low-growing herbaceous annual. Germination occurs after onset of late-fall and winter rains. The conservation plan states that different cohorts emerge from the seed bank over the winter and early spring growing season. Initially formed as a basal rosette, flowering stalks appear as days lengthen and flowering stocks are produced in springtime. Flowering generally occurs between April and June. The overall size of spineflowers vary. The conservation plan describes the leaves and flowering in detail. By late summer, the spineflower plant dies. Seeds are eventually released. But the exact mechanism and timing of the seed release has not been described. The spineflower is protected under the endangered species act. It is a candidate species under the federal Endangered Species Act.

2. Documents

The conservation plan is discussed at length in the environmental report. In addition to the environmental impact report, the department issued a series of documents concerning spineflower related issues: the findings of fact and overriding considerations

statement; the department's findings of fact under the endangered species act; a 290-page spineflower mitigation and monitoring plan; an incidental take permit for the spineflower; and the 308-page final conservation plan. (As noted, an incidental take permit allows the take of an endangered species which is incidental to an otherwise lawful activity. (Fish & G. Code, §§ 2080-2081; *California Native Plant Society v. County of El Dorado* (2009) 170 Cal.App.4th 1026, 1039.))

3. Environmental impact report discussion

As noted, the conservation plan extends beyond the boundaries of the specific plan approved by the county. The conservation plan extends also to the Valencia Commerce Center and the Entrada Planning Areas. These two latter areas are included within the environmental impact report project area because the conservation plan covers a larger geographical area than the resource management plan. The environmental impact report describes the conservation plan as a component of the project. The conservation plan is designed to conserve, manage and permanently protect a system of preserves. Those preserves are designed to maximize the long-term persistence of core occurrences of spineflower.

The conservation plan objectives include: providing potential pollinators; restoring of degraded or damaged habitat by use of buffers to minimize the effect of adjoining land uses; maintaining connectivity between preserves and other protected areas (e.g. the Santa Clara River, open areas and utility easements and the like); enhancing spineflower populations; and providing a suitable habitat to accommodate natural evolutionary and ecological occurrences such as spatial and colonization events.

The environmental impact report explains the spineflower was believed to be extinct until it was rediscovered in 1999 on property in Ventura County in the vicinity of Laskey Mesa. Prior to 1999, the last time spineflower had been observed was in 1927 in the Castaic area of the county. The Ventura County area where the spineflower was discovered has now become an open space preserve. According to the federal wildlife

service, there are only two known locations where the spineflower can be found. One is the Ventura County open space preserve near Laskey Mesa while the other is in the project area. (Endangered and Threatened Wildlife and Plants; Review of Native Species That Are Candidates for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions, 72 Fed. Reg. 69034, 69082 (Dec. 6, 2007).) The two spineflower populations are approximately 17 miles apart.

The distribution of the spineflower in the conservation plan area was documented annually during six growing seasons between 2002 and 2007 by Dudek and Associates and FL_x, a Santa Barbara environmental consulting firm. The environmental impact report describes the studies as focused plant surveys. The surveys were floristic in nature and conducted pursuant to accepted scientific protocol. The surveys were conducted on foot. Locations were documented by global positioning system and aerial photography technologies.

The environmental impact report explains six general occurrences of spineflowers have been identified in the project area: Airport Mesa; Grapevine Mesa; Potrero Canyon; San Martinez Grande Canyon; Entrada Planning Area; and the Commerce Center Planning Area. As we will note, the specific plan created two preserve areas--Airport and Grapevine Mesas. The soils at the six sites vary among combinations of sandy and gravelly silt and clay loams. The occurrences of spineflower populations in the conservation plan area are generally close to one another. Each of the individual growth areas is separated from one another by site features such as roadways, ridge lines or State Route 126. But there are scattered, intervening spineflower occurrences which are not located within the six general population areas.

In order to identify and design spineflower preserve areas, a habitat suitability index was used for the entire study area. All of the developer's landholdings containing spineflower populations are analyzed in the conservation plan. The habitat suitability index was developed using the following datasets: vegetation; soils; geology; elevation; and aspect. This research did not produce the anticipated results. The environmental

impact report explains: “Unfortunately, the results did not produce the anticipated predictive standards. The results of this effort suggested that either the existing habitat data may be too coarse to resolve the actual habitat features that spineflower selects or that habitat features is not predictive of spineflower occurrence.” Department scientists concluded that it would not be prudent to use the “datasets” to evaluate the preserve areas nor to develop management and monitoring strategies based on the index. Rather, department scientists utilized a representative model test to evaluate the proposed preserve areas, “Thus, a representative model was utilized to evaluate the proposed spineflower preserve areas, and compared the distribution of the individual attributes within each dataset for the entire study area and for the proposed preserve areas.”

The specific plan requires the developer establish spineflower preserves. Each preserve will be deeded in perpetuity to the department as a permanent conservation easement. There are two existing preserves in Airport and Grapevine Mesas created by the specific plan. The existing Airport Mesa conservation easement is 20 acres. In addition, there is a 44-acre preserve at Grapevine Mesa. Also, spineflower preserves will be created in the Potrero and San Martinez Grande Canyons and the Entrada Planning Area. The total preserve area created by the conservation plan is 167.56 acres plus expansion areas. The conservation plan’s preserves are designed to accommodate expansion over time. The currently existing spineflower occurrences in the Valencia Commerce Center Planning Area will not be preserved. (The spineflower occurrences in the Valencia Commerce Center Planning Area consist of approximately 4.2 percent of the cumulative growth in the conservation plan space.)

Surrounding the preserves will be buffers. These buffers are included in the 167.56-acre total preserve area. The buffers are located on the preserves’ core perimeters and the outer preserve boundaries or urban edges. The buffer zone widths were designed with adjacent land uses in mind as well as potential edge effects. A buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge). Further, site-specific factors were considered in designing the preserves including percent slope, micro-topography, vegetation type and density. Other design factors

including brow ditches and swales are to be installed to intercept water before it reaches preserve areas. Some development areas have mitigating factors incorporated into the design that may offset risk factors. Likewise, fencing will be installed to preclude intrusion by humans and vehicles.

The 2002 through 2007 surveys uncovered only 13.88 acres of actual spineflower growth in the specific plan and Entrada Planning Areas. As noted, the total preserve area is 167.56 acres. The core growth area is 56.79 acres. The buffer areas occupy 110.77 acres. And the conservation plan provides for 42.90 acres of expansion areas. An expansion area is described as follows in the environmental impact report, "Expansion area represents the area interior to the core that is not part of the cumulative area occupied." Thus, the 167.56-acre spineflower preserve figure does not include the additional 42.90-acre expansion areas.

The planned preserves materially increase the areas of potential growth beyond the 13.88 acres of actual spineflower uncovered in the 2004 through 2007 surveys. As previously noted, two presently existing preserves have been granted to the department under the specific plan. In the Airport Mesa area, the 2002 through 2007 surveys indicated 5.22 acres were occupied with spineflowers. The specific plan only provided for a 20-acre preserve at Airport Mesa. Under the conservation plan, the Airport Mesa preserve area will be dramatically increased to: a core growth area of 26.16 acres; a buffer area of 18.82 acres; and an expansion area of 20.94 acres. In the Grapevine Mesa area, the specific plan provided for a 44-acre preserve. The 2002 through 2007 surveys indicated 4.02 acres had spineflower growth in the 44-acre preserve. Under the conservation plan, the Grapevine Mesa preserve will provide for: a core growth area of 9.01 acres; a buffer area of 37.33 acres; and an expansion area of 4.99 acres. Thus, the Grapevine Mesa area will increase from 44 acres to 46.34 acres.

The conservation plan establishes three new preserve areas in: Potrero Canyon; San Martinez Grande Canyon; and the Entrada Planning Area. In the Potrero Canyon area, the 2002 through 2007 surveys uncovered only 1.32 acres of spineflowers. Under the conservation plan, the Potrero Canyon preserve will consist of: a core growth area

of 4.37 acres; 10.43 acres of buffer; and an expansion area of 3.05 acres. In the San Martinez Grande Canyon area, the 2002 through 2007 surveys indicated spineflowers populated only 2.29 acres. Under the conservation plan, the San Martinez Grande Canyon area preserve will consist of: a core growth area of 8.24 acres; a 26.17-acre buffer area; plus a 5.95-acre expansion area. And a new preserve will be established in the Entrada Planning Area. The 2002 through 2007 surveys reveal only 1.03 acres were occupied by spineflowers. The conservation plan creates a 27.02-acre preserve in the Entrada Planning Area which consists of: a 9-acre core area; an 18.02-acre buffer area; and a 7.97-acre expansion area.

The conservation plan does result in the take of 6.06 acres of existing spineflower growth areas. Hence, the need for an incidental take permit as the spineflower is a protected species under the endangered species act. In the specific plan area, the acreage of actually existing spineflower growth which will be taken by location will be: Airport Mesa, 2.87 acres; Grapevine Mesa, .78 acres; and Potrero Canyon, .48 acres. No spineflower will be taken from the San Martinez Grande Canyon preserve area. In the Entrada Planning Area, 1.09 acres of spineflowers will be removed. In the Valencia Commerce Center Planning Area, all .85 acres of actual growth will be taken. The conservation plan preserves 68.6 percent of the existing spineflower populations but dramatically increases the area to allow future growth.

4. Factual findings and overriding considerations statement

The department's factual findings and overriding considerations statement provides different statistical data. The factual findings provide a broader analysis of other data but do not focus on actual growth areas. The department found that with the implementation of the mitigating measures, the approval of the conservation plan would not have a significant impact on the environment. The department's factual findings identified the following benefits: preserves will include habitat for potential pollinators and dispersal agents; the preserve management will allow restoration of degraded and/or

damaged habitats and enhance future growth; site-specific buffers on the parameters of actual growth areas will minimize and control adverse edge effects from adjacent land use changes; the preserves will maintain biological connectivity between preserves and permanently protected and managed open space areas; management in open space areas will allow restoration of degraded and/or damaged habitats; the spineflower preserves will maximize genetic diversity and overall population size, while capturing the range of environmental conditions where other plant populations are present; the habitat will accommodate natural evolutionary and ecological processes for the spineflower, such as spatial fluctuations and colonization events; and the conservation plan provides endowments for the protection of spineflower habitats.

Further, the department found: “In light of the scale of this [project] and the unique opportunities that the subject large private landholding of [the project] provides for large-scale conservation and preservation of species and their habitats (specifically, the ability to require long-term conservation of 8,500 acres of natural habitat) and recognizing that primary land use authority for the development of the [project] site rests with Los Angeles County, which has already approved the [s]pecific [p]lan, [the department] finds that the above benefits of the [resource management plan/conservation plan project] outweigh the unavoidable significant adverse environmental impacts of the [project]. The benefit of the [resource management plan/conservation plan project], as described above, is hereby determined to be a basis for overriding all unavoidable project-level and cumulative environmental impacts identified in the [environmental impact report] and in these findings.”

5. Incidental take permit and supporting findings

The spineflower incidental take permit consists of 59 pages of analyses, charts, conditions and data. The permit sets forth milestones which are conditions of issuance and maintenance of the permit. Within 45 days, the developer is required to: irrevocably offer to dedicate and record the dedication of the preserves mandated by the spineflower

conservation plan; record the same for the adaptive management area next to the San Martinez Grande Canyon preserve; fund the first installment for the preserve next to Santa Martinez Grande Canyon area (\$1,305,309); initiate specified fencing; and commence a habitat characterization study. Within one year of the incidental take permit's issuance, a second set of milestones in different planning areas were to be completed which involve: millions of dollars of preservation expenditures; insuring financial security for future conservation and monitoring expenditures; recordation of deed restrictions; and partial implementation of the conservation and monitoring plans. The permit requires, prior to the commencement of development activities, that a biological monitor be identified. The biological monitor is vested with the authority to shut down all development activity.

The factual findings for the spineflower incidental take permit the taking of 4.85 acres of the area occupied by the plant. This will result from the buildout of the specific plan and Entrada and Valencia Commerce Center Planning Areas. But these impacts will, according to the incidental take permit's factual findings, be minimized and fully mitigated. This alleviation will result from the avoidance and mitigation measures specified in the environmental impact report and incidental take permit.

6. Conservation plan

The conservation plan consists of 17 sections: the description of the biological goals and objectives of establishing the preserve areas; a species description; an analysis of the surveys conducted in 2000 through 2007 in the project area; the environmental setting and existing land uses; the methodology used to design the spineflower preserves; a separate description of the preserves including buffer distances; a listing of management activities designed to minimize or eliminate risk factors from development and to achieve the project's biological goals; a description of an adaptive management program which includes plans to monitor the preserves and make adjustments over time; a monitoring program which is designed to measure the success of the conservation

process, track the viability of spineflower populations and remediate damage resulting from wildfires or geological events; the use of short term bonds to fund in perpetuity the management, monitoring and reporting requirements imposed by the plan; identification of the developer as the party responsible for plan implementation; reporting requirements; the schedule for compliance with the monitoring and management requirements; conservation and take estimates; and eight pages of supporting scientific studies used as references in the preparation of the document. In addition, the conservation plan consists of six appendices which include: a listing of invasive ornamental plants which are prohibited in landscape areas adjacent to the preserve areas; an extensive discussion of strategies for controlling the invasive Argentine ant (*Linepithema humile*) which can adversely potentially affect spineflower population; and an adaptive management program module. Portions of this latter part of the appendix paralleled and repeated material parts of section 10 of the conservation plan which described the adaptive management strategy.

The conservation plan summarizes its methodology as follows: “[T]he long-term conservation of spineflower will be achieved first by establishing a system of preserves to protect the core occurrences of spineflower in the project study area, and second, by implementing management and monitoring within an adaptive management framework to maintain or enhance the protected spineflower occurrences. [¶] The preserve design and adaptive management framework proposed in this plan have been developed based on the following biological goals and objectives, which describe the desired conditions of (1) the spineflower populations, (2) the communities in which the spineflower occurs, and (3) the ecosystem processes known or hypothesized to maintain the spineflower populations and associated communities. For each goal, a set of objectives provides the steps for attaining the goals, and a short explanation or rationale is provided for each objective.” This is accomplished by increasing spineflower density within the preserves and reducing or preventing “identified stressors or anthropogenic factors” which threaten individual and population growth. And because there are gaps in the understanding of the ecology of the spineflower, the conservation plan requires practices to be instituted to

increase knowledge of the species. All of this is to be accomplished while maintaining native plant diversity within the preserves.

According to the conservation plan: “In general, more abundant populations (i.e., those comprising more individuals) will have a greater probability of persisting and maintaining genetic diversity necessary to adapt to a changing environment than smaller (less abundant) populations. . . . Management of preserves will be designed to remove unnatural barriers to spineflower populations and maintain conditions conducive to persistence of a viable seed bank, in order to increase abundance and enhance long term population persistence.” The conservation plan also was designed to allow other species to flourish and contribute to plant diversity.

There were aspects of the studies however which did not logically correlate and future studies were necessary: “It is important to emphasize that the population numbers described above are estimates: spineflower populations are highly aggregated and densities vary considerably within the same polygon. Preliminary studies indicate that variability between areas is lower than the variability from year to year (Dudek and Associates 2006d), although the exact area of occupancy has changed each year. For example, in 2002, 2004, and 2007—years of low abundance—spineflower occurred in some areas where they did not occur in 2003, a highly abundant year. These results need further analyses and will be addressed by future monitoring described in Section 11.0 [of the conservation plan]. Analysis of variance (ANOVA) tests of the density of spineflower individuals and acres occupied at the five core locations gave contrasting results. The area occupied varied more between sites than between years, while density varied more annually than between sites. There was no significant interaction between year and site when a two-way ANOVA was used, which means all of the sites tended to change year to year in a similar fashion. More data are needed, but the preliminary interpretation is that preferred spineflower location is controlled by intrinsic environmental characteristics (e.g., soil type), while population density (and, in turn, actual numbers of individuals) is controlled by extrinsic environmental characteristics (e.g., rainfall).”

The department qualified the foregoing uncertainty analysis in the next paragraph of the conservation plan: “After mapping the boundaries of each polygon, the number of individuals was counted/estimated in a rectangular ‘sample estimation area,’ which is a subset of the total polygon. The sample estimation area was between 200 centimeters (10 by 20 centimeters) and 2 meters (1 by 2 meters), depending on various factors (e.g., size of the polygon, plant densities, variation in plant densities within the polygon). The number of subsets within the total polygon was determined and added/multiplied, resulting in a total estimate of the number of individuals of the polygon (e.g., $4 \times 125 = 500$; $8 \times 12 = 96$; $9 \times 100 = 900$). This number was then rounded to the nearest magnitude or multiple of a magnitude (e.g., 500, 100, 1,000). Although the spineflower population numbers are expected to overestimate true population densities (Dudek and Associates 2006d), the area occupied should be accurate, as it represents completely mapped units. The general agreement between population estimates and occupied area indicates that, at least for general qualitative analyses, the population estimates are adequate.” (Fns. omitted.) We will detail other aspects of the conservation plan in our extensive discussion of the merits of plaintiffs’ contentions. The conservation plan identifies seven pages of government and private sector scientific studies and documents utilized in the development of the preserves. This does not include dozens of scientific articles identified by private sector consultants and public entity staff.

7. The petition and the ruling

In the first cause of action for violation of section 21000 et seq., the petition alleges that the environmental impact report’s evaluation is defective. The petition alleges: the analysis of the project impacts on the spineflower is based on a misunderstanding of its population dynamics that is contrary to available scientific evidence; the environmental impact report underestimates the project’s impacts on the spineflower; the environmental impact report fails to evaluate the effect of permanently removing most of the spineflower’s seed bank from the project area on the viability of the

proposed reserves; and the conservation plan and the environmental impact report rely on unproven and ineffective mitigation measures. As to the third cause of action for violation of the endangered species act, the petition alleges: the spineflower incidental take permit authorizes the destruction of approximately 24 percent of its habitat located in the specific plan area, i.e., Entrada and Valencia Commerce Center Planning Areas; the department has failed to insure that the impacts of the spineflower incidental take permit have been fully mitigated; the department has not insured that the conservation measures required by the spineflower incidental take permit are capable of successful implementation; the department has failed to insure there is adequate funding to implement the conservation plan; the department has failed to insure that the issuance of the spineflower incidental take permit would not jeopardize the continued existence of specified covered species; the department's conclusions the spineflower incidental take permit would not likely jeopardize the continued existence of the covered species are not based on the best scientific evidence; those conclusions are not based on other reasonably available information; the conservation plan arbitrarily designates some areas as "core habitat" which ignore the spineflower population dynamics and high annual variability; the incidental take permit does not minimize or fully mitigate damage to other covered species; and the department has violated its duty to protect public trust resources. Finally, in the fourth cause of action, the petition alleges that no substantial evidence supports the department's findings that: the impacts of the take of spineflowers will be minimized and fully mitigated; the spineflower conservation measures are capable of successful implementation; and the issuance of the incidental take permit will not jeopardize the continued existence of "the covered species."

The trial court ruled the department's analysis of the spineflower mitigation measures was legally impermissible. The trial court ruled there was no substantial evidence the proposed mitigation measures were adequate. The trial court ruled the department failed to: competently evaluate the potential for growth in the seven preserves; provide "useful information" concerning the spineflower habitat; evaluate how the spineflower pollinates; conduct research about the existence of seed banks in the

project area; and require the developer to protect seeds banks if they are discovered in the area to be developed. The trial court ruled: the developer lacked “any underlying scientific understanding of the” spineflower and the department decided to await further analysis of the plant’s physical and biological habitat; there was no substantial evidence of habitat, ecology and propagation of the spineflower in the record and, “Only the creation or restoration of new Spineflower land can mitigate for the loss of any existing wildflower habitat.” Finally, the trial court ruled the mitigation plan was not supported by “any” substantial evidence and thereby violated unspecified provisions of the California Environmental Quality Act.

8. Substantial evidence supports the department’s mitigation plan determinations

The parties agree we apply a substantial evidence standard of review to the mitigation issue. The conservation plan is the result of years’ long extensive, collaborative and scientific analysis by credentialed scientists. The conservation plan resulted from changes occurring in the iterative process. This process was directed by an array of department scientists whose names we have listed in the margin.²⁰ In addition, the developer’s consultant, Dudek and Associates, utilized 43 biologists in conducting surveys and scientific analyses. Spineflower surveys of the conservation plan area were conducted by Dudek and Associates, URS Corporation and FL_x. Dudek and Associates scientists conducted 21 surveys of the project area in order to identify the spineflower

²⁰ The scientific staff involved in the preparation of the conservation plan included: John Willoughby, M.S., of the federal land management bureau; Sherri Miller, M.S., B.S.; Kamarul Muri, B.S.; Callie Ford, B.S.; Dr. Phil Behrends; Dr. Jodi McGraw; Scott White, M.A., B.A.; Dr. Nathan Gale; Dr. Anujah Parikh; Christopher Julian, B.S.; Kevin Hunting, Department Regional Manager; Mary Meyer, M.A., B.A., a department plant and ecology scientist; Dennis Bedford, a department environmental scientist; Michael J. Mulligan, a regional manager for the department; Mary Ann Showers, the department’s lead botanist; Terri Dickerson, the department’s senior environmental scientist; Betty Courtney, the department senior environmental scientist; and Dr. Edmund J. Pert, the department’s regional manager.

habitat. Those surveys are part of the administrative record. In terms of the 2002 through 2007 surveys, the conservation plan details the matters studied: “The data discussed includes the number and distribution of occurrences and ecological indicators such as slope, aspect, vegetation, soils, and pollinators. The data also includes the results of the on-site geology and soils testing.”

Moreover, an August 13, 2004 study prepared by Allen E. Seward Engineering, Inc. (Seward study) describes the spineflower habitat. The Seward study, which was a follow-on to a 2002 analysis, was accomplished utilizing: subsurface investigations involving 39 test pits; surface analysis at 175 plant stations; laboratory testing; and geologic analyses. The Seward study found geologic and geomorphic conditions that were fairly consistent at each occurrence site including: the types of geologic formations where spineflowers grow with specified rare exceptions; the largely consistent nature of soils where spineflowers grow; the probable subsoil soils composition range which support spineflower growth; soil coloration; and the slope gradients where spineflowers flourish.

The conservation plan provides additional information concerning spineflower populations and the like. The 2002 through 2007 spineflower population surveys were conducted “throughout” the specific plan and Entrada and Valencia Commerce Center Planning Areas. The spineflower population dramatically increased between 2004 and 2006. But in 2007, the population decreased significantly. The size of the population correlated to annual rainfall figures—the greater the moisture, the larger the spineflower population.

The conservation plan describes varying factors which affect spineflower propagation including the absence of competing species depending on the direction the plot faces. This analysis was premised on test-plot experiments at Laskey Mesa, the results of which were published in 2003. A second Laskey Mesa study indicates the use of herbicides to defoliate followed by planting spineflower produced flowering. And the Dudek and Associates studies indicate environmental conditions and competition affect spineflower population density. One study relied on by the department was co-authored

by 10 scientists with the California State University, Fullerton. That study, published by the California Botanical Society, examined the reproductive factors of pollination interactions and germination success including identifying six pollinators which provided a majority of visits to spineflowers. The study concluded that the spineflower's rarity is due to the destruction of its habitat—the exact problem the preserves are designed to resolve. Further, the authors of the California State University, Fullerton study expressed their appreciation to the Dudek and Associates, Inc. and Sapphos Environmental, Inc. staffs.

One study cited in the conservation plan is an extensive analysis prepared by Glenn Lukos Associates and Sapphos Environmental Inc. in February 2000 (Lukos-Sapphos). The Lukos-Sapphos study of the spineflower was prepared for the Ahmanson Land Company. The Las Virgenes site is the only known area of spineflower growth outside the specific plan and Entrada and Valencia Commerce Center Planning Areas. The Lukos-Sapphos study concluded the spineflower prefer open habitats, free of shade and competing plants and has a wide tolerance for soil properties. The Lukos-Sapphos study specifically details propagation (by a diverse set of insects) and germination of the spineflower. After summarizing the factors which affect maintenance of the species in the Las Virgenes area, the Lukos-Sapphos study concluded, “[T]here is every reason to believe that this plant can be restored in historic localities, and successfully managed onsite by a combination of methods that incorporate a knowledge of its biology.”

To sum up, the conservation plan dramatically expands the area for potential growth of the spineflower. Between 2002 and 2007 surveys uncovered only 13.88 acres of actual spineflower growth in the specific plan and in the Entrada Planning Areas. The preserves will expand 13.88 acres of actual spineflower growth to: core growth areas of 56.79 acres; buffer areas occupying 110.77 acres; and expansion areas of 42.90 acres. In the five preserve areas, two of which already exist but will be expanded, the department, utilizing recognized biological strategies, expects to dramatically increase the area of spineflower growth.

The foregoing constitutes substantial evidence which supports the department's scientific strategies and mitigation findings. In addition, the foregoing constitutes substantial evidence that: the take is incidental to an otherwise lawful activity; the impacts of the spineflower take have been minimized and fully mitigated; the spineflower mitigation requirements are capable of successful implementation; the incidental take permit is consistent with the provisions of California Code of Regulations, title 14, section 783.0 et seq.; and there is adequate funding to support the spineflower mitigation measures. (Fish & G. Code, § 2081, subd. (b)(1)-4.) In addition, the foregoing constitutes substantial evidence that: the incidental take permit will not jeopardize the spineflower's continued existence; the department has used the best scientific and other information that is reasonably available to make the determination the spineflower's continued existence will not be jeopardized; and the department has utilized such information to evaluate the adverse impacts of the taking on the spineflower species ability to survive in light of population trends, other threats and further reasonably foreseeable impacts. (Fish & G. Code, § 2081, subd. (c).)

Plaintiffs' other arguments fall into five general areas. First, plaintiffs argue the department admitted it had little knowledge of the spineflower. Plaintiffs reason this lack of substantive knowledge therefore supports the trial court's ruling that the department's mitigation and other spineflower analysis is not supported by substantial evidence. Plaintiffs' argument in this regard takes the department's cautionary analysis out of its context. As noted, the conservation plan indicates that future study is warranted because of the variables in spineflower growth and the like. After acknowledging the problems of assessing spineflower growth in the context of preserves, the department, as noted, expressly stated in the conservation plan, "The general agreement between population estimates and occupied area indicates that, at least for general qualitative analyses, the population estimates are adequate." The department acted with candor in evaluating the difficulties of protecting an endangered species. This is particularly true in that only one other place in the world, in Ventura County, is there a viable spineflower population.

The department's conclusions in this regard are buttressed by extensive scientific and academic research.

Second, plaintiffs rely on views expressed by Ms. Myers, a department scientist, concerning earlier versions of the conservation plan. However, Ms. Myers's disagreement with earlier versions of the conservation plan is not pertinent to the issue of whether the environmental impact report's conclusions are supported by substantial evidence. (*Environmental Council, supra*, 142 Cal.App.4th at p. 1042, fn. 5; *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 280.) Third, most of plaintiffs' analysis requires us to reweigh conflicting conclusions offered by Ms. Myers and others rather than engage in deferential substantial evidence review.

Fourth, the department's comprehensive monitoring plan does not amount to deferring appropriate environmental actions. A conservation plan that adapts to changing scientific knowledge does not necessarily violate the endangered species act. (*Environmental Council of Sacramento, supra*, 142 Cal.App.4th at pp. 1025-1026.) It is appropriate that the department, as it has done so under the conservation plan, require the developer to engage in studies concerning spineflower: genetic structure; breeding and pollination; habitat; and soil disturbance. Under these circumstances, the requirement that future research be conducted concerning the spineflower is not deferring an environmental decision--it is sound ecological management. Finally, monitoring the developer's conduct within the preserve areas for a prolonged period of time does not constitute deferring an environmental decision.

Fifth, there was no requirement that a separate habitat conservation plan be prepared. An extraordinary amount of scientific inquiry preceded the issuance of the environmental impact report and incidental take permit. Under these circumstances, no obligation to prepare a separate habitat analysis exists under either the endangered species or California Environmental Quality acts. The legal issue before us is whether substantial evidence supports the department's conclusions. It does. We need not discuss plaintiffs' other contentions.

9. No abuse of discretion occurred in connection with the issuance of the incidental take permit

Insofar as plaintiffs contend the incidental take permit should not have been issued (as distinguished from an attack on the environmental impact report), such a challenge is without merit. Our Supreme Court has identified the applicable standard of review of an agency regulatory decision such as issuance of an incidental take permit: “[T]he standard for review of agency decisions in connection with regulatory approvals is generally one of abuse of discretion. ““Abuse of discretion is established if the respondent [agency] has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence.” [Citations.]’ (*Sierra Club v. State Bd. of Forestry*[, *supra*,] 7 Cal.4th [at p.] 1236.)” (*Environmental Protection Information Center v. California Dept. of Forestry And Fire Protection*, *supra*, 44 Cal.4th at pp. 478-479.) All of the foregoing analysis as it relates to the environmental impact report applies equally to the issuance of the incidental take permit. No abuse of discretion occurred.

[Part IV (G) is deleted from publication]

G. Baseline For Assessing Cumulative Impacts Of Greenhouse Gas Emissions And Related Significance Analysis

1. Overview

The trial court ruled the environmental impact report’s selection of a baseline for assessing the cumulative impacts of the project’s greenhouse gas emissions was, as a matter of law, inappropriate. In addition, the trial court ruled that certain aspects of the department’s significance analysis in the environmental impact report is not supported by

substantial evidence. Much of the following discussion involves the Health and Safety Code section 38550 goal of reducing greenhouse gas emissions to 1990 levels.

2. Summary of environmental impact report's discussion of greenhouse gas emissions

The environmental impact report's 150-page Global Climate Change analysis consists of: an introduction including an analysis of the strategies in the Valencia Commerce Center and Entrada Planning Areas which can be expected to reduce greenhouse gas emissions; a discussion of how the quantity of greenhouse gas emissions are calculated; federal and state imposed requirements including Health and Safety Code section 38500 et seq., section 21083.05, Guidelines section 15604 and Green Building Standards; a Global Climate Change analysis; a discussion of significance thresholds; the greenhouse gas emissions' impacts on the project and alternatives; and a statement of mitigation measures. We will describe the particulars of the environmental impact report's greenhouse gas emissions discussion in greater detail later in this opinion.

3. Trial court's ruling

a. technical and legal background

The trial court found several errors in the department's greenhouse gas emissions assessment. Before summarizing the trial court's findings, it is appropriate to provide some technical background and define several terms utilized by the parties and the trial court. In 2006, Health and Safety Code section 38500 et seq., which is entitled the California Global Warming Solutions Act of 2006 (global warming act), was enacted. The term "greenhouse gases" is defined by Health and Safety Code section 38505, subdivision (g) which is part of the global warming act to include: carbon dioxide; methane; nitrous oxide; hydrofluorocarbons; perfluorocarbons; sulfur hexafluoride; and nitrogen trifluoride. More generally, greenhouse gases are described as "any gas that

absorbs infrared radiation in the atmosphere” and, consequently, also include water vapor, ozone and hydrochlorofluorocarbons. (*POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 699, fn. 3.)

Health and Safety Code section 38550 requires the California Air Resources Board (air resources board) to develop a plan to limit statewide greenhouse gas emissions to 1990 levels by 2020. Health and Safety Code section 38550 states: “By January 1, 2008, the state 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.” (See *Association of Irrigated Residents v. State Air Resources Bd.* (2012) 206 Cal.App.4th 1487, 1490; *Utility Consumers’ Action Network v. Public Utilities Com.* (2010) 187 Cal.App.4th 688, 694.)

The air resources board has determined, by law, greenhouse gas emissions must be reduced to 1990 levels by the year 2020. This is to be accomplished by developing actions to reduce greenhouse gas emissions. The lead agency for accomplishing this reduction in greenhouse gas emissions is the air resources board. (Health & Saf. Code, § 38510.) On December 11, 2008, the air resources board issued its 121-page “Climate Change Scoping Plan” which proposed a comprehensive set of actions designed to reduce overall greenhouse gas emissions. (See *Association of Irrigated Residents v. State Air Resources Bd.*, *supra*, 206 Cal.App.4th at p. 1492.)

The air resources board’s scoping plan’s executive summary states, “This plan calls for an ambitious but achievable reduction in California’s carbon footprint. Reducing greenhouse gas emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emissions levels projected for 2020, or about 15 percent from today’s levels.” The term “business-as-usual emissions levels” refers to what will occur if there is no transition to renewable energy technologies and increased energy

efficiency programs. The scoping plan defines the business as usual methodology as a means of identifying the quantity of emissions if no greenhouse gas reduction measures are undertaken. The scoping plan also utilizes the term “no action taken” scenario to describe the level of greenhouse gas emissions if no environmentally appropriate corrective action is taken. The planned deviation from the business as usual or no action taken scenario is described in the air resources board’s scoping plan thusly: “Significant progress can be made toward the 2020 goal relying on existing technologies and improving the efficiency of energy use. A number of solutions are ‘off the shelf,’ and many - especially investments in energy conservation and efficiency - have proven economic benefits. Other solutions involve improving our state’s infrastructure, transitioning to cleaner and more secure sources of energy, and adopting 21st Century land use planning and development practices.” These terms, business as usual or no action taken, appears throughout the statement of decision and in the parties’ discussion of the legal issues. Now we turn to the trial court’s findings.

b. statement of decision

First, the trial court ruled judicial evaluation of the threshold determination was *not reviewed for substantial evidence*. Rather, according to the trial court, judicial review consists of an assessment of whether the department proceeded in a manner prescribed by law in making a threshold determination. The trial court ruled in connection with the baseline issue: “Whether or not a proper baseline determination has been proffered by the expert is not a question of ‘substantial evidence.’ Rather, the question presented here is whether the [department]’s analysis has proceeded in a manner required law by using a realistic measure of the impact of the current project on the environment. Thus, the standard of review . . . is *de novo*.” The trial court also ruled: “[T]he use of an improper baseline interferes with the [environmental impact report’s] ability to assess the impacts of the proposed project. In cases in which a project is being proposed for undeveloped

pieces of property . . . , the baseline has been existing environments, rather than some hypothetical impacted future environment that might occur without the project.”

Second, the trial court faulted the department’s analysis concerning greenhouse gas emissions. The trial court’s analysis follows. When the environmental report was prepared, the air resources board had not yet recommended a return to the 1990 emission levels as a basis for a significance determination. The department’s consultant estimated the existing activities in the project area resulted in 10,272 metric tons of carbon dioxide equivalents emissions. After completion of full development, the consultant estimated the annual emission level would be 269,000 metric tons of carbon dioxide emissions.

According to the trial court, the department concluded the project would not significantly affect the environment. The department compared the level of emissions after the use of new technologies and environmentally responsible practices with the scenario where no changes are made. As noted, if no changes in environmental regulation and practices occur, that is referred to as the business as usual or no action taken scenario. The trial court ruled: “But, a magnitude change of this size did not support a finding that the project would have a significant climate change impact. Instead, [the department] asked whether this numeric increase would impede the State of California’s compliance with [global warming act’s] emissions mandate. If the [L]egislature’s mandate could be reached, then it could be concluded that the [project] would not significantly affect the environment. This single ‘significance determination’ is based on the unsubstantiated assumption that [the] new development that is 29% below ‘business as usual’ . . . is consistent with California’s near-term emissions reduction objectives, and therefore, would not result in a cumulatively considerable environmental impact on global warming.” (Fns. omitted.)

The trial court concluded the department’s foregoing analysis was inappropriate: “The question to be answered in an [environmental impact report] is not whether this project will result in non-compliance with a state-wide legislative objective, but rather whether the project will have adverse environmental effects and whether those impacts can be avoided or substantially lessened by way of feasible mitigation. A baseline

analysis of impacts on the existing environment, therefore, is required to inform decision-makers of the magnitude (or significance) of the cumulative environmental impact [of the project] on greenhouse gas emissions. Whether such a project would assist or defeat (or, more likely, have no effect on) the state's efforts at reducing these levels is not the proper question."

The trial court continued: "In contravention of [the California Environmental Quality Act], the [environmental impact report] presumes, without any substantial evidence in the record to support the claim, that because the [air resources board] Scoping Plan states that California's overall emissions must be reduced to 29% below 'business as usual' to meet legislative targets, that new developments (such as this one) need only reduce greenhouse gases to 29% below 'business as usual' to fully mitigate its impacts under [the California Environmental Quality Act.] In fact, given that opportunities for reducing emissions from the already built environment present greater challenges, there is no legitimate basis upon which to presume that expectations for minimizing emissions from new developments should be greater. In fact, as recognized by the Attorney General, 'new development[s] must be more [greenhouse gas-]efficient than this average, given past and current sources of emissions, which are substantially less efficient tha[n] this average, will continue to exist and emit.'" (Fn. omitted.)

The trial court noted that the air resources board was fully engaged in an effort to reduce greenhouse gas emissions in order to comply with the 2020 goals. The trial court stated: "The 29% below 'business as usual threshold' adopted by [the department] as a significance threshold will be largely achieved through compliance with existing and anticipated regulatory requirements. Thus, the 31% below 'business as usual' conditions promised by this [project] - in effect - awards emission reduction 'points['] to [the developer] for mitigation already required by local or state law."

The trial court then criticized the department for misrepresenting the air resources boards' implementation of unspecified portions of Health and Safety Code section 38500 et seq. The trial court ruled: "In addition, the 'methodology' employed in this case did not even use the entire mandate under [the air resources board's] implementation of [the

global warming act] to assess environmental significance. Rather, the [department] ‘cherry picked’ [the air resources board’s] thresholds. There are two different aspects of the [air resources board’s] greenhouse gas targets in its plan. Not only does [the air resources board] propose a 30 percent reduction of the state’s [business as usual] projected emissions in 2020, but it also proposes a ten percent reduction from *actual* 2002-2004 average emissions. Using the ‘actual’ 2002-2004 greenhouse gas level as a ‘baseline’ -- which [the air resources board] also proposes as using as a measure of compliance with [the global warming act] -- the [project] would be environmentally significant if it fails to meet [Health and Safety Code section 38510’s] requirement of decreasing greenhouse gases from 2002-2004 levels by 10 percent.”

The trial court ruled that using a business as usual measure to evaluate whether a significant environmental impact resulted would defeat the goals of the global warming act. The trial court ruled: “By partially importing a regulatory measure intended to address a legislative mandate and using it as a measure of significance in an [environmental impact report] approval process, project planners are making the achievement of [Health and Safety Code section 38510’s] mandates more difficult. New developments of the type under consideration here must actually reduce greenhouse gas emissions from the business as usual baseline in order to allow ‘past and current sources of emissions,’ which are substantially less efficient than this [project] pre-development, to continue to exist and emit.”

The trial court indicated the absence of federal guidance or appellate decisions made the department’s greenhouse gas effects task “particularly” problematic. And the trial court acknowledged the law does afford “some reasonable discretion” to the department. Then, the trial court ruled that the department’s consultant’s conclusion did not constitute substantial evidence. According to the trial court, the consultant’s analysis of environmental significance was not adequately supported by facts and analysis contained in the environmental impact report. The trial court concluded: “As time has progressed, there has emerged greater consensus . . . regarding how global climate change should be analyzed and which significance criteria are to be used. In further

proceedings in this case, that growing guidance will assist decision-makers in the evaluation of greenhouse gas emissions from this proposed [project].” (Fn. omitted.)

4. The parties’ contentions

The department and the developer argue the trial court utilized the wrong standard of review. Additionally, the department and the developer contend that the trial court mistakenly confused the baseline assessment with the significance determination. In that regard, they contend that the environmental impact report adequately addresses both assessments.

Plaintiffs argue that the trial court correctly rejected the department’s greenhouse gas emissions analysis in the environmental impact report. Plaintiffs contend the substantial evidence test is not the correct standard for making a baseline determination. Additionally, adopting the trial court’s analysis, plaintiffs contend that the significance analysis utilized an impermissible, illusory environmental baseline. Finally, plaintiffs contend that the discussion concerning greenhouse gas emissions and the business as usual concept was insufficient.

5. The department’s baseline determination

As noted, plaintiffs contend that the proper standard of review of an agency determination for a baseline analysis is not substantial evidence. Guidelines section 15125, subdivision (a) sets forth the regulatory requirements for a baseline discussion in an environmental impact report: “An [environmental impact report] must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.

The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives.” The determination of an environmental baseline for the existing conditions in a project area is largely factual in nature. (*Neighbors for Smart Rail v. Exposition Metro Line Const. Authority, supra*, 57 Cal.4th at p. 449; *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 120.) If there are differing methodologies or opinions by consultants for determining a project’s baseline, it is the agency’s duty to decide such disputes. (*Ibid.*; see *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Counsel* (2010) 190 Cal.App.4th 1351, 1378, disapproved on another point in *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority, supra*, 57 Cal.4th at p. 457.) Our Supreme Court has synthesized the flexible nature of an agency’s discretion in identifying the baseline physical conditions in assessing an environmental impact’s significance: “[N]either [the California Environmental Quality Act] nor the . . . Guidelines mandates a uniform, inflexible rule for determination of the existing conditions baseline. Rather, an agency enjoys the discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all [California Environmental Quality Act] factual determinations, for support by substantial evidence.” (*Neighbors for Smart Rail v. Exposition Metro Line Const. Authority, supra*, 57 Cal.4th at p. 449, quoting *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 328; see *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 336.) As a result, we respectfully disagree with plaintiffs that we should apply a standard of review other than substantial evidence in assessing the department’s baseline analysis.

The department’s baseline determination is supported by substantial evidence. As will be noted, the department identified the amount of greenhouse gas emissions currently emanating from the project site. The existing environmental setting typically is the baseline. (Guidelines, § 15125, subd. (a); *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority, supra*, 57 Cal.4th at p. 448.) We agree with the department

that the trial court's ruling, as do some aspects of plaintiffs' analysis, conflated the baseline with the significance determination. We need not decide whether that conflation warrants reversal on its own. Rather, we will address the merits of the significance determination.

6. Substantial evidence supports the department's greenhouse gas emissions assessments

a. regulatory requirements for a greenhouse gas emissions discussion in an environmental impact report

Guidelines section 15064 sets forth the general requirements for determining whether a project may have a significant effect on the environment. The environmental impact report must discuss the project's significant environmental impacts. (Guidelines, § 15126, subd. (a); *North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors*, *supra*, 216 Cal.App.4th at p. 625.) Guidelines section 15064.4, subdivision (a) requires an agency to determine the significance of greenhouse gas emissions emanating from the project. The lead agency's responsibility is defined as follows: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to: [¶] (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or [¶] (2) Rely on a qualitative analysis or performance based standards." (See *North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors*, *supra*, 216 Cal.App.4th at p. 650 [environmental impact report]; *Citizens for Responsible Equitable*

Environmental Development v. City of Chula Vista (2011) 197 Cal.App.4th 327, 329, 336 [mitigated negative declaration].)

In assessing the significance of greenhouse gas emissions impacts, the lead agency considers three factors. To begin with, the lead agency evaluates the extent to which the project affects greenhouse gas emissions when compared to the existing environmental setting. (Guidelines, § 15064.4, subd. (b)(1).) Additionally, the lead agency determines whether the project greenhouse gas emissions exceed a significance threshold that it determines applies to the project. (Guidelines, § 15064.4, subd. (b)(2).) Finally, the agency evaluates the extent to which the project complies with regulatory requirements imposed by other government agencies for the mitigation of greenhouse gas emissions. (Guidelines, § 15064.4, subd. (b)(3); see *North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors*, *supra*, 216 Cal.App.4th at p. 650; *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista*, *supra*, 197 Cal.App.4th at p. 336.)

b. The environmental impact report's significance discussion

The environmental impact report relies upon the air resources board's assessment as to the necessary greenhouse gas emissions reductions that must be achieved to comply with the 1990 levels. The environmental impact report states: "[The air resources board] found, by its emission estimates, that emissions must be reduced about 29 percent below the [no action taken] scenario for California to achieve the . . . reduction mandates. ¶¶ The . . . [no action taken] scenario relies on specific assumptions, including assumptions relating to electricity generation, vehicle fuel efficiency, and building energy efficiency. In particular, [the air resources board] assumed that all new electricity generation would be supplied by natural gas plants, no regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at the 2005 . . . standards."

According to the environmental impact report, worldwide emissions of greenhouse gas emissions in 2004 totaled 26.8 billion tons. In 2004, the United States emitted about 7 billion tons of greenhouse gas emissions. Energy-related fossil fuel combustion results in 80 percent of United States greenhouse gas emissions. According to the California Environmental Protection Agency, in 2004, California emitted .497 billion tons of greenhouse gases. The percentages of greenhouse gas emissions, according to the California Environmental Protection Agency in 2004 were: 81 percent emanated from fossil fuel combustion; 4 percent from process emissions; 5.6 percent were comprised of methane emissions; 6.8 percent resulted from nitrous oxide emissions; and fluorinated gases which have a very high global warming potential accounted for 2.9 percent of emissions. The highest end use category for greenhouse gas emissions are transportation related including industrial and residential uses.

At present, roughly 10,272 tons of greenhouse gas emissions are estimated to emanate from the project site. The department estimated that the project, utilizing new environmental efficiencies and strategies, will result in 269,000 metric tons of greenhouse gas emissions on an annualized basis. If no action is taken, (the business as usual scenario), the annualized total of project greenhouse gas emissions in 2020 will be 390,046 tons. Thus, in 2020, the emissions of the project will be 31 percent below the level if no action were taken (the business as usual scenario). The department compared the project with state, national and global greenhouse gas emissions levels. In 2004, greenhouse gas emissions totaled: 26.8 billion tons globally; 7 billion tons nationally; and 0.480 billion tons for California. By contrast, the project's discharge at the conclusion of the buildout will be: 0.001 percent of global emissions; 0.0038 percent of national emissions; and 0.056 percent of statewide emissions. Thus, the department calculated on an annualized basis: the present level of greenhouse gas emissions, 10,272 tons; the project's emission level if no environmentally protective actions are taken (the business as usual or no action taken scenario), 390,046 tons; the project's emission levels if environmental safeguards designed to meet the Health and Safety Code section 38550 targets, 269,000 tons; and the percentage reduction in emission levels if no effort is made

to meet the Health and Safety Code section 38550 targets, 31 percent. According to ENVIRON International Corporation, the developer's consultant, these figures, in terms of compliance with the Health and Safety Code section 38550 target, are extremely conservative. This is because the statistics do not include the developer's own efforts to reduce further greenhouse gas emissions.

One final point is an order concerning the foregoing statistical emission data. At one place in the environmental impact report, the department states that in 2004, California emitted 0.497 billion tons of greenhouse gases. Later in the environmental impact report, the department states the 2004 emission level was "about" .480 billion tons. No party asserts these differing emission tonnage figures are of statistical or legal consequence.

The department declined to make a significance determination based upon these numbers. The environmental impact report, in reference to the foregoing statistical data states: "The above analysis is not intended to suggest that the proposed [project's] emissions are *de minimis*; instead, it is provided for overall context. In general, the combined emissions of projects globally appear to be the primary cause of global climate change, even though many [project]-specific emissions appear small when viewed in isolation."

Additionally, the department noted there is an absence of scientific and factual information regarding when particular quantities of greenhouse gas emissions become significant. Further, there is no consensus among governmental agencies as to whether a particular project may result in a potentially significant impact on greenhouse gas emissions. When the environmental impact report was circulated, neither the corps nor the department found any other federal, state, regional or local agency had adopted greenhouse gas emissions significance thresholds.

In the response to comments made after the environmental impact report was circulated, evidence of other agencies' adoption of significance thresholds was discussed. After the draft environmental impact report was prepared, the department distributed its responses to comments. The department noted, as of that date, no statewide agency had

promulgated a significance threshold for greenhouse gas emissions. Neither the air resources board nor the South Coast Air Quality Management District had promulgated significance threshold determination standards. But the San Joaquin Valley Air Pollution Control District provided a tiered method of assessing a project's significance. The San Joaquin Valley District developed a significance determination when there was a 29 percent reduction from a business as usual emissions level. The San Joaquin Valley District concluded under those circumstances the greenhouse gas emissions levels should be determined to have a less than significant individual and cumulative impact. The Sacramento Metropolitan Air Quality Management District recommended that thresholds of significance should be related to the Health and Safety Code section 38550 goals. According to the Sacramento district, "[A] possible threshold of significance could be to determine whether a project's emissions would substantially hinder the State's ability to attain the goals identified in [Health and Safety Code section 38550] (*i.e.*, reduction of statewide [greenhouse gas] emissions to 1990 levels by 2020; approximately a 30 percent reduction from projected 2020 emissions)."

The Bay Area Air Quality Management District adopted a different significance determination from that used in the environmental impact report in this case. The Bay area district posited three criterion: does the project comply with a qualified greenhouse gas reduction strategy?; would the project emit less than 1,100 metric tons of greenhouse gas emissions equivalent yearly?; or would the project emit less than 4.6 metric tons of greenhouse gas equivalents per service population per year? If the project did not meet one of these three criteria, then its greenhouse gas impacts would be deemed significant.

The environmental impact report acknowledges a significant increase in the amount of greenhouse gas emissions from the project site over the existing scenario. The environmental impact report states: "[T]he increase, alone, is not sufficient to support a significance determination because of the absence of scientific and factual information regarding when particular quantities of greenhouse gas emissions become significant (as climate change is a global issue). Accordingly, and as discussed further below, the analysis also considers whether the proposed [project's] emissions . . . would impede the

State of California's compliance with the statutory emissions reduction mandate established by [Health and Safety Code section 38550].”

Rather, than exclusively focus on the emissions differential, the department concluded the significance determination should be premised on the Health and Safety Code section 38550 target. The department adopted the following significance criterion to assess impacts: “[The department] has determined it is appropriate to rely on [the global warming act], and specifically Health [and] Safety Code, section 38550, as a benchmark and use the statute to inform its judgment as to whether the [project’s] [greenhouse gas] emissions would result in a significant impact. (See Cal. Code Regs. tit. 14, § 15064, subd. (f)(1).) Accordingly, the following significance criteria is used to assess impacts: [¶] Will the proposed [project’s] [greenhouse gas] emissions impede compliance with the [greenhouse gas] emission reductions mandated in [the global warming act]?”

c. significance determination

Once an agency determines an environmental impact report must be prepared, the document must contain a discussion of the project’s significant ecological impacts. (§ 21002.1, subd. (a); *Protect The Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109 [“Thus, in preparing the [environmental impact report], the agency must determine whether any of the *possible* significant environmental impacts of the project will, in fact, be significant.”].) If an agency determines that any effect will not be significant, there need only be a brief discussion as to why the environmental impacts will be nonserious. (§ 21100, subd. (c); Guidelines, § 15128; *Protect The Historic Amador Waterways v. Amador Water Agency*, *supra*, 116 Cal.App.4th at p.1109.)

The department has discretion to select the significance criterion for greenhouse gas emissions. (Guidelines, § 15064.4, subd. (a); *Citizens for Responsible Equitable Environmental Dev. v. City of Chula Vista*, *supra*, 197 Cal.App.4th at p. 336.) The Court

of Appeal for the First Appellate District, Division Four explained a lead agency's responsibilities in assessing the significance of greenhouse gas emissions: "In assessing the significance of these emissions, the lead agency should consider the extent to which the project may affect emissions levels; whether emissions exceed an applicable threshold of significance; and whether the project complies with regulations or requirements adopted to implement statewide, regional, or local plans to reduce [greenhouse gas emissions]." (*North Coast Rivers Alliance v. Marin Municipal Water District Board of Directors*, *supra*, 216 Cal.App.4th at p. 650; see *Citizens for Responsible Equitable Environmental Dev. v. City of Chula Vista*, *supra*, 197 Cal.App.4th at p. 335.) The use of Health and Safety Code section 38550 as a basis for a significance determination has been upheld in two other cases. (*Friends of Oroville v. City of Oroville* (2013) 219 Cal.App.4th 832, 841 ["The City properly adopted Assembly Bill 32's reduction targets for [greenhouse gas] emissions as the threshold-of-significance standard in determining whether the [project's] [greenhouse gas] emissions constituted a significant environmental impact."]; *Citizens for Responsible Equitable Environmental Dev. v. City of Chula Vista*, *supra*, 197 Cal.App.4th at p. 336 ["Here, the City properly exercised its discretion to utilize compliance with [AB 32] as the threshold."].)

The department found the impact would be less than significant because the project's emissions were 31 percent below the level that would be expected if no action is taken: "The proposed [project] will result in the emission of about 269,000 metric [tons] of [greenhouse gases] on an annualized basis (and incorporating vegetation and construction emissions). These emissions or 31 percent below the level that would be expected if the proposed [project] and resulting development were constructed consistent with [the air resources board's] assumptions for the [board's] 2020 [no action taken] scenario. Because this reduction exceeds the 29 percent reduction required for California to achieve the [Health and Safety Code section 38550] reduction mandate, the proposed [project] would result in a less-than-significant impact." The environmental impact report assessed the reductions in greenhouse gas emissions if the Health and Safety Code section 38550 standards were met. For example, in terms of residential developments, if

no action were taken to reform environmental policies, 86,607 tons of greenhouse gases would be released into the environment in 2020. But if the environmental reforms resulting from the global warming act's enactment, the residential greenhouse gas emissions would be reduced to 59,449 tons annually for a 31 percent reduction.

No doubt, inherent in the department's analysis are some projections involving uncertainty in evaluating greenhouse gas emissions. However, Guidelines section 15144 recognizes that an environmental impact report necessarily involves a degree of forecasting: "Drafting an [environmental impact report] . . . necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." (Guidelines, § 15144; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, *supra*, 40 Cal.4th at p. 428; *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 96.) Further, Guidelines section 15064.4, subdivision (a) requires a lead agency to "make a good-faith effort" to "describe, calculate or estimate" the amount of greenhouse gas emissions. Nothing in the greenhouse gas emissions section of the environmental impact report contravenes these requirements.

7. Plaintiffs' criticisms of the environmental impact report

Plaintiffs argue: the department used an impermissible illusory baseline; disclosure of existing greenhouse gas emissions does not satisfy unspecified portions of the California Environmental Quality Act; the air resources board's business as usual (no action taken) standard does not provide a proper baseline for greenhouse gas emissions significance analysis; other significance thresholds would have avoided the use of an illusory environmental baseline; the analysis in the environmental impact report obstructs the goals of unspecified provisions of the global warming act; and the environmental impact report improperly takes credit for existing ecological regulations and legislation. These contentions have no merit.

The environmental impact report assesses: the current greenhouse gas emissions; the anticipated changes resulting from the project's development; and significance in terms of 2020 compliance with Health and Safety Code section 38550. As we have explained, utilizing this form of environmental analysis has been expressly approved on two occasions by two different Courts of Appeals. (*Friends of Oroville v. City of Oroville*, *supra*, 219 Cal.App.4th at p. 841; *Citizens for Responsible Equitable Environmental Dev. v. City of Chula Vista*, *supra*, 197 Cal.App.4th at p. 336.) The department declined to solely rely on the increase in greenhouse gas emissions as a baseline for determining significance. Further, the department declined to utilize the numerical percentages of total worldwide, national and state emissions as the basis for its significance determination. This was because the scientific community could not *quantify* when a particular increase was *significant*. It bears emphasis that the department is vested with the discretion to select a threshold to apply to greenhouse gas emissions. (Guidelines, § 15064.4, subd. (a); *Citizens for Responsible Equitable Environmental Dev. v. City of Chula Vista*, *supra*, 197 Cal.App.4th at p. 336.)

Further, the statistical analysis was premised upon an extensive environmental evaluation prepared by ENVIRON International Corporation. The October 2009 ENVIRON International Corporation technical addendum updated its prior calculations concerning greenhouse gas emissions. The ENVIRON International Corporation analysis was premised in material part on the air resources board scoping plan. Further, the updated technical analysis was premised upon: environmental legislation which requires electricity sellers to increase renewable energy percentages; an executive order, effective November 11, 2008, which requires increased procurement of eligible renewable energy resources by 2020; new statutory requirements for reducing greenhouse gas emissions by 2016; and new federal fuel efficiency and emissions standards requirements.

The analysis in the October 2009 ENVIRON International Corporation technical update evaluated various types of emissions. For example, the update identified the greenhouse gas emissions from renewable and nonrenewable power sources. In doing so, the consultant relied upon the California Climate Action Registry General Reporting

Protocol. Further, the consultant referred to the climate action registry database for data provided by Southern California Edison Company, the likely energy provider for the project area. Also, the October 2009 technical update evaluated emissions resulting from the construction of 6,346 residences in the project area. The technical assessment was premised upon an energy modeling package approved by the California Energy Commission. The analysis was based upon various models for residences compliant with 2005 and 2008 versions of the California Building Standards Code. (Tit. 24, Cal. Code Regs.) In addition, the technical update calculated emissions per dwelling unit assuming the developer was able to provide a 15 percent improvement over California Building Standards Code requirements.

Also, the ENVIRON International Corporation update evaluated nonresidential power usage. Much of the data was taken from a 2006 California Energy Commission report on commercial end-use power usage. The nonresidential power usage analysis evaluated separate scenarios depending upon compliance with the 2008 California Building Standards Code requirements. A separate analysis was made if solar panels were utilized in nonresidential development and for each design alternative. Much of the source materials for the ENVIRON International Corporation analysis were from California Energy Commission documents.

Additionally, the technical update evaluated greenhouse gas emissions from municipal sources in the project area. Among the municipal sources evaluated were: water distribution and reclamation facilities; vehicle use in connection with water distribution and reclamation; swimming pools; and recreation centers under each of the design alternatives. Most of these calculations relied upon documents provided by: the California Climate Action Registry Database; the California Energy Commission; studies by other municipalities; federal Environmental Protection Agency energy department studies; and academic studies.

Based upon this data, the ENVIRON International Corporation analysis evaluated greenhouse gas emissions for each design municipal sources alternative if no action were taken to improve environmental practices. In addition, the technical update evaluated

municipal greenhouse gas emissions if sounder environmental practices were adopted. The source information for these comparisons were analyses prepared by the California Energy Commission, other municipalities, federal agencies, and the air resources board. There is no merit to plaintiffs' challenges to the department's environmental impact report and the consultants' analysis. The department's environmental baseline and significance conclusions, premised in part upon the ENVIRON International Corporation technical update and the air resources board scoping report, are supported by substantial evidence.

Only one other of plaintiffs' arguments warrants further explicit analysis. Plaintiffs infer that Deputy Attorney General Timothy E. Sullivan has raised issues pertinent to the present environmental impact report. In fact, in his November 4, 2009 letter, Mr. Sullivan addressed a staff report concerning greenhouse gas emissions prepared by the San Joaquin Valley Air Pollution Control District. Plaintiffs rely on Mr. Sullivan's following comments: "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 [greenhouse gas] 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. [¶] 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 today, 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, [greenhouse gas] efficient." (Fns. omitted.)

For a multitude of reasons, Mr. Sullivan's November 4, 2009 letter, by itself or in conjunction with other analyses, does not permit the environmental impact report to be set aside. Those reasons include: on November 4, 2009, Mr. Sullivan was not evaluating

the present environmental impact report; Mr. Sullivan was explaining the difficulty of merely applying Health and Safety Code section 38550 and Executive Order S-03-05 requirements to future unspecified hypothetical projects; the environmental impact report in this case sets a specific environmental objective--exceeding the Health and Safety Code section 38550 standards; and the environmental impact report does not discuss a mere *hypothetical project* but concretely identifies the number of greenhouse gas triggering facilities, activities and the anticipated emissions levels. Finally, the developer correctly notes that the Attorney General has taken no position in connection with the present environmental impact report. Mr. Sullivan's November 4, 2009 discussion about the San Joaquin Valley air pollution district's staff report does not permit the environmental impact report's certification to be set aside.

Plaintiffs' argument is that the environmental impact report did not examine existing onsite emissions, the project as originally conceived, as well as projected greenhouse gas emissions' impacts have no merit. The environmental impact report analyzed the project if no action was taken. The project as originally conceived was not hypothetical. It consisted of anticipated real construction on and development of presently open space. Plaintiffs' repeated characterizations some hypothetical project was analyzed have no merit. Nor is there any merit to the argument that the department was *required* to adopt baseline and significance analysis utilized by others. It was the department's obligation to select an appropriate baseline and there was no requirement that analysis adopted by others be utilized in the environmental impact report. Nor does utilization of the Health and Safety Code section 38550 targets obstruct the goals of the global warming act. Finally, the authority cited by plaintiffs is neither controlling nor does it provide a ground to set aside the environmental impact report's certification. We, with respect, reject plaintiffs' challenges to the greenhouse gas analysis in the environmental impact report.

[The balance of the opinion is to be published]

V. DISPOSITION

The judgment is reversed. Upon remittitur issuance, judgment is to be entered in favor of defendant, California Department of Fish and Wildlife, and the real party interest, The Newhall Land and Farming Company. Defendant and real party in interest shall recover their costs incurred on appeal jointly and severally from plaintiffs: Center for Biological Diversity; Friends of the Santa Clara River; Santa Clarita Organization for Planning the Environment; Wishtoyo Foundation/Ventura Coastkeeper; and California Native Plant Society.

CERTIFIED FOR PARTIAL PUBLICATION

TURNER, P. J.

We concur:

MOSK, J.

KRIEGLER, J.

Attachment B

**Court of Appeal of California, Second Appellate District,
Recommendation Against Publication (April 7, 2014)
(recommending to California Supreme Court that
unpublished portion of opinion in *Center for Biological
Diversity v. California Department of Fish and Wildlife* (Case
Number B245131) remain unpublished)**

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

DIVISION FIVE

COURT OF APPEAL – SECOND DIST.

FILED

Apr 07, 2014

JOSEPH A. LANE, Clerk

D. LEE Deputy Clerk

CENTER FOR BIOLOGICAL
DIVERSITY et al.,

Plaintiffs and Respondents,

v.

CALIFORNIA DEPARTMENT OF FISH
AND GAME,

Defendant and Appellant;

THE NEWHALL LAND AND FARMING
COMPANY,

Real Party in Interest and Appellant.

B245131

(Super. Ct. No. BS131347)

RECOMMENDATION AGAINST
PUBLICATION

The California Building Industry Association and Chamber of Commerce have requested that the unpublished portion of our opinion filed on March 20, 2014, part IV(G), be published. We recommend to our Supreme Court that part IV(G) of opinion remain unpublished. Part IV(G) applies established rules of environmental law to a meritless aspect of a challenge to an environmental impact report certification. Standards concerning baseline determinations are clearly established. Already, two Court of Appeal decisions have held Health and Safety Code section 38550 may serve as the basis for a significance determination. Health and Safety Code section 38550 is part of Assembly Bill No. 32 (2005-2006 Reg. Sess.). Thus, the unpublished discussion in part

IV(G) of our opinion does not meet the publication standards set forth in California Rules of Court, rule 8.1105(c). Pursuant to California Rules of Court, California Rules of Court, rule 8.1120(b)(1), this recommendation, along with a copy of our partially published opinion, are to be served on our Supreme Court. Copies of this recommendation are to be served on the parties and counsel for the California Building Industry Association and Chamber of Commerce as required by California Rules of Court, rule 8.1120(b)(2).



TURNER, P.J.



MOSK, J.



KRIEGLER, J.



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Chair
Robert Bernstein

Vice-Chair
Jim Balter

Secretary
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Treasurer
Ginny Turner

Executive Committee
Katie Mullin

Executive Committee
Fran Farina

Executive Committee
Katie Davis

December 12, 2014

APCD Staff, CAC and Board of Directors
Santa Barbara County Air Pollution Control District (APCD)
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110

Re: Threshold of significance for Greenhouse Gas (GHG) emissions.

APCD Decision Makers,

On behalf of our over two thousand members and the citizens and residents of Santa Barbara, we are writing to thank you for acting to address greenhouse gas emissions under the California Environmental Quality Act (CEQA) and to urge you to adopt a zero emissions threshold for significance.

The latest report from the IPCC, the UN Intergovernmental Panel on Climate Change, states unequivocally that human influence on the climate system is already impacting all continents, reducing grain yields worldwide and costing human lives. It says, “We have little time before the window of opportunity to stay within 2°C of warming closes.” It further states that we need to reduce emissions by 40 to 70 percent between 2010 and 2050 and to zero by 2100 to avoid “severe, pervasive and irreversible impacts for people and ecosystems.”¹

Local impacts from GHG emissions are also well documented, including temperature and ecosystem disruption, rising sea levels, ocean acidification, impacts to water supplies, wildfires, etc.²

Given this reality, and the scientific consensus that we must reduce emissions, not increase them, it is unacceptable to set an emissions threshold of 10,000 tons. This is equivalent to adding 2,000 additional cars to county roads, and that is clearly significant. If you must set a threshold, it should capture all major new industrial sources of emissions. That means setting a threshold as close to zero as practical. (We might understand a threshold of 25 tons, a level the APCD generally considers significant for criteria pollutants.)

We find the other options presented (percentage reduction from BAU) convoluted, unprecedented, unworkable and unacceptable. Firstly, this approach does not set a threshold. It doesn't make sense that a pollutant is significant only to the degree it differs from best practices. It is significant if it adds net new pollution regardless of the mechanism. This approach is more like setting a convoluted remedy than a threshold. Secondly, we think this approach would have little practical impact and the oil industry would try to undermine it. They are already spending millions of dollars on lobbying and front groups in an attempt to undermine AB 32.³

The APCD's obligation is to "add GHG threshold to significance criteria for cumulative impacts" under CEQA. The APCD's mission is "to protect the people and the environment of Santa Barbara County from the effects of pollution."

Given this task, you should set an actual threshold, and it should take into account the scientific consensus that we must decrease (not increase) GHG emissions to protect people and the environment. Only a zero threshold or something very close to zero, meets those criteria.

It should be noted that 100% of the citizen comments at the public meetings on this issue called for a zero threshold and so this must be an option brought to the CAC and APCD Board.

The APCD's mission is not to protect industry or industry profits, but to protect the people and the environment of Santa Barbara County. Given the oil industry's stated goal to increase the use of steam injection for oil extraction in Santa Barbara County—among the most carbon-intensive forms of oil extraction in the world—it is essential that APCD resist industry lobbying.

We look to you to set a scientifically-based threshold of significance and to protect people and the environment of the county. That means a zero emissions threshold.

Respectfully submitted,



Robert Bernstein
Chair, Sierra Club, Santa Barbara Group

¹http://www.ipcc.ch/pdf/ar5/prpc_syr/11022014_syr_copenhagen.pdf

² <http://www.sbnature.org/content/715/Frank%20Davis%20Statement.pdf>

³<http://www.businessweek.com/articles/2014-11-25/revealed-the-oil-lobbys-playbook-against-californias-climate-law#p1> and http://switchboard.nrdc.org/blogs/mborgeson/oil_industry_doubles_spending.html

December 19th, 2014

Ms. Molly Pearson
Mr. Brian Shafritz
Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110
mmp@sbcapcd.org; bps@sbcapcd.org

Re: District Environmental Review Guidelines Addressing Greenhouse Gas Emissions under CEQA

Dear Ms. Pearson and Mr. Shafritz,

The Community Environmental Council appreciates the opportunity to comment on the District environmental review guidelines addressing greenhouse gas emissions under CEQA. Climate change is the largest and most pervasive environmental challenge that faces our planet and scientists are increasingly warning that we need to take action now to slow the worst and costliest of climate change effects.

Option #1

CEC supports Option #1, a zero emission threshold. Low costs offsets are now available to make it easy and feasible for projects to mitigate their greenhouse gas pollution. This threshold will not force projects into environmental review solely on the basis of projected greenhouse gas emissions because there are ample opportunities to fully mitigate greenhouse gas emissions.

Our county has been making strides to reduce our greenhouse gas emissions, but just a few large projects have the potential to reverse this downward trend. The District's mission is to "protect the people and the environment of Santa Barbara County from the effects of air pollution" and to allow an increase in greenhouse gas emissions is incompatible with this mission.

Option #2

A bright line threshold requiring mitigation down to 10,000 MTCO₂/yr is unlikely to capture a significant portion of emissions. **CEC could possibly support a much lower bright line, one that would capture 95% or more of emissions.** 10,000 MT/yr is equivalent to the emissions from 2,000 average cars, which is a massive amount of additional pollution that polluters should not be allowed to freely emit. Additionally, piecemealing of projects is a concern, and already projects such as the North Garey enhanced oil project with emissions of 9,850 MT/yr have recently been approved.

According to District analysis presented to the Community Advisory Council in 2011, a 10,000 MT threshold in Santa Barbara County at that point affected 7% of projects and 55% of new emissions from stationary sources (198,786 MT/yr). Additionally, while 55% of new emissions would be affected, if these six projects were required to mitigate to 10,000 MT, that would mean 60,000 MT would remain unmitigated, leading to a total capture rate of 138,786 MT/yr, or 39% of new emissions, not 55%. Thus a lower threshold is required to capture an equivalent percentage of new emissions in our County. We pointed this out in our letter sent July 3rd, 2014, but have yet to see a new analysis that uses updated data.

It is our concern that a large number of new industrial projects could be permitted with minimal greenhouse gas reductions, thus allowing our county's greenhouse gas pollution to increase, not decrease. We ask that the district use the latest data to calculate what percentage of emissions a 10,000 MT/yr threshold would capture and where the bright line threshold would need to be set to reduce 95% of new emissions.

Option #3

The performance-based measure hasn't been used in any other District across the state. **CEC does not support this option, as it is our concern that this measure could lead to an overall increase in greenhouse gas emissions, as many large projects could be permitted with minimal mitigation required.** Under option #3, it is possible that our county's greenhouse gas emissions will increase, not decrease, if many large projects are approved.

While the District's examples were helpful, it would be most helpful to see analysis of a project that most commenters are familiar with, the Santa Maria Energy project. We understand why perhaps a single project shouldn't be singled out, but an analysis could be done on a generic project that emits 87,000 MT/yr, using average performance numbers for Santa Barbara County cyclic steaming to calculate the level of mitigation this project would be required to mitigate under the performance-based option. This example, based upon a real life project that many of us are familiar with, would be very illustrative in showing how this measure would work, and could allow us to see how it compares to the 10,000 MT threshold that the County adopted when they approved the project.

Option #4

CEC does not support Option #4. This option allows a minimal mitigation of 15.3% or 35%, and would likely lead to an increase in overall county greenhouse gas emissions if many large projects are approved. The low level of mitigation is justified by referring to AB 32 and the updated Scoping Plan targets for 2020, which seek a reduction of greenhouse gas emissions to 1990 levels by 2020. However, many potential projects will continue long past 2020, and California's Executive Order S-21-09 is to reduce greenhouse gas emissions 80% below 1990 levels by 2050. Thus a mitigation level of 15.3% or 35% is clearly incompatible with E.O. S-21-09.

In fact, SANDAG recently had a ruling from the California Court of Appeals which judged that the EIR for SANDAG's Regional Transportation Plan and Sustainable Communities Strategy was inadequate because the analysis of impacts from greenhouse gas emissions was limited to the 2020 time period, despite the fact that the state has a greenhouse gas reduction target for

2050, and the plan will likely exceed that target. The court ruled that it was not necessary for the state to have a specific plan or threshold to achieve the 2050 target; SANDAG still should have analyzed the greenhouse gas emissions that are projected through 2050 and the impacts that would result. The failure to analyze emissions to 2050 undermined the analysis of mitigation measures as well.

Additionally, option #4 uses the 2020 Scoping Plan targets that use data from during the recession and before the enhanced oil recovery boom had gained steam. Thus these targets are likely to be low in light of the many large enhanced oil projects being permitted across the state. The District should reject this approach that could lead to overall increased emissions in Santa Barbara County.

Conclusion

Only Option #1, a zero emission threshold, will likely lead to an overall reduction in greenhouse gas emissions in Santa Barbara County. All other options could lead to an increase in greenhouse gas emissions, which is counter to the District's mission.

CEC would like to see the District conduct further analysis including:

1. What percentage of emissions would a 10,000 MT/yr threshold capture? What level would the bright line need to be set to capture 95% of emissions from industrial facilities?
2. For option #3, how would it apply to a project that emits 87,000 MT/yr using average cyclic steaming numbers?
3. How many projects or total number of greenhouse gas emitting projects would need to be permitted to have Santa Barbara County's greenhouse gas emission increase, not decrease in each scenario?
4. What is the justification for using 2020 targets rather than 2050 targets for projects that may still be producing after 2020?

Thank you for your consideration of these comments. Many entities and individuals in Santa Barbara County are taking action to reduce their greenhouse gas emissions. It would be a shame if all these positive efforts were offset by allowing emissions to increase from large industrial projects, especially as these projects may have the financial resources to fully mitigate their pollution. Thanks for your consideration of our comments and we wish the District success in your endeavor to ensure meaningful consideration and mitigation of GHG emissions from stationary sources.

Sincerely,



Dave Davis
Executive Director



December 29, 2014

Santa Barbara County Air Pollution Control District (APCD)
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110

Re: Threshold of significance for Greenhouse Gas (GHG) emissions.

Dear APCD Staff and Directors,

We are writing to urge you to adopt a zero threshold for GHG emissions.

1. 100% of the public comments from citizens at the public meetings held on this issue called for a zero threshold. This must be the option brought forward.
2. This is already a status quo default position being used by state agencies to evaluate projects. Anything other than a zero threshold is a step backwards.

e.g., EIR for the Goleta oil project (PRC 421 Recommissioning Project) uses a zero threshold in lieu of APCD setting one.

4.4 Air Quality and Greenhouse Gases

4-140 "Until such time the Santa Barbara County APCD establishes GHG thresholds, the threshold of "zero net increase" for GHG emissions recommended by CSLC staff would require mitigation and would be less than significant"

(http://www.slc.ca.gov/division_pages/DEPM/Reports/Venoco_PRC_421/PDF/4.0_Impacts_pt1.pdf)

3. The 10,000 tons option is far too high. This is the equivalent of adding 2,000 cars to county roads. It also doesn't take into account cumulative impacts from lots of new projects and may increase and encourage industry to game the system by coming in just under this level. For instance, the large 56 well "North Garey" steam injection oil project approved in March came in at an estimated 9,850 tons of GHGs. A number of projects of this size would be a very significant increase in emissions. 25 tons is more customary number to use.

e.g., EIR for the Goleta oil project (PRC 421 Recommissioning Project) references 25 tons.

4.4 Air Quality and Greenhouse Gases

4-135 "As stated above, neither the City of Goleta nor the APCD have established thresholds of significance for construction emissions, but the APCD generally considers emissions of any criteria pollutant that exceed 25 tons per year to be significant."

(http://www.slc.ca.gov/division_pages/DEPM/Reports/Venoco_PRC_421/PDF/4.0_Impacts_pt1.pdf)

4. The “percentages off” options do not comply with the goal to create a threshold for CEQA significance. Regardless of the percentage reduction, if the result of a project is a large increase in pollution, that new source of pollution is significant. By the logic of a percentage reduction, a project could lead to a 10-fold increase emissions in the county and be judged insignificant provided they demonstrate that it could be even worse. There is no precedent for this approach for good reason. It is an unacceptable “solution” that is worse than the status quo.
5. Our county’s tight oil reserves can only be accessed using extremely carbon-intensive forms of oil extraction. According to the California Air Resources Board, some of the oil fields in our county are among the most carbon-intensive in the world. Furthermore, the oil industry is spending record sums in California and in Santa Barbara County to influence elections and ensure they have as little regulatory oversight as possible. Given this, it is essential that the APCD set a clear goal to not increase emissions in the county and stand by it.

At a time when the scientists are telling us that climate change is affecting us now in the form of drought, increased wildfires, rising sea levels and other catastrophic impacts, and that these impacts will be irreversible if we do not begin reducing greenhouse gas emissions, it is incumbent on APCD to take seriously our obligation to reduce greenhouse gas emissions, starting with a net zero increase for discretionary projects. The stakes could not be any greater.

Sincerely,

John Foran, Ph.D.
Bill Palmisano
Charlene Little
Catherine Gautier-Downes, Ph.D.
Rebecca Claassen
Hunter Grosse
Corrie Ellis
Arlo Bender-Simon
Grace Feldmann
Vivian Stanton
Rebecca August
Katie Davis
John Broberg
Max Golding

350 Santa Barbara
GHG Emissions Committee



City of Santa Barbara

Community Development Department

www.SantaBarbaraCA.gov

January 13, 2015

Director's Office

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& Human Services

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Santa Barbara, CA

93102-1990

Mary Byrd, Community Programs Supervisor
Molly Pearson, Planning & Grants Supervisor
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110

Delivery via email to ceqa@sbcapcd.org
and via U.S. Mail.

Subject: District CEQA Guidelines Update for Stationary Source Greenhouse Gas Emissions

Dear Ms. Byrd and Ms. Pearson:

The City of Santa Barbara Community Development Department, Planning Division has reviewed District materials and options pertaining to the proposal to add a CEQA greenhouse gas (GHG) cumulative impact significance threshold to the District CEQA Guidelines. The proposed threshold would be applicable to new or modified stationary source projects subject to CEQA environmental review when the APCD is lead agency for CEQA review and permitting.

The Planning Division recommends the December 2014 Option 4 Hybrid/Step-Wise proposal. This option would capture most emissions, correlate with State AB 32 goals and State Cap-and-Trade regulations, recognize local CEQA options for programmatic GHG mitigation approaches, and avoid the administrative burden and cost for small sources. The use of the 10,000 MTCO₂e/year screening threshold as part of this option also provides for some consistency with the approach adopted by other jurisdictions and air districts in the State, including the Bay Area AQMD, San Luis Obispo APCD, and South Coast APCD, and the approach used by the County of Santa Barbara for recent energy projects. Changes to climate information and State legislation and regulations will occur over time, and may be expected to necessitate periodic updates to local criteria for evaluating climate change effects.

Thank you for the public workshops and opportunity to comment. Please contact Barbara Shelton of this office with any questions on this matter (bshelton@santabarbaraca.gov).

Sincerely,

Bettie Weiss, City Planner

c: Mayor Helene Schneider
Paul Casey, City Administrator
George Buell, Director, Community Development Department
Barbara Shelton, Project Planner/Environmental Analyst



Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Sandra Burkhart
Senior Coastal Coordinator

January 15, 2015

Ms. Molly Pearson
Planning and Grants Supervisor
Santa Barbara County Air Pollution Control District
260 N. San Antonio Rd, Suite A
Santa Barbara, CA 93110

Subject: WSPA Comments - SBCAPCD CEQA GHG Significance Threshold Development

Dear Ms. Pearson:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing 26 companies that explore for, refine, transport, and market petroleum, petroleum products, natural gas and other energy supplies for California and four other western states. WSPA appreciates this opportunity to provide comments on the development of Santa Barbara County Air Pollution Control District (SBCAPCD) guidance for evaluating the significance of the impacts of greenhouse gas (GHG) emissions from new or modified stationary sources pursuant to the California Environmental Quality Act (CEQA) in cases where the SBCAPCD is the lead agency for the proposed project.

In our written comments submitted to the SBCAPCD on August 15, 2014, WSPA suggested a step-wise approach for determining the significance of GHG emissions from stationary sources that is consistent with and complimentary to the comprehensive statewide GHG emission reduction program pursuant to AB 32 (Global Warming Solution Act of 2006) as implemented by the California Air Resources Board (ARB). At the December 3, 2014 workshop conducted by the SBCAPCD on this issue, SBCAPCD presented an approach similar to the approach suggested by WSPA (Option 4, Percent Reduction from Business-As-Usual).

Option 4 as presented by the SBCAPCD incorporated two of the key elements suggested by WSPA:

A 10,000 MT/yr CO₂e Screening Threshold: If a project's total GHG emissions are below a 10,000 metric ton per year (MT/yr) significance screening level, then the project would be determined to have a less than significant individual and cumulative impact for GHG emissions.

Considers the ARB Cap & Trade Program as a Qualified GHG Reduction Plan: WSPA stated in our written comments that if a project is in compliance with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions, the project would be determined to have a less than significant individual and cumulative impact for GHG emissions. WSPA agrees with the SBCAPCD that the ARB Cap & Trade Regulation is a qualified GHG reduction plan (reference the SJVAPCD CEQA Determinations of Significance for Projects Subject to the ARB GHG

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Cap & Trade Regulation). The ARB Cap & Trade Regulation is different from most other measures in the AB 32 Scoping Plan. The regulation was devised as a corrective mechanism as it sets a hard cap instead of an emissions limit, so the emission reductions from the program vary as estimates of “Business-As-Usual” emissions in the future are updated. As stated in ARB’s updated AB 32 Scoping Plan: “the Cap and Trade Regulation provides assurance that California’s 2020 limit will be met because the regulations sets a firm limit on 85% of California’s GHG emissions.” The emissions threshold for a stationary source’s inclusion in the ARB Cap & Trade Program is 25,000 MT/yr CO₂e. Therefore, it is WSPA’s assertion that stationary sources that exceed this threshold would automatically be deemed to have a less than significant impact for GHG emissions under a CEQA review by the SBCAPCD as a lead agency for the project.

What remains is an approach to determine significance criteria for projects greater than 10,000 or less than 25,000 MT/yr CO₂e. WSPA addressed this stationary source GHG emissions category in our past written comments as follows:

“A project can demonstrate that project-specific GHG emissions would be reduced or mitigated by a percentage consistent with the AB 32 Scoping Plan, compared to “Business-As-Usual” (BAU) baseline (i.e., 3-year period prior to AB 32 promulgation in 2006). Thus, the project GHG emissions (which would be subject to current SBCAPCD rules and regulations) would be compared to project GHG emissions if the project had been permitted during the baseline period under the requirements in place during the baseline period. The most recent AB 32 Scoping Plan indicated a 15% target. Projects achieving designated GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.”

In their presentation at the workshop, SBCAPCD staff presented a similar approach that addresses this GHG emissions category. WSPA has several comments on SBCAPCD’s approach:

- The SBCAPCD guidelines should incorporate a provision that if a project is in compliance with any approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions, the project would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- The SBCAPCD approach equates the BAU emissions scenario to the project GHG emissions as proposed in the permit application. The SBCAPCD’s approach is not, in fact, a BAU emissions scenario. Rather, it is only adjusting the applicant’s project emissions included in the application by the percent reduction listed in the updated AB 32 Scoping Plan. Consistent with our past written comments (cited above), WSPA suggests that the BAU emissions scenario be revised to be consistent with the BAU methodology outlined in the updated AB 32 Scoping Plan.
- The SBCAPCD presentation also suggested two options for a percent reduction for this GHG emissions category: the 15.3% reduction as outlined in the updated AB 32 Scoping Plan, and a 35% reduction that would be “tied to the 2050 goal set by the Governor in Executive Order S-3-05 and the AB 32 Scoping Plan goals and targets.” WSPA understands that projects to be reviewed by the SBCAPCD may last beyond 2020, but the SBCAPCD did not provide details on the derivation of the 35% reduction, and there is no current legislation or regulation supporting a post 2020 percent reduction. Therefore, WSPA suggests that the proposed percent reduction be

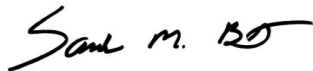
limited to one option: the 15.3% reduction that is supported by the updated AB 32 Scoping Plan and current regulations.

The SBCAPCD presented “Notes on Mitigation” at the workshop. WSPA has the following comments on this section:

- Although onsite or local mitigation is preferred by the SBCAPCD, it is recognized that climate change impacts are global not local, and mitigation that meets AB 32 protocols and requirements, regardless of location, must be allowed in the proposed SBCAPCD Guidelines;
- WSPA requests further details on the potential obligation to monitor, report, and mitigate project GHG emissions annually; and
- Projects subject to the Cap and Trade program are deemed less than significant and no further mitigation would be required by the SBCAPCD.

WSPA would again like to express our appreciation for the opportunity to provide comments regarding this very important regulatory item. If you have any questions regarding the approach described in this letter, please contact me at (805) 966-7113.

Sincerely,



Sandra Burkhardt
Senior Coordinator, Coastal Region, State Marine, Waste, and Property Tax Issues

CC: David Van Mullem - SBCAPCD

From: Jim Nuttall
Sent: Thursday, January 15, 2015 8:46 PM
To: CEQA contact
Subject: please do not allow additional GHG

It's not fair and irresponsible to allow anymore GHG to spew into the atmosphere.
We are all working hard to reduce our individual pollution.

Jim Nuttall



January 16, 2015

Ms. Molly Pearson
Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110
ceqa@sbcapcd.org

Re: Updating District Environmental Review Guidelines to Address Greenhouse Gas Emissions under the California Environmental Quality Act (CEQA)

Dear Ms. Pearson:

Thank you for the opportunity to comment on the Santa Barbara County Air Pollution Control District's ("District") proposal to update its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of greenhouse gas ("GHG") emissions from new or modified stationary sources. This letter is submitted by the Environmental Defense Center ("EDC") on behalf of our members. Our organization is very involved in efforts to reduce climate change impacts in our community, and we represent clients in responding to projects that will generate new GHG emissions and contribute to cumulative climate change impacts.

Establishing an appropriate threshold for analyzing (and mitigating) GHG emissions is critical given the dire state of climate change in our community and around the globe. Recent scientific research demonstrates that climate change trends are much worse than previously thought, and potential impacts will be much more severe. These impacts will be felt locally, whether they are related to more severe droughts and reductions in available water supplies, or increased sea level rise affecting local beaches and structures, or increased fire risk, among other significant impacts. For this reason, EDC supports timely, thorough analysis and disclosure of GHG emissions, as well as full mitigation of impacts from such emissions.

EDC supports a zero emission threshold approach because this is the only approach that allows for full mitigation of impacts from new GHG emissions. This threshold finds support in CAPCOA's white paper on CEQA and climate change, and is utilized by the California State Lands Commission in its Environmental Impact Reports ("EIRs") for local oil and gas projects.

As there is ample opportunity for project proponents to fully mitigate their emissions, a zero emission threshold will not force projects into environmental review solely on the basis of projected GHG emissions.

Option 1- Zero Emission Threshold

EDC supports Option 1, which would establish a zero emission threshold for evaluating GHG emissions. This option would require the District to consider the full potential impacts of a proposed project, consistent with CEQA, and would provide the basis for considering the full array of potential mitigation measures necessary to avoid or substantially lessen a project's impacts.

The basis for this threshold is founded in the most current scientific studies, which demonstrate that global carbon levels are already unsustainable. These studies show that a target of 350 ppm for atmospheric levels of CO₂ is necessary to achieve climate stabilization and avoid disastrous global consequences.¹ Given that atmospheric levels have reached 400 ppm,² we are already on a trajectory that is not sustainable, and we must decrease GHG emissions more rapidly and to a greater extent than previously thought. Thus, *any* additional contribution of CO₂ would be a step further from acceptable target levels.

The potential consequences of global warming further underscore the need for a zero emission threshold. The Intergovernmental Panel on Climate Change ("IPCC"), Union of Concerned Scientists, and the California Climate Change Center have published several studies that identify how climate change will affect the environment.³ These impacts include an increase in water temperatures, rise in sea level, coastal erosion, reduction of the Sierra snowpack, increase in severity and frequency of storms, increased droughts, famine, changes in ecosystems, increase in heat waves, increases in pests and diseases, flooding, retreating glaciers, ozone formation, and the potential for wildfires.⁴ More recently, the U.S. Global Change Research

¹ Matthews H.D., and K. Caldeira (2008), *Stabilizing climate requires near-zero emissions*, Geophys. Res. Lett., 35, L04705, doi:10.1029/2007GL032388; James Hansen, et al., *Target Atmospheric CO₂: Where Should Humanity Aim?* The Open Atmospheric Science Journal, 2008, 2, 217-231; Statements of Dr. Chris Field, Carnegie Institution for Science, Decisive Action Needed as Warming Predictions Worsen, Says Carnegie Scientist, available at

http://www.ciw.edu/news/decisive_action_needed_warming_predictions_worsen_says_carnegie_scientist

²<http://research.noaa.gov/News/NewsArchive/LatestNews/TabId/684/ArtMID/1768/ArticleID/10187/NOAA-Carbon-dioxide-levels-reach-milestone-at-Arctic-sites.aspx>

³ Union of Concerned Scientists. 2006. California Global Warming Impacts and Solutions, available at http://www.ucsusa.org/clean_california/ca-global-warming-impacts.html. California Climate Change

⁴ Karl, T.R., *supra*; Levin, K., *supra*, citing Emanuel, K., *Increasing Destructiveness of Tropical Cyclones Over the Past 30 Years* (Nature, vol. 436, August 4, 2005), P.J. Webster, et al., *Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment* (Science, vol. 309, September 16, 2005), NASA Earth Observatory, *Record Low for June Arctic Sea Ice* (June 2005 at earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=16978), A.J. Cook et al., *Retreating Glacier Fronts on the Antarctic Peninsula Over the Past Half-Century* (Science, vol. 308, April 22, 2005), R.B. Alley et al., *Ice-Sheet and Sea-Level Changes* (Science, vol. 310, October 21, 2005), E.D. Domack, et al., *Stability of the Larsen B Ice Shelf on the Antarctic Peninsula During the Holocene Epoch* (Nature, vol. 436, August 4, 2005), F.S. Chapin III, et al., *Role of Land Surface Changes in Arctic Summer Warming* (Science, vol. 310, October 28,

Program released a report on “Climate Change Impacts in the United States” that identified current and projected effects of climate change on a regional basis in the U.S.⁵ This report confirms that climate change impacts from GHG emissions are real and must be addressed without further delay.

The use of a “zero emission” threshold is one of the options discussed in CAPCOA’s white paper on CEQA and climate change.⁶ According to the CAPCOA report,

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 impacts.*** 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.***⁷

A “zero emission” threshold has been used by the California State Lands Commission in its Final EIRs for the Venoco Ellwood Marine Terminal and Venoco Revised PRC 421 Recommissioning Project, and the Draft EIR for the Venoco Ellwood Full Field Project.⁸ We strongly encourage the District to utilize a zero emission threshold in its evaluation of direct and indirect GHG emissions.

2005), M. Hopkin, *Amazon Hit by Worst Drought for 40 Years: Warming Atlantic Linked to Both US Hurricanes and Rainforest Drought* (Nature, October 11, 2005), I.T. Stewart, et al., *Changes Toward Earlier Streamflow Timing Across Western North America* (Journal of Climate, vol. 18, April 2005).

⁵ Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., 2014: *Highlights of Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program, 148 pp.

⁶ CAPCOA. 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. Jan.

⁷ CAPCOA, p. 27, emphasis added.

⁸ Venoco Ellwood Marine Terminal Lease Renewal Project Final Environmental Impact Report, California State Clearinghouse (SCH) No. 2004071075, CSLC EIR No. 743, April 30, 2009; Venoco Revised PRC 421 Recommissioning Project Final Environmental Impact Report, California State Clearinghouse (SCH) No. 2005061013, CSLC EIR Number 732, January 2014; Venoco Ellwood Oil Development and Pipeline (Full Field) Project Draft Environmental Impact Report, State Clearinghouse No. 2006061146, CSLC EIR No. 738, June 2008.

A zero emission threshold will not result in elevated environmental review for new proposed projects. If a project would otherwise be exempt from environmental review, the fact that it will generate GHG emissions will not affect the applicability of the exemption. California Public Resources Code § 21084(b).

If a project would otherwise be subject to a negative declaration, the proponent can still avoid preparation of an EIR by incorporating available mitigation measures. In many instances, on-site mitigation measures may be available to adequately reduce GHG emissions. For example, in the case of Venoco's Revised PRC 421 Recommissioning Project, the EIR found that project emissions could be fully mitigated by replacing existing heater treaters with more efficient emulsion heaters.⁹ In addition to on-site measures to reduce emissions, there are ample state-certified programs through which applicants can purchase "credits" to fully offset any new GHG emissions. As noted in the District's fact sheet, it is entirely feasible for a project proponent to mitigate GHG emissions to a net of zero new emissions.¹⁰ We also support the District's consideration of a County-wide GHG emission credit program so that the co-benefits of emission reductions could be experienced in our community.

Option 2 – Bright Line (10,000 MTCO₂e/yr)

This option would establish a threshold at a defined amount of 10,000 MTCO₂e/year. Notably, several of the "pros" identified by the District for this option also apply to the zero emission threshold. For example, the zero emission threshold option is simple, easy to explain and provides for straightforward implementation. It is also easy to administer, and has been applied elsewhere without legal challenge (e.g., State Lands Commission EIRs referenced *infra*). And, as noted in the District's presentation, there is an exact nexus and proportionality between the impacts and any required mitigation. Accordingly, all of these "pro" arguments should also be applied to the zero emission threshold.

A numeric bright line provides simplicity and efficiency, but at 10,000 MTCO₂e/yr does not fully disclose and mitigate a project's cumulative climate change impacts. Districts, such as the South Coast and Bay Area AQMDs, have chosen this threshold with a goal of "capturing" 90 and 95%, respectively, of new project GHG emissions. For Santa Barbara County, however, a bright line threshold of 10,000 MTCO₂e would only capture approximately 50% of new project emissions. Thus, if the District intends to use a bright line approach, it should identify the bright line threshold for addressing 95% of new project emissions.

Our concern with this approach, obviously, is that it does not disclose all project impacts and does not require full mitigation of such impacts. In addition, the District would need to ensure that proponents do not piecemeal projects in an effort to avoid the threshold and thus avoid any mitigation requirements.

⁹ Venoco Revised PRC 421 Recommissioning Project Final EIR, p. 4-142.

¹⁰ Santa Barbara County Air Pollution Control District, *CEQA Significance Thresholds for GHGs – Questions and Answers*, pp. 3-5; see also California Climate Action Reserve, <http://www.climateactionreserve.org/>

Option 3 – Performance-Based Measures and Percent Reduction Consistent with AB 32 Goals

We strongly oppose any approach based on AB 32. Most importantly, this target only addresses emissions until 2020, and will be irrelevant to projects that will continue to generate GHG emissions beyond 2020. The state's 2050 goal set forth in Executive Order S-03-05 (reducing GHG emissions to 80% below 1990 levels by 2050) is more relevant for new proposed projects.

In addition, this target is based on outdated information. AB 32 was based on a target for global GHG emissions of 450 ppm. Consequently, this target was designed to allow a significant increase in GHG emissions over current levels. As noted above, more recent scientific evidence indicates that 450 ppm is too high and that agencies instead must work to achieve a target of 350 ppm. Thus, updated targets require a *decrease* in current emissions, which is much different from the increase contemplated and allowed in AB 32. Even at current levels, the effects of climate change are being felt throughout the globe.

Although we have raised this concern previously, it achieved additional traction and validation given the recent Court of Appeal decision in *Cleveland National Forest Foundation v. SANDAG*, attached hereto. In that case, the Court found that "SANDAG's decision to omit an analysis of the transportation plan's consistency with the Executive Order [S-03-05] did not reflect a reasonable, good faith effort at full disclosure and is not supported by substantial evidence because SANDAG's decision ignored the Executive Order's role in shaping state climate policy." (Slip Opinion at p. 14.) This omission "deprived the public and decision makers of relevant information about the transportation plan's environmental consequences. The omission was prejudicial because it precluded informed decisionmaking and public participation." (*Id.* at p. 15.) Therefore, the court ordered SANDAG to analyze the plan's consistency with the state's 2050 target set forth in S-03-05.

Accordingly, as much as we oppose the use of this approach, we recommend that if a percent-reduction approach is used, it must be based on 2050 targets.

Option 4 – Percent Reduction from Business-as-Usual

Similarly, this approach will not fully disclose or mitigate all project impacts. To the extent this approach is pursued, it is important that the goals reflect up-to-date scientific information and achieve long-term targets for project mitigation.

Conclusion

In conclusion, we encourage the District to adopt a zero emission threshold because it is the only threshold that will disclose all project cumulative effects and allow for adequate mitigation. This threshold will not force projects into environmental review solely on the basis of

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projected GHG emissions because there are ample opportunities to fully mitigate GHG emissions.

Thank you for your consideration of these comments. Please do not hesitate to contact me if you have any questions concerning these comments.

Sincerely,



Linda Krop
Chief Counsel

cc: Glenn Russell, SBC Planning and Development Department

Att: *Cleveland National Forest Foundation v. SANDAG*

CERTIFIED FOR PUBLICATION
COURT OF APPEAL, FOURTH APPELLATE DISTRICT
DIVISION ONE
STATE OF CALIFORNIA

CLEVELAND NATIONAL FOREST
FOUNDATION et al.,
Plaintiffs and Appellants,

v.

SAN DIEGO ASSOCIATION OF
GOVERNMENTS et al.,
Defendants and Appellants;
THE PEOPLE,
Intervenor and Appellant.

D063288

(Super. Ct. No. 37-2011-00101593-
CU-TT-CTL)

CREED-21 et al.,
Plaintiffs and Appellants,

v.

SAN DIEGO ASSOCIATION OF
GOVERNMENTS et al.,
Defendants and Appellants;
THE PEOPLE,
Intervenor and Appellant.

(Super. Ct. No. 37-2011-00101660-
CU-TT-CTL)

APPEAL from a judgment of the Superior Court of San Diego County,
Timothy B. Taylor, Judge. Judgment modified and affirmed.

The Sohagi Law Group, Margaret M. Sohagi, Philip A. Seymour; and Julie D. Wiley for Defendants and Appellants San Diego Association of Governments et al.

Kamala D. Harris, Attorney General, Timothy R. Patterson and Janill L. Richards, Deputy Attorneys General, for Intervenor and Appellant.

Shute, Mihaly & Weinberger, Rachel B. Hooper, Amy J. Bricker, Erin B. Chalmers; Daniel P. Selmi; Coast Law Group, Marco Gonzalez; Kevin P. Bundy; and Cory J. Briggs for Plaintiffs and Appellants Cleveland National Forest et al.

INTRODUCTION

After the San Diego Association of Governments (SANDAG) certified an environmental impact report (EIR) for its 2050 Regional Transportation Plan/Sustainable Communities Strategy (transportation plan), CREED-21 and Affordable Housing Coalition of San Diego filed a petition for writ of mandate challenging the EIR's adequacy under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).¹ Cleveland National Forest Foundation and the Center for Biological Diversity filed a similar petition, in which Sierra Club and the People later joined.

The superior court granted the petitions in part, finding the EIR failed to carry out its role as an informational document because it did not analyze the inconsistency

¹ Further statutory references are also to the Public Resources Code unless otherwise stated.

between the state's policy goals reflected in Executive Order S-3-05 (Executive Order) and the transportation plan's greenhouse gas emissions impacts after 2020. The court also found the EIR failed to adequately address mitigation measures for the transportation plan's greenhouse gas emissions impacts. Given these findings, the court declined to decide any of the other challenges raised in the petitions.

SANDAG appeals, contending the EIR complied with CEQA in both respects. Cleveland National Forest Foundation and Sierra Club (collectively, Cleveland) cross-appeal, contending the EIR further violated CEQA by failing to analyze a reasonable range of project alternatives, failing to adequately analyze and mitigate the transportation plan's air quality impacts, and understating the transportation plan's impacts on agricultural lands. The People separately cross-appeal, contending the EIR further violated CEQA by failing to adequately analyze and mitigate the transportation plan's impacts from particulate matter pollution. We conclude the EIR failed to comply with CEQA in all identified respects. We, therefore, modify the judgment to incorporate our decision on the cross-appeals and affirm. In doing so, we are upholding the right of the public and our public officials to be well informed about the potential environmental consequences of their planning decisions, which CEQA requires and the public deserves, before approving long-term plans that may have irreversible environmental impacts.

DISCUSSION

I

A

General Role of an EIR

"The Legislature has made clear that an EIR is 'an informational document' and that '[t]he purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.' " (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 391 (*Laurel Heights*); Guidelines, § 15002.)² "The EIR is the primary means of achieving . . . the policy of this state to 'take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.' [Citation.] The EIR is therefore 'the heart of CEQA.' [Citations.] An EIR is an 'environmental "alarm bell" whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.' [Citations.] The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.' [Citations.] Because the EIR must

² All references to Guidelines are to the CEQA Guidelines, which are located in title 14 of the California Code of Regulations beginning at section 15000. "In interpreting CEQA, we accord the Guidelines great weight except where they are clearly unauthorized or erroneous." (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 448, fn. 4 (*Smart Rail*).)

be certified or rejected by public officials, it is a document of accountability. If CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees. [Citations.] The EIR process protects not only the environment but also informed self-government." (*Laurel Heights, supra*, 47 Cal.3d at p. 392.)

B

Role of a Program EIR

The EIR at issue in this case is a program EIR. A "program EIR" is "an EIR which may be prepared on a series of actions that can be characterized as one large project" and are related in specified ways. (Guidelines, § 15168, subd. (a); *Town of Atherton v. California High-Speed Rail Authority* (2014) 228 Cal.App.4th 314, 343 (*Atherton*).) The use of a program EIR can: "(1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action, [¶] (2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis, [¶] (3) Avoid duplicative reconsideration of basic policy considerations, [¶] (4) Allow the lead agency to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, [and] [¶] (5) Allow reduction in paperwork." (Guidelines, § 15168, subd. (b); *Atherton, supra*, at pp. 343-344.)

"[W]here an agency prepares a 'program EIR' for a broad policy document . . . , Guidelines section 15168, subdivision (c)(2) allows agencies to limit future environmental review for later activities that are found to be 'within the scope' of the program EIR." (*Latinos Unidos de Napa v. City of Napa* (2013) 221 Cal.App.4th 192, 196; accord, *Citizens Against Airport Pollution v. City of San Jose* (2014) 227 Cal.App.4th 788, 801-802.) Further environmental review for such activities is required only where "(a) Substantial changes are proposed in the project which will require major revisions of the [EIR]. [¶] (b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the [EIR]. [¶] (c) New information, which was not known or could not have been known at the time the [EIR] was certified as complete, becomes available." (§ 21166; *May v. City of Milpitas* (2013) 217 Cal.App.4th 1307, 1325-1326; accord, *Citizens Against Airport Pollution v. City of San Jose, supra*, at p. 802.)

Because of these limitations, once an EIR is finally approved, a court generally cannot compel an agency to perform further environmental review for any known or knowable information about the project's impacts omitted from the EIR. (*Citizens Against Airport Pollution v. City of San Jose, supra*, 227 Cal.App.4th at pp. 807-808; *Citizens for Responsible Equitable Environmental Development v. City of San Diego* (2011) 196 Cal.App.4th 515, 531-532.) A court also generally cannot compel an agency to perform further environmental review if new regulations or guidelines for evaluating the project's impacts are adopted in the future. (*Concerned Dublin Citizens v. City of*

Dublin (2013) 214 Cal.App.4th 1301, 1320; *Fort Mojave Indian Tribe v. Department of Health Services* (1995) 38 Cal.App.4th 1574, 1605.)

Hence, "[d]esignating an EIR as a program EIR . . . does not by itself decrease the level of analysis otherwise required in the EIR. 'All EIR's must cover the same general content. [Citations.] The level of specificity of an EIR is determined by the nature of the project and the "rule of reason" [citation], rather than any semantic label accorded to the EIR.' " (*Friends of Mammoth v. Town of Mammoth Lakes Redevelopment Agency* (2000) 82 Cal.App.4th 511, 533.) Consequently, in considering a challenge to a program EIR, "it is unconstructive to ask whether the EIR provided 'project-level' as opposed to 'program-level' detail and analysis. Instead, we focus on whether the EIR provided 'decision makers with sufficient analysis to intelligently consider the environmental consequences of [the] project.' " (*Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal.App.4th 1036, 1052.)

*Standard of Review in CEQA Cases*³

"[I]n a CEQA case, as in other mandamus cases, [our review] is the same as the trial court's: [we review] the agency's action, not the trial court's decision; in that sense [our review] is de novo. (*Vineyard, supra*, 40 Cal.4th at p. 427.) However, our inquiry extends " 'only to whether there was a prejudicial abuse of discretion.' ([§ 21168.5].)" (*Vineyard*, at p. 426.)

"[A]n agency may abuse its discretion under CEQA either by failing to proceed in the manner CEQA provides or by reaching factual conclusions unsupported by substantial evidence. (§ 21168.5.) Judicial review of these two types of error differs significantly: While we determine de novo whether the agency has employed the correct procedures, 'scrupulously enforc[ing] all legislatively mandated CEQA requirements' [citation], we accord greater deference to the agency's substantive factual conclusions." (*Vineyard, supra*, 40 Cal.4th at p. 435.) "In evaluating an EIR for CEQA compliance, then, [we] must adjust [our] 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.

³ The California Supreme Court is currently reviewing the standard and scope of judicial review under CEQA. (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 [172 Cal.Rptr.3d 271], review granted Oct. 1, 2014, S219783.) Pending further guidance, we endeavor to apply the review dichotomy most recently articulated by the Supreme Court. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 426-427, 435 (*Vineyard*); accord, *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 131; *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1161-1162 (*Bay-Delta*); *Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection* (2008) 43 Cal.4th 936, 944.)

For example, where an agency failed to require an applicant to provide certain information mandated by CEQA and to include that information in its environmental analysis, . . . the agency 'failed to proceed in the manner prescribed by CEQA.' [Citations.] In contrast, in a factual dispute over 'whether adverse effects have been mitigated or could be better mitigated' [citation], the agency's conclusion would be reviewed only for substantial evidence." (*Ibid.*)

II

Appeal

A

Background

1

In 2005 then Governor Arnold Schwarzenegger issued the Executive Order establishing greenhouse gas emissions reduction targets for California. Specifically, the Executive Order required reduction of greenhouse gas emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.⁴

⁴ "[A]n executive order is generally regarded as 'a formal written directive of the Governor.'" (75 Ops.Cal.Atty.Gen. 263 (1992).) The Executive Order provided in relevant part: "I, ARNOLD SCHWARZENEGGER, Governor of the State of California, by virtue of the power invested in me by the Constitution and statutes of the State of California, do hereby order effective immediately That the following greenhouse gas emission reduction targets are hereby established for California: by 2010, reduce [greenhouse gas] emissions to 2000 levels; by 2020, reduce [greenhouse gas] emissions to 1990 levels; by 2050, reduce [greenhouse gas] emissions to 80 percent below 1990 levels" (<http://gov.ca.gov/news.php?id=1861> [as of Nov. 21, 2014].)

The Legislature subsequently enacted the California Global Warming Solutions Act of 2006 (Health & Saf. Code, § 38500 et seq.), referred to by the parties as Assembly Bill No. 32 (AB 32). Among its provisions, AB 32 tasked the California Air Resources Board (CARB) with determining the state's 1990 greenhouse gas emissions level and approving an equivalent emissions level to be achieved by 2020. (Health & Saf. Code, § 38550.)

The Legislature intended for the emissions limit to "continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020." (Health & Saf. Code, § 38551, subd. (b).) The Legislature also intended for the emissions limit to work in concert with other environmental protection laws, expressly stating AB 32 does not "relieve any person, entity, or public agency of compliance with other applicable federal, state, or local laws or regulations, including state air and water quality requirements, and other requirements for protecting public health or the environment." (Health & Saf. Code, § 38592, subd. (b).) The Legislature further intended for "the Climate Action Team established by the Governor to coordinate the efforts set forth under [the Executive Order] continue its role in coordinating overall climate policy." (Health & Saf. Code, § 38501, subd. (i).) Thus, the Legislature, through AB 32, effectively endorsed the Executive Order and its overarching goal of ongoing greenhouse gas emissions reductions as state climate policy. (See, e.g., *Professional Engineers in California Government v. Schwarzenegger* (2010) 50 Cal.4th 989, 1000, 1043-1044, 1051 [subsequent legislative endorsement operates to ratify and validate provisions in Executive Order].)

Bolstering this conclusion, the Legislature also enacted the Sustainable Communities and Climate Protection Act of 2008 (Stats. 2008, ch. 728; Stats. 2009, ch. 354, § 5), referred to by the parties as Senate Bill No. 375 (SB 375). In enacting SB 375, the Legislature found automobiles and light trucks are responsible for 30 percent of the state's greenhouse gas emissions. (Stats. 2008, ch. 728, § 1, subd. (a).) Accordingly, SB 375 directed CARB to develop regional greenhouse gas emission reduction targets for automobiles and light trucks for 2020 and 2035. (Gov. Code, § 65080, subd. (b)(2)(A).) The targets established by CARB for the San Diego region require a 7 percent per capita reduction in carbon dioxide emissions by 2020 and a 13 percent per capita reduction by 2035 (compared to a 2005 baseline).⁵ CARB must update these targets every eight years until 2050, and may update the targets every four years based on changing factors. (Gov. Code, § 65080, subd. (b)(2)(A)(iv).)

2

The transportation plan, which SANDAG must prepare every four years (23 U.S.C. § 134, subd. (c); Gov. Code, § 65080, subds. (a) & (d)), "serves as the long-range plan designed to coordinate and manage future regional transportation improvements, services, and programs among the various agencies operating within the San Diego region." In enacting SB 375, the Legislature found the state's emissions reductions goals cannot be met without improved land use and transportation policy. Consequently, SB 375 (Gov. Code, § 65080, subd. (b)(2)(B)) mandates the transportation

⁵ The transportation plan meets these limited scope targets (see part II.C.1, *post*).

plan include a sustainable communities strategy to, as the EIR states, "guide the San Diego region toward a more sustainable future by integrating land use, housing, and transportation planning to create more sustainable, walkable, transit-oriented, compact development patterns and communities that meet [CARB's greenhouse gas] emissions targets for passenger cars and light-duty trucks." Once the sustainable communities strategy is approved, some transit priority projects consistent with the strategy are exempt from CEQA requirements. Other transit priority projects, residential projects, and mixed-use projects consistent with the strategy are subject to streamlined CEQA requirements. (§§ 21155-21155.4, 21159.28; Guidelines, § 15183.3.)

B

Greenhouse Gas Emissions Impacts Analysis

The EIR acknowledged the transportation plan's implementation would lead to an overall increase in greenhouse gas emissions levels; however, the EIR did not analyze whether this consequence conflicted with the Executive Order, or would impair or impede the achievement of the Executive Order's goals. As it did in the EIR and below, SANDAG contends on appeal its decision to omit an analysis of the transportation plan's consistency with the Executive Order (consistency analysis) did not violate CEQA because CEQA does not require such a consistency analysis. Whether the EIR's analysis complies with CEQA depends on whether the analysis reflects a reasonable, good faith effort to disclose and evaluate the transportation plan's greenhouse gas emissions impacts. We review the sufficiency of the analysis in light of what is reasonably foreseeable. (Guidelines, § 15151; *City of Maywood v. Los Angeles Unified School Dist.*

(2012) 208 Cal.App.4th 362, 386 (*City of Maywood*); *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 897-898 (*City of Long Beach*).) As the focus of SANDAG's contention is whether the EIR's analysis was reasonable and not whether the EIR violated a specific statute or regulation, the contention presents a predominately factual question and our review is for substantial evidence. (*Vineyard, supra*, 40 Cal.4th at p. 435.)

Substantial evidence for CEQA purposes is "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, subd. (a).) Substantial evidence includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." (*Id.*, subd. (b).) It does not include argument, speculation, unsubstantiated opinion or narrative, clearly erroneous or inaccurate evidence, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment. (*Id.*, subd. (a).)

"In reviewing for substantial evidence, [we] 'may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable,' for, on factual questions, our task 'is not to weigh conflicting evidence and determine who has the better argument.' " (*Vineyard, supra*, 40 Cal.4th at p. 435; *Laurel Heights, supra*, 47 Cal.3d at p. 393.) Rather, we must resolve any reasonable doubts and any conflicts in the evidence in favor of the agency's findings and decision. (*Laurel Heights*, at p. 393; *Citizens for Responsible Equitable Environmental Development v. City of San Diego, supra*, 196 Cal.App.4th at pp. 522-523.)

In this case, SANDAG's decision to omit an analysis of the transportation plan's consistency with the Executive Order did not reflect a reasonable, good faith effort at full disclosure and is not supported by substantial evidence because SANDAG's decision ignored the Executive Order's role in shaping state climate policy. The Executive Order underpins all of the state's current efforts to reduce greenhouse gas emissions. As SANDAG itself noted in its Climate Action Strategy, the Executive Order's 2050 emissions reduction goal "is based on the scientifically-supported level of emissions reduction needed to avoid significant disruption of the climate and *is used as the long-term driver for state climate change policy development.*" (Italics added.)

Indeed, the Executive Order led directly to the enactment of AB 32, which validated and ratified the Executive Order's overarching goal of ongoing emissions reductions, recognized the Governor's Climate Action Team as the coordinator of the state's overall climate policy, and tasked CARB with establishing overall emissions reduction targets for 2020 and beyond. The Executive Order also led directly to the enactment of SB 375, which tasked CARB with establishing regional automobile and light truck emissions reduction targets for 2020 and 2035. CARB is required to revisit these targets every eight years through 2050, or sooner if warranted by changing circumstances. (Gov. Code, § 65080, subd. (b)(2)(A)(iv).) Thus, the Executive Order, with the Legislature's unqualified endorsement, will continue to underpin the state's efforts to reduce greenhouse gas emissions throughout the life of the transportation plan. The EIR's failure to analyze the transportation plan's consistency with the Executive Order, or more particularly with the Executive Order's overarching goal of ongoing

greenhouse gas emissions reductions, was therefore a failure to analyze the transportation plan's consistency with state climate policy. As evidence in the record indicates the transportation plan would actually be inconsistent with state climate policy over the long term, the omission deprived the public and decision makers of relevant information about the transportation plan's environmental consequences. The omission was prejudicial because it precluded informed decisionmaking and public participation. (*Smart Rail*, *supra*, 57 Cal.4th at p. 463; *City of Long Beach*, *supra*, 176 Cal.App.4th at p. 898.)

SANDAG contends the EIR cannot analyze the transportation plan's consistency with the Executive Order because there is no statute or regulation translating the Executive Order's goals into comparable, scientifically based emissions reduction targets. However, we do not agree the lack of such targets precludes the EIR from performing a meaningful consistency analysis in this instance. "Drafting an EIR . . . necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." (Guidelines, § 15144.) Although SANDAG may not know precisely what future emissions reduction targets the transportation plan will be required to meet, it knows from the information in its own Climate Action Strategy the theoretical emissions reduction targets necessary for the region to meet its share of the Executive Order's goals. It also knows state climate policy, as reflected in the Executive Order and AB 32, requires a continual *decrease* in the state's greenhouse gas emissions and the transportation plan after 2020 produces a continual *increase* in greenhouse gas emissions. With this knowledge, SANDAG could have reasonably analyzed whether the

transportation plan was consistent with, or whether it would impair or impede, state climate policy.⁶

SANDAG's attempts to disavow its responsibility for performing this analysis are unavailing. The Legislature specifically found reducing greenhouse gas emissions cannot be accomplished without improved land use and transportation policy. Accordingly, the transportation plan plays both a necessary and important role in achieving state climate policy. By failing to adequately inform the public and decision makers the transportation plan is inconsistent with state climate policy, the EIR deterred the decision makers from devising and considering changes to favorably alter the trajectory of the transportation plan's post-2020 greenhouse gas emissions. When the decision makers are inevitably faced with post-2020 requirements aligned with state climate policy, their task of complying with these requirements will be more difficult and some opportunities for compliance may be lost. As SANDAG explained in its Climate Action Strategy, "Once in place, land use patterns and transportation infrastructure typically remain part of the built environment and influence travel behavior and greenhouse gas emissions for several decades, perhaps longer." In this regard, the EIR falls far short of being "an

⁶ We do not intend to suggest the transportation plan must achieve the Executive Order's 2050 goal or any other specific numerical goal. Our concern is with the EIR's failure to recognize, much less analyze and attempt to mitigate, the conflict between the transportation plan's long-term greenhouse gas emissions increase and the state climate policy goal, reflected in the Executive Order, of long-term emissions reductions. In fact, the EIR does not even discuss the transportation plan's failure to maintain emissions reductions after 2020, which is AB 32's minimum expectation. (See Health & Saf. Code, § 38551, subd. (b).)

'environmental "alarm bell" whose purpose it is to alert the public and its responsible officials to environmental changes before they have reach ecological points of no return.' " (*Laurel Heights, supra*, 47 Cal.3d at p. 392.) It also falls far short of " 'demonstrat[ing] to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its actions.' " (*Ibid.*)

We are likewise unpersuaded by SANDAG's assertion the EIR's analysis of the transportation plan's greenhouse gas emissions impacts fully complies with CEQA because it utilized significance thresholds specified in Guidelines section 15064.4, subdivision (b).⁷ This Guideline states in relevant part: "A lead agency should consider the following factors, *among others*, when assessing the significance of impacts from greenhouse gas emissions on the environment: [¶] (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting[.] [¶] (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project. [¶] (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution

⁷ "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." (Guidelines, § 15064.7.)

of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project."

(Guidelines, § 15064.4, subd. (b), italics added.)

Although this Guideline specifies three means of determining whether a project's greenhouse gas emissions impacts are significant, the "among others" qualifying language indicates these means are not exclusive.⁸ Moreover, "the fact that a particular environmental effect meets a particular threshold cannot be used as an automatic determinant that the effect is or is not significant . . . a threshold of significance cannot be applied in a way that would foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant." (*Protect The Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109 (*Amador*).) Consequently, the use of the Guideline's thresholds does not necessarily equate to compliance with CEQA, particularly where, as here, the failure to consider the transportation plan's consistency with the state climate policy of ongoing emissions reductions reflected in the Executive Order frustrates the state climate policy and renders the EIR fundamentally misleading.

⁸ Indeed, in its statement of reasons for adopting the Guideline, the Natural Resources Agency explained the Guideline "reflects the existing CEQA principle that there is no iron-clad definition of 'significance.'" [Citations.] Accordingly, lead agencies must use their best efforts to investigate and disclose all that they reasonably can regarding a project's potential adverse impacts." (California Natural Resources Agency, Final Statement of Reasons for Regulatory Action (Dec. 2009) p. 20 < http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf > (as of Nov. 21, 2014).)

We are also unpersuaded by SANDAG's assertion it was not required to analyze the transportation plan's consistency with the state climate policy reflected in the Executive Order because SANDAG has broad discretion to select the criteria it uses to determine the significance of the transportation plan's impacts. While we agree SANDAG has such discretion (*North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th 614, 624), SANDAG abuses its discretion if it exercises it in a manner that causes an EIR's analysis to be misleading or without informational value. (See *Smart Rail, supra*, 57 Cal.4th at pp. 445, 457.) "A lead agency cannot avoid finding a potentially significant effect on the environment by rotely applying standards of significance that do not address that potential effect." (*Rominger v. County of Colusa* (2014) 229 Cal.App.4th 690, 717, citing *Amador, supra*, 116 Cal.App.4th at p. 1111.)

By disregarding the Executive Order's overarching goal of ongoing emissions reductions, the EIR's analysis of the transportation plan's greenhouse gas emissions makes it falsely appear as if the transportation plan is furthering state climate policy when, in fact, the trajectory of the transportation plan's post-2020 emissions directly contravenes it. "[O]mitting material necessary to informed decisionmaking and informed public participation" subverts the purposes of CEQA and "precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences." (*Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 658.) Such an omission is particularly troubling where, as here, the project under review involves long-term,

planned expenditures of billions of taxpayer dollars. No one can reasonably suggest it would be prudent to go forward with planned expenditures of this magnitude before the public and decision makers have been provided with all reasonably available information bearing on the project's impacts to the health, safety, and welfare of the region's inhabitants. We, therefore, conclude SANDAG prejudicially abused its discretion by omitting from the EIR an analysis of the transportation plan's consistency with the state climate policy, reflected in the Executive Order, of continual greenhouse gas emissions reductions.⁹

C

Mitigation of Greenhouse Gas Emissions Impacts

1

Although the EIR did not analyze the transportation plan's consistency with the state climate policy reflected in the Executive Order, the EIR nevertheless, analyzed the transportation plan's greenhouse gas emissions impacts against three significance thresholds for each of the planning years 2020, 2035, and 2050. Under the first

⁹ Our decision will not necessarily stop any project encompassed within the transportation plan. (See *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 286-289.) Our decision also will not procedurally or substantively expand CEQA requirements in violation of section 21083.1 because the EIR is required to analyze the transportation plan's potential "to degrade the quality of the environment, curtail the range of the environment, *or to achieve short-term, to the disadvantage of long-term, environmental goals.*" (§ 21083, subd. (b)(1), italics added; Guidelines, § 15065, subd. (a)(2), (c).) Rather, our decision is consistent with the intent CEQA "be interpreted to afford the fullest possible protection to the environment within the reasonable scope of the statutory language. (Guidelines, § 15003, subd. (f).)

threshold, the EIR posited the transportation plan's impacts would be significant if the transportation plan's implementation were to increase greenhouse gas emissions compared to existing, or 2010, conditions. Under the second threshold, the EIR posited the transportation plan's impacts would be significant if the transportation plan's implementation conflicted with CARB's regional automobile and light truck emissions reductions targets. Under the third threshold, the EIR stated the transportation plan's impacts would be significant if the transportation plan's implementation conflicted with either CARB's Climate Change Scoping Plan (Scoping Plan) or SANDAG's own Climate Action Strategy.¹⁰

The EIR concluded the transportation plan's greenhouse gas emissions impacts would be significant under the first significance threshold for the 2035 and 2050 planning years because the emissions would be higher in those planning years than in 2010. The EIR concluded the greenhouse gas emissions impacts would be less than significant in all other respects analyzed.¹¹

¹⁰ The Scoping Plan is CARB's roadmap for achieving greenhouse gas emissions reductions. The Climate Action Strategy is SANDAG's guide for addressing climate change. The Climate Action Strategy emphasizes the areas where the greatest impact can be made at the local level, including transportation infrastructure.

¹¹ The People and Cleveland have not challenged these conclusions and their propriety is not before us. Nonetheless, regarding the third significance threshold, we note the Climate Action Strategy expresses far stronger views than the transportation plan on the steps necessary to achieve the state's long-term greenhouse gas emissions reductions goals. For example, the Climate Action Strategy maintains achieving the goals "will require fundamental changes in policy, technology, and behavior" and "[b]y 2030, the region must have met and gone below the 1990 [emissions] level and be well on its way to doing its share for achieving the 2050 greenhouse gas reduction level."

To mitigate the significant greenhouse gas emissions impacts found under the first threshold, the EIR identified three mitigation measures it deemed feasible.¹² The first mitigation measure required SANDAG to update its future regional comprehensive plans, regional transportation plans, and sustainable communities plans to incorporate policies and measures leading to reduced greenhouse gas emissions. The second mitigation measure encouraged the San Diego region cities and the County of San Diego (County) to adopt and implement climate action plans for reducing greenhouse gas emissions to a level the particular city or the County determined would not be cumulatively considerable. The second mitigation measure also identified various provisions the plans should include and stated SANDAG would assist in the preparation of the plans and other climate strategies through the continued implementation of its own Climate Action Strategy and Energy Roadmap Program.¹³ The third mitigation measure stated SANDAG would and other agencies should require the use of best available control technology to reduce greenhouse gas emissions during the construction and operation of projects.

¹² " 'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (Guidelines, § 15364.)

¹³ According to the record, the Energy Roadmap Program "identifies energy-saving measures that can be integrated into local planning and permitting processes, ordinances, outreach and education efforts, and municipal operations."

According to the EIR, these mitigation measures encourage reduction in greenhouse gas emissions, but they do not provide a mechanism guaranteeing such reductions. Consequently, the EIR concluded the significant impacts found under the first threshold would remain significant and unavoidable.

The EIR also considered and rejected three other mitigation measures deemed infeasible. These mitigation measures were: (1) requiring all vehicles driven within the region to be zero-emission vehicles or to be powered by renewable energy; (2) requiring all future construction to be net-zero energy use; and (3) requiring all future construction activity to include only equipment retrofitted to significantly reduce greenhouse gas emissions.

3

SANDAG contends the EIR adequately addressed mitigation for the transportation plan's significant greenhouse gas emissions impacts. Given our conclusion in part II.B, *ante*, this challenge is at least partially moot as the additional analysis necessary to properly address the transportation plan's consistency with the state climate policy reflected in the Executive Order will likely require revisions to related sections of the EIR, including the EIR's discussion of mitigation measures. (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 91 [once a lead agency recognizes an impact is significant, the agency must describe, evaluate, and adopt

feasible mitigation measures to mitigate or avoid the impact].)¹⁴ We, nonetheless, briefly address SANDAG's contention. As this contention is predominately factual, our review is for substantial evidence. (*Vineyard, supra*, 40 Cal.4th at p. 435.)

a

"The core of an EIR is the mitigation and alternatives sections." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; *Watsonville Pilots Assn. v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1089.) "Section 21002 requires agencies to adopt feasible mitigation measures to substantially lessen or avoid otherwise significant adverse environmental impacts. [¶] The CEQA guidelines state that to be legally adequate mitigation measures must be capable of: '(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.' [Citation.]

"For each significant effect, the EIR must identify specific mitigation measures; where several potential mitigation measures are available, each should be discussed separately, and the reasons for choosing one over the others should be stated. If the

¹⁴ We do not express any view on precisely how SANDAG must remedy the analytical deficiencies identified in this opinion as we recognize a court may direct SANDAG to comply with CEQA, but a court may not direct SANDAG to exercise its discretion in a particular fashion or to produce a particular result. (§ 21168.9, subd. (c); *Schellinger Brothers v. City of Sebastopol* (2009) 179 Cal.App.4th 1245, 1266.)

inclusion of a mitigation measure would itself create new significant effects, these too, must be discussed, though in less detail than required for those caused by the project itself." (*Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1027.)

For significant greenhouse gas emissions effects, feasible mitigation measures may include: "(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 . . . ; [¶] (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions; [¶] (4) Measures that sequester greenhouse gases; [¶] [and] (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." (Guidelines, § 15126.4, subd. (c).)

b

At one extreme, the EIR in this case considered and deemed feasible three measures requiring little to no effort to implement and assuring little to no concrete steps toward emissions reduction. In addition, according to the EIR, many of the suggestions contained in these measures have already been incorporated into the transportation plan and, by implication, the transportation plan's emissions estimates. "A 'mitigation measure' is a suggestion or change that would reduce or minimize significant adverse

impacts on the environment caused by the project as proposed." (*Lincoln Place Tenants Association v. City of Los Angeles* (2007) 155 Cal.App.4th 425, 445.) A mitigation measure is not part of the project. (*Lotus v. Department of Transportation, supra*, 223 Cal.App.4th at p. 656 & fn. 8.) Thus, it is questionable whether these measures even qualify as mitigation measures.

At the other extreme, the EIR considered and deemed infeasible three particularly onerous measures. Each of the measures would be difficult, if not impossible, to enforce and each requires implementation resources not readily available. Unrealistic mitigation measures, similar to unrealistic project alternatives, do not contribute to a useful CEQA analysis. (See *Watsonville Pilots Assn. v. City of Watsonville, supra*, 183 Cal.App.4th at p. 1089; 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont.Ed.Bar 2014) § 15.10, pp. 15-16.) As none of these measures had any probability of implementation, their inclusion in the EIR was illusory.

Missing from the EIR is what CEQA requires: a discussion of mitigation alternatives that could both substantially lessen the transportation plan's significant greenhouse gas emissions impacts and feasibly be implemented. (*Lincoln Place Tenants Association v. City of Los Angeles, supra*, 155 Cal.App.4th at p. 445.) A few examples of potential alternatives identified in the Climate Action Strategy include: supporting the planning and development of smart growth areas through transportation investments and other funding decisions; offering incentives for transit-oriented developments in smart growth areas; coordinating the funding of low carbon transportation with smart growth development; and encouraging parking management measures that promote walking and

transit use in smart growth areas. Given the absence of any discussion of such mitigation alternatives, we conclude there is not substantial evidence to support SANDAG's determination the EIR adequately addressed mitigation for the transportation plan's greenhouse gas emissions impacts. The error is prejudicial because it precluded informed public participation and decisionmaking. (§ 21005, subd. (a); *City of Maywood, supra*, 208 Cal.App.4th at p. 386.)

III

Cross-Appeals

A

Forfeiture

The People's and Cleveland's pleadings and briefs below challenged many aspects of the EIR in addition to the EIR's analysis and mitigation of greenhouse gas emissions impacts. In its tentative ruling, the superior court acknowledged the other challenges, but determined it could resolve the case solely on the greenhouse gas emissions impacts analysis and mitigation issues and, consequently, it did not need to address the other challenges. The People and Cleveland through their cross-appeals now seek rulings from this court on many of the other challenges. SANDAG contends they forfeited these challenges by failing to attempt to obtain rulings on them below.

Even if SANDAG's contention were correct, the application of the forfeiture rule is not automatic and we may excuse forfeiture in cases presenting "an important legal issue." (*In re S.B.* (2004) 32 Cal.4th 1287, 1293.) We are persuaded the legal issues raised in the cross-appeals are sufficiently important we should exercise our discretion to

excuse any forfeiture. Moreover, we are mindful of the Legislature's intent "that any court, which finds, or, in the process of reviewing a previous court finding, finds, that a public agency has taken an action without compliance with [CEQA], shall specifically address each of the alleged grounds for noncompliance." (§ 21005, subd. (c).)

B

Project Alternatives

1

The EIR analyzed seven project alternatives. They were:

1. A no project alternative, which assumed the transportation plan would not be adopted and only transportation improvements under construction or development would be built (Alternative 1);
2. A modified funding strategy alternative, which deleted some highway improvements, delayed other highway improvements, added some transit projects, advanced other transit projects, and increased some transit service frequencies (Alternative 2a);
3. The same modified funding strategy alternative coupled with a modified "smart growth" land use pattern, which assumed added infill and redevelopment to increase residential development density in urban and town center areas and increased employment within job centers (Alternative 2b);
4. A transit emphasis alternative, which advanced the development of some transit projects, but did not add any new transit projects (Alternative 3a);

5. The same transit emphasis alternative, but assuming the modified smart growth land use pattern (Alternative 3b);
6. An alternative implementing the transportation plan's transportation network, but assuming the modified smart growth land use pattern (Alternative 4); and
7. A slow growth alternative, which assumed the application of regulations and/or economic disincentives to slow population and employment and delayed the complete implementation of the transportation plan by five years (Alternative 5).

2

Cleveland contends the EIR fails to comply with CEQA because the EIR did not analyze a reasonable range of project alternatives. As the focus of this contention is whether the analysis was reasonable and not whether it occurred, the contention presents a predominately factual question and our review is for substantial evidence. (*Vineyard, supra*, 40 Cal.4th at p. 435.)

"CEQA requires that an EIR, in addition to analyzing the environmental effects of a proposed project, also consider and analyze project alternatives that would reduce adverse environmental impacts. [Citations.] The [Guidelines] state that an EIR must 'describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project' [Citation.] An EIR need not consider every conceivable alternative to a project or alternatives that are infeasible. [Citations.] [¶] . . . [¶]

" 'There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.' [Citation.] The rule of reason 'requires the EIR to set forth only those alternatives necessary to permit a reasoned choice' and to 'examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.' [Citations.] An EIR does not have to consider alternatives 'whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.' " (*Bay-Delta, supra*, 43 Cal.4th at p. 1163, fn. omitted.) A court will uphold the selection of project alternatives unless the challenger demonstrates " 'that the alternatives are manifestly unreasonable and that they do not contribute to a reasonable range of alternatives.' " (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 988.)

In this case, the EIR's discussion of project alternatives is deficient because it does not discuss an alternative which could significantly reduce total vehicle miles traveled. Although Alternatives 3a and 3b are labeled "transit emphasis" alternatives, the labeling is a misnomer. These alternatives mainly advance certain rapid bus projects, but leave the planned rail and trolley projects largely unchanged. In addition, these alternatives do not provide any new transit projects or significant service increases. In fact, the "transit emphasis" alternatives include fewer transit projects than some of the other non-"transit-emphasis" alternatives.

The omission of an alternative which could significantly reduce total vehicle miles traveled is inexplicable given SANDAG's acknowledgment in its Climate Action Strategy that the state's efforts to reduce greenhouse gas emissions from on-road

transportation will not succeed if the amount of driving, or vehicle miles traveled, is not significantly reduced. The Climate Action Strategy explained, "Lowering vehicle miles traveled means providing high-quality opportunities to make trips by alternative means to driving alone such as walking, bicycling, ridesharing, and public transit, and by shortening vehicle trips that are made. This can be accomplished through improved land use and transportation planning and related measures, policies and investments that increase the options people have when they travel." Accordingly, the Climate Action Strategy recommended policy measures to increase and prioritize funding and system investments for public transit and transit operations, increase the level of service on existing routes and provide new public transit service through expanded investments, and improve the performance of public transit with infrastructure upgrades. Given these recommendations, their purpose, and their source, it is reasonable to expect at least one project alternative to have been focused primarily on significantly reducing vehicle trips.

Instead, it appears the project alternatives focused primarily on congestion relief. The Climate Action Strategy provides evidentiary support for the consideration of congestion relief alternatives as it notes, "Eliminating or reducing congestion can lead to more efficient travel conditions for vehicles and greenhouse gas savings." However, the transportation plan is a long-term plan and congestion relief is not necessarily an effective long-term strategy. As the Climate Action Strategy explains, "Measures to relieve congestion also may induce additional vehicle travel during uncongested periods, particularly over the long-term, which can partially or fully offset the greenhouse gas reductions achieved in the short-term from congestion relief. Induced demand

(sometimes called the rebound effect) in transportation refers to the increase in travel that can occur when the level of service on a roadway or other facility improves. Travelers sometimes respond to faster travel times and decreased costs of travel by traveling more, resulting in increased vehicle miles traveled." (Fns. omitted.) Given the acknowledged long-term drawbacks of congestion relief alternatives, there is not substantial evidence to support the EIR's exclusion of an alternative focused primarily on significantly reducing vehicle trips. The error is prejudicial because it precluded informed public participation and decisionmaking. (§ 21005, subd. (a); *City of Maywood, supra*, 208 Cal.App.4th at p. 386.)

C

Air Quality Impacts

1

Eleven air quality monitoring stations throughout the region measure ambient air pollutant concentrations to determine whether the region's air quality meets federal and state standards. The region does not meet the state standards for emissions of respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM₁₀) and fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less (PM_{2.5}).¹⁵ The EIR forecasted the daily tonnage of on-road mobile emissions of PM₁₀ and PM_{2.5} from the transportation plan's transportation network

¹⁵ According to the EIR, "respirable" means the particulate matter can "avoid many of the human respiratory system defense mechanisms and enter deeply into the lung."

improvements would steadily and substantially increase from 2010 to 2050. The EIR did not forecast whether there would be any increase in these emissions from regional growth or land use changes associated with the transportation plan. Instead, the EIR indicated such forecasting would be done during the next tier of environmental review.

Five of the region's air quality monitoring stations also sample toxic air contaminants (TACs), which are contaminants known or suspected to cause cancer or serious health problems, but for which there are no federal or state ambient air quality standards. State law also requires facilities to report any emissions of TACs in order to quantify the amount released, the location of the release, the concentrations to which the public is exposed, and the resulting potential health risk. (Health & Saf. Code, § 44300 et seq.) In 2009, annual emissions of TACs in the region were estimated to be more than 64.9 million pounds.

According to the EIR, exposure to TACs can cause cancer and other serious health problems. This is especially true of exposure to diesel particulate matter, which is respirable (see fn. 15, *ante*). The EIR further explained, "The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there is no 'safe' level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer."

One of the thresholds the EIR used to determine the significance of the transportation plan's air quality impacts was whether sensitive receptors would be exposed to substantial pollutant concentrations. For purposes of this threshold, "sensitive

receptors" included children, the elderly, and communities already experiencing high levels of air pollution and related diseases.

As to PM₁₀ and PM_{2.5} emissions, the EIR indicated sensitive receptors could be significantly impacted if they were located near congested intersections. As to TACs, the EIR indicated TACs emitted from highway vehicles and nonroad equipment tend to impact those closest to the emission sources. The EIR explained, "[a] growing body of scientific evidence shows that living or going to school near roadways with heavy traffic volumes is associated with a number of adverse effects. These include increased respiratory symptoms, increased risk of heart and lung disease, and elevated mortality rates."

Although the EIR recognized regional growth and land use changes associated with the transportation plan had the potential to expose sensitive receptors to substantial localized pollutant concentrations, the EIR stated the level of exposure could not and would not be determined until the next tier of environmental review when facility designs of individual projects became available. The EIR made identical statements regarding proposed transportation improvements associated with the transportation plan.

The EIR summarized several studies linking proximity to heavily traveled roads and freeways to harmful health effects to children. The EIR also noted CARB had estimated the region's health risk from diesel particulate matter in 2000 was 720 excess cancer cases per million and had recommended sensitive land uses not be sited within 500 feet of a freeway, urban roads with 100,000 vehicles per day, and rural roads with 50,000 vehicles per day.

Cleveland contends the EIR's air quality impacts analysis violates CEQA because the EIR's description of existing conditions does not adequately depict the public's existing exposure to TACs. Cleveland contends the existing conditions description also fails to identify the approximate number and location of sensitive receptors near planned transportation projects. SANDAG, however, asserts its existing conditions description is sufficiently detailed for a program level EIR. As these contentions focus on the reasonableness of the EIR's analysis, they present predominately factual questions and our review is for substantial evidence. (*Vineyard, supra*, 40 Cal.4th at p. 435; accord, *Smart Rail, supra*, 57 Cal.4th at pp. 447-449; *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 328.)

To fulfill its information disclosure function, "an EIR must delineate environmental conditions prevailing absent the project, defining a baseline against which predicted effects can be described and quantified." (*Smart Rail, supra*, 57 Cal.4th at p. 447; see *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953 [without an adequate baseline description, "analysis of impacts, mitigation measures and project alternatives becomes impossible"]; Guidelines, § 15125, subd. (a).)¹⁶ If the description of the environmental setting "is inaccurate, incomplete or

¹⁶ Guidelines section 15125, subdivision (a), provides: "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and

misleading, the EIR does not comply with CEQA. [Citation.] "Without accurate and complete information pertaining to the setting of the project and surrounding uses, it cannot be found that the [EIR] adequately investigated and discussed the environmental impacts of the development project." ' ' (*Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 219.)

In this case, for TACs exposures, the record shows there was available data from monitoring stations and mandatory reports with which SANDAG could have developed a reasoned estimate of the region's existing TACs exposures. Likewise, for sensitive receptors, the record shows SANDAG has data showing current population and land use patterns and current transportation infrastructure from which it could have developed a reasoned estimate of the number and location of sensitive receptors adjacent to highways and heavily traveled roadways.

The fact more precise information may be available during the next tier of environmental review does not excuse SANDAG from providing what information it reasonably can now. (Guidelines, § 15144.) Moreover, if known impacts are not analyzed and addressed in a program EIR, they may potentially escape analysis in a later tier EIR. (§ 21166; *Citizens Against Airport Pollution v. City of San Jose, supra*, 227 Cal.App.4th at pp. 807-808; *Concerned Dublin Citizens v. City of Dublin, supra*, 214 Cal.App.4th at p. 1320; *Citizens for Responsible Equitable Environmental Development v. City of San Diego, supra*, 196 Cal.App.4th at pp. 531-532; *Fort Mojave Indian Tribe v.*

regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant."

Department of Health Services, supra, 38 Cal.App.4th at p. 1605.) We, therefore, conclude there is not substantial evidence to support SANDAG's determination it could not reasonably provide additional baseline information in the EIR about TACs exposures and the location of sensitive receptors. The error is prejudicial because it precluded informed public participation and decisionmaking. (§ 21005, subd. (a); *City of Maywood, supra*, 208 Cal.App.4th at p. 386.)

3

Both the People and Cleveland contend the EIR's analysis of air quality impacts fails to comply with CEQA because it fails to correlate the transportation plan's adverse air quality impacts to resulting adverse health impacts. SANDAG again contends its disclosure efforts are adequate for the program level of environmental review and producing additional information at this level is infeasible. As with the parties' other contention, this contention is predominantly factual and our review is for substantial evidence. (*Vineyard, supra*, 40 Cal.4th at p. 435.)

"Guidelines section 15126.2, subdivision (a) requires an EIR to discuss, inter alia, 'health and safety problems caused by the physical changes' that the proposed project will precipitate." (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1219 (*Bakersfield Citizens*).) Accordingly, an EIR must identify and analyze the adverse health impacts likely to result from the project's air quality impacts. (*Id.*, at p. 1220; *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comrs., supra*, 91 Cal.App.4th at pp. 1367-1371.)

Here, the EIR identified in a general manner the adverse health impacts that might result from the transportation plan's air quality impacts. However, the EIR failed to correlate the additional tons of annual transportation plan-related emissions to anticipated adverse health impacts from the emissions. Although the public and decision makers might infer from the EIR the transportation plan will make air quality and human health worse, at least in some respects for some people, this is not sufficient information to understand the adverse impact. (*Bakersfield Citizens, supra*, 124 Cal.App.4th at p. 1220 [EIR analysis of air quality impacts deficient where public would have no idea of the health consequences of increased air pollution].)

While SANDAG contends it is not feasible to provide more definite information at this juncture, we have not located nor has SANDAG identified any evidence in the record supporting this contention. Instead, SANDAG impermissibly relies solely on its own bald assertions of infeasibility contained in the EIR. (*City of Maywood, supra*, 208 Cal.App.4th at p. 385 [an EIR must contain facts and analysis, not just the agency's bare conclusions].) Certainly, we recognize there are limitations to the precision of a program-level analysis. SANDAG is nonetheless obliged to disclose what it reasonably can about the correlation, it has not done so, and there is not substantial evidence showing it could not do so. The error is prejudicial because it precluded informed public

participation and decisionmaking.¹⁷ (§ 21005, subd. (a); *City of Maywood, supra*, at p. 386.)

4

a

To mitigate the transportation plan's air quality impacts, the EIR identified the following mitigation measures:

1. Local jurisdictions should incorporate into their land use decisions certain measures recommended by the California Attorney General for reducing greenhouse gas emissions.

2. At the next tier of environmental review, SANDAG will and other implementing agencies should incorporate certain dust control measures into project specifications for transportation network improvements.

3. At the next tier of environmental review, SANDAG will and other implementing agencies should require any heavy duty off-road vehicles used to construct transportation network improvements to utilize all feasible measures to reduce specified emissions to a less than significant level.

4. At the next tier of environmental review, SANDAG will and other implementing agencies should evaluate potential impacts from carbon monoxide, PM₁₀

¹⁷ Given this conclusion and its bases, we need not decide the People's conditional motion for judicial notice of examples of correlative information contained in comparable EIRs from other jurisdictions.

and PM_{2.5} emissions and their health risks and, if required, add one or more recommended mitigation measures to reduce the emissions.

The EIR further concluded these were the only mitigation measures available at the program-level of environmental review.

b

Both the People and Cleveland contend these measures, except for the second, violate CEQA because they improperly defer mitigation of the transportation plan's significant air quality impacts. SANDAG once more counters these measures are adequate for the program level of environmental review.

This issue, like the issue involving the mitigation of greenhouse gas emissions impacts, is at least partially moot given our conclusion in parts III.C.2 & 3, *ante*, as the additional analysis necessary to correct the noted deficiencies will likely require revisions to related sections of the EIR, including the discussion of mitigation measures.

(*Communities for a Better Environment v. City of Richmond*, *supra*, 184 Cal.App.4th at p. 91.) However, we briefly address the People's and Cleveland's contentions. As these contentions are predominantly factual, our review is for substantial evidence. (*Vineyard*, *supra*, 40 Cal.4th at p. 435.)

"An EIR shall describe feasible measures which could minimize significant adverse impacts. (Guidelines, § 15126.4, subd. (a)(1).) An EIR may not defer the formulation of mitigation measures to a future time, but mitigation measures may specify performance standards which would mitigate the project's significant effects and may be accomplished in more than one specified way. (*Id.*, subd. (a)(1)(B).)

"Thus, ' " 'for [the] kinds of impacts for which mitigation is known to be feasible, but where practical considerations prohibit devising such measures early in the planning process (e.g., at the general plan amendment or rezone stage), the agency can commit itself to eventually devising measures that will satisfy specific performance criteria articulated at the time of project approval. Where future action to carry a project forward is contingent on devising means to satisfy such criteria, the agency should be able to rely on its commitment as evidence that significant impacts will in fact be mitigated.' " ' [Citation.] Conversely, ' "[i]mpermissible deferral of mitigation measures occurs when an EIR puts off analysis or orders a report without either setting standards or demonstrating how the impact can be mitigated in the manner described in the EIR." ' ' ' (Preserve Wild Santee v. City of Santee (2012) 210 Cal.App.4th 260, 280-281.)

In this case, with one exception, the EIR defers the analysis of appropriate mitigation measures. It also fails to set performance standards and commit SANDAG to complying with them. Although SANDAG contends no other mitigation is feasible at the program level of environmental review, we have not located nor has SANDAG pointed to any evidence in the record supporting this contention. Accordingly, we conclude there is not substantial evidence to support SANDAG's determination the EIR adequately addressed mitigation for the transportation plan's air quality impacts. The error is prejudicial because it precluded informed public participation and decisionmaking. (§ 21005, subd. (a); *City of Maywood, supra*, 208 Cal.App.4th at p. 386.)

D

Agricultural Impacts

1

The EIR evaluated the transportation plan's agricultural impacts under two significance thresholds. Under the first threshold, the EIR evaluated the impacts to land designated prime farmland, unique farmland or farmland of statewide significance under the California Resources Agency's Farmland Mapping and Monitoring Program.¹⁸ The EIR concluded implementation of the transportation plan would result in the conversion of 3,485.09 acres of such farmland by 2050.

Under the second threshold, the EIR evaluated impacts to all land with existing agricultural uses regardless of classification, lands subject to Williamson Act contracts, and lands designated under the California Farmland Conservancy Program Act.¹⁹ The EIR concluded implementation of the transportation plan would result in the conversion

¹⁸ According to the EIR, the Farmland Mapping and Monitoring Program is used to identify agricultural resources of 10-acres or more. "Farmlands are classified according to soil factors, including available water holding capacity, temperature regime, acidity, depth to the water table, electrical conductivity, flooding potential, erosion hazard, permeability, rock content, and rooting depth. The best quality land is identified as Prime Farmland and Farmland of Statewide Importance."

¹⁹ According to the EIR, "the Williamson Act [Gov. Code, § 51200 et seq.] enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based upon farming and open space uses as opposed to full market value."

The California Farmland Conservancy Program Act (§ 10200 et seq.) encourages "the long-term, private stewardship of agricultural lands through the voluntary use of agricultural conservation easements."

of 7,023.07 acres of such land by 2050. The conclusion was based on data from the Farmland Mapping and Monitoring Program augmented with data from SANDAG's own geographic information system.

2

a

Cleveland contends the EIR violates CEQA by understating the transportation plan's growth-induced impacts on agricultural lands. As this contention is predominantly factual, our review is for substantial evidence. (*Vineyard, supra*, 40 Cal.4th at p. 435.)

As we have previously indicated, when reviewing the adequacy of an EIR's disclosures, we are chiefly concerned with whether the EIR reasonably fulfills its function of facilitating informed decisionmaking. An analysis which understates the severity of a project's impacts "impedes meaningful public discussion and skews the decisionmaker's perspective concerning the environmental consequences of the project, the necessity for mitigation measures, and the appropriateness of the project approval." (*Citizens to Pres. the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 431.)

In this case, both of the data sets used to analyze the transportation plan's agricultural impacts have important limitations. The Farmland Mapping and Monitoring Program does not capture information for farmland under 10 acres. In addition, according to SANDAG, its own geographic information system's inventory of agricultural land may not include any agricultural lands that went into production after the mid-1990s. The combined effect of these limitations is that there is not substantial evidence to show the EIR's analysis accounted for impacts to farmland of less than 10

acres put into production within the last 20 years. The error necessarily prejudiced informed public participation and decisionmaking because 68 percent of the farmland in the County is between one and nine acres, with the average farm size being four acres. (§ 21005, subd. (a); *City of Maywood, supra*, 208 Cal.App.4th at p. 386.)

While SANDAG correctly points out CEQA permits the use of data from the Farmland Mapping and Monitoring Program to analyze a project's agricultural impacts (Guidelines, Exhibit G), CEQA does not mandate the use of such data nor does it insulate an EIR from further scrutiny if the EIR relies on the data. Moreover, because the transportation plan included the sustainable communities strategy, SANDAG was required by statute to "gather and consider the best practically available scientific information regarding resource areas and farmland in the region" (Gov. Code, § 65080, subd. (b)(2)(B)(v).) By choosing a methodology with known data gaps, SANDAG produced unreliable estimates of the amount of existing farmland and, consequently, unreliable estimates of the transportation plan's impacts to existing farmland. Accordingly, SANDAG failed to comply with its statutory obligation as well as CEQA's information disclosure requirements.

b

Finally, in addition to Cleveland's general contention that the EIR understated the transportation plan's agricultural impacts, Cleveland raises two specific contentions: (1) the EIR failed to disclose and analyze the transportation plan's impacts to small farms; and (2) the EIR's discussion of impacts to agricultural land from growth inaccurately assumed land converted to a rural residential designation would remain farmland.

SANDAG counters Cleveland is precluded under section 21177, subdivision (a), from raising these two specific contentions because Cleveland never exhausted its administrative remedies as to them.²⁰ Except to the extent the specific contentions are subsumed within the general contention, we agree.

"A CEQA challenge is not preserved 'unless the alleged grounds for noncompliance with [CEQA] were presented to the public agency orally or in writing by any person during the public comment period provided by this division or prior to the close of the public hearing' [Citation.] 'Exhaustion of administrative remedies is a jurisdictional prerequisite to maintenance of a CEQA action.' [Citation.]

" 'To advance the exhaustion doctrine's purpose "[t]he 'exact issue' must have been presented to the administrative agency" [Citation.] While " 'less specificity is required to preserve an issue for appeal in an administrative proceeding than in a judicial proceeding' because, . . . parties in such proceedings generally are not represented by counsel . . . ' [citation]" [citation], "generalized environmental comments at public hearings," "relatively . . . bland and general references to environmental matters" [citation], or "isolated and unelaborated comment[s]" [citation] will not suffice. The same is true for " '[g]eneral objections to project approval' [Citations.]" [Citation.]

²⁰ Section 21177, subdivision (a), provides: "An action or proceeding shall not be brought pursuant to Section 21167 unless the alleged grounds for noncompliance with this division were presented to the public agency orally or in writing by any person during the public comment period provided by this division or prior to the close of the public hearing on the project before the issuance of the notice of determination."

" '[T]he objections must be sufficiently specific so that the agency has the opportunity to evaluate and respond to them.' " ' [Citation.]

" ' "The petitioner bears the burden of demonstrating that the issues raised in the judicial proceeding were first raised at the administrative level. [Citation.]" [Citation.] An appellate court employs a de novo standard of review when determining whether the exhaustion of administrative remedies doctrine applies.' " (*Citizens for Responsible Equitable Environmental Development v. City of San Diego, supra*, 196 Cal.App.4th at p. 527.)

Cleveland has not met its burden in this case. Before SANDAG approved the EIR, Cleveland submitted a letter commenting on the EIR's analysis of agricultural impacts from growth as follows: "[T]he [EIR] states that approximately 10,500²¹ acres of agricultural land will be impacted due to regional growth and land use change by the year 2050. [Citations.] The [EIR] also acknowledges that its regional growth projections are based on current planning assumptions for San Diego County and the jurisdictions therein. [Citation.] However, the EIR for the County's current General Plan update, which by definition reflects current planning assumptions (as of 2011), shows that the General Plan expects 55,963 acres of agricultural land to convert to non-agricultural uses by the year 2030. [Citation.] Even though they account for conditions expected to exist 20 years sooner, these impacts are more than five times greater than the impacts identified in the [transportation plan's EIR].

²¹ This figure apparently represents the combined total of the impacts identified under both significance thresholds (see part III.D.1, *ante*).

"It is not clear how the [EIR] could use current planning assumptions for growth and determine that there will be only 10,500 acres of agricultural land impacted, when the current plans on which it bases its assumptions assume there will be more than five times as many acres impacted. SANDAG must explain if there is a basis for this discrepancy. Without any such explanation, the [EIR] appears to severely underestimate the amount of agricultural land that will be impacted, in contravention of CEQA. [¶] In sum, the [EIR's] failure to accurately account for impacts to agricultural land renders it inadequate as a matter of law."

Even read liberally, Cleveland's comment letter did not fairly apprise SANDAG that Cleveland had specific concerns about the EIR's handling of impacts to small farms and lands redesignated rural residential. Instead, Cleveland's comment letter focused on the discrepancy between SANDAG's estimate of overall growth-induced impacts and the County's estimate of overall growth-induced impacts. Cleveland cites to no other place in the record where any other person or organization raised specific concerns about the EIR's handling of impacts to small farms and lands designated rural residential. Consequently, Cleveland has not demonstrated exhaustion of administrative remedies as to these concerns.

DISPOSITION

The matter is remanded to the superior court with directions to modify the judgment and writ of mandate to incorporate our decision on the cross-appeals. The judgment is affirmed as so modified. The People and Cleveland are awarded their appeal and cross-appeal costs.

McCONNELL, P. J.

I CONCUR:

IRION, J.

BENKE, J., Dissenting.

My colleagues and I have vastly different views on the extent to which this court can and should control environmental review of the planning decisions of a regional transportation agency such as the San Diego Association of Governments (SANDAG). Where the majority, as a result of the alleged inadequacy of the environmental impact report's (EIR) analysis of greenhouse gas (GHG) impacts, would strike down the EIR implementing SANDAG's regional transportation plan (RTP) calling for investment of about \$214 billion over the next several decades in the San Diego region, I would not. Where the majority purports to enforce the California Environmental Quality Act (CEQA) and its Guidelines,¹ I believe my colleagues weaken and confuse the law. Thus, although I conclude that substantial evidence supports the finding SANDAG's GHG impacts analysis is CEQA-compliant, I preface that substantial evidence analysis with the following observations and concerns.

In order to understand the full impact of my colleagues' decision regarding the adequacy of SANDAG's assessment of the GHG impacts of the project, it is first necessary to define a "threshold of significance." CEQA requires "[a]ll public agencies . . . adopt by ordinance, resolution, rule, or regulation, objectives, criteria, and procedures for the evaluation of projects and the preparation of environmental impact reports." (Pub. Resources Code, § 21082.)² Such "objectives, criteria, and procedures" are also known

¹ Citations to "Guidelines" refer to California Code of Regulations, title 14, section 15000 et seq., which are the guidelines for the application of CEQA. (Cal. Code Regs., tit. 14, §§ 15000, 15001.)

² All further statutory citations refer to the Public Resources Code unless otherwise indicated.

as "thresholds of significance" and are used by an agency as a benchmark in determining the significance of environmental effects of a project. (Guidelines, § 15064.7, subd. (a).) A threshold of significance for GHG impacts *may* be accompanied by a plan to achieve the reduction or mitigation of GHG emissions, but the plan *must* be adopted through a public review process. (Guidelines, § 15064.4, subd. (b)(3).)

Executive Order No. S-3-05, signed in 2005 by then Governor Arnold Schwarzenegger (Executive Order), does not unilaterally qualify as a threshold of significance. To reach this conclusion, one need go no further than our Supreme Court's opinion of *Professional Engineers in California Government v. Schwarzenegger* (2010) 50 Cal.4th 989 (*Professional Engineers*). In *Professional Engineers*, the court concluded that an executive order, which attempted to implement a mandatory furlough program during our state's fiscal crisis, had no foundation in the state constitution or existing statutes. In particular, the court noted "the Governor fails to cite any judicial decision or other supporting authority holding or suggesting that the power under the California Constitution to establish or revise the terms and conditions of state employment, even in a fiscal emergency, resides in the Governor (or any other executive officer or entity) rather than in the Legislature. To the contrary, the following is well established: (1) Under the California Constitution it is *the Legislature*, rather than the Governor, that generally possesses the ultimate authority to establish or revise the terms and conditions of state employment through legislative enactments, and (2) any authority that the Governor or an executive branch entity . . . is entitled to exercise in this area emanates from the Legislature's delegation of a portion of its legislative authority to such executive officials or entities through statutory enactments." (*Id.* at p. 1015.)

The court in *Professional Engineers* likewise rejected the Governor's argument that his power to impose a mandatory work furlough program through an executive order was supported by statutes, including several specific statutory provisions. Among the factors noted contrary to this position, the court recognized that "the Legislature has demonstrated a special interest in retaining . . . [the] ultimate control over the salary and wages of such employees." (*Professional Engineers, supra*, 50 Cal.4th at p. 1024.) The court held that the mandatory furlough program was valid *only* because the Legislature, "through the exercise of its own legislative prerogative," independently adopted the program. (*Id.* at p. 1047.)

Similarly, the Executive Order at issue in this case, which includes *statewide* GHG reduction targets for 2020, 2035 and 2050, was at its inception merely a broad policy statement of goals issued by the Governor. Like the order at issue in *Professional Engineers*, it too does not have an identifiable foundation in the constitutional power of the Governor or in statutory law.

The majority cites no judicial decision or other supporting authority holding or even suggesting that the power to establish thresholds of significance, qualitative or quantitative, resides in the Governor rather than in the Legislature. Nor is there any authority supporting the view that the Legislature has delegated to the Governor any power to enact or establish thresholds of significance, including with respect to GHG at issue in this case.

To the contrary, as I discuss, the Legislature has clearly demonstrated it intends to retain ultimate control over the regulation of environmental planning. It has vested in the California Air Resources Board (CARB) the responsibility for coordinating efforts to

attain and maintain ambient air quality standards, to conduct research into the causes of and solution to air pollution, and systematically attack the serious problem caused by motor vehicles. (Health & Saf. Code, § 39003.) It also has limited by statute the ability of courts to add substantive or procedural requirements to CEQA provisions. (Pub. Resources Code, § 21083.)

The majority is either unable or unwilling to expressly declare its position on whether the Executive Order is a threshold of significance as that term is employed in CEQA analysis. I sympathize with their apparent uneasiness. If the majority declares the Executive Order *is* a threshold of significance, it is faced with the reality that the Executive Order simply does not meet the requirements necessary to have attained that status. If it expressly acknowledges that the Executive Order is *not* a threshold of significance, then it must also acknowledge that SANDAG is quite correct that it was not required to employ it as a CEQA measuring stick in assessing compliance.

My colleagues attempt to avoid the dilemma altogether. They offer that the *policy* underlying the Executive Order is of such overarching importance that it *must* be included within the significance factors listed in Guidelines section 15064.4, subdivision (b), and, therefore, SANDAG was *required* to consider that policy in what they euphemistically refer to as a "consistency analysis" involving the GHG impacts of its project and the Executive Order. Because SANDAG failed to provide such a policy analysis in its EIR, my colleagues conclude SANDAG abused its discretion. By this exercise in linguistics, the majority in contravention of *Professional Engineers* has elevated the Executive Order to the status of a threshold of significance without ever having to expressly declare they are doing so. Its action is judicial fiat, pure and simple.

The majority seeks support for its new formulation of the law by noting that important legislation has sprung from the Executive Order, and they offer that the Executive Order will continue to be the springboard for legislative action. Relying on *Professional Engineers*, the majority also concludes the policy underlying the Executive Order has been "ratified" by subsequent legislation. (Maj. opn. *ante*, at p. 14.) If, by this reasoning, the majority implies that subsequent environmental legislation somehow bestowed on the Executive Order a power it did not have, I believe it is mistaken. As *Profession Engineers* recognizes, our Legislature acts independently. As I discuss, the fact that the Legislature has enacted environmental legislation in recognition of the Executive Order's goals does not bestow on the Executive Order any more power than it had before the Legislature acted.

Moreover, although the Legislature has exercised its own independent prerogative by tasking CARB with adopting regional GHG reduction targets for 2020 and 2035, it has not done so for 2050. As I also discuss, the Legislature is currently considering a comprehensive and complex plan for 2050 that tasks the CARB to establish regional targets. It is possible the Legislature may alter the Executive Order's 2050 goals or reject them altogether. Using the majority's own logic, the Legislature has not ratified the Executive Order's qualitative or quantitative goals for 2050.

It is true, of course, that *qualitative* thresholds of significance are acceptable in assessing significance. (See Guidelines, § 15064.7, subd. (a).) However, qualitatively addressing the policy and sciences underlying the Executive Order—if this in fact is what the majority means by a "consistency analysis"—adds little if any meaning to the discussion of the significance of GHG impacts. SANDAG considered in its EIR the

important public policy of GHG emissions reduction in implementing its project. It acknowledged the Executive Order and its goals. It concluded the 2050 goal in that order was not at this time applicable. The purpose of remand is therefore unclear to me if the majority merely requires additional, undefined consideration of the qualitative aspects of the Executive Order.

Quantitatively speaking, as noted, SANDAG in its EIR considered, but did not use, the 2050 GHG reduction targets set forth in the Executive Order. Until the Legislature independently acts and tasks the CARB with adopting regional 2050 GHG emissions reduction targets, SANDAG in my view was not required to consider in its EIR the broad 2050 statewide goals set forth in the Executive Order. (See *Professional Engineers, supra*, 50 Cal.4th at p. 1047.)

The majority states that it is not requiring SANDAG's project to "*achieve* the Executive Order's 2050 goal or any other specific numerical goal" in undertaking the now-required "consistency analysis." (Maj. opn. *ante*, at p. 15, fn. 6.) This comes as little surprise, inasmuch as an EIR is merely an "informational document." (See Guidelines, § 15003, subd. (i).)

Nonetheless, whether qualitative or quantitative, it is not clear to me how, in assessing the significance of GHG impacts of the project—including for 2050—a lead agency is supposed to adopt from the Executive Order *regional* GHG emissions reduction targets. The majority appears to answer this question by stating SANDAG can determine its "share" of GHG emissions reduction responsibility from theoretical targets. With respect to SANDAG's share of responsibility, it is important to emphasize what the majority has not acknowledged: SANDAG is responsible only for its "*fair share*" when

assessing significance. Establishing an agency's "*fair share*" is a complex and science-based process. It begins by recognizing that the level of GHG emissions is a statewide problem encompassing a diverse array of emitters. Included in the array is not only transportation but also, for example, land use and development, agriculture, electricity generation, forestry, and industrial sectors. The analysis of GHG impacts thus involves emissions across sectors both within SANDAG's planning discretion (i.e., transportation and land use) and outside SANDAG's planning discretion (i.e., heavy industry). SANDAG is not empowered or equipped to offer and use analyses in statewide sectors over which it has no control.

The point is SANDAG, unlike the CARB, is a *regional* and not a state agency. Without a model addressing *regional* GHG emissions reduction targets between 2035 and 2050, it is impossible for SANDAG in its RTP to conduct a "consistency analysis" for these years of study.

As the lack of substance in the now-required "consistency analysis" attests, there is little to say except that, in the world of GHG emissions, "more of them are bad and less is good." It is a reasonable conclusion here that the SANDAG Board of Directors, comprised of locally elected officials from San Diego County and the 18 cities in the region, are already well aware of this. The EIR in any event recognizes the important policy goal of reducing GHG emissions.

As I discuss, there is legislation currently pending tasking the CARB with setting state and regional targets for 2050. This pending legislation further demonstrates my point that the Legislature has not yet independently adopted the Executive Order's 2050 statewide GHG emissions reduction goals. Once the CARB sets these regional targets,

which incidentally, may be different than the Executive Order's statewide goal, SANDAG and the other 18 metropolitan planning agencies (MPO's) throughout the state can then use them to determine their "*fair share*" of GHG emissions in analyzing the significance of GHG impacts of their projects. I fear the majority's demand that SANDAG "do more" *now* based on mere policy goals and/or theoretical targets, and without providing any guidance as to what more should be done, will in effect require SANDAG to set unilaterally 2050 regional GHG reduction targets in order to try to satisfy, somehow, the majority's "consistency analysis." In doing so, it may take action that ultimately conflicts with requirements set by CARB.

Perhaps the most profound harm arising from the majority's finesse of CEQA is the lasting damage it does to Guidelines section 15064.4. This section gives a lead agency substantial discretion to determine both the amount of GHG emissions from a project and whether such emissions are significant. Subdivision (b) of Guidelines section 15064.4 in particular states that in assessing GHG impacts, the lead agency *should* consider three factors, *among others*. One such factor expressly gives a *lead agency* the discretion to determine the thresholds of significance that should apply to its project in determining significance. (Guidelines, § 15064.4, subd. (b)(2).) To the extent thresholds of significance *other* than the three expressly provided in subdivision (b) apply, that should be a determination made by an agency in the proper exercise of its discretion.

It is apparent to me that identifying and selecting thresholds of significance is not a judicial function. Despite the clear language of Guidelines section 15064.4, subdivision (b) and the obvious intent of that section, the majority asserts a right to determine that a gubernatorial policy statement, which does not qualify as a threshold of significance, is to

be included among the "other factors" and then *orders* SANDAG on remand to develop an undefined "consistency analysis" between the lead agency's plan and the policy statement.

This insinuation of judicial power into the environmental planning process and usurping of legislative prerogative is breathtaking. Now we, the courts, without institutional planning expertise or knowledge, get to tell a lead agency what it must use as a threshold of significance. As a consequence of not being prescient enough to know what a court might select, the EIR's of projects such as this RTP, which, as noted, calls for investment of about \$214 billion in the San Diego region over the next few decades, are invalidated and sent back to the lead agency to anticipate what we, the court, might next decide is or has become of such critical policy significance that the agency must use it as a threshold of significance. There is no legal support for our action, which strips lead agencies of the discretion vested in them by the Legislature and reposes that discretion in the courts. To be clear, I do not believe our action expands Guidelines section 15064.4; instead, I believe it destroys the integrity of that section. (See Maj. opn. *ante*, at p. 20, fn. 9.)

The mischief caused by the majority would not be confined to the SANDAG region. The majority would have each of our states' six appellate districts, and multiple divisions within many of them, instructing the 18 MPO's regarding whether a "consistency analysis" is required based on, for example, the Executive Order, and, if so, what it should contain. It does not take much energy to foresee the permutations possible as each MPO receives judicial instruction. Chaos in environmental planning comes to mind.

The Legislature, in its wisdom, has foreseen the kind of damage we do today, and it has taken steps to forbid such judicial interference. First, the Legislature vested one agency, CARB, with creating the targets and metrics in assessing, and ultimately reducing, GHG emissions regionally and statewide. (Health & Saf. Code, § 39003.) Second, it has, in CEQA itself, expressly prevented courts from selecting what "other factors" an agency should consider in assessing significance of GHG impacts.

Indeed, section 21083.1 provides the legislative intent underlying CEQA and the interpretation of its statutes and guidelines by our courts: "It is the intent of the Legislature that courts, consistent with generally accepted rules of statutory interpretation, shall not interpret this division or the state guidelines adopted pursuant to Section 21083 in a manner which imposes procedural or substantive requirements beyond those explicitly stated in this division or in the state guidelines." Judicial imposition of significance thresholds does precisely what the statute prohibits.

As I discuss in more detail *post*, I conclude substantial evidence in the record shows SANDAG made a good faith and reasonable effort to analyze in its EIR the GHG impacts of its project. In its 39-page GHG impacts analysis, SANDAG, as noted, analyzed the targets set by the CARB for 2020 and 2035 under three thresholds of significance, in compliance with Guidelines section 15064.4. I thus would *reverse* the trial court's order finding SANDAG's GHG impacts analysis of the project was inadequate, including because SANDAG did not address the 2050 GHG *statewide* reduction goals set forth in the Executive Order.

As to the cross-appeal, because the trial court declined to reach those issues and because the majority in any event is remanding the matter with respect to the EIR's

treatment of GHG impacts and mitigation measures of the project, I would defer the issues raised in the cross-appeal to the trial court for consideration in the first instance. I do, however, note that our instructions on remand include what appears to be a directive that SANDAG consider further analysis of mass transportation. This directive, coupled with the vague requirement of a "consistency analysis," leaves me with an uncomfortable feeling that some might believe that, in sending this case back, we are *sub rosa* directing SANDAG to shift the emphasis in its plan to mass transportation. If that is a direction in which we inadvertently venture, I would only comment that it is not a journey we are empowered or equipped to undertake.

DISCUSSION

I

GHG Impacts

A. *Regulation of GHG by the CARB*

On June 1, 2005, at the United Nations World Environment Day in San Francisco, Governor Schwarzenegger signed the Executive Order in front of hundreds of international leaders. The Governor told his invited guests, which included mayors from more than 70 cities from around the world, that the "debate" over global warming from GHG emissions was "over." (Marshall, *Schwarzenegger Issues Plan to Reduce Greenhouse Gases* (June 2, 2005) N.Y. Times <http://www.nytimes.com/2005/06/02/national/02arnold.html?_r=0> [as of November 2014].)

The Executive Order established the following *statewide* reduction targets for greenhouse gas emissions: by 2010, to 2000 levels; by 2020, to 1990 levels; and by 2050, to 80 percent below 1990 levels. It also directed the California Environmental Protection

Agency (Cal-EPA) to develop strategies to meet these targets. In response, the "Climate Action Team," comprised of representatives from various agencies and commissions including the Cal-EPA and the CARB, was created. (See *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 938; see also Comment, *Quantifying an Uncertain Future: The Demands of the California Environmental Quality Act and the Challenge of Climate Change Analysis* (2012) McGeorge L.Rev. 1065, 1068-1069.)

Although the Executive Order provided the "power" for its issuance was derived from "the Constitution and statutes of the State of California," that order did *not* identify any article, section and/or statute as the source of this alleged authority. In any event, as noted, I do not believe our Constitution, including article V, vested the Governor with the authority to singlehandedly issue and enforce the Executive Order. (See, i.e., *Professional Engineers, supra*, 50 Cal.4th at p. 1015 [rejecting the argument the governor had the unilateral authority to implement a mandatory furlough program].) I also do not believe that our Legislature expressly granted that authority to the Governor. (See *id.* at p. 1000.) Therefore, I believe the GHG statewide emission reduction targets set forth in the Executive Order are nothing more than mere policy recommendations unless and until our Legislature independently acts to adopt such targets, which, as I explain, it has done for 2020 and 2035, but not for 2050. (See *ibid.*)

The Executive Order was by no means the first attempt in our state to address GHG emissions. In 2002, our Legislature passed a law regulating GHG vehicle emissions. (See Stats. 2002, ch. 200, enacting Assem. Bill No. 1493 (2001-2002 Reg. Sess.) (AB 1493).) Under this law, the CARB was required to develop and adopt, by

January 1, 2005, "regulations that achieve the maximum feasible and cost-effective reduction of greenhouse gas emissions from motor vehicles." (Health & Saf. Code, § 43018.5, subd. (a).) In enacting this law, our Legislature noted that the "control and reduction of emissions of greenhouse gases are critical to slow the effects of global warming." (Stats. 2002, ch. 200, § 1(c).) Thus, AB 1493 shows that our state policy of reducing GHG emissions did *not* originate with the 2005 Executive Order, as the majority appears to suggest, but rather was in existence before the Executive Order was issued.³

The California Global Warming Solutions Act of 2006 (Health & Saf. Code, § 38500 et seq., added by Stats. 2006, ch. 488, § 1, enacting Assem. Bill No. 32 (AB 32)) implemented the 2020 reduction target set forth in the Executive Order. (See Health & Saf. Code, § 38550; see also *Rialto Citizens for Responsible Growth v. City of Rialto*, *supra*, 208 Cal.App.4th at p. 939.) AB 32 directed the CARB to develop a "scoping plan . . . for achieving the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases" (Health & Saf. Code, § 38561, subd. (a); see Health & Saf. Code, § 38562, subd. (a) [requiring the CARB to "adopt greenhouse gas emission limits and emission reduction measures by regulation . . . to become operative beginning on January 1, 2012"]; see also *Association of Irrigated Residents v. State Air Resources Bd.* (2012) 206 Cal.App.4th 1487, 1490 [noting AB 32 designated the CARB as "the state agency

³ Our Legislature as early as 1975 tasked the CARB with the responsibility of "coordinating efforts to attain and maintain ambient air quality standards, to conduct research into the causes of and solution to air pollution, and to systematically attack the serious problem caused by motor vehicles, which is the major source of air pollution in many areas of the state." (Health & Saf. Code, § 39003.)

charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases' . . . and imposes numerous directives and timelines on the [CARB]").)

To assist an agency in its analysis of GHG emissions in CEQA review, our Legislature in 2007 enacted, among other provisions, section 21083.05 (added by Stats. 2007, ch. 185, § 1, enacting Sen. Bill No. 97 (SB 97)).⁴ SB 97 directed the Office of Planning and Research (OPR) to prepare and submit to the Natural Resources Agency (NRA) "guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions . . . including, but not limited to, effects associated with transportation or energy consumption." (Former § 21083.05, subd. (a).) SB 97 further provided that the OPR and NRA "shall periodically update the guidelines to incorporate new information or criteria" established by the CARB pursuant to AB 32. (*Id.*, subd. (c).)

The NRA adopted regulations on the significance of GHG emissions for CEQA, which were then incorporated into the CEQA Guidelines including, as perhaps most relevant here, Guidelines section 15064.4, discussed *post*.⁵

In 2008, our Legislature passed the Sustainable Communities and Climate Protection Act of 2008 (Sen. Bill No. 375 (2007-2008 Reg. Sess.)). As the majority recognizes, SB 375 supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning. Under SB 375, the CARB—

⁴ SB 97 was amended effective January 1, 2013. (Stats. 2012, ch. 548, § 5.)

⁵ "In interpreting CEQA, we accord the Guidelines great weight except where they are clearly unauthorized or erroneous." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428, fn. 5.)

once again—was directed to provide each region by no later than September 30, 2010 with GHG emission "reduction targets for the automobile and light truck sector for 2020 and 2035, respectively." (Gov. Code, § 65080, subd. (b)(2)(A).) Once these targets were established by the CARB, each of the state's MPO's was required to prepare under Government Code former section 65080, subdivision (b)(2) a "sustainable communities strategy" (SCS) as part of the MPO's RTP. (See Gov. Code, former § 65080, subd. (b)(2).)⁶

In developing the SCS, SB 375 required each MPO to "conduct at least two informational meetings . . . within the region for members of the board of supervisors and city councils" on the SCS. (Gov. Code, § 65080, subd. (b)(2)(E).) The purpose of the meetings was to "discuss the [SCS] . . . , including the key land use and planning assumptions to the members of the board of supervisors and the city council members in that county and to solicit and consider their input and recommendations." The SCS, if and when implemented, would allow the MPO to reach the GHG reduction targets established by the CARB. If those targets were unmet, the MPO would be required to prepare an alternative planning strategy to the SCS. (Gov. Code, § 65080, subd. (b)(2)(E).)

As *the* agency responsible for "target-setting" GHG emissions reductions, the CARB in 2010 created reduction targets for SANDAG's MPO region for 2020 and 2035.

⁶ Government Code section 65080 was amended effective January 1, 2010 (Stats. 2009, ch. 354, § 1) and again effective January 1, 2011 (Stats. 2010, ch. 328, § 95). The requirement of an SCS as part of an MPO's RTP remains in the current version of Government Code section 65080, subdivision (b).

SANDAG used these targets in addressing in its EIR the GHG impacts of the project. However, as SANDAG properly recognized in its EIR impact analysis, the CARB has not yet set 2050 GHG emissions reduction targets for the MPO's. As noted and as I discuss, there is legislation currently pending, Assembly Bill No. 2050 (AB 2050), that would require the CARB to do so.⁷

Thus, our Legislature has recognized the strong public policy of GHG emissions reductions in our state and has fully occupied this enormously complex field by delegating the "target-setting responsibility" of such reductions to the CARB through a series of comprehensive legislative enactments, including in AB 32, SB 97 and SB 375.⁸

⁷ According to a recent summary prepared by the Senate Appropriations Committee, AB 2050 would amend SB 32 by requiring "the California Air Resources Board (CARB) to develop greenhouse gas (GHG) emissions reductions goals for 2050, including intermediate goals, and to perform a number of analyses of the strategies that would be required to reach those goals" for purposes of the next scoping plan update. (Sen. Appropriations. Com., analysis of Assem. Bill No. 2050 (2013-2014 Reg. Sess.) p. 1.)

⁸ This list is not exhaustive. For example, in 2010 legislation was enacted requiring the Department of Transportation to update the federally mandated California Transportation Plan (CTP) by December 31, 2015 and every five years thereafter. (Gov. Code, §§ 65070, subd. (a) & 65071.) The CTP requires identification of a "statewide integrated multimodal transportation system" that includes among other requirements the incorporation of all SCS and/or alternate planning strategies required by SB 375. (Gov. Code, § 65072.2) "In developing the [CTP] . . . , the department shall address how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of [GHG] emissions to 1990 levels by 2020 as required by [AB 32] and 80 percent below 1990 levels by 2050." (*Ibid.*) The CTP must include: "(a) A policy element that describes the state's transportation policies and system performance objectives. These policies and objectives shall be consistent with legislative intent described in Sections 14000, 14000.5, 14000.6, and 65088. [¶] (b) A strategies element that shall incorporate the broad system concepts and strategies synthesized from the adopted regional transportation plans prepared pursuant to Section 65080. The California Transportation Plan shall not be project specific. [¶] (c) A recommendation element that includes economic forecasts and recommendations to the Legislature and the Governor to

The CARB in response has then set reduction targets for each of the 18 MPO's in our state.

Against this backdrop, I disagree with the majority's conclusion that SANDAG acted unreasonably in refusing to engage in a "consistency analysis" using the Executive Order as a CEQA measuring stick when accessing the GHG impacts of its regional project. (See *Professional Engineers, supra*, 50 Cal.4th at p. 1000.) Instead, in my view, the record contains more than sufficient evidence showing SANDAG acted in good faith and properly exercised its broad discretion under Guidelines section 15064.4 in assessing the significance of GHG impacts of the project.

achieve the plan's broad system concepts, strategies, and performance objectives." (*Id.*, § 65072.) The Legislature in the CTP directly (*id.*, § 14000.6, subd. (b)) and indirectly (*id.*, § 65072.2) referenced the Executive Order and its goal of reducing GHG emissions to 80 percent of 1990 levels by 2050. However, as noted, the Legislature has not yet tasked the CARB to set 2050 GHG regional reduction targets for the MPO's.

B. *Guidelines Section 15064.4*⁹

As noted, CEQA requires that public agencies "adopt by ordinance, resolution, rule, or regulation" criteria for the evaluation of a project and the preparation of an EIR that are consistent with the statutory provisions of CEQA and its Guidelines. (§ 21082.)

Section 21083, subdivision (a) directs the OPR to "prepare and develop proposed guidelines" for implementation by a public agency. Subdivision (b) of that statute states the "guidelines shall specifically include criteria for public agencies to follow in determining whether or not a proposed project may have a 'significant effect on the environment.'" As noted *ante*, section 21083.5 was added by SB 97 to require the OPR to

⁹ Guideline section 15064.4 provides: "(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to: [¶] (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or [¶] (2) Rely on a qualitative analysis or performance based standards. [¶] (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment: [¶] (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; [¶] (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project. [¶] (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project."

prepare specific guidelines dealing with CEQA review of GHG.

Adopted after passage of SB 97, Guidelines section 15064.4, subdivision (a) requires a lead agency to make a "good-faith effort" to determine the GHG emissions of a project. In making this determination, a lead agency has the discretion to "[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use" (Guidelines, § 15064.4, subd. (a)(1)) and/or to "[r]ely on a qualitative analysis or performance based standards" (*id.*, subd. (a)(2)). After choosing a methodology and selecting significance thresholds, the lead agency next is required under Guidelines section 15064.4 to assess the "significance of impacts" of GHG emissions. (*Id.*, subd. (b).)

In assessing the significance of GHG impacts of a given project, Guidelines section 15064.4 states a lead agency "should" consider among others the following factors: (1) the extent to which the project may increase or reduce GHG "as compared to the existing environmental setting"; (2) whether the project's GHG emissions "exceed a threshold of significance that the *lead agency determines* applies to the project"; and (3) the extent to which the project "complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation" of GHG. (Guidelines, § 15064.4, subd. (b)(1), (2) & (3), italics added.) Subdivision (b)(3) of Guidelines section 15064.4 further provides that "[s]uch requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions."

Guidelines section 15064.4 thus "confirms that lead agencies retain the discretion to determine the significance of greenhouse gas emissions and should "make a good-faith

effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of [GHG] emissions resulting from a project." [Citation.]" [Citations.]" (*Citizens Against Airport Pollution v. City of San Jose* (2014) 227 Cal.App.4th 788, 807.)

I therefore disagree with the majority's interpretation of Guidelines section 15064.4: although subdivision (b) of this section clearly states the factors listed in subdivisions (1), (2) and (3) are not exhaustive, that does not ipso facto mean the courts may require an agency to consider additional "factors" (i.e., the Executive Order) in evaluating the GHG impacts of a project, as the majority has done here. In my view, the majority's reading of Guidelines section 15064.4 usurps the broad discretion afforded an agency in analyzing significance and improperly puts courts in charge of determining whether benchmarks other than those expressly provided in subdivisions (1), (2) and (3) must be considered by an agency when undertaking such an analysis.

Here, as I have noted, the EIR used three separate GHG analyses utilizing two of the specific significance criteria authorized by Guidelines section 15064.4. GHG-1, the first analysis, is an "existing conditions" baseline analysis authorized by subdivision (b)(1) of Guidelines section 15064.4.¹⁰ Under this analysis, any increase of GHG emissions over existing conditions (i.e., 2010) was deemed to be a significant impact.

¹⁰ I note the existing environmental setting "normally constitute[s] the baseline physical conditions by which a lead agency determines whether an impact is significant." (Guidelines, § 15125, subd. (a); see *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 445 [holding that "[w]hile an agency has the discretion under some circumstances to omit environmental analysis of impacts on existing conditions and instead use only a baseline of projected future conditions, existing conditions 'will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant'"].)

The GHG-1 analysis concluded that, although regional GHG emissions would decrease under the project from existing levels until after 2020, they would increase above existing levels by 2035 and increase still further by 2050, largely as a result of population increase and development. The EIR therefore determined the GHG impacts in 2020 would be a less than significant impact but would be significant in 2035 and 2050.

The second analysis, GHG-2, used the GHG reduction targets set forth in SB 375 as a significance criteria. GHG-2 used a narrower range of GHG emissions than GHG-1. GHG-2's approach, in my view, was also fully consistent with Guidelines section 15064.4.

Under SB 375, as I have noted, the CARB prepared regional GHG emission reduction targets, compared to 2005 emissions, for cars and light trucks for 2020 and 2035 for each of the state's MPO's. In response, each of the MPO's, including SANDAG, prepared an SCS as part of its RTP to "reduce GHGs by better aligning transportation, land use, and housing. For SANDAG, the targets are to reduce per capita CO₂ emissions 7 percent below 2005 levels by 2020 and 13 percent below 2005 levels by 2035. Because CARB has not developed a target for 2050, no analysis is provided for that year."

Using this significance criteria, the EIR concluded the project would have less than a significant impact because the project met SB 375's goals, as set by the CARB, for lowered per capital vehicle-related GHG emissions in 2020 and 2035.

The third GHG impact analysis, GHG-3, analyzed whether regional GHG emissions (from both transportation and land use/growth) would conflict with (1) the scoping plan adopted by the CARB pursuant to AB 32, which plan functions as a roadmap to achieve GHG reductions in our state, and (2) SANDAG's own adopted

Climate Action Strategy (CAS), which was created in 2010 under a partnership with the California Energy Commission "as a guide for SANDAG and local governments and policymakers in addressing climate change."

Because the scoping plan time horizon was limited to 2020, the EIR's analysis of whether or not the project under GHG-3 would have a significant impact with respect to GHG was limited to 2020, and no analysis was presented for 2035 and 2050. Although recognizing 2035 and 2050 emission reduction targets for GHG's were established in the Executive Order, the EIR in my view properly concluded the order was not a "plan" adopted through a public review process as required in subdivision (b)(3) of Guidelines section 15064.4. The EIR, however, analyzed transportation and land use/growth in 2035 and 2050 expected as a result of implementation of the project, with respect to the CAS.

The EIR analysis concluded that with respect to transportation, the estimated emissions from transportation in 2020 would be less than required by AB 32 and would constitute a less than significant impact under this threshold. The EIR also concluded that the project would not impede the CAS and its policy of promoting the reduction of vehicle miles traveled and minimization of GHG in transportation, inasmuch as the project also sought to reduce GHG emissions in transportation through a series of projects. Therefore, for transportation, the EIR found the implementation of the project would constitute a less than significant impact under the CAS threshold for 2020, 2035 and 2050.

With respect to land use/growth, the EIR analysis concluded in GHG-3 that emissions of GHG in 2020 were expected to exceed the scoping plan reduction goals. However, it noted several other measures included in the scoping plan were not yet

adopted or implemented, including "cap-and-trade," and, therefore, were not included in the GHG reduction calculations. Because the RTP was itself consistent with its role in the overall scoping plan strategy, SANDAG concluded for land use/growth that for 2020 the impact would be less than significant under this threshold. The EIR further provided for 2020, 2035 and 2050, implementation of the project would not impede the CAS but in fact would promote it and the goals of increasing energy efficiency and reducing energy consumption and, therefore, would constitute a less than significant impact.

C. Substantial Evidence Supports the Finding SANDAG's Assessment of Significance of GHG Impacts in its EIR Satisfied CEQA

Unlike my colleagues, I do not believe SANDAG's failure to discuss the project's consistency with the Executive Order shows a lack of a "good-faith effort" to assess in the EIR the GHG impacts of the project.¹¹ Rather, in my view, there is abundant evidence in the record showing that SANDAG made a "good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions [in the SANDAG MPO region] resulting from [the] project" (Guidelines, § 15064.4, subd. (a)); and that it properly assessed the significance of these emissions under applicable thresholds (*id.*, subd. (b)), including those adopted by the CARB (through enabling legislation) for 2020 and 2035. (See *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal.App.4th 327, 335-336 (*City of Chula Vista*).)

¹¹ In finding an alleged lack of evidence in the record of a reasonable, good-faith effort by SANDAG to assess the GHG impacts, the majority, in my view, is in effect applying an independent standard of review, and its contention otherwise is one of form over substance. (Maj. opn. *ante*, at p. 14.)

Moreover, the record also contains substantial evidence showing SANDAG properly exercised its discretion when it decided not to use the Executive Order's 2050 statewide emission reduction target as a CEQA measuring stick for its regional plan. *North Coast Rivers Alliance v. Marin Municipal Water Dist. Board of Directors* (2013) 216 Cal.App.4th 614 (*North Coast*) informs my view on this issue.

There, the petitioners contended an EIR for a project to build a sea-water desalination plant approved by a local water district was deficient because, among other reasons, it contained an inadequate analysis of GHG emissions. Although the trial court rejected this argument, it nonetheless found the EIR lacked substantial evidence to support the water district's conclusion the plant's GHG emissions were not cumulatively considerable. (*North Coast, supra*, 216 Cal.App.4th at p. 650.)

In reversing, the court concluded the EIR's use of AB 32, and its requirement that the CARB "adopt regulations that would require the reporting and verification of statewide GHG emissions and limit statewide GHG emissions to 1990 levels by 2020," was acceptable as a threshold of significance, inasmuch as the EIR properly noted "no CEQA thresholds of significance have been established for GHG[]." (*North Coast, supra*, 216 Cal.App.4th at p. 651.) The court also concluded the EIR used as a threshold a program voluntarily adopted by Marin County, which the water district joined, where GHG emissions would be reduced to 15 percent below 1990 levels by 2020. (*Ibid.*)

The *North Coast* court then reviewed the EIR in light of these thresholds, which focused primarily on energy consumption for plant operations. (*North Coast, supra*, 216 Cal.App.4th at p. 652.) In concluding the EIR's analysis "more than satisfied the requirements of CEQA" (*id.* at p. 652), the court recognized that the petitioners'

disagreement with the district's significance conclusion for GHG impacts was insufficient under CEQA because a ""reviewing court 'may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable,' for, on factual questions, [the court's] 'task is not to weigh conflicting evidence and determine who has the better argument.'"" (*Id.* at p. 653.)

Similarly, this court in *City of Chula Vista* rejected the petitioner's contention the lead agency (i.e., the city) was required to use three other well-recognized potential thresholds of significance, instead of the goals set forth in AB 32, in analyzing the GHG impacts of a store replacement project. Citing to then-newly enacted Guidelines section 15064.4, this court concluded that this regulation "confirms that lead agencies retain the discretion to determine the significance of greenhouse gas emissions." (*City of Chula Vista, supra*, 197 Cal.App.4th at p. 336.) This court also concluded the lead agency "properly exercised its discretion to utilize compliance with [AB 32] as the threshold" and, as such, *rejected* the petitioner's contention the lead agency erred by not applying different thresholds. (*Ibid.*; see *Citizens Against Airport Pollution v. City of San Jose, supra*, 227 Cal.App.4th at p. 807 [recognizing that Guidelines, § 15064.4 gives a lead agency discretion to determine the significance of GHG emissions based to the extent possible on available scientific and factual data].)

North Coast and *City of Chula Vista*, in my view, provide guidance in the instant case and support the conclusion that SANDAG properly exercised its discretion under Guidelines section 15064.4, subdivision (b)(1), (2) and (3), including when it used the regional target numbers established by the CARB (developed in response to AB 32 and SB 375) in analyzing the impacts of GHG of the project. (See *Citizens for a Sustainable*

Treasure Island v. City and County of San Francisco (2014) 227 Cal.App.4th 1036, 1060-1061 [noting the "core principle" that an EIR is not required to engage in "speculative analysis," and, thus, a lead agency is not required to "'forsee[] the unforeseeable,'" "predict[] the unpredictable or quantify[] the unquantifiable"] (*Treasure Island*).) *North Coast* and *City of Chula Vista* also support the conclusion that, subject to the requirements of Guidelines section 15064.4, lead agencies and not the courts have the discretion to determine the benchmarks to be used for determining the GHG impacts of a project.

Indeed, as I previously noted, there is legislation currently pending, Assembly Bill No. 2050 (AB 2050), that among other purposes would delegate to the CARB the authority to set specific GHG emission reduction targets for the MPO's, including in the SANDAG region, but in this instance, the targets would be for 2050. Regardless of whether AB 2050 ultimately passes, the bill is significant because it shows our Legislature has not yet acted to set 2050 reduction targets (through the CARB). AB 2050 also demonstrates, yet again, the intent of the Legislature to fully occupy the field of regulating GHG emissions in our state. I believe the majority ignores this intent by requiring SANDAG, based on a strained interpretation of Guidelines section 15064.4, to do a "consistency analysis" using the Executive Order as a CEQA measuring stick. I also believe doing so has far-reaching, negative consequences.

By imposing a requirement on SANDAG that does not exist under CEQA, including in the applicable GHG Guidelines, the majority is contravening section 21083.1, as I have already discussed. In addition, as I have noted, the regulation of GHG emissions is better left to our Legislature and government agencies like the CARB in

what is clearly an area that "involves numerous highly technical and novel scientific, technical and economic issues" that will span many decades. (*Association of Irrigated Residents v. State Air Resources Bd.*, *supra*, 206 Cal.App.4th at pp. 1502, 1505 [noting the CARB has been "assigned the responsibility of designating and overseeing the implementation of measures" to achieve the "challenging" goals of reducing GHG emissions in our state].)

The complexity of the issues addressed by SANDAG's RTP, the first of its kind to be approved in this state, cannot be overstated. The sheer volume of the record in this case pays homage to the difficult issues facing a lead agency like SANDAG in preparing a RTP with an SCS component, where transportation planning and land use are linked to regional GHG emissions reduction goals for the next several decades. In contrast, judges "have neither the resources nor scientific expertise to engage in such analysis." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 393.)

Until our Legislature directs the CARB to set regional goals for 2050, I do not believe SANDAG was required to use the Executive Order and/or its 2050 GHG statewide reduction goal as a threshold to assess the significance of the GHG impacts of the project. (See *Treasure Island*, *supra*, 227 Cal.App.4th at p. 1054 [refusing to "fault" an EIR for a project to redevelop a former naval station into a new, mixed-use community because there were many project features that were subject to future revision, and, thus, the EIR "cannot be faulted for not providing detail that, due to the nature of the [p]roject, simply does not now exist"].)

Finally, the majority in my view is unnecessarily interfering with SANDAG's program EIR and tiering, which frustrates the goal of good planning: "Where a lead agency is using the tiering process in connection with an EIR for a large-scale planning approval, such as a general plan or component thereof . . . , the development of detailed, site-specific information may not be feasible but can be deferred, in many instances, until such time as the lead agency prepares a future environmental document in connection with a project of a more limited geographic scale, as long as deferral does not prevent adequate identification of significant effects of the planning approval at hand."

(Guidelines, § 15152, subd. (c).)

Our high court in *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143 rejected a challenge to a program EIR on the basis it lacked sufficient detail regarding water sources to implement a project to restore the ecological health and improve the management of the Bay-Delta region. In so doing, the court noted that the Bay-Delta project was a "broad, general, multiobjective, policy-setting, geographically dispersed" plan (*id.* at p 1171); that at the first-tier program level, the "environmental effects of obtaining water from potential sources may be analyzed in general terms, without the level of detail appropriate for second-tier, site-specific review" (*id.* at p. 1169); that the advantage of a program EIR is it allows a lead agency "to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts" (*ibid.*, citing Guidelines, § 15168, subd. (b)(4)); and that because the Bay-Delta project "is to be implemented over a 30-year period[,] . . . [i]t is therefore impracticable to foresee with certainty specific sources of water and their impacts" (*id.* at p. 1172).

Much like the Bay-Delta project, the project here is a "broad, general, multiobjective, policy-setting" plan. (See *In re Bay-Delta etc.*, *supra*, 43 Cal.4th at p. 1171.) As such, I believe substantial evidence in the record shows SANDAG in its EIR engaged in a "good-faith effort" to analyze the GHG impacts of the project for purposes of the first-tier stage of what is clearly a long-term planning process that will be implemented over decades, "with the understanding that additional detail will be forthcoming when specific second-tier projects are under consideration." (See *id.* at p. 1172; see also *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 372 [upholding program EIR against a challenge it was vague and insufficiently described potential future facilities of a county's hazardous waste management plan because the plan, much like SANDAG's project at issue here, served only as an "assessment and overview, with any separate future projects, when identified, to be accompanied by additional EIR's"].)

According to SANDAG, implementation of the project will involve "literally hundreds of individual freeway, highway, local road, public transit, bikeway and other transportation projects, as well as ongoing development of various mitigation, planning and transportation management programs." In addition, many of these projects will occur 10, 20 or 30 years into the future and will be carried out by others including local governments and/or agencies, where baseline conditions may have substantially changed and after the project itself will have gone through multiple mandatory updates on a four-year cycle as currently required under Government Code section 65080, subdivision (d).

Because most, if not all, of these individual future transportation projects and/or land use decisions will be subject to its own project-level review under CEQA, and

because, in any event, SANDAG's EIR considered the public policy of GHG emission reduction and the CARB has not yet established 2050 GHG reduction target numbers for the SANDAG MPO region, I believe there is absolutely no reason to send the EIR back to the trial court for further consideration of GHG impacts utilizing the Executive Order as a threshold. Rather, I believe this is a waste of precious resources and will amount to "endless rounds of revision and recirculation of EIR's" that the Legislature did not intend. (See *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1132; see also Guidelines, § 15151 [stating that the "sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible" and that "courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure" in analyzing the adequacy of an EIR]; *Treasure Island, supra*, 227 Cal.App.4th at p. 1061 [noting it "has long been recognized that premature attempts to evaluate effects that are uncertain to occur or whose severity cannot reliably be measured is 'a needlessly wasteful drain of the public fisc'"].)

In sum, I conclude there is substantial evidence in the record showing SANDAG acted reasonably and in good faith when it addressed the GHG impacts of its project and properly exercised its discretion under Guidelines section 15064.4. I thus would reverse the trial court order finding SANDAG's GHG impacts analysis insufficient under CEQA.

II

Mitigation Measures

Initially, because I conclude the EIR adequately addressed the GHG impacts of the project, unlike the majority I do not deem moot (or partially moot) (Maj. opn. *ante*, at p. 23) SANDAG's contention that the EIR also adequately addressed mitigation measures

for the project's significant GHG impacts. Also unlike the majority, I conclude the EIR adequately considered reasonable mitigation measures for GHG impacts.

A. Additional Background

As noted, the EIR under the "existing conditions" baseline, GHG-1, concluded that the GHG impacts in 2020 would be a less than significant impact but would be significant in 2035 and 2050. Based on this analysis, the EIR proposed three mitigation measures to reduce impacts related to GHG emissions to less than significant levels.

The first mitigation measure, GHG-A, provided: "SANDAG shall update future Regional Comprehensive Plans and Regional Transportation Plans/Sustainable Community Plans to incorporate policies and measures that lead to reduced GHG emissions. Such policies and measures may be derived from the General Plans, local jurisdictions' Climate Action Plans, and other adopted policies and plans of its member agencies that include GHG mitigation and adaptation measures or other sources."

The second, GHG-B, encouraged the "San Diego region cities and the County government" to "adopt and implement Climate Actions Plans" (CAP's) and other climate strategies by: a) quantifying GHG emissions, "both existing and projected over a specified time period, resulting from activities within their respective jurisdictions"; b) establishing a "level . . . below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable"; c) identifying and analyzing GHG emissions "resulting for specific actions . . . anticipated within their respective jurisdictions"; d) specifying measures, "including performance standards, that . . . if implemented on a project-by-project basis, would collectively achieve the specified emissions level"; e) establishing a mechanism to monitor the "progress toward achieving

that level" of specified emissions and requiring an amendment if such levels are not achieved; and f) adopting such plans "in a public process following environmental review."

GHG-B further provided that, when appropriate, CAP's should "incorporate planning and land use measures from the California Attorney General's latest list of example policies to address climate change at both the plan and project level." At the plan level, GHG-B identified various policies to be considered and, if appropriate, implemented, from the website of the California Attorney General providing examples to address climate change, including "[s]mart growth, jobs/housing balance, transit-oriented development, and infill development through land use designations, incentives and fees, zoning, and public-private partnerships"; "[c]reate transit, bicycle, and pedestrian connections through planning, funding, development requirements, incentives and regional cooperation, and create disincentives for auto use"; [and] "[e]nergy and water-efficient buildings and landscaping through ordinances, development fees . . . and other implementing tools."

GHG-B also identified project-specific mitigation measures available on the website that, if appropriate, should be implemented at the plan level in a CAP's planning and land use measures, including adopting a "comprehensive parking policy" that encourages use of alternate transportation and discourages use of private vehicles; building or funding a "major transit stop within or near development"; providing public transit incentives, such as free or low-cost monthly transit passes to the public; incorporating bicycle lanes and routes into new development; and requiring facilities and amenities for non-motorized transportation, such as secure bicycle parking.

SANDAG in connection with GHG-B stated it would assist local governments in preparing CAP's and other climate strategies plans through implementation of its own CAS, which, as noted, was created in 2010 "as a guide for SANDAG and local governments and policymakers in addressing climate change." The CAS "provides a toolbox of land use, transportation, and related policy measures and investments that help implement the 2050 RTP/SCS [i.e., the project] through reducing GHG emissions. Policy measures also are identified for buildings and energy use, protecting transportation and energy infrastructure from climate impacts, and to help SANDAG and local jurisdictions reduce GHGs from their operations."

The third mitigation measure discussed in the EIR, GHG-C, provided SANDAG and local governments should require "Best Available Control Technology" (BACT) in constructing and operating projects.

SANDAG also considered additional mitigation measures that were found to be infeasible. One such measure was requiring all vehicles in the San Diego region to be either zero-emission vehicles or to be powered by renewable energy. SANDAG found this measure infeasible because of the "rate of turnover of vehicles on the roadway" and because of the limited number of such vehicles available. Another measure found to be infeasible was requiring all future construction to be net-zero energy use. Although renewable energy is available and is an option for a portion of a project's energy needs, SANDAG concluded it was infeasible for all projects to have net-zero emissions (i.e., hospitals).

Finally, SANDAG also found infeasible the requirement that all future construction activity include only "retrofitted equipment." Because certain equipment

does not have "retrofit components," SANDAG concluded this mitigation measure was infeasible.

SANDAG in the EIR noted that implementation of mitigation measures GHG-A through GHG-C "would reduce GHG emissions through adoption of measures and policies that encourage GHG emissions reduction in regional plans, adoption of Climate Action Plans by member agencies, and using BACT during construction and operation of implemented projects." Because of the growth in population, housing, and employment, the EIR concluded implementation of the project "would result in an increase in GHG emissions" and, as such, even with the mitigation measures, GHG-1, the existing conditions baseline, "would remain a significant and unavoidable impact in 2035 and 2050."

B. Governing Law and Analysis

It is axiomatic that an EIR must describe feasible measures that could minimize significant adverse impacts. (Guidelines, § 15126.4, subd. (a)(1).) Feasible means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (*Id.*, § 15364.)

However, a lead agency may find that "particular economic, social, or other considerations make the alternatives and mitigation measures infeasible and that particular project benefits outweigh the adverse environmental effects. (Pub. Resources Code, § 21081, subds. (a)(3), (b); Guidelines, § 15091, subd. (a)(3).) Specifically, an agency cannot approve a project that will have significant environmental effects unless it finds as to each significant effect, based on substantial evidence in the administrative

record, that (1) mitigation measures required in or incorporated into the project will avoid or substantially lessen the significant effect; (2) those measures are within the jurisdiction of another public agency and have been adopted, or can and should be adopted, by that agency; or (3) specific economic, legal, social, technological, or other considerations make the mitigation measures or alternatives identified in the EIR infeasible, and specific overriding economic, legal, social, technological, or other benefits outweigh the significant environmental effects. (Pub. Resources Code, §§ 21081, 21081.5; Guidelines, § 15091, subds. (a), (b).)" (*Federation of Hillside & Canyon Assns. v. City of Los Angeles* (2004) 126 Cal.App.4th 1180, 1198; see *South County Citizens for Smart Growth v. County of Nevada* (2013) 221 Cal.App.4th 316, 336 [noting that "'CEQA requires the appropriate public agency 'to find, based on substantial evidence, that the mitigation measures are 'required in, or incorporated into, the project'; or that the measures are the responsibility of another agency and have been, or can and should be, adopted by the other agency; or that mitigation is infeasible and overriding considerations outweigh the significant environmental effects'"].)

Claims concerning the feasibility or effectiveness of mitigation measures are reviewed for substantial evidence, which is defined as "'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.'" (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 486.) In reviewing an agency's decision for substantial evidence, courts "'must indulge all reasonable inferences from the evidence that would support the agency's determinations and resolve all conflicts in the evidence in favor of the agency's decision.'" (*California Native Plant*

Society v. City of Santa Cruz (2009) 177 Cal.App.4th 957, 985.) This standard of review flows from the fact that an "agency has the discretion to resolve factual issues and to make policy decisions." (*Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 120.)

""As with all substantial evidence challenges, an appellant challenging an EIR for insufficient evidence must lay out the evidence favorable to the other side and show why it is lacking. Failure to do so is fatal. A reviewing court will not independently review the record to make up for appellant's failure to carry his [or her] burden."" (*Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1572.)

Here, I conclude petitioners have not met their burden of showing the mitigation measures for GHG emissions described by SANDAG in its program EIR were inadequate. As noted, the EIR discussed three separate mitigation measures in connection with impact analysis GHG-1. Each such measure complies with Guidelines section 15126.4, subdivision (c)(5), which was adopted in response to SB 97 and which provides the GHG mitigation measures proposed in connection with adoption of a long-range plan, such as the instant project, "may include the identification of specific measures that may be implemented on a project-by-project basis."¹²

¹² Subdivision (c) of Guideline section 15126.4 provides in part: "[L]ead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. 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

Moreover, the record shows SANDAG considered additional mitigation measures to reduce GHG emissions and found them infeasible. (See *Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 245 [noting that CEQA does not require "an EIR to explain why certain mitigation measures are infeasible"]; see also *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 351 [noting CEQA does not require an EIR to analyze in detail mitigation measures deemed infeasible].)

At the conclusion of the CEQA review process, the record shows SANDAG adopted both the mitigation measures within its power to implement and a mitigation monitoring program (MMRP) for compliance. (See §§ 21081 & 21081.6.) The mitigation measures and MMRP confirm SANDAG's commitment to implementing GHG mitigation measures described in the EIR.

I do not agree with petitioners that the mitigation measures were insufficiently unenforceable because, particularly with respect to GHG-A and GHG-B, they depended on the cooperation of multiple other agencies. As noted, CEQA allows a lead agency to approve or carry out a project with potential adverse impacts if "[c]hanges or alterations have been . . . incorporated into[] the project" and "[t]hose changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency." (§ 21081, subd. (a)(1) & (2).)

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."

Finally, because SANDAG in my view satisfied its initial burden to consider a range of reasonable mitigation measures in its EIR, I would conclude the burden then switched to petitioners to establish from the record what petitioners describe as other "effective" mitigation measures that allegedly were omitted from consideration in the EIR and to show, again from the record, that such "effective" measures 1) were not only legally feasible but also suitable for discussion in a program EIR involving a project incorporating a broad range of planning measures and policies over the next several decades, *and* 2) would avoid or substantially lessen the project's GHG impacts. (See *San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th 1, 14-17 [rejecting the petitioners' contention that unspecified, additional mitigation measures should have been considered in "meaningful detail" in an EIR and noting the general rule that "CEQA does not . . . require discussion of every mitigation measure the agency rejected as infeasible"].) I would conclude petitioners have not met, and cannot meet, this burden in this case. (See *id.* at p. 17 [noting that "[f]easibility under CEQA encompasses desirability to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors"].)¹³

BENKE, J.

¹³ Because the trial court never reached the issues raised in the cross-appeal and because the majority in any event is remanding the matter with respect to the EIR's treatment of GHG impacts and mitigation measures of the project, as I have noted, I would defer the issues raised in the cross-appeal to the trial court for consideration. Nonetheless, I feel compelled to state my objection to the majority's conclusion that SANDAG failed to consider a reasonable range of project alternatives.

LATHAM & WATKINS^{LLP}

January 16, 2015

VIA ELECTRONIC MAIL
VIA FEDERAL EXPRESS

Molly Pearson
Santa Barbara County Air Pollution Control District
260 N. San Antonio Road, Suite A
Santa Barbara, CA 93110
(805) 961-8838
ceqa@sbcapcd.org

Re: SBCAPCD Consideration of a California Environmental Quality Act
Significance Threshold for Greenhouse Gas Emissions

Dear Ms. Pearson:

On behalf of Pacific Coast Energy Company, we respectfully offer recommendations to the Santa Barbara County Air Pollution Control District (District) in response to the District's solicitation of comments regarding its development of a California Environmental Quality Act (CEQA) significance threshold for greenhouse gas (GHG) emissions. We previously submitted a comment letter dated August 15, 2014 on this same topic and hereby incorporate it by reference in its entirety.

In connection with the District's ongoing consideration of revisions to its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of GHG emissions from new or modified stationary sources, four potential significance threshold options were presented at the Public Workshop held by the District on December 3, 2014:

1. Zero.
2. "Numeric Bright Line" of 10,000 metric tonnes (MT) of carbon dioxide equivalent emissions per year (CO₂e/yr).
3. Performance-Based Measures and Percent Reduction Consistent with Assembly Bill (AB) 32 Goals.
4. Percent Reduction from Business-As-Usual (BAU).

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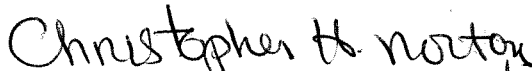
LATHAM & WATKINS^{LLP}

These significance threshold options fall into two general categories. The first two options are mass-based thresholds. Under Option 1 and Option 2, a CEQA project's GHG emissions alone would determine whether the District will conclude that the project has a significant effect on the environment – regardless of that project's carbon efficiency. The last two options are efficiency-based thresholds. Under Option 3 and Option 4, the District would determine the significance of a CEQA project's GHG emissions according to that project's relative carbon efficiency.

As explained in further detail in the attached, an efficiency-based threshold is more appropriate and supported by substantial evidence than a mass-based threshold. Of the options presented by the District thus far, Option 4 is the best choice, subject to further modification and improvement, as described in Attachment A. Between the two mass-based thresholds, Option 2 is the better option, as discussed in Attachment A.

We appreciate the opportunity to submit comments on the District's potential revisions to its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of GHG emissions. Accordingly, we respectfully offer the recommendations contained in this letter (including Attachment A hereto). We are available to further discuss our comments at your convenience.

Very truly yours,


Christopher H. Norton
of LATHAM & WATKINS LLP *due*

cc: Dave Van Mullem, SBCAPCD
Greg Brown, PCEC

ATTACHMENT A

I. AN EFFICIENCY-BASED THRESHOLD IS MORE APPROPRIATE THAN A MASS-BASED THRESHOLD

As indicated in our comment letter to the District dated August 15, 2014 (the Prior Comment Letter), efficiency-based thresholds are better calibrated to address a cumulative impact like global climate change. The disclosure of a project's mass GHG emissions, while necessary for compliance with CEQA's information disclosure requirements, generally does not provide lead agencies with as much relevant data to permit informed decision-making. Given the global nature of climate change, adoption of a mass-based GHG emissions significance threshold, in particular a zero emissions threshold, could be vulnerable to litigation as speculative and not supported by substantial evidence. As population growth appears inevitable and economic growth is both likely and desirable, a comparison to "Business As Usual" (BAU) (or another efficiency-based metric) is a valuable tool for lead agencies to assess the relative carbon intensity and efficiency of a particular project. In particular, use of AB 32's GHG emissions reduction mandate provides a carefully crafted tool supported by substantial evidence¹ to assess the contribution to climate change of a particular project.

A. Option 4 Is Preferable To Option 3

Of the two efficiency-based thresholds proffered by the District, Option 4 is preferable, though it should be modified as discussed in greater detail below. There are a couple of issues with Option 3 that could make its adoption and application vulnerable. The foundation of Option 3 is reliance on Product Benchmarks developed by the Air Resources Board (ARB). However, as acknowledged in the District's "Supplemental Explanation of Performance-Based Measure Approach," these Product Benchmarks were not developed to serve the purpose envisioned by the District. Rather, the Product Benchmarks were developed and incorporated into the Cap-and-Trade Program to calibrate its free allocation of Cap-and-Trade Program allowances to certain industrial sectors. Inherent in this calibration was ARB's intention to provide an incentive for industrial facilities to become more carbon efficient. To that end, ARB did not use an industrial sector's production weighted average GHG emissions intensity as the Product Benchmark. Instead, ARB made the Product Benchmarks more stringent, "targeting the benchmark to allocate 90 percent of this level per unit product."²

This stringency typically results in the majority of facilities in a certain industry being less carbon efficient than the pertinent Product Benchmark. Indeed, the example provided in the District's "Supplemental Explanation of Performance-Based Measure Approach" shows that 16 of the 20 heavy crude extraction facilities have carbon emissions intensities higher than the Product Benchmark. Likewise: "In ... evaluating the benchmark values, [ARB] staff found that the [90 percent] stringency approach ... worked for many sectors but, in some cases, would set

¹ For example, studies and analyses relied on by the Air Resources Board in the adoption of the Climate Change Scoping Plan.

² California Air Resources Board, Appendix B: *Development of Product Benchmarks for Allowance Allocation*, at 3 (July 2011)(available at <http://www.arb.ca.gov/regact/2010/capandtrade10/candtappb.pdf>).

the benchmark at a level that was more stringent than the current emissions intensity of any existing Californian facility.”³ In short, the Product Benchmarks developed by ARB for use in the Cap-and-Trade Program do not represent BAU levels of GHG emissions intensity, rendering the Product Benchmarks an inappropriate foundation for a GHG significance threshold like Option 3.

Another issue with Option 3 is that it would apply a percent reduction on top of the Product Benchmark of either 15.3% or 35%, which the option notes “would be consistent with AB 32 Scoping Plan goals.” But that is incorrect and inconsistent with ARB’s calculation in the Climate Change Scoping Plan of the percent reductions necessary to meet AB 32’s mandates. As explained in more detail in our Prior Comment Letter, forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the scope of the reductions California has to make to return to the 1990 emissions level by 2020 as required by AB 32. The no-action scenario is known as BAU. ARB originally defined the BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the Climate Change Scoping Plan. ARB has been refining the BAU scenario as new GHG emissions inventory data and economic modeling becomes available, and as certain GHG emissions reduction measures are implemented. Most recently, on May 22, 2014, ARB approved the First Update to the Climate Change Scoping Plan (First Update), which indicates that ARB will propose to revise both the 2020 BAU emissions inventory (to 509 million MTCO₂e) and 2020 emissions limit (to 431 million MTCO₂e) to account for updates to calculations of Global Warming Potential (GWP).⁴ If ARB were to revise said inventory and limit as proposed, a 15.3% reduction below the estimated BAU levels would be necessary to return to 1990 levels.

Therefore, use of a 15.3% reduction as part of a determination of significance is inextricably tied to ARB’s concept of BAU. Without a grounding in ARB’s analysis and GHG emissions inventory calculations, use of a 15.3% reduction (and, by extension, a 35% reduction for years post-2020) is arbitrary. In sum, requiring the additional percentage reductions below the Product Benchmarks is not supportable as those reductions are untethered from ARB’s reasoned analysis in the Climate Change Scoping Plan and updates thereto.

B. Refining Option 4

We recommend further refining Option 4 to make it more consistent with ARB’s concept of BAU (and thus further supported by substantial evidence). When describing Option 4, the

³ *Id.* (emphasis added).

⁴ California Air Resources Board, First Update to the Climate Change Scoping Plan, at 92-93 (May, 2014) (http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf) (“[M]ost national and international climate change organizations are moving to the IPCC’s Fourth Assessment Report, which updated the global warming potential of GHGs, especially methane and HFCs. ARB is proposing to update the number for the 2020 limit, weighting the 1990 emissions with 100-year GWPs from the IPCC’s Fourth Assessment Report. The new 2020 statewide limit is 431 MMTCO₂e—an approximately 1-percent increase from the 427 MMTCO₂e limit adopted by the Board in 2007. In addition, to assess progress toward the limit in a consistent manner, ARB is using GWPs from the Fourth Assessment Report to update projections of the emission reductions that adopted and anticipated Scoping Plan measures will achieve.”).

District's presentation indicates: "The BAU emissions scenario should equate to the project GHG emissions as proposed in the permit application." This formulation of BAU is inconsistent with ARB's concept of BAU. Similar to Option 3, Option 4 would apply a percent reduction on top of "BAU" of either 15.3% or 35%. As discussed above, use of these percent reductions as part of a determination of significance is inextricably tied to ARB's concept of BAU. Use of a 15.3% reduction (and, by extension, a 35% reduction for years post-2020) should be grounded in ARB's analysis and GHG emissions inventory calculations.

As explained in more detail in our Prior Comment Letter, ARB originally defined the BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the Climate Change Scoping Plan. ARB generated the BAU scenario because forecasting the amount of GHG emissions that would occur in 2020 if no actions were taken to reduce emissions was necessary to assess the scope of the reductions California would have to make to achieve the emission levels required by AB 32. In other words, only after identifying the scope of the challenge could ARB craft responsive GHG emission reduction measures. ARB has been refining the BAU scenario as new GHG emissions inventory data and economic modeling becomes available, and as certain GHG early action emissions reduction measures are fully implemented. However, the central characteristic of BAU is that it does not continually ratchet down as technology and efficiency practices improve. Instead, BAU is linked to a particular point in time and/or set of circumstances with concomitant implications for carbon efficiencies. BAU is a touchstone for measuring progress or compliance; if it is not reasonably static, then it loses its efficacy. The notion of BAU reflected in the current iteration of Option 4 would be a moving target as permit applications reflect the latest technology and efficiency practices. Accordingly, Option 4 should be modified to adhere to ARB's definition of BAU, thereby improving and supporting the use of Option 4 as a tool to assess the significance of GHG emissions.

C. Option 2 Is Preferable To Option 1

Although, as explained above, an efficiency-based threshold is more appropriate than a mass-based threshold, if the District were to adopt a mass-based threshold, Option 2 is preferable to Option 1. A zero threshold would impose a substantial administrative burden on the District without a corresponding climate benefit. Virtually all CEQA projects where the District functions as the lead agency would be deemed significant, requiring the preparation of full Environmental Impact Reports. In other words, the District would likely no longer be able to prepare Negative Declarations for small projects. Accordingly, we urge the District to reject the zero threshold should it choose to adopt a mass-based threshold.

II. GENERAL COMMENTS ON ALL THRESHOLD OPTIONS

The following comments apply to all of the threshold options identified by the District.

A. Application Of A Threshold Must Address All GHG Emissions, Not Only Those From Stationary Sources

Based both on Slide 40 of the presentation⁵ made at the December 3, 2014 Public Workshop and comments made by District Staff at that Workshop, we understand that the District is not contemplating applying the adopted significance threshold or otherwise addressing indirect sources of GHG emissions. However, CEQA requires the consideration of indirect effects,⁶ and it is now common practice for CEQA documents to include inventories of GHG emissions that cover both direct (e.g., from stationary sources) and indirect (e.g., from motor vehicles, electricity generation, water conveyance and treatment) sources. Accordingly, we recommend that the District clarify that its adopted significance threshold would apply to all of the GHG emissions associated with CEQA projects.

B. Role Of Cap-And-Trade Program

As explained in more detail in our Prior Comment Letter, a project's GHG emissions subject to the Cap-and-Trade Program should neither count against a project when assessing its significance under CEQA nor require further mitigation. We were encouraged that the District's flow charts ("Mechanics of Threshold Application") for Option 4 acknowledge that a project's compliance with the Cap-and-Trade Program renders those GHG emissions less than significant. We also were encouraged that the District's "Examples of Potential Mitigation Scenarios" for all of the Options acknowledge that a project's compliance with the Cap-and-Trade Program counts as CEQA mitigation. However, we urge full adherence to CEQA Guidelines Section 15064(h)(3), which allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with the Cap-and-Trade Program or other regulatory scheme to reduce GHG emissions.

Further, we note that Slide 40 of the presentation⁷ made at the December 3, 2014 Public Workshop could suggest that offsets purchased to comply with the Cap-and-Trade Program would not count as mitigation. If this indeed is the District's position, we urge reconsideration

⁵ Slide 40 is titled Notes on Mitigation and provides in pertinent part: "If APCD is the lead agency (e.g. permit for new boiler), sources may not be required to mitigate indirect source emissions (i.e. emissions from electricity use and motor vehicles)."

⁶ See 14 Cal. Code Regs. § 15126.2(a) ("Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."); 14 Cal. Code Regs. § 15358(a)(2) ("Indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.").

⁷ Slide 40 is titled Notes on Mitigation and provides in pertinent part: "Under all options, allowances purchased under Cap and Trade would apply towards mitigation."

because offsets are “compliance instruments” under the Cap-and-Trade Program and their surrender is an accepted method of compliance. Each offset credit issued by ARB can be used by companies and facilities to comply with the Cap-and-Trade Program for up to eight percent (8%) of each covered entity’s compliance obligation. In this sense, offsets are the equivalent of a California carbon allowance and, like those compliance instruments, can also be freely sold or traded.

To meet the rigorous requirements of the Cap-and-Trade Program, every offset credit must be *additional*, that is, over and above any reductions already required by law or regulation. Offsets must also be real, verifiable, quantifiable, enforceable and permanent. ARB approves protocols (methods of accounting to measure the number of tons of GHG emissions reductions achieved) for offset projects. To date, ARB has adopted five Compliance Offset Protocols that may be used to generate ARB offset credits:

- U.S. Forest Projects Compliance Offset Protocol
- Urban Forest Projects Compliance Offset Protocol
- Livestock Projects Compliance Offset Protocol
- Ozone Depleting Substances (ODS) Projects Compliance Offset Protocol
- Mine Methane Capture (MMC) Projects Compliance Offset Protocol.

The Cap-and-Trade Regulation also requires a third-party verification of all GHG emission reductions or removal enhancements before any ARB offset credits may be issued. Only ARB-accredited offset verification bodies and offset verifiers may provide offset verification services under the Compliance Offset Program.⁸ Accordingly, offsets purchased to comply with the Cap-and-Trade Program should count as mitigation just as allowances would.

Finally, we note that the District’s “Examples of Potential Mitigation Scenarios” for all of the Options seem to indicate that only purchased allowances, and not allowances received via free allocation from ARB, qualify as mitigation. We request that the District clarify that both purchased allowances and allowances allocated by ARB qualify as mitigation, as allowances allocated are no different vis-à-vis environmental benefits than those purchased. Indeed, allowances purchased by an entity for compliance originally may have been freely allocated to another entity as way of industrial assistance. The allowance market intentionally was designed by ARB to be liquid. As such, there is no difference between allowances: (i) sold directly by ARB at the quarterly auctions; (ii) allocated to investor-owned and publicly-owned utilities and then consigned to the quarterly auctions, with sales revenue flowing to the utilities for use in various programs; or (iii) bought and sold on the so-called secondary market.

⁸ More information about offsets may be found on ARB’s Compliance Offset Program web page: <http://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm> (last visited December 30, 2014).

III. RELEVANT DEVELOPMENTS ARE PENDING

Finally, we respectfully suggest that the District consider the potential benefits of waiting for certain relevant developments to play out before adopting a significance threshold. There are two developments in particular which warrant attention.

First, as discussed in more detail in our Prior Comment Letter, the California Supreme Court on July 9, 2014 granted a petition for review of *Center for Biological Diversity v. California Department of Fish and Wildlife*, 224 Cal. App. 4th 1105 (Cal. App. 2d Dist. 2014, Case No. B245131)(*CBD v. CDFW*). The appellate court's strongly worded opinion in *CBD v. CDFW* confirmed that analyzing a project's GHG emissions under CEQA via a significance threshold derived from California's GHG emissions reduction goals is appropriate. As such, the California Supreme Court soon may provide guidance on the selection of a methodology by a lead agency for determining the significance of GHG emissions under CEQA. The California Supreme Court's final decision, generally expected in the Summer of 2015, would be particularly informative for the District's adoption of one of the proffered Options.

Second, Senate Bill (SB) 32 was introduced by Senator Fran Pavley on December 1, 2014. SB 32 would amend AB 32 to *require* ARB to set a 2050 GHG emissions limit for the state and also would *authorize*, but not require, ARB to establish interim targets for 2030 and 2040. Larger percentage reductions below BAU post-2020 may be needed. If enacted, SB 32 would lead to a clarification of what those percentage reductions should be.



January 16, 2015

Santa Barbara Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110

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Dick Flacks, *V.P. South*
Jerry Connor, *V.P. North*
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Janet Blevins
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SB CAN

P.O. Box 23453
Santa Barbara, CA 93121
805.563.0463
ken@sbcn.org

Re: Threshold of significance for Greenhouse Gases

Dear Decision Makers,

Santa Barbara County Action Network (SB CAN) works to promote social and environmental justice, to preserve our environmental and agricultural resources, and to create sustainable communities. All of these objectives are seriously threatened by climate change.

Accordingly, we applaud the District's intent to address greenhouse gas emissions (GHG) under the California Environmental Quality Act. On behalf of our members we urge you to adopt a zero-emissions threshold for significance.

Local and global impacts from GHG emissions are well documented, including temperature and ecosystem disruption, rising sea levels, ocean acidification, impacts to water supplies, and wildfires. The scientific consensus is that we must reduce emissions, not increase them.

A year and more ago, SB CAN championed a lower threshold for GHG emissions than was proposed by Santa Barbara County staff for the Santa Maria Energy project. We advocated a zero-emission threshold, but settled for a 10,000-ton threshold, judging that was far better than the 68,000 tons proposed to be allowed.

With mounting scientific evidence and given precedents set

by others, such as the State Lands Commission's zero-emission threshold, we no longer find it acceptable to set an emissions threshold of 10,000 tons. Each project allowed under such a threshold would be equivalent to adding 2,000 cars to county roads, which to us is definitely significant.

If the District deems it necessary to set a threshold above zero to avoid undue burdens on very small projects, it should be designed to capture all major new industrial sources of emissions. That means setting a threshold as close to zero as practical. The District generally uses a 25-ton threshold for criteria pollutants and that might be reasonable for GHG emission as well. Still, it would be better to have a zero-emission threshold and to design rules that do not place undue burdens. This threshold should not force projects into environmental review solely on the basis of projected greenhouse gas emissions because there are ample opportunities to fully mitigate greenhouse gas emissions, and the District should help project proponents find these opportunities.

In a related aside, the District should aggressively pursue every means of providing GHG offsets locally, so we get the economic benefits and related reductions in criteria pollutants.

The residents, businesses and local governments in Santa Barbara County have made strides to reduce our greenhouse gas emissions, but without a zero-emission threshold, just a few large projects could reverse this downward trend. The District's mission is to "protect the people and the environment of Santa Barbara County from the effects of air pollution" and allowing increased greenhouse gas emissions is inconsistent with this.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ken Hough', with a stylized, cursive script.

Ken Hough
Executive Director

From: Carl Gwinn
Sent: Friday, January 16, 2015 10:53 AM
To: CEQA contact
Subject: Steam Injection Wells and Gases in Santa Barbara County

Dear Sir or Madam:

I am writing to ask that you demand that permits for any additional steam-injection oil wells in Santa Barbara County be accompanied by requirements for payment for the accompanying green-house emissions — or that the applications be rejected. Santa Barbara County is a pathfinder in California in air-quality issues; just as California is for the US. As a community, we are perfectly capable of facing up to our environmental responsibilities, and it is high time that we do so.

Many thanks!

Carl Gwinn
Professor of Physics
UC Santa Barbara
Santa Barbara, CA 93106

From: Emily Houlik-Ritchey
Sent: Friday, January 16, 2015 3:25 PM
To: CEQA contact

To whom it may concern:

I am writing to ask that you say "no" to increased greenhouse gas emissions in Santa Barbara County. As requests for permits for Steam-Injection Wells come in, we must deny oil and gas companies the right to pollute without limit. Please set a "zero net increase" in emissions.

Sincerely,
Emily Houlik-Ritchey

From: Katie Davis
Sent: Friday, January 16, 2015 6:31 PM
To: CEQA Contact
Subject: Over 400 people sign on to letter asking for zero GHG emissions threshold

Ms. Molly Pearson
Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110
ceqa@sbcapcd.org

Re: Updating District Environmental Review Guidelines to Address Greenhouse Gas Emissions under the California Environmental Quality Act (CEQA)

Please note that over 400 people have signed on to a letter asking the Santa Barbara APCD to please bring forward the zero emissions threshold for greenhouse gas emissions. It is important to remember that you serve the people of Santa Barbara County, and we expect a zero threshold to be presented to your advisory council and board.

Please refer to some of the signatories and comments below as well as this article in The Independent:
<http://www.independent.com/news/2015/jan/13/regulatory-battle-royale/>

Regards,

Katie Davis
Grace Feldmann
Charlene Little
Sharon Broberg
Rebecca Claassen
Corrie Ellis
Vivian Stanton
Kristofer Young, DC
David Acosta
Kenneth Brinson
Rebecca Carey
joseph augustine
Kathy Stiles
Patricia Norris
Stu Sherman
sharon & earl troglin
Linda Bescrypt
Robert Wilkinson
Clifford Terry
Elizabeth Audas
Rachael Hazen
Jera Janzen
Kevin O'Malley

Joseph Robustleli
SETH & CONNIE
STEINER
Paul Ramos
Betty Songer
Ted von Eiff
Holly Higgins
SANDRA GARCIA
gerald blake
Adriana Micciulla
Bea Trenier
Margie Borchers
Linda Fay Sampson
Carrie Lombardi
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Marian Shapiro
virginia mariposa
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Jaime fior
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Gail Tinsley
Michael Adcock
Elizabeth Taylor-
Schott
Jim Balter
Mary Kobe
mike organista
Elizabeth Crawford
Karissa Silver
suzanne saunders
Matt Wright
Nancy Black
Michelle Bednash
Dan Fuller

Claudia Knudson
lenore smith
Allison Gilbert
James Downey
dennis Allen
Hector Herrera
Catherine Gautier
Ted Williams
Shannon Pitts
Marilyn Scott
Jan Dietrick
Paul Langhorn
Sandy Stinson
Wayne Crislip
Astrid O'Brien
marianne tornatore
peter monteleone
jean zeibak
Carol Ann Martin
chris dickinson
Curry Sawyer
Vallee Rose
Sarah Hearon
roger simpson
Janis Carney
Kathleen Begley
H. Guh
Tristan Schmelcher
Frank Briggs
June caminiti
Mimi Shiffman
Leita Lord
Aranye Fradenburg
Terry Fernandez
Julie You
Nicholas Perocco
Concerned Citizen
sharon brazil
kathryn deputy
Eduardo Molina
John Watson
BARRY SMITH
Freddie Williams
Nicole Schauser
Jennifer Yukl
Patricia Camacho
Christopher Horner
Amber Sims

antonia robertson
mary o'connor
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Victoria Greene
Elie Katzenson
Fred Frank
Camille Gilbert
Shawn Van
Valkenburgh
Terrell Hawes
anthony parent
Barbara Henry
Angeline Albright
Colin Loustalot
Pam Flynt Tambo
Kathi King
Therese Blake
Douglas Bond
Cherie Baroni
Linda Ulvaeus
Patty Taylor
Janet Blevins
Larry Bishop
Vibiana Saavedra
Sharon Rose
Adrianne Davis
Henry Weinberg
Lindsey Tavares
Walter Koch
Harold Hill
Mckenzie Rasmussen
Michael Chiacos
Gary Shapiro
Mary Wiener
Linda Stewart-Oaten
Jean Kaplan
Ben Wiener
Stan Hatch
John Fowler
robert burgess
Alex Pujo
Betty Faas
Sandy Lejeune

Richard Kaplan
Richard Rosen
Susan Shields
Melissa Kelly
Tom Urban
James Heady
Marjorie Popper
Eileen Vopelak
bart woolery
Kate Connell
Frances Davis
Vicky Blum
Michelle Murchison
Robert Petty
Nancy Murdock
Robert Del Rio
Joshua Steele
Jerri Gilbert
Susan Manseau
Bryanna Ojeda
Ruth Powers
Jean Alexander
Leonard Flippen
Gar Kinson
Emma Vogan
Alexander Favacho
leonardo nunez
Gabriele Drozdowski
d goldsmith
Samantha Shepard
Shepard
al holtz
Ian Cummings
Andrew Houlik-
Ritchey
Camille Herrick
catherine mullin
Sheri Wright
Eric Schwartz
Cameron Atwood
Michael Ward
danielle acosta
Corine Fairbanks
Annette Szproch
siana stutchbury
Alexah Hart
Ally Arganbright
Maggie Gold

Sally Warner-Arnett
Carissa Hayes
Marjorie Elkin
Gilbert Loustalot
Martha Sadler
Stephen Ferry
Christina Eliason
Penelope Cooper-
Kelley
jp mendez
Heather Blancho
janice edmunds
Pamela Wall
MARIKA DAVIDEK
susanne schenck
Brian Barnett
Rebecca Anglin
Judith Bolton
Gail Hines
billy baldwin
Nathan Carlson
Rebecca Claassen
Lynnette Arnold
Silvia Tyndall
Vibiana Saavedra
Tracy Freeman
Kathleen Petty
Denise Williams
william Caprice
Jennifer Gherardi
Julian Palmisano
Liz Kelleher
Jeremy Garza
Susan Reilly
Amy Anderson
Jane Warner
Mary Louise Bland
Renée O'Neill
Laura Selken
Heather Hurwitz
Jane Sun
Marcia Burt
Nancy Withington
John Ernest
Sybil Rosen
Gail Gillies
Andrew West
annette ordas

Michelle Gobely
Javiera Barandiaran
Tara Kamath
Andrea Poole
Phoebe Alexiades
Jeanne Reeves
Jorge Manly Gil
Dorothy Littlejohn
Debbie Miles-Dutton
Patricia Krout
Kay Stevens
R. Thomas
GRIFFITH
Erica Miller
Charles Lang
Mary Johnston
Delton Johnson
Mortimer Glasgal
Mary sue Miller
Eva Anda
John and Madeleine
Peterson
Christine Jeffries
Katherine Baker
Katelynn Bishop
Shelley Gault
Bud Stuart
Leslie Edgerton
Barbara Rosen
Elizabeth Colón
Lesley Weinstock
Lila Trachtenberg
Ryan Lewis
stephanie statom
Janelle Webb
Jan McCall
Barbara Davies
Lisa Northrup
Jeremy Taylor
Judy Salviolo
Nicholas Beeson
Carmen Bree
Diane Fox
Eugenia Hoyne
Christine Milne
Terin Smith
Linda Bernson
Kerry Methner

Howard Rothman
Patricia Beal
Ella Bendrick-
Chartier
Eric Nau
A. Wolf
Miles Wallace
Nancy Schaak
Matthew Hill
Robert sipe
Maria Prado
Katherine Maynard
Anthony Biegen
Laura Francis
JuliaAnne Whitney
Michael Vergeer
charles shapiro
James Spellman
Jay Freeman
kristel garcia
Emile Millar
Marleny Albarran
Sarah Rebstock
Lori Walker
Miki Holden
Kimberly Sven-
Brown
Tanner Yould
Albert Oaten
Cheryl Snell
Anne MacDermott
Lora Barnett
Jane Fehrenbacher
James Taylor
betsy denison
Lucas Meier
Chloe Conger
Michael Ruiz
Brenda Cervantes
Tish Gainey
Paige Comaduran
Anthony Castelo
Michael Fanelli
Miranda O'Mahony
Chris Lange
Fiona Hannan
michael meredith
Kelsey Baker

Michael Lynch
Jane Baxter
Arlo Bender-Simon
john broberg
Wendy Lofland
Tillman Timothy
Lamara Heartwell
Cody Wilgus
Emily Bernath
Jay Hinkle
henry castelo
Chantal Buslot
Jeff Krieger
Caroline MacDougall
Don Schroeder
Rebecca August
Cecilia Anne Spencer
Shelley Meaney
James Mulcare
Ben Holstrom
Emily Hall
Arthur Walter
Hunter Grosse
Carole Iverson
Muffett Kaufman
JoAnn Gerfen
mary williams
Sharma Gaponoff
roland gauvin
Jerald Brown
Gloria Sefton
Kelsey lundy-freeman
Melissa Vatterott
Stefanie Shuman
Alex Fuhrer
Stephanie Hagensen
Maureen Entera
Harriette Jensen
Steve Downing
Emily Houlik-Ritchey
Chris Angel
Sheila Hutman
Ethan Turpin
Karen McChrystal
Julia Freewoman
James Webb

Some of the comments regarding the GHG threshold:

Sharon Broberg	We need to reduce our greenhouse gas emissions and a good start is to set a cap.
Vivian Stanton	I'm signing because I believe that taking local action in order to be part of a positive response to climate change is the only way we can act with integrity towards a global solution to this crisis.
Kristofer Young	I'm pro life.
David Acosta	Save the world!
Patricia Norris	There is no need more urgent than reducing greenhouse gas emissions, and zero net increase is a step in the right direction.
SETH & CONNIE STEINER	We can't allow the oil companies to buy their way with our county as well as the state.
Paul Ramos	No increase in emissions.
SANDRA GARCIA	This is the most important issue in our country
Bea Trenier	industries do not truly regulate themselves. oversight is needed.
Marian Shapiro	We need to act now if we hope to make a safe environment for our children and grandchildren.
Sherry Bogan	We've got to start curbing greenhouse emissions NOW, it is almost too late. There won't be any "do overs", it's now or never.
Jaime Fior	I support efforts to reduce greenhouse gas emissions, climate change is real and we must act.
Shawn Sargent	America: Needs a " zero net increase " threshold set to curb greenhouse gas emissions now !
John Ackerman, M.D.	It's obvious: significant threat to S.B. County residents re: their Public Health
Michael Adcock	Are we going to let the Fox guard the henhouse. It is critically urgent that we be LOWERING emissions in all aspects of our greenhouse emissions, especially the most polluting industries such as coal fired power plants and the oil companies.
Elizabeth Crawford	1) I care about the future 2) no increases of any kind above "net zero" should be allowed 3) I am a live organism and I live there...
James Downey	We can't wait another minute to address climate change in a serious manner. In SB County we can no longer permit oil companies to have a free ride in their lust for profit, while they poison our atmosphere and doom our children to climate disaster.
Dennis Allen	Reducing emissions and mitigating climate change is our most important task for now and for future generations.
Hector Herrera	I want to live in a clean environment now and for future generations
Jan Dietrick	The oil industry's atmospheric pollution is egregious.
Sarah Hearon	I want our children and grandchildren to have clean air now and into the future. Their health is at stake.
Roger Simpson	profits at the expense of the earth and its creatures is not acceptable
Leita Lord	I believe we can achieve energy production through less harmful means. It is time to invest in alternative, sustainable, energy.
kathryn deputy	we are being polluted by oilfield h2s gas releases , on a regular bases from oil company ERG Resources .
John Watson	... the Greenhouse Effect is irrefutable.
Cherrie Wise	Our county make enough money from tourism and agriculture. We have a decent economy and a beautiful place to live. If the oil industry developes with "no holds barred", we will have nothing but a poisonous wasteland. I remember Casmalia, California. Is that what we want for our pristine coast?

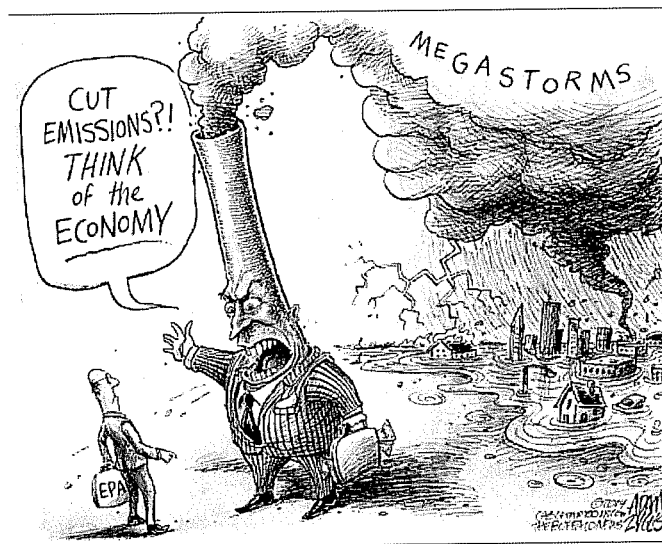
	I am outraged at the amount big oil spent to defeat our local anti fracking proposition P and now they intend to frack off shore!
Terrell Hawes	I abhor the assault on our local environment and the savage incorrect tactics of threat with job losses, etc. to continue polluting our environment. Our children and grandchildren will pay a steep price for this in poor health, contaminated foods and ground water, etc.
Larry Bishop	We must act now in the face of an oil industry owned congress.
Sharon Rose	We need to reduce emissions for climate and public health and shift away from fossil fuels to clean renewables.
Adrianne Davis	I am signing this petition because the possible allowance by the APCD given to the oil companies will be incrementally fatal to this county and beyond. This land is ALL of ours NOT to be taken over by blinded-by-short term-greedy polluters of great scale. Extreme oil extraction of all types must be stopped here and everywhere.
Harold Hill	We must all do our part to eliminate green house gas emissions to save the planet.
Linda Stewart-Oaten	We need to continue to push back against the Big Oil interests, who value profits over the health of our planet and our children.
Richard Kaplan	Stop climate change, please!
Frances Davis	Oil extraction, especially enhanced operations like fracking and cyclic steam, produce prodigious amounts of green house gas. This is unconscionable given the state of our planet.
Vicky Blum	I'm signing the petition because I believe that climate change is the most challenging issue that the world is facing.
Nancy Murdock	This is SO important
d goldsmith	pollution hurts us all
Camille Herrick	as a steward for future generations
Eric Schwartz	I want a future for the children of this community
Corine Fairbanks	I care
Carissa Hayes	We need to lower our Carbon Emissions to secure a future for humans
Gilbert Loustalot	With increased pressure on our ecosystems from every quarter, we urgently need action reduce pollution of every type.
Pam Wall	We must do our share to reduce greenhouse gas emissions and the devastation climate change will bring if we don't take action NOW! We cannot leave the consequences for our future generations.
Gail Hines	I believe we can make a difference and create a world that is healthy for all life on our planet.
Amy Anderson	Climate change is not only real, but the greatest threat to our community in Santa Barbara County - to our lives and livelihoods. Please support the "zero net increase."
Mary Louise Bland	I'm signing because I want Santa Barbara to be part of the solution.
Renee O'Neill	I want our state to be the leader in reducing greenhouse gas emissions. Let's set an example for the rest of the world.
Nancy Withington	To allow greed to end life on earth is beyond stupidity - it is heinous!
Javiera Barandiaran	I am concerned about our current environment, as well as our future environment. Economic opportunities will never be lacking, but clean air, water, and soils are increasingly scarce.
Phoebe Alexiades	There has already been tremendous global destruction created by humans. There's no time left for discussion, only quick and effective action NOW.
Dorothy Littlejohn	I am concerned about the air quality on our planet.
john dutton	Santa Barbara should be a leader of conservation and reducing greenhouse gas emissions as well as reducing our reliance on oil! Keep SB green, help our planet and DECREASE GHG!

mary sue miller	Oil Companies MUST figure out how to pollute less; keep the cap at zero for healthy lungs and overall environment.
Shelley Gault	More emissions is unacceptable. Climate change is real, let's not keep making it worse!
Janelle Webb	I'm signing because I have grand children & a great granddaughter. I want them along with all the children to grow up in then live in a world with clean water and clean air. Fracking can & will ruin both the air & the water. If we citizens do not stop the fracking madness who will?!?!?
Judy Salviolo	Protect our air!
Miles Wallace	We need zero immissions increase
Matthew Hill	I care about the future of this world and the generations
Laura Francis	we are at a critical juncture in human history where we can choose to keep the environment safe and healthy for our children. We need to reduce, not increase greenhouse gas emissions now.
Miki Holden	We may be heading into a water crisis, an air pollution crisis, a climate crisis. What other reasons do you want?
Kimberly Sven-Brown	We can't wait any longer to reduce carbon emissions.
Tanner Yould	I care about our future
Chloe Conger	I care about air quality and reversing climate change
Brenda Cervantes	I care for future generations
Paige Comaduran	I care.
Michael Fanelli	I'd like a few more generations to be able to enjoy a habitable planet.
Fiona Hannan	I care about my children's children
Arlo Bender-Simon	I love Santa barbara and don't want to see it become polluted by dirty business!
Timothy Tillman	I care
Lamara Heartwell	I Care
Shelley Meaney	I'm signing this because I care about the future of this planet more than I care about profits for corporations.
Carole Iverson	We will not benefit from increased emissions. We need to regulate the oil companies very carefully. It should be very clear that increasing emissions in Santa Barbara County is absolutely unacceptable.
JoAnn Gerfen	Big Oil is not good for our area -Fracking is a threat to our wellbeing everywhere in SB County. Zero is right for greenhouse gas emissions!
Jerald Brown	If we do not stop climate change, we imperil all species, including our own.
Maureen Entera	I care.
Harriette Jensen	Climate change needs to be treated like the emergency it is. We need to eliminate as many greenhouse gas emissions as possible in order to have a fighting chance for a livable world for our children and grandchildren.
Emily Houlik-Ritchey	As a parent and teacher, I am committed to maintaining a healthy environment for the young.
Hannah French	Our planet and the life on it are more important than profits or politics.
Max kaffel	I'm signing because this issue is extremely important, not just for Santa Barbara, but to set a precedent for other cities and states.
Kia Medina	This is our environment for or children...
Robert Domingos	i want my children and grandchildren to be able to breathe in the land of their ancestors.
Susie Gomez	I care about our planet, our health, our livelihood .
September Bowman	I'm signing because I want my grandchildren to have a world they can exist in

A Regulatory Battle Royale

By Katie Davis

Tuesday, January 13, 2015



Adam Zyglis, The Buffalo News

Greenhouse Gas Emission Levels at Stake Again

Santa Barbara County is quietly deciding one of the most important environmental regulations it's ever had to develop in the face of intense pressure by the most powerful polluters in the county. The question is simple: What amount of greenhouse gas emissions (GHGs) from new stationary, industrial sources — like new oil drilling projects — is significant?

On one hand, it's clear that any increase is significant. We need to reduce emissions, not increase them. On the other hand, oil companies don't want any limit at all. They favor shaving a percentage off expected emissions and calling the rest insignificant. The practical effect of such a policy would be huge increases in county emissions while regulators turn a blind eye.

Why does this matter? Oil companies are planning to expand high-pressure steam injection operations in Santa Barbara County. This type of oil extraction requires massive engines to heat the earth hundreds of degrees, making it the most emissions-intensive form of oil production in the world. The resulting increase in GHG emissions from these operations threatens all other progress in Santa Barbara County in reducing greenhouse gas emissions.

For example, the County Climate Action Plan calls for a 15 percent reduction in GHG emission levels by 2020. That reduction — 186,900 tons per year — would be achieved through heroic efforts from commuter rail to mandatory energy audits to establishing a community choice energy utility to finance, build, and sell renewable power.

But applications already submitted by Pacific Coast Energy for 96 steam-injection wells and by ERG, currently being sold to a Chinese company, for 233 wells — just those two projects — could wipe out all the emissions savings in the County Climate Action Plan entirely. And these two projects are just the beginning. The county is expecting an application for 300 steam injection wells by AERA, a company owned by Shell and Exxon. And other oil companies have stated plans for thousands of additional steam-injection wells in the coming years.

In short, all the energy savings from those of us who have changed our light bulbs, put solar panels on our houses, chosen to drive electric cars or bike to work — everything that any of us have done to reduce our energy use as well as the most ambitious plans put forward by county planners — all that savings could be wiped out many times over by increased unconventional oil production in our county.

The science is clear. The latest report from the IPCC, the UN Intergovernmental Panel on Climate Change, states that we need to reduce greenhouse gas emissions by 40 to 70 percent within the next 30 years to avoid "severe, pervasive and irreversible impacts for people and ecosystems." It is very clear that we need to reduce emissions if we want to keep global climate change to a level that might be manageable. The alternative is catastrophic and, according to the IPCC, "irreversible." We get one shot, right now, to do the right thing.

The California State Lands Commission has also weighed in on this question and came to the same conclusion. For projects that it oversee, such as a recent proposal to restart drilling for oil on the beach in Goleta, they assume any increase in greenhouse gas emissions is significant. "Until such time as the Santa Barbara County Air Pollution Control District (APCD) establishes GHG thresholds, the threshold of 'zero net increase' for GHG emissions recommended by California State Lands Commission staff would require mitigation and would be less than significant," reads that EIR.

This goal of "zero net increase" in emissions makes a lot of sense. If we must reduce emissions, any project that increases them is a concern. Everyone who showed up at the community meetings hosted by the Santa Barbara County APCD on this subject agreed.

The APCD's mission is to protect the people and environment of Santa Barbara County, not oil industry profits. If it resists industry pressure and sets a policy of a zero net increase in emissions, then at least oil companies will not have a license to pollute for free. The county can seek remedies to reduce or offset their pollution.

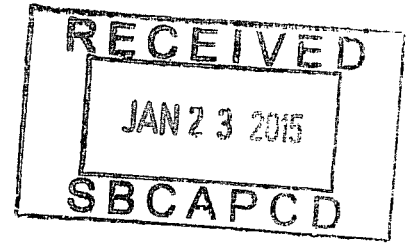
The oil companies can well afford to pay for their pollution. It would likely cost around two cents per gallon. And it might be in their interest to do so. The more the oil companies bully regulators and interfere in elections, the more likely they will be to push citizens to fight back and ban these extreme forms of oil extraction entirely. Measure P lost in November, but a revised attempt in a higher-turnout election might yet succeed.

The APCD is accepting public comment until this Friday, January 16. Write to ceqa@sbcapcd.org or sign the online petition and tell them to say "no" to increased greenhouse gas emissions in Santa Barbara County.

Katie Davis is chair of Santa Barbara's chapter of the Sierra Club and one of the founders of Water Guardians environmental group, which created Measure P, a 2014 ballot measure to ban fracking, acidizing, and steam-injection oil extraction techniques in Santa Barbara County.

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Alex Oaten
Care of Ms. Sillars
4205 Foothill Road
Santa Barbara, CA 93110
January 6th, 2015



Molly Pearson
Planning and Grants Supervisor
Air Pollution and Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110

Dear Ms. Pearson:

My name is Alex Oaten. I live in Santa Barbara, California, where you and the Air Pollution Control District regulate and prevent air pollution, to keep our city's air clean and breathable. This helps make Santa Barbara a cleaner and more desirable city for tourists and a wonderful place to live in for its residents.

I know that the APCD has done a thorough and consistent job of regulating air pollution in Santa Barbara. I know that you and your co-workers also work very hard to prevent our air from becoming too polluted. The APCD has done this for a long time and will hopefully continue to do so for many years to come.

To help keep our air clean, I suggest that you set a threshold of zero for the net emissions of greenhouse gases. Hopefully, this would prevent an increase in emissions, and also prevent air pollution in Santa Barbara County, and the reduced greenhouse gas could potentially help curb climate change. I hope you seriously consider this option. I look forward to hearing back from you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Alex Oaten".

Alex Oaten

From: Nicholas Solakian < >
Sent: Wednesday, March 18, 2015 8:19 AM
To: CEQA contact
Subject: Greenhouse Gas Emissions

Please join EDC and CEC, as well as other local groups, in requesting a “zero emission threshold” so that ALL new GHG emissions will be disclosed and mitigated. The threat of climate change is too urgent to ignore the impact of any new emissions. We need to reduce, not increase, carbon emissions into the atmosphere.

thanks,
Nicholas

--

From:
Sent: Wednesday, March 18, 2015 9:15 AM
To: CEQA contact
Subject: Support for zero GHG emissions

It is important that our region establish a zero greenhouse gas emission standard if we are going to seriously address the issue of climate change. I support the position of a zero standard that will be under consideration at the hearing next week on March 25.

Dennis Allen

From: max golding <
Sent: Wednesday, March 18, 2015 9:54 AM
To: kevin@countyofsb.org; CEQA contact
Subject: Zero emissions threshold

To Whom It May Concern,

Based on the assumption that the consensus of climate scientists is correct, that we must stop emitting GHGs as fast as possible and transition to a renewable energy economy yesterday, it's a no brainer. But then you have this industry saying to you that setting a zero GHG threshold will do the following:

- Force them to lay people off or cut their wages
- Frame this as "crazy environmentalists" who are being brainwashed by the "Big Green NGOs"
- Try to confuse you and shed doubt about climate science, citing fringe scientists and studies funded by think tanks they created for this exact purpose
- Claim that the county will go bankrupt and it will be your fault

We saw it during Measure P and during the SME hearings. It has probably happened before I came along, maybe some of you have seen this circus over and over for decades. These people are ruthless and deceptive. Remember the motives behind what they're saying.

They will bring in oil workers and line them along the walls to intimidate you. They might bus them in from another county but won't tell you, the workers will if you ask them. They will self-victimize and say that government and activists are the real bullies when they're the ones pushing to undo AB32. They're the ones who have been funding climate denial think tanks. They're the ones who fight tooth and nail for every project that society now understands to be the wrong direction for the world.

Remember that those of us doing this are volunteers. We have busy lives and it is difficult for us to keep up with all these things, to write comments, to attend hearings, to stay motivated and involved at a consistent rate. I have two jobs and am in grad school. I have a personal life. I do not enjoy writing these emails, to be honest. I would rather be gardening, running, swimming, listening to music.

Do the responsible thing, and remember their motives and remember you are being manipulated when they speak. Remember the precedent you can set here. Remember that your decision is a legacy for future generations everywhere.

Zero emissions threshold. It's a no brainer.

Thank you.

Max Golding
350 Santa Barbara co-founder
Antioch Santa Barbara MACP Program

From: John Dutton < >
Sent: Wednesday, March 18, 2015 10:59 AM
To: kevin@countyofsb.org; CEQA contact
Subject: Minimum Amount of GHG to Trigger Review

To whom it may concern,

I would like to request that any greenhouse gas emissions from new projects be reviewed and mitigated before the project is approved. The threat of climate change is too real and already upon us. NOAA scientists say we have only one year of water reserves left if the drought doesn't end, and it doesn't look it's going to end anytime soon. We are hitting record high temps nearly every week. Our verdant coastal community will soon be a desert. We need to be reducing out GHG emissions not increasing them with new projects. We need to act now and cut carbon emissions rather than approving more.

Sincerely,
John Dutton

Santa Barbara, Ca 93110

From: Linda Krop
Sent: Friday, March 20, 2015 11:21 AM
To: CEQA contact
Subject: EDC letter re GHG threshold
Attachments: EDC letter to SBCAPCD re GHG emission guidelines_2015_01_16.pdf

Please distribute the attached letter to the APCD Board and CAC.

Thank you,
LK

Linda Krop, Chief Counsel
Environmental Defense Center
906 Garden Street
Santa Barbara, CA 93101
Phone (805) 963-1622, x106
Fax (805) 962-3152
www.EnvironmentalDefenseCenter.org

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January 16, 2015

Ms. Molly Pearson
Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110
ceqa@sbcapcd.org

Re: Updating District Environmental Review Guidelines to Address Greenhouse Gas Emissions under the California Environmental Quality Act (CEQA)

Dear Ms. Pearson:

Thank you for the opportunity to comment on the Santa Barbara County Air Pollution Control District's ("District") proposal to update its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of greenhouse gas ("GHG") emissions from new or modified stationary sources. This letter is submitted by the Environmental Defense Center ("EDC") on behalf of our members. Our organization is very involved in efforts to reduce climate change impacts in our community, and we represent clients in responding to projects that will generate new GHG emissions and contribute to cumulative climate change impacts.

Establishing an appropriate threshold for analyzing (and mitigating) GHG emissions is critical given the dire state of climate change in our community and around the globe. Recent scientific research demonstrates that climate change trends are much worse than previously thought, and potential impacts will be much more severe. These impacts will be felt locally, whether they are related to more severe droughts and reductions in available water supplies, or increased sea level rise affecting local beaches and structures, or increased fire risk, among other significant impacts. For this reason, EDC supports timely, thorough analysis and disclosure of GHG emissions, as well as full mitigation of impacts from such emissions.

EDC supports a zero emission threshold approach because this is the only approach that allows for full mitigation of impacts from new GHG emissions. This threshold finds support in CAPCOA's white paper on CEQA and climate change, and is utilized by the California State Lands Commission in its Environmental Impact Reports ("EIRs") for local oil and gas projects.

As there is ample opportunity for project proponents to fully mitigate their emissions, a zero emission threshold will not force projects into environmental review solely on the basis of projected GHG emissions.

Option 1- Zero Emission Threshold

EDC supports Option 1, which would establish a zero emission threshold for evaluating GHG emissions. This option would require the District to consider the full potential impacts of a proposed project, consistent with CEQA, and would provide the basis for considering the full array of potential mitigation measures necessary to avoid or substantially lessen a project's impacts.

The basis for this threshold is founded in the most current scientific studies, which demonstrate that global carbon levels are already unsustainable. These studies show that a target of 350 ppm for atmospheric levels of CO₂ is necessary to achieve climate stabilization and avoid disastrous global consequences.¹ Given that atmospheric levels have reached 400 ppm,² we are already on a trajectory that is not sustainable, and we must decrease GHG emissions more rapidly and to a greater extent than previously thought. Thus, *any* additional contribution of CO₂ would be a step further from acceptable target levels.

The potential consequences of global warming further underscore the need for a zero emission threshold. The Intergovernmental Panel on Climate Change ("IPCC"), Union of Concerned Scientists, and the California Climate Change Center have published several studies that identify how climate change will affect the environment.³ These impacts include an increase in water temperatures, rise in sea level, coastal erosion, reduction of the Sierra snowpack, increase in severity and frequency of storms, increased droughts, famine, changes in ecosystems, increase in heat waves, increases in pests and diseases, flooding, retreating glaciers, ozone formation, and the potential for wildfires.⁴ More recently, the U.S. Global Change Research

¹ Matthews H.D., and K. Caldeira (2008), *Stabilizing climate requires near-zero emissions*, *Geophys. Res. Lett.*, 35, L04705, doi:10.1029/2007GL032388; James Hansen, et al., *Target Atmospheric CO₂: Where Should Humanity Aim?* *The Open Atmospheric Science Journal*, 2008, 2, 217-231; Statements of Dr. Chris Field, Carnegie Institution for Science, *Decisive Action Needed as Warming Predictions Worsen*, Says Carnegie Scientist, available at

http://www.ciw.edu/news/decisive_action_needed_warming_predictions_worsen_says_carnegie_scientist
²<http://research.noaa.gov/News/NewsArchive/LatestNews/TabId/684/ArtMID/1768/ArticleID/10187/NOAA-Carbon-dioxide-levels-reach-milestone-at-Arctic-sites.aspx>

³ Union of Concerned Scientists. 2006. *California Global Warming Impacts and Solutions*, available at http://www.ucsusa.org/clean_california/ca-global-warming-impacts.html. California Climate Change

⁴ Karl, T.R., *supra*; Levin, K., *supra*, citing Emanuel, K., *Increasing Destructiveness of Tropical Cyclones Over the Past 30 Years* (*Nature*, vol. 436, August 4, 2005), P.J. Webster, et al., *Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment* (*Science*, vol. 309, September 16, 2005), NASA Earth Observatory, *Record Low for June Arctic Sea Ice* (June 2005 at earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=16978), A.J. Cook et al., *Retreating Glacier Fronts on the Antarctic Peninsula Over the Past Half-Century* (*Science*, vol. 308, April 22, 2005), R.B. Alley et al., *Ice-Sheet and Sea-Level Changes* (*Science*, vol. 310, October 21, 2005), E.D. Domack, et al., *Stability of the Larsen B Ice Shelf on the Antarctic Peninsula During the Holocene Epoch* (*Nature*, vol. 436, August 4, 2005), F.S. Chapin III, et al., *Role of Land Surface Changes in Arctic Summer Warming* (*Science*, vol. 310, October 28,

Program released a report on “Climate Change Impacts in the United States” that identified current and projected effects of climate change on a regional basis in the U.S.⁵ This report confirms that climate change impacts from GHG emissions are real and must be addressed without further delay.

The use of a “zero emission” threshold is one of the options discussed in CAPCOA’s white paper on CEQA and climate change.⁶ According to the CAPCOA report,

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 impacts.*** 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.***⁷

A “zero emission” threshold has been used by the California State Lands Commission in its Final EIRs for the Venoco Ellwood Marine Terminal and Venoco Revised PRC 421 Recommissioning Project, and the Draft EIR for the Venoco Ellwood Full Field Project.⁸ We strongly encourage the District to utilize a zero emission threshold in its evaluation of direct and indirect GHG emissions.

2005), M. Hopkin, *Amazon Hit by Worst Drought for 40 Years: Warming Atlantic Linked to Both US Hurricanes and Rainforest Drought* (Nature, October 11, 2005), I.T. Stewart, et al., *Changes Toward Earlier Streamflow Timing Across Western North America* (Journal of Climate, vol. 18, April 2005).

⁵ Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., 2014: *Highlights of Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program, 148 pp.

⁶ CAPCOA. 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. Jan.

⁷ CAPCOA, p. 27, emphasis added.

⁸ Venoco Ellwood Marine Terminal Lease Renewal Project Final Environmental Impact Report, California State Clearinghouse (SCH) No. 2004071075, CSLC EIR No. 743, April 30, 2009; Venoco Revised PRC 421 Recommissioning Project Final Environmental Impact Report, California State Clearinghouse (SCH) No. 2005061013, CSLC EIR Number 732, January 2014; Venoco Ellwood Oil Development and Pipeline (Full Field) Project Draft Environmental Impact Report, State Clearinghouse No. 2006061146, CSLC EIR No. 738, June 2008.

A zero emission threshold will not result in elevated environmental review for new proposed projects. If a project would otherwise be exempt from environmental review, the fact that it will generate GHG emissions will not affect the applicability of the exemption. California Public Resources Code § 21084(b).

If a project would otherwise be subject to a negative declaration, the proponent can still avoid preparation of an EIR by incorporating available mitigation measures. In many instances, on-site mitigation measures may be available to adequately reduce GHG emissions. For example, in the case of Venoco's Revised PRC 421 Recommissioning Project, the EIR found that project emissions could be fully mitigated by replacing existing heater treaters with more efficient emulsion heaters.⁹ In addition to on-site measures to reduce emissions, there are ample state-certified programs through which applicants can purchase "credits" to fully offset any new GHG emissions. As noted in the District's fact sheet, it is entirely feasible for a project proponent to mitigate GHG emissions to a net of zero new emissions.¹⁰ We also support the District's consideration of a County-wide GHG emission credit program so that the co-benefits of emission reductions could be experienced in our community.

Option 2 – Bright Line (10,000 MTCO₂e/yr)

This option would establish a threshold at a defined amount of 10,000 MTCO₂e/year. Notably, several of the "pros" identified by the District for this option also apply to the zero emission threshold. For example, the zero emission threshold option is simple, easy to explain and provides for straightforward implementation. It is also easy to administer, and has been applied elsewhere without legal challenge (e.g., State Lands Commission EIRs referenced *infra*). And, as noted in the District's presentation, there is an exact nexus and proportionality between the impacts and any required mitigation. Accordingly, all of these "pro" arguments should also be applied to the zero emission threshold.

A numeric bright line provides simplicity and efficiency, but at 10,000 MTCO₂e/yr does not fully disclose and mitigate a project's cumulative climate change impacts. Districts, such as the South Coast and Bay Area AQMDs, have chosen this threshold with a goal of "capturing" 90 and 95%, respectively, of new project GHG emissions. For Santa Barbara County, however, a bright line threshold of 10,000 MTCO₂e would only capture approximately 50% of new project emissions. Thus, if the District intends to use a bright line approach, it should identify the bright line threshold for addressing 95% of new project emissions.

Our concern with this approach, obviously, is that it does not disclose all project impacts and does not require full mitigation of such impacts. In addition, the District would need to ensure that proponents do not piecemeal projects in an effort to avoid the threshold and thus avoid any mitigation requirements.

⁹ Venoco Revised PRC 421 Recommissioning Project Final EIR, p. 4-142.

¹⁰ Santa Barbara County Air Pollution Control District, *CEQA Significance Thresholds for GHGs – Questions and Answers*, pp. 3-5; see also California Climate Action Reserve, <http://www.climateactionreserve.org/>

Option 3 – Performance-Based Measures and Percent Reduction Consistent with AB 32 Goals

We strongly oppose any approach based on AB 32. Most importantly, this target only addresses emissions until 2020, and will be irrelevant to projects that will continue to generate GHG emissions beyond 2020. The state's 2050 goal set forth in Executive Order S-03-05 (reducing GHG emissions to 80% below 1990 levels by 2050) is more relevant for new proposed projects.

In addition, this target is based on outdated information. AB 32 was based on a target for global GHG emissions of 450 ppm. Consequently, this target was designed to allow a significant increase in GHG emissions over current levels. As noted above, more recent scientific evidence indicates that 450 ppm is too high and that agencies instead must work to achieve a target of 350 ppm. Thus, updated targets require a *decrease* in current emissions, which is much different from the increase contemplated and allowed in AB 32. Even at current levels, the effects of climate change are being felt throughout the globe.

Although we have raised this concern previously, it achieved additional traction and validation given the recent Court of Appeal decision in *Cleveland National Forest Foundation v. SANDAG*, attached hereto. In that case, the Court found that "SANDAG's decision to omit an analysis of the transportation plan's consistency with the Executive Order [S-03-05] did not reflect a reasonable, good faith effort at full disclosure and is not supported by substantial evidence because SANDAG's decision ignored the Executive Order's role in shaping state climate policy." (Slip Opinion at p. 14.) This omission "deprived the public and decision makers of relevant information about the transportation plan's environmental consequences. The omission was prejudicial because it precluded informed decisionmaking and public participation." (*Id.* at p. 15.) Therefore, the court ordered SANDAG to analyze the plan's consistency with the state's 2050 target set forth in S-03-05.

Accordingly, as much as we oppose the use of this approach, we recommend that if a percent-reduction approach is used, it must be based on 2050 targets.

Option 4 – Percent Reduction from Business-as-Usual

Similarly, this approach will not fully disclose or mitigate all project impacts. To the extent this approach is pursued, it is important that the goals reflect up-to-date scientific information and achieve long-term targets for project mitigation.

Conclusion

In conclusion, we encourage the District to adopt a zero emission threshold because it is the only threshold that will disclose all project cumulative effects and allow for adequate mitigation. This threshold will not force projects into environmental review solely on the basis of

January 16, 2015

Molly Pearson, SBC APCD re Environmental Review Guidelines for GHG Emissions

Page 6

projected GHG emissions because there are ample opportunities to fully mitigate GHG emissions.

Thank you for your consideration of these comments. Please do not hesitate to contact me if you have any questions concerning these comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Krop'.

Linda Krop
Chief Counsel

cc: Glenn Russell, SBC Planning and Development Department

Att: *Cleveland National Forest Foundation v. SANDAG*

From: Molly M. Pearson
Sent: Friday, March 20, 2015 3:45 PM
To: CEQA contact
Subject: FW: GHG Emissions/ ZERO EMISSION THRESHOLD

From: Drude, Kevin [mailto:Kevin@co.santa-barbara.ca.us]
Sent: Friday, March 20, 2015 3:09 PM
To: Molly M. Pearson
Subject: FW: GHG Emissions/ ZERO EMISSION THRESHOLD

Molly,

The comments below are addressed to both the County and the APCD. If I get others so addressed, I'll send them along to you.

Kevin

From: Patricia Hedrick Duncan
Sent: Friday, March 20, 2015 2:46 PM
To: Drude, Kevin; Hedrick Duncan Patricia
Subject: GHG Emissions/ ZERO EMISSION THRESHOLD

To the County of Santa Barbara and Air Pollution Control District (APCD) :

I believe that it is URGENT that Santa Barbara County government adopt the STRICTEST POSSIBLE REGULATIONS to disclose and mitigate greenhouse gas emissions (GHG) from all new projects.

I believe a "ZERO EMISSION THRESHOLD" is imperative at a time when the threat of climate change and severe drought are affecting our environment. (note: Jan, Feb, Mar 2015 - record heat in Santa Barbara)

Most climate scientists (NASA) agree the main cause of the current global warming trend is human caused expansion of greenhouse gases (GHG). Carbon dioxide, methane, nitrous oxide- all are contributing to this expansion.

Santa Barbara is seen by the world to be a community that takes pride in it's beautiful, unique environment. How do we continue this legacy? Let's support a clean and prosperous future by limiting greenhouse gases.

Thank you for your consideration,

Patricia H. Duncan
Solvang, CA

From: Lucila Serra
Sent: Monday, March 23, 2015 4:23 PM
To: CEQA contact
Subject: Fwd: Request for GHG emissions regulation

To whom it may concern,

I am writing to you to request that you

support the lowest threshold possible for regulating greenhouse gas emissions from stationary sources. This decision will impact Santa Barbara's ability to regulate GHG emissions for generations to come.

The thresholds being considered differ drastically in their ability to reduce harmful GHG emissions from large sources such as new oil drilling projects.

Thank you,

Lucila Serra

Sent from my iPhone

From: Palencia, April W.
Sent: Monday, March 23, 2015 4:25 PM
To: CEQA contact
Subject: GHG emissions

Please make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources.

Thank you,



APRIL PALENCIA, AIA
Project Manager
10 East Figueroa Street, Suite 1
Santa Barbara, CA 93101
(805) 963-8283 x.505

rrmdesign.com

From: tot ton
Sent: Monday, March 23, 2015 5:54 PM
To: dvillalo@co.santa-barbara.ca.us; CEQA contact
Cc: us2-84d39e7e8b-9c684416cc@conversation01.mailchimpapp.com; elyse@cecmail.org
Subject: Please Curb greenhouse emissions

Dear Santa Barbara Planning Commission and Santa Barbara Air Pollution Control District,

With the currently increasing carbon dioxide levels in our atmosphere (300->400ppm/last 100yr), acidifying of the oceans, ocean level rise (3mm/yr), and other hydrocarbon pollution of our environment, please minimize the greenhouse gas emissions allowed from all sources. An exception to this would be to allow newer emergency generators to test regularly for electrical maintenance activities and during real power outages without penalty.

Carbon dioxide & similar molecules act like a blanket to hold more of earth's or man-made heat from escaping into space with an effect of 100 years into the future <http://climate.nasa.gov/>. CO2 used to stay under 300ppm for the last >500,000yrs before 1900. This increase in turn creates the effects we see. Do we really want to change our world at a pace, like heating frogs to a boil from cool water, where we ignore the problems a bit too long for recovery before jumping to a solution?

We do not want to lose business and jobs to other countries or areas that do not implement strong emissions rules, so please give incentives to those who comply and/or penalize businesses and products from outside our area who do not comply. The planet, giving us our health and welfare, needs to be protected.

Thank you,

T. Totton, Goleta, CA

I support the lowest threshold possible for regulating greenhouse gas emissions.

This Wednesday, both the Santa Barbara County Planning Commission and Air Pollution Control District (APCD) will consider options for setting greenhouse gas (GHG) emission thresholds from stationary sources. Their decisions will impact Santa Barbara's ability to regulate GHG emissions for generations to come.

CEC has been working on this issue for several years, and we need your help as both agencies are approaching a final ruling. The thresholds being considered differ drastically in their ability to reduce harmful GHG emissions from large sources such as new oil drilling projects. **Please take a moment to request that both the County and the APCD make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources.**

From: Art Fisher
Sent: Monday, March 23, 2015 5:59 PM
To: CEQA contact
Subject: I support the lowest possible GHG emission threshold...

Lawrence A. Fisher
Carpinteria

From: Katheryn Keller
Sent: Monday, March 23, 2015 6:35 PM
To: CEQA contact
Subject: ! Please curb greenhouse emissions for future generations

I support the lowest threshold possible for regulating greenhouse gas emissions. Please make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources and set a good example for the world to follow!

Thanks,

Katheryn Keller

Santa Barbara, CA. 93103

From: Sandra Castellino
Sent: Monday, March 23, 2015 7:52 PM
To: CEQA contact
Subject: regulating GHG emissions

I'm writing to add my vote for the strongest protection possible for our air by setting the lowest threshold possible for GHG emissions from stationary sources such as oil drilling.

Besides looking out for our health, it is critical to SB as a tourist town which brings in a huge part of its revenue from attracting visitors, that clean air, water, etc. should be a top priority. I moved here 32 years ago because of the environment - the beaches, mountains, clean air and the fact that the 'industry' in SB is so clean - tourism, education, R&D. Please do whatever you can to ensure that continues to be a priority.

Thanks
Sandra Castellino, M.Ed.

From:
Sent: Monday, March 23, 2015 9:00 PM
To: CEQA contact
Subject: GHG emissions

I hereby request that in its upcoming deliberations the APCD make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources.

Susan Shields

Santa Barbara, CA 93105

From: Karen Feeney
Sent: Tuesday, March 24, 2015 7:59 AM
To: CEQA contact
Subject: Regulating Greenhouse Gas Emissions

Good morning. I am sending this email as I am unable to attend the hearing this coming Wednesday. I request that the Community Advisory Council to the Santa Barbara Air Pollution Control District make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources.

With climate changing around the globe, I am concerned for our future generations. The actions you take on Wednesday have the potential to impact the lives of my children and my grandchildren and their children to come. Acting on the local level is the place to start with reducing GHG emissions.

Please make sure your action is a positive and wise one by setting the lowest thresholds possible.

Sincerely,

Karen Feeney

From: Tina Boradiansky
Sent: Tuesday, March 24, 2015 9:51 AM
To: CEQA contact
Subject: air emission standards

Good Morning

I am writing to ask you to adopt extremely stringent new air emission standards. With the President announcing a 40% emission reduction goal this week, and California poised to become a leader in greenhouse reduction plans, Santa Barbara needs to be responsible and do its part to contain emissions that are destabilizing our climate. The science is well established that our local releases will harm the global atmosphere for a very long time and damage our children and grandchildren's futures. Please adopt a NO additional emissions standard. Steam injection oil drilling produces four times the emissions of regular drilling. Please contain this problem while we can.

Thank you

Tina Boradiansky
Resident, Santa Barbara County

From: Patricia Jasper
Sent: Tuesday, March 24, 2015 9:57 AM
To: CEQA contact
Subject: Greenhouse emissions

Thank you for making our environment a priority when deciding about the threshold for emissions from stationary sources. We should be a leader in this area and an example for other counties. PLEASE SET THE LOWEST THRESHOLD POSSIBLE FOR GHG EMISSIONS FROM STATIONARY SOURCES.

From: on behalf of Tam Hunt
Sent: Tuesday, March 24, 2015 10:30 AM
To: CEQA contact
Subject: GHG limits

Hello, I am writing to express my support for APCD setting GHG thresholds for stationary sources at the lowest possible level (the least emissions allowed).

--

Tam Hunt, J.D.
Community Renewable Solutions, LLC

From: Mary Ellen Brooks
Sent: Tuesday, March 24, 2015 11:13 AM
To: CEQA contact
Subject: Public Comment: Hearing on GHG Emissions
Attachments: CPA GHG apcd .doc

Dear STaff: Please include the attached letter in the packet for tomorrow APCD hearing about Greenhouse Gas Emissions Thresholds. I hope to attend the meeting and I plan to speak during Public Comment time.

Regards,
Mary Ellen Brooks
Acting President
Citizens Planning Association.

PS. Could you please respond to this e-mail so I know you received the comment letter.



916 Anacapa Street

Santa Barbara, CA 93101

March 24, 2015

To: Air Pollution Control District Board

Re: Environmental Thresholds and Guideline Manual (GHG Emissions)

Dear APCD Board Members:

The Citizens Planning Association has been a voice for good planning in Santa Barbara County for the past 55 years. We would like to submit the following comments for the hearing on establishing greenhouse gas emissions thresholds.

CPA requests that the APCD board make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources. In the past, CPA has advocated a zero-emission threshold when reviewing such projects as the Santa Maria Energy expansion.

CPA is disappointed that your staff has not included a zero-emissions standard as a choice for the decision-makers. Considering that Santa Barbara is far behind many other counties in California, taking a weak position for these emissions jeopardizes our air quality for generations to come. It also seems to contradict the Governor's mandate on GHG emissions.

It has come to our attention that North County has few monitoring stations in place to measure GHG so this makes it even more important to have the lowest reasonable emission standards.

Thank you for the opportunity to submit these comments.

Respectfully,
Mary Ellen Brooks,
Acting President, CPA

From: jeanholmes
Sent: Tuesday, March 24, 2015 12:28 PM
To: CEQA contact
Subject: CEQA threshold for GHG emissions
Attachments: CEQA Threshold - COUNTY PC 03 25 15.doc

FYI -- Attached and pasted below is the statement made by the Santa Barbara League of Women Voters to the county planning commission on the topic of a CEQA threshold for GHG emissions.

This is possibly a second sending because I submitted via the APCD website yesterday but today received a report that the message was unroutable - sorry for the possible doubling.

-- Jean Holmes

League of Women Voters of Santa Barbara

March 25, 2015

To:, Santa Barbara County Planning Commission
Re: CEQA Threshold for Greenhouse Gas Emissions

The League of Women Voters considers climate change to be an extremely serious problem, one that needs to be attacked by all means possible. Consequently we think a threshold of zero would be ideal. However we recognize that practical considerations may need to be taken into account and we would accept a somewhat higher limit. We have in mind a bright line threshold that would result in the elimination or mitigation of 95% of the county's greenhouse gas emissions from industrial stationary sources. We note that the recommendation of 10,000 MT/year would mean only 82.4% capture or, otherwise stated, the unmitigated release of some 183,000 MT/year. That is too much for a county that prides itself on its environmental record.

Also, the League agrees that the threshold should recognize emissions from all phases of a single project as a single amount.

Almost every day we read of new evidence of the harmful impacts of greenhouse gases. The staff report tells us that the state Air Resources Board estimates the current rate of decline in emissions will have to be several times greater if we are to reach our long term goals. Santa Barbara County should recognize that need and adopt an extremely low threshold of significance for greenhouse gases.

Joanie Jones, co-President

CONTACT: Jean Holmes, jeanholmes@earthlink.net Attached and pasted below

League of Women Voters of Santa Barbara

March 25, 2015

To:, Santa Barbara County Planning Commission

Re: CEQA Threshold for Greenhouse Gas Emissions

The League of Women Voters considers climate change to be an extremely serious problem, one that needs to be attacked by all means possible. Consequently we think a threshold of zero would be ideal. However we recognize that practical considerations may need to be taken into account and we would accept a somewhat higher limit. We have in mind a bright line threshold that would result in the elimination or mitigation of 95% of the county's greenhouse gas emissions from industrial stationary sources. We note that the recommendation of 10,000 MT/year would mean only 82.4% capture or, otherwise stated, the unmitigated release of some 183,000 MT/year. That is too much for a county that prides itself on its environmental record.

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Almost every day we read of new evidence of the harmful impacts of greenhouse gases. The staff report tells us that the state Air Resources Board estimates the current rate of decline in emissions will have to be several times greater if we are to reach our long term goals. Santa Barbara County should recognize that need and adopt an extremely low threshold of significance for greenhouse gases.

Joanie Jones, co-President

CONTACT: Jean Holmes, jeanholmes@earthlink.net

From: Tana Sommer
Sent: Tuesday, March 24, 2015 1:02 PM
To: CEQA contact
Subject: making it a priority to ensure very limited emissions in SB County

Dear SBAPCD

I am writing to you as a long time supporter of the Community Environmental Council. I strongly urge you to require the lowest threshold of GHG emissions in our county. California is leading the way for the whole USA in improving air quality and not contributing to climate change. Please do not let oil interests and big business sway you into lax standards.

Let's leave our grandchildren a viable world to live in.

Thank you, Tana Sommer-Belin

Santa Barbara, CA 93103

--

From: debbie
Sent: Tuesday, March 24, 2015 1:29 PM
To: CEQA contact
Subject: regulating greenhouse gas emissions

Dear Members of the Air Pollution Control District,

Please make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources.

Thank you!

debra arnesen
santa barbara mother, wife, business person and voter

From: David A Cleveland
Sent: Tuesday, March 24, 2015 4:42 PM
To: CEQA contact
Subject: Please adopt a zero emissions threshold for new projects

To: Santa Barbara Air Pollution Control District (APCD)

I urge you to adopt a zero threshold for greenhouse gas emissions (GHGE) emissions from new projects that will trigger environmental review and mitigation. The overwhelming majority of scientific research points to the need to reduce overall GHGE to avoid catastrophic global climate change. Only a zero threshold on GHGE from new projects will make a significant contribution to avoiding catastrophe.

Its time to take a longer view of the well being of Santa Babara County now, and in the future, and larger view of our place on the earth.

Sincerely,

David A Cleveland, Professor
Environmental Studies Program
Affiliated faculty: Geography;
Ecology, Evolution & Marine Biology
University of California
Santa Barbara, CA 93106-4160

cleveland@es.ucsb.edu
<http://www.es.ucsb.edu/faculty/cleveland/>

tel: + 805.893.2968 (messages)
fax: + 805.893.8686
office: Environmental Studies 4019 (floor 4L, Bren Bldg)

From: Sharon Broberg
Sent: Tuesday, March 24, 2015 5:01 PM
To: CEQA contact
Subject: GHG Emissions....set at net zero increase

I request that the APCB make protecting our climate a top priority by setting the the threshold for GHG emissions from stationary sources at zero.

We need a "net zero increase" in emissions, We need to be reducing our emissions, not increasing them. New stationery sources of greenhouse gas emissions will undo all the work we've done over decades with conservation such as changing light bulbs, buying electric vehicles, and putting up solar panels.

Thank you,
Sharon Broberg
Santa Barbara CA 93103

From: John Broberg
Sent: Tuesday, March 24, 2015 5:07 PM
To: CEQA contact
Subject: Net Zero GHG Emissions Threshold

I encourage the District to adopt a zero emission threshold for stationary sources, it is the only threshold that will disclose all project cumulative effects and allow for adequate mitigation. Without this some projects will be broken up into smaller projects to take advantage of the 10,000 MT limit or any arbitrary limit and the District will not achieve the desired results. This zero threshold will allow ample opportunity to mitigate and should not force projects into environmental review if they have reasonable mitigation plans. Exemptions for very small sources should be provided for.

*Cordially,
John Broberg*

From: Shawn Van Valkenburgh
Sent: Tuesday, March 24, 2015 5:39 PM
To: CEQA contact
Subject: Net zero emissions in santa barbara

To whom it may concern:

I am graduate student at ucsb and as a citizen of this county I am asking for zero net emissions from any energy company that wants to profit off of our land.

Thank you,
Shawn

Sent from my iPhone

From: Claudia Knudson
Sent: Tuesday, March 24, 2015 7:57 PM
To: dvillalo@co.santa-barbara.ca.us; CEQA contact
Subject: Santa Barbara County: Set a "zero net increase" threshold for greenhouse gas emissions

Dear Sirs and Madams,

It is clear that we need to take climate change seriously along with the drought throughout California, we can ill afford to continue doing business as usual. The time is now to make legislative changes that will offset the impact of climate change in our county. Please take action toward protecting the quality of our land, water, and air the safety and well being of the population is in your hands, we rely on you to make decisions that are based on the welfare of our society.

Set a zero net increase threshold for greenhouse gas emissions, at least one that spans 7 years. Let us take the threat of climate change seriously and take measures to turn the tide.

Thank you.

Sincerely,
Claudia Knudson

Santa Barbara, CA 93103

From: Sally Warner-Arnett on behalf of Sally Warner-Arnett
<arnetts@cox.net>
Sent: Tuesday, March 24, 2015 9:03 PM
To: CEQA contact
Subject: Net zero increase in emissions

This is to request that the ACPD set the threshold for greenhouse gas emissions from stationary sources at a net zero increase. We need to reduce our current level of emissions, not increase them. It is critical that we make protecting our climate a top priority.

Thank-you.

Sally Warner-Arnett
Santa Barbara, CA 93103

From: Delton Johnson
Sent: Tuesday, March 24, 2015 10:02 PM
To: dvillalo@co.santa; CEQA contact
Cc: Dr. Delton Lee Johnson
Subject: A health issue

Santa Barbara Planning Commission

Santa Barbara County Engineering Building, Room 17
123 East Anapamu Street
Santa Barbara, CA 93101

Dear friends,

I served two four-year terms on our Ventura County APCD Advisory Committee so I am familiar with the issues before you.

My great wife now has Alzheimer's disease and I have been her caregiver for 13 years. She and I owned and operated a small business in Santa Barbara for 12 years, and I have operated a business in Saugus for about 32 years. I mention this because I want you to know that I am familiar with the needs and concerns of business owners. Business interests are important **but health interests are absolutely critical.** The matter before you is clearly a health issue.

This proposal to allow companies net emissions increase of 10,000 tons, and the proposals of the oil companies are far greater. **Your decision will affect the health of real persons, including many persons yet unborn.**

There is real need to reduce emissions, and that will not happen if we just kick the can down the road by allowing this increase. Thank you for considering my comments.

Sincerely,

Dr. Delton Johnson

Santa Paula, CA 93060

Discussion

From: Marian Cohen on behalf of Marian Cohen <marian21@cox.net>
Sent: Wednesday, March 25, 2015 12:11 AM
To: CEQA contact
Subject: Environmental Review Guidelines and GHG Emissions

Dear APCD Community Advisory Council members,

We are writing to urge you to set the lowest possible threshold, i.e. a zero emission threshold, for greenhouse gas emissions from stationary sources.

Sincerely,
Marian and Stephen Cohen

(Proud owners of solar panels which power our home and our electric car!)

From: Nadine Hug Martins
Sent: Wednesday, March 25, 2015 12:38 AM
To: CEQA contact
Subject: Regulating Greenhouse Gas Emissions

Dear Government officials who will be making decisions on regulating greenhouse gas emissions:

Are you doing everything in your power to protect the health and safety of life on Earth?

Scientists have been informing us for four decades about the effects of releasing asphyxiating greenhouse gases that have been stored up inside our Planet Earth into the atmosphere and in the last decade we're experiencing what they have been telling us.

Are we preparing for the worst and hope for the best, doing everything we can to prevent the catastrophic worst case scenarios or are we continuing business as usual, mining every possible mineral, eroding precious soil, polluting our water, air, soil, causing mass extinction quite possibly our own?

I understand climate change is an incredibly difficult problem we're facing as it touches virtually every aspect of our current lives and I'm struggling every day to do my best to become more sustainable but I understand it requires drastic changes from everybody on every level. But we had civilized lives before fossil fuels so do you think it's possible to become sustainable and if so how?

Our lives today are so interconnected with the rest of the world, do you think we can focus on becoming sustainable on a local level first and can we count on our government to give us guidance how to?

Government regulations are powerful, i.e. we don't have lead in gasoline anymore, no more ozone depleating CFC's in spray bottles...

It's time to make the difficult decisions and I hope you do what's best for the public and not the monetary benefits of a few.

Thanks

Nadine Martins

Carpinteria, CA 93013

From: Kimberly Selkoe
Sent: Wednesday, March 25, 2015 8:43 AM
To: CEQA contact
Subject: thresholds for GHG emissions

Dear APCD:

I am writing to urge you to set the lowest thresholds for greenhouse gas emissions from stationary sources in Santa Barbara. As a marine ecologist studying human influences on the oceans, I am well aware that GHG related climate change is the single largest threat to the marine life on our planet and locally in Santa Barbara, where our well-being and economy are tied closely to the health of our coastal seas. We all need to do everything in our power to slow the pace of climate change.

Thank you,

Kim Selkoe, Ph.D.

From: Linda Ulvaeus
Sent: Wednesday, March 25, 2015 11:08 AM
To: CEQA contact
Subject: GHG Emissions....set at net zero increase

I request that the APCB make protecting our climate a top priority by setting the threshold for GHG emissions from stationary sources at zero.

We need a "net zero increase" in emissions, We need to be reducing our emissions, not increasing them. New stationery sources of greenhouse gas emissions will undo all the work we've done over decades with conservation such as changing light bulbs, buying electric vehicles, and putting up solar panels.

Thank you,
Linda Ulvaeus
Santa Barbara CA 93109

From: Pam Bury
Sent: Wednesday, March 25, 2015 12:51 PM
To: CEQA contact
Subject: set the lowest threshold possible for GHG emissions from stationary sources

I am very concerned that the SBAPCD make protecting our climate a top priority!

I was born in Santa Barbara in 1950 and have lived here all my life: I know that the weather has changed, gardening has changed, it is too hot, it is too dry--and human activity is causing climate change that is affecting our beautiful state and county.

Please set the lowest threshold possible for GHG emissions from stationary sources, at a net zero increase in emissions or less. Our children and all future generations deserve no less from our government, say NO to short-term business interests and \$\$\$, and protect the land, air and water NOW!

Sincerely,
Pamela Bury

From: Laura Francis
Sent: Wednesday, March 25, 2015 1:33 PM
To: CEQA contact
Subject: Support for net zero emissions

Along with my family and my community , I support a net zero increase in emissions for Santa Barbara.

Laura

From: Arlo Bender-Simon
Sent: Wednesday, March 25, 2015 1:42 PM
To: CEQA contact
Subject: Green House Gas Emissions Threshold

Hello,

My name is Arlo and I am currently in my fifth year residing in Santa Barbara county. As I consider my future on the central coast of California, the threat of climate change weighs heavily in my deliberation. While changes in our planet's climate moving forward are now unavoidable, we can still act to reduce the impact these will have on humanity. I want to see Santa Barbara county, along with all of California, leading in the effort to stop ongoing human-caused climate change.

There is no entity more responsible for the climate change we face than the fossil fuel industry. Through the destruction of lands to extract dirty fuels, the exploitation of indigenous peoples, the power and wealth granted to oppressive governments in possession of black gold, and the massive emission of greenhouse gases, oil and gas companies keep alive a negative strain of human industry that is harming the health of planet Earth.

Greenhouse Gases are pollutants. Not only are they changing the chemistry of our planet's climate, they have negative impacts on life forms that happen to be nearby. Skin, lungs, eyes, nose; anywhere that is in contact with the air is vulnerable to oil and gas pollution.

There is no longer any excuse to allow for these emissions to take place. Renewable energy can be deployed today. We can massively reduce our consumption of oil and gas if we make the transition to clean energy now. New emissions of green house gases are unacceptable.

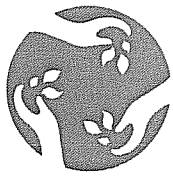
In order to reduce our collective ghg emissions to zero, we must start with the fossil fuel industry.

As a resident of Santa Barbara County, I urge you to adopt a "zero net increase" emissions standard for all new oil and gas projects.

Thank you,

--

Arlo Bender-Simon
Isla Vista Food Coop Back End Clerk
UCSB Class of 2014
B.A. in History & Environmental Studies



Community Environmental Council

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Ms. Molly Pearson

Santa Barbara County Air Pollution Control District
260 North San Antonio Road, Suite A
Santa Barbara, CA 93110

March 25, 2015

Re: Greenhouse Gas Emissions Thresholds of Significance under the California Environmental Quality Act

Dear Ms. Pearson:

The Community Environmental Council (CEC) appreciates the opportunity to comment on the APCD's threshold options for GHG emissions under the California Environmental Quality Act (CEQA). Setting an appropriate threshold of significance is a powerful measure by which APCD can reduce GHG emissions from the region.

Given the dire threat posed by climate change and the fact that global atmospheric carbon dioxide is already at unsustainable levels, all GHG emissions are significant and thus should be mitigated. CEC therefore advocates that the APCD adopt a zero emission threshold of significance. Climate change impacts are cumulative and caused by both large and small emitters; a zero emission threshold is the only option that appropriately addresses the threats posed by climate change.

However, if APCD does not adopt a zero emission threshold, CEC advocates for a bright-line threshold of 1,000 MT CO₂e. A bright-line threshold allows for simplicity of implementation and creates uniform regulation across projects. According to APCD's Staff Report, a 1,000 Metric ton threshold will capture 98.6% of the emissions from stationary sources within the County.

Both the APCD and the County staff reports on GHG thresholds reference a potential "administrative burden" posed by setting a threshold which would apply to too many sources. To avoid this "administrative burden", CEC proposes that projects with emissions ranging from 1,000 MT CO₂e to 10,000 MT CO₂e be subject to a programmatic EIR with approved standard mitigation procedures.

According to the APCD staff report, under a 1,000 Metric ton threshold 347 of the 418 stationary sources in the county would fall below the threshold not be subject to further environmental review. Of the remaining stationary sources, the vast majority could be addressed with a programmatic EIR and be subject to standard mitigations and possibly receive mitigated negative declarations. This would leave only the largest emitters, according to the APCD report just twelve, which would undergo full environmental review. The programmatic EIR thus relieves the administrative burden upon County and/or APCD staff while providing project developers with a suite of mitigation options that could be incorporated into proposed projects.

CEC encourages APCD to adopt a 1,000 Metric ton bright-line threshold coupled with a programmatic EIR option for "smaller" emitters. This option offers APCD a 98.6% capture rate, avoids unnecessary administrative burden, and provides project developers with approved mitigation options.

Thank you for your consideration of these comments. Please do not hesitate to contact me if you have any questions.

Sincerely,

Jefferson Litten
Energy Program Manager

From: Dorothy Littlejohn
Sent: Thursday, March 26, 2015 4:03 PM
To: CEQA contact
Subject: Air Pollution

Please control the air we breathe. **APCD should make protecting our climate a top priority by setting the lowest threshold possible for GHG emissions from stationary sources.**
thank you

Dorothy Littlejohn

Santa Barbara, CA 93103



GHG and CEQA Workshop - Questions and Discussion Notes Santa Maria - May 6, 2014

23 attendees

Director Dave Van Mullen introduced presenters Brian Shafritz and Molly Pearson.

After the presentation, District staff offered to answer questions about the presentation and the information conveyed.

Q: What pollutants are greenhouse gases (GHGs)? How are they measured at sources?

A: *Showed slide that listed GHG pollutants and Global Warming Potential (CO₂e), discussed reporting requirements to state and APCD. We're primarily looking at combustion sources.*

Q: Can you elaborate on how sources are required to report their GHG emissions to the state? Are sources also required to report GHG emissions to the APCD?

A: *Sources emitting more than 10,000 metric tons per year of combustion GHGs are required to report to the state under the Mandatory Reporting Regulation; data is available online from the California Air Resources Board. Sources report information to the District that allows us to estimate GHG emissions also.*

Q: You mentioned that there is no law that codifies the 2050 target, does this constrain the District in this process? A lot is made of AB 32, and if that's the target, we're on track, but that's just six years from now. 2050 seems like it's a more realistic target for this process.

A: *This does not necessarily constrain the District, and that's why we are here today, to put the information out and to hear peoples' opinions.*

Q: Does APCD possess the ability to monitor levels of contaminants? Which ones are you equipped to monitor? Equipment to monitor in Cat Canyon?

A: *APCD monitors in the ambient air all criteria pollutants listed on the slide (ozone, particulate matter, carbon monoxide, sulfur dioxide, nitrogen oxides, lead) except for lead. Some data on lead from ARB sites that they operate in Santa Barbara County in conjunction with us. We also have stack monitoring for some sources, originally designed to enforce existing rules and regulations. There are no GHG limits built into our rules. We have a testing program where we work with specialized contractors to conduct stack testing; we oversee that program and review/verify the data.*

Q: Regarding the 2050 target, ARB is already working on how to define it.

A: *The most recent draft version of the Scoping Plan does include discussion of targets beyond 2020, there may be legislation that helps to define future targets as well.*

Q: Is the District collaborating with other Districts such as San Luis Obispo, Ventura? Is consistency with other District's important?

A: *San Luis Obispo APCD has adopted thresholds for residential/commercial and for stationary source projects. That information is publicly available on their website. If you think that coordinating thresholds with other Districts is important, please provide that input. We do talk and work with other districts frequently; however, at this point we are pursuing this independently.*



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Q: I do have a comment and several questions. Regarding how these emissions are reported, facilities with emissions over 10,000 tons are required to report to the State, and facilities that emit over 25,000 tons are required to report to the federal government. These are substantial requirements. California reporting must be verified by a third party and there are substantial penalties for false reporting. Your schedule for your process is fairly open-ended. When will you be providing details on revisions to the Environmental Review Guidelines and to the Appendix A exemptions?

A: *This will likely happen at the same time that we propose draft revisions to the guidelines; the exemptions need to dovetail with the revisions.*

Q: What is your process to support significance criteria? You said you need substantial evidence. Bay Area went through an "intense 8-step process". What do you envision your process will be? Will you be doing a data analysis? What inventory would you be using as a baseline?

A: *Bay Area went through a several-step process for their commercial/residential thresholds. Stationary sources were treated differently. We don't have a specific path right now. We are aware that there are a lot of different data sets that can be used to support a threshold. There are also provisions (in the CEQA Guidelines) that we can rely on other lead agency determinations. We haven't decided where will go as far as developing substantial evidence.*

Q: Is your most recent greenhouse gas inventory what's in the 2010 Clean Air Plan (2007 inventory)? Is the most recent inventory available on your website?

A: *The inventory in the 2010 Clean Air Plan (2007 inventory year) is available on our website and includes not just stationary sources but other sources as well. We have done a more recent inventory of just stationary sources, but we have not posted that to our website. We can provide it if requested.*

Q: Will you be doing a CEQA analysis for this project?

A: *We are considering that and have not made a final decision, but we will need to consider the right approach to protect our agency from challenges under CEQA.*

Q: For now, until you come up with significance thresholds, you are determining significance on a case-by-case basis, is that correct?

A: *That's correct.*

Q: What's your anticipated schedule for this process? When would initial draft revisions be issued? When would it go to the CAC (Community Advisory Council), when would it go to the Board?

A: *Hard to say, depends on the feedback we get after the workshops. We also anticipate having stakeholder meetings. Earliest time frame is November – January at best. Also depends on the CEQA review. If we hear that we need to do more extensive research or studies, this will affect the timeline.*

Q: Has the 2013 Clean Air Plan been approved?

A: *We took it to the Community Advisory Council about a year ago. Then we took a proposal to our Board, but the Board requested us to package the Clean Air Plan with the proposals we had for addressing our offsets scarcity issue. So it is still in process.*

Q: The Santa Barbara Community Action Network (SBCAN) has advocated for a "zero" threshold, and we are advocating for that here. Are you talking about that with other air districts, and have they given it



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some consideration, or is it in your presentation just because people have suggested it? Are you giving it serious consideration?

A: As far as other air districts, we're not aware of any that are considering a zero threshold, but we put it in our presentation because we have heard from various parties that it should be an option, and so we listed it as one.

Q: We had the SME (Santa Maria Energy) decision, which was a case-by-case decision and not a policy or setting guidelines. This was the Board of Supervisors' initial decision on this issue. How much will that decision influence this process? Are you dealing with a "fresh sheet of paper"? Because eventually, it will go to the Board of Supervisors for approval.

A: Yes, we are dealing with a "fresh sheet of paper". We are starting from the beginning. The APCD Board has the five supervisors plus eight representatives from each of the cities.

Q: For projects that have been approved but have not been built, will the old greenhouse gas values be grandfathered, or will those projects have to comply with new values?

A: The CEQA process is complete when the land use approval is complete. Projects do not need to be re-evaluated under CEQA because they have not been built yet. If the land use approval period lapses and a time extension is required, then the project may require additional CEQA review. Generally, once a land use approval is granted, that's it. This threshold that we develop and propose would only apply to our lead agency decisions from the time the threshold is approved, forward. Other agencies may choose whether or not to use it. Not retroactive.

Q: Does the APCD have a budget for air quality measuring equipment? A friend that lives in Cat Canyon has called on APCD to monitor "transitory" emissions on an ongoing basis, and they never came to monitor those emissions. How do you verify the pollution from stacks if you don't go out and measure the pollution? How do you address complaints related to odors, rotten egg smell? I saw a contaminated soil permit condition that called for monitoring upwind of the project (to be done by an outside consultant).

A: We have a policy that if we receive a real-time complaint, our inspectors will go out and investigate the complaint (conduct interviews, identify potential sources, generate a report). Regarding air quality monitoring, we operate our stations according to various state and federal programs and guidelines, and the stations require a significant amount of expense and oversight. Making changes to monitoring stations is not an easy process and can be very expensive. Our network monitoring plan is reviewed and approved annually. We don't have the capacity to deploy "portable" air monitoring stations. Regarding the contaminated soil permit monitoring, those permits require the applicants to use portable monitors to sample according to specific procedures to protect the public and not cause a nuisance.

Q: What will the document and the recommendation on significance threshold look like? Are you looking to adopt one option, or several? Could there be a menu of options? For example, in the Santa Maria Energy hearing there was discussion of either a 10,000 metric ton threshold or a reduction from BAU of 90%, and they were presented as being roughly equivalent.

A: We are seeking input on this. Would a menu of options be helpful/useful? Would it be confusing? There are agencies that have included a menu of options. Regarding the Santa Maria Energy project EIR, those options were presented as being roughly equivalent to give some perspective on the level of mitigation that would be required.



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Q: San Joaquin Valley APCD has taken a checklist approach, where if you're a developer and you do A, B, C, or D, they've done the math to show that you've done enough as far as your fair share mitigation of cumulative impacts. Certainly makes it easier for the applicant, makes the analysis easier, determine what you are willing to commit to.

A: *This is one of the "consistency with AB 32" approaches that we reviewed in our presentation, called "best performance standards". It's a complex way to go about it and it took a lot of time to come up with those standards. They had to go through many hearings. It's a lot of work but it is an option.*

Q: What is the relationship of this process to Santa Barbara County Planning & Development Department (P&D)'s efforts to develop a GHG significance threshold? Are you coordinating with them? It would be awkward if APCD had a threshold and P & D had a different one. What is the status of P&D's threshold, or are they still on a case-by-case basis? Will they be developing something in parallel, or will they wait for APCD to develop a threshold?

A: *APCD is not aware that P&D is in a process to develop thresholds, but when they do, it will have to be a public process. We felt like it was time for us to start this process. We are glad to work with other agencies, hear what they're doing, and coordinate with them. As far as we know, P&D is right now in a "case by case" situation. Doug Anthony, who was in attendance at the workshop, added that he was representing Santa Barbara County P&D and that they are monitoring the APCD's process at this point.*

Q: As a follow-up, in observing a case before the County Planning Commission for an independent oil company for a project that was under 10,000 tons, one of the commissioners asked a hypothetical question: suppose this project was over 10,000 tons, would the project have to mitigate down to 10,000? The answer by P&D staff was yes. However in the document, it said that the 10,000 was just a guideline and that projects that exceeded that amount had to do an analysis of significance. It didn't mean that you had to mitigate down to 10,000 tons. So, I'm confused. Are they on a case-by-case, or do they have a 10,000 ton threshold?

A: *(Doug Anthony from P&D answered this question) P&D is on a case-by-case basis, there are only two cases that have gone through the process (that one and the Santa Maria Energy project). The Board of Supervisors has yet to adopt a threshold with the amount of certainty that you are looking for. The Board of Supervisors did request during the May budget workshops that P&D do a cost estimate for a threshold process, and at the June budget hearings they will consider whether or not to fund that effort.*

Q: Is CAPCOA considering adopting thresholds?

A: *CAPCOA is the California Air Pollution Control Officers Association, and no, they are not working on an effort currently. There are historical documents that CAPCOA has developed on this topic.*

Q: Can you clarify how GHG impacts are characterized as cumulative impacts versus a project specific impact? How have other air districts dealt with this cumulative evaluation?

A: *We acknowledge that one project will not necessarily cause climate change. Yet, one project may contribute a cumulatively considerable amount of GHG emissions so that the cumulative impact is significant (there is specific language in the CEQA Guidelines stating this). The point is that even though there's not a project-specific impact (as there might be with toxics/health risk thresholds, or with criteria pollutant thresholds), there is still an impact, and that impact still needs to be mitigated project-by-*

project, if it's above a threshold. Other air districts have taken lots of different approaches to GHG impact analysis. Most (if not all) air districts consider GHG impacts to be cumulative.

Q: How will you determine who will participate in stakeholder meetings?

A: *We are asking for meeting requests. We do not have any scheduled at this point. Please contact us in the next couple of weeks if you would like to have a stakeholder group meeting.*

Q: If you have a residence, and it's a zero threshold, and you need to pull a permit from the county that's discretionary, would that trigger review under the threshold?

A: *Most residential building permits are ministerial, so CEQA doesn't apply. However, there may be smaller residential projects with a discretionary approval (such as projects in the coastal zone, or projects subject to ABR review), so this is a consideration. However, the thresholds we are considering are for stationary sources (not residences).*

Q: Are the CAPCOA mitigation standards proven to be effective to reduce GHG emissions? I read a Final EIR that included a statement that the CAPCOA mitigation standards have proven not to be effective. Why does an agency refer to them if it's acknowledged that they're not effective? Referring to a CAPCOA Manual.

A: *Not sure what language or document is being referenced. The CAPCOA CEQA and Climate Change "white paper" is frequently referenced in environmental documents and includes a number of strategies but is not a guidance document and does not advocate for any specific option.*

Workshop participants were also asked to provide additional input or comments:

Comment: On the bright line threshold idea, there is the potential to encourage development of many smaller projects, rather than a fewer number of large projects. A case in point is the North Garey Project – if they went over the 10,000 ton threshold, they would have to mitigate the amount that they went over. I prefer the zero emission threshold approach but maybe a 90% reduction from BAU (business as usual) is better than a 10,000 ton bright line threshold, because you're not incentivizing to have lots of projects that are just under the 10,000 ton bright line.

Comment: I concur with the previous commenter. For instance, in Lompoc Hills, Freeport-McMoRan has a 9-well project that they don't have to do an EIR on, they don't have to do anything on, because it's under the threshold. Several have been commenting to Planning & Development on the inadequacy of this. Some sort of bright line encourages the smaller projects. They will hold back and add another well to the next project, to stay below the threshold.

Comment: Please provide the presentation in a more simplified format (black and white).

Comment: As a private citizen, I support a zero emissions threshold. Since we're only targeting new projects or major modifications to existing facilities, and the older projects are still contributing to emissions, I think doing a zero emissions threshold is the way to go. I also like that it would address the



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problems discussed regarding the bright line threshold, and incentivizing small projects to come in under the bright line.

Comment: I also support a zero emissions level. I live downwind from a project that has not come to fruition but will be built out by 2050. The City as the lead agency has not published thresholds. The project is a large industrial park. The City does not know what sources will move in, so how do they know what the cumulative GHG impact will be? The project has already undergone CEQA review. However, residents realize that there may be up to 72 wells, 2000 feet upwind of their homes, within Area 9. We would like to see the impact analysis done through the county as opposed to being done by private contractors. The City has not identified a complaint investigation process. We are exposed to fumes and would like to see the APCD be more involved in monitoring.

Comment: Request that for each of the options listed, you provide an analysis and also provide what the impacts to your resources are. If you will consider a zero emissions threshold, basically everything that emits will have to be examined. Analysis should be similar to what EPA did when the Supreme Court decided that GHGs were part of the (federal) Clean Air Act and would be under PSD permitting requirements. The PSD major source threshold was 250 tons. If they regulated GHGs under 250 tons, they estimated 15 to 20 million Title V permits would have to be submitted. If you do a zero emission threshold, it's going to have a major impact on your staff and your resources, I hope that you will consider this.

Comment: Suggestion that we should reach out to our regulated community and ask if they want to participate in a stakeholder meeting. *We clarified that we have done extensive outreach and noticing to the public, planning agencies, and to the regulated community.*



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33 attendees signed in; many joined late and/or did not sign in.

Director Dave Van Mullen introduced presenters Brian Shafritz and Molly Pearson.

After the presentation, District staff offered to answer questions about the presentation and the information conveyed.

Q: You say that the guidelines set significance thresholds for air quality impacts only, not GHGs. I'm confused, how do you measure air quality separately?

A: *Traditionally our agency has addressed impacts related to health-based criteria pollutants – those with known human health effects (ozone, NOx, SOx, PM, lead) and we have threshold levels for those pollutants in our guidelines. Greenhouse gases (GHGs) are different, and we have not yet incorporated thresholds for greenhouse gases into our guidelines.*

Q: What's your timeline? When would this go to the Community Advisory Council (CAC) and to the Board?

A: *We don't have an established date yet. We would like for it to move quickly, but we need to consider what people have said and whether we need to do further studies. Seeking input, no target date yet.*

Q: What is the hierarchy of agencies that make decisions on projects? Sometimes you're a lead agency, sometimes the lead agency would be the Planning Commission or the Board of Supervisors. Are there other agencies in the county also? If the City of Lompoc comes up with a project, what is the District's role? What about the state Air Resources Board? Is there an agency above you?

A: *Each city is its own jurisdiction, as well. Land use decisions are generally made either by the County, for the unincorporated areas, or by a City. A CEQA lead agency could be a division of the County, could be a special district (such as APCD). For a City of Lompoc approval, we may play a Responsible Agency role if we will be issuing a permit. The Air Resources Board is a CEQA lead agency for projects that they propose – for instance, they had to do a CEQA evaluation for their AB 32 Scoping Plan. For projects in Santa Barbara County, it's generally the county or cities that are the CEQA lead agency. We may be a CEQA lead agency for our permit action when another agency has not made a land use decision on a project. This does not happen frequently.*

Q: How many jurisdictions have adopted thresholds and out of the four that you presented, what have the majority adopted (statewide)? What is the statewide trend?

A: *There's a lot of variation throughout the state, from a "bright line" approach to a "business as usual" approach. For stationary sources, 4 districts out of 35 have adopted thresholds. They range from a bright line approach to a business as usual approach connected with the AB 32 Scoping Plan. There is no consistency statewide, it's all over the map. For stationary sources specifically, there are a few that have gone with bright line thresholds, and others that haven't. More often, Districts have not adopted anything but are applying thresholds on a case-by-case basis.*

Q: What are the top 5 stationary sources emitters?

A: *In Santa Barbara County for GHGs, they are the largest combustion devices. We can send you a list if you like. Generally, it's oil & gas sources. For example, there's an oil & gas processing facility in Las Flores Canyon that has a large cogen unit, and they're using a lot of natural gas to provide power for their*



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plant. We don't have any large power plants here. The largest sources are the ones that burn gas to produce heat for their process. There is a mix – for example, Vandenberg Air Force Base and UCSB have a lot of boilers, and they are like a little city and they have a lot of sources spread out. Also there is a mineral facility (diatomaceous earth) in Lompoc that has some large furnaces.

Q: It seems that the County has adopted a bright line threshold, how will that influence your process? Are you open-minded at this point? How will what the County has done impact what you guys are doing?

A: Just to clarify, the County has not adopted anything. They have applied it in practice to a number of projects. We are paying attention to what they are doing, they are paying attention to what we are doing. But, we are different agencies. We are starting with a clean slate in this process.

Q: Are GHGs being measured just from production, or also from seepage? Reference to a situation in Carpinteria, where GHGs are released from seepage underneath the seawater.

A: For the sources that we permit, the largest sources of emissions are the combustion emissions. But, there are also emissions of methane, which has a high global warming potential. We include that in our inventory, but it's not the biggest source. The naturally occurring seepage that you're referring to is something that we would not be taking a permitting action on, because it's occurring naturally out in the ocean.

Q: How about in the case of "unnatural" seepage, where production occurred, then production discontinued, and emissions occur in the form of post-production seepage?

A: We wouldn't necessarily take a permit action in that scenario. However, if a project were proposed to install a tent to capture seepage, that work would be reviewed under CEQA. (The commenter then asked, Would this be a Cap and Trade issue? District staff replied that it might be).

Q: You mentioned the need to reduce by 2020 to the 1990 levels. I'm assuming the reduction would be the 80 metric tons (from presentation materials). So by 2050, what is the target reduction level?

A: The way the Scoping Plan lays it out, it would be an 80% reduction from the Business as Usual projections for 2050; the 2050 projection is about 507 tons. The graphic we included was a snapshot in time; there is another draft of the Scoping Plan out with slightly different numbers. It's a moving target, but the goals are to get it down by a large amount.

Q: I have heard that there are not many companies that have anything to trade under the Cap and Trade program. If there is nothing to trade, how are you going to do that?

A: There are already a lot of emissions offsets banked under the Cap and Trade program. There are some early reductions/voluntary reduction projects that have been folded into the Cap and Trade program. There are several protocols, so there will be the ability to create additional offsets. The idea of Cap and Trade is to force efficiencies within that cap, so that companies that have the opportunity to reduce more can then trade those with other companies (as showed in the presentation earlier).

Q: Right now, all the targets are for 2020, to meet 1990 levels (as codified in AB 32); the next threshold is 2050, to be 80% below 1990 levels. First, are we on target to meet the 2020 goals? Also, with the developments over the last few years, is there any talk about trying to hit much more aggressive thresholds earlier than 2050?



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A: The draft update to the Scoping Plan, which goes to the Air Resources Board on May 22, identifies that with the measures implemented so far, and the measures to be implemented in the next few years, we're on target to meet the 2020 levels. In the latest scoping plan, there is a discussion of a concerted effort to go after short-lived pollutants like black carbon. If you control that in the short-term, it has a lot more effect on the climate system more quickly.

Q: How do you bank an asset for Cap and Trade?

A: ARB has adopted a number of protocols including urban forest, forest management, and digester gas. There are a number of different methodologies that can be applied to different project types, and they are trying to get more protocols approved. They have also approved some of the credits that were created previously under the voluntary markets. These credits are generated all over the U.S., not just California, and not so much internationally. For example, you could capture emissions from a landfill in some other state, and get some offsets that could be used in the Cap and Trade program.

Q: A mixed-use development would have direct and indirect impacts (transportation, waste, energy supplies, and stationary sources). Would the guidance your developing address impacts from a mixed-use development such as this?

A: This is a challenge for agencies around the state, and agencies have been dealing with it differently. Projects might involve stationary source emissions but also impacts from commercial or residential development. Sometimes lead agencies have applied a stationary source threshold just to the stationary source aspect, and then some other threshold or performance metric to other aspects of the project. We are seeking input on the best way to go about this. We are mainly looking at our permit actions as a CEQA lead agency.

Q: So, the South Coast AQMD developed a threshold that they could apply when they are a lead agency for a stationary source. Are you thinking more in those terms, what their process was?

A: Yes.

Q: Following up on the question earlier about seepage, there is leakage during drilling and extraction, and there is post-production leakage/seepage. According to the Union of Concerned Scientists, that totally negates natural gas as a replacement for coal. It's actually worse than coal when you include the leakage and seepage. The leakage is between 1 and 9%, depending on the operation, and the threshold is about 3%. If you get beyond 3% seepage, you might as well burn coal instead of natural gas. Are you going to fold in the long term post-production leakage and seepage?

A: Haven't seen that type of analysis done for local projects. We look at stationary source emissions in our lead agency role, and we do inventory the process leakage emissions as part of that project. Mike Goldman, from APCD's Engineering Division, said that he's working now with ARB on a control measure for the oil and gas industry. They are looking at drilling and post-production emissions. That would be a statewide standard that would apply to those types of emissions.

Q: You said earlier that Santa Barbara County has Cap and Trade credits readily available. My understanding is that our local supply of credits is very tight and there's not much available. Am I misunderstanding?



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A: Clarification: we do not have a readily available supply of locally-generated criteria pollutant emission reduction credits. For the Cap and Trade program and GHG offset credits, they are banked with the state and are not necessarily generated locally.

Q: If they (the GHG offset credits) are “in the bank” for the state, can Santa Barbara County access that?

A: Yes, for “compliance grade” credits for the Cap and Trade program, Santa Barbara County projects can access those credits. But, for CEQA mitigation, there are other offsets out there, that aren’t under the Cap and Trade program, that can be accessed for CEQA mitigation.

Q: Have any lead agencies adopted a “zero” threshold?

A: We are not aware of any lead agencies that have officially adopted this as a threshold. However, the zero threshold concept has been applied to some projects. For example, California State Lands Commission has applied it to projects.

Q: Right now, you’re considering adding GHG thresholds to the significance criteria for permitting in Santa Barbara County, being that they are not a significance criteria now.

A: We have to conduct a CEQA review if we are a lead agency, and you’re right, there are no criteria in that document currently, and so now if we are a lead agency we have to do a case-by-case determination. Typically, we are not a lead agency. This project is to add significance criteria to this document under cumulative impacts. Currently, lead agencies are obligated to examine GHG impacts as part of a CEQA review for a proposed project. Comparing proposed projects to AB 32 reduction goals and targets is one way of doing the impact analysis.

Q: Some jurisdictions have convened a task force to pursue this. Are you considering a task force for this effort?

A: We have an internal team right now; if there’s a need, we may utilize a consultant. Some districts have developed thresholds for commercial and residential projects as well, which is a much bigger effort.

Q: How much of the GHG that is not “natural” is stationary vs. non-stationary? For example, what you regulate vs. what is under Santa Barbara County Association of Government’s Sustainable Communities Strategy.

A: We presented a pie chart from our 2010 Clean Air Plan GHG inventory; emissions don’t change much from year to year. The pie chart shows that stationary sources are about 1/5 of the total (about 1 million metric tons out of 5 million metric tons total).

Q: Do you expect that to change much in the next ten years with all of the oil and gas projects coming online?

A: If we do get more oil and gas projects that burn more fuel, then that chunk of emissions would go up, but we don’t know by how much. We anticipate that all of the pieces of the pie will change over the next ten years due to climate change measures in different sectors; oil and gas source emissions will be reduced through implementation of the Cap and Trade program.

Q: Does the stationary source inventory fraction in the pie chart include all permitted and unpermitted sources?



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A: Just permitted sources. Smaller devices that aren't subject to permit are probably under the "area source" category.

Q: So you're saying that 20% comes from oil & gas sources, and all that adds up to about 20%? Doesn't seem like much.

A: Everything that we permit is about 1/5 of the "manmade" emissions. Other big sources/sectors of GHG emissions are transportation and electricity generation, as shown in the pie chart.

Q: Your slide says that lack of an adopted threshold does not relieve lead agencies of the obligation to address GHG impacts under CEQA, but sometimes EIRs say that there is no threshold so they will not address the impact. Where can the city go for numbers?

A: There are tools to assess GHG impacts and we can work with cities on estimating GHG emissions for CEQA compliance. The CalEEMod tool estimates emissions for health-based pollutant impacts as well as GHG impacts.

Q: Not representing anybody but wondering if it's possible to separate out for-profit from nonprofit emissions? Is it possible to change policy in the future?

A: Would have to change state law to have impact analysis be different for these different emission sources. CEQA does not make a distinction.

Q: If you have anything other than a zero threshold, what's going to happen with fracking in Santa Maria and North County?

A: Fracking is a separate issue from what we're talking about today. Are you concerned about GHG emissions associated with fracking? If a project proposes fracking, we would look at the impacts related to that project. Right now fracking in SB County requires a land use permit and CEQA analysis.

Q: Would you look at water quality impacts if a project were proposed that involved fracking?

A: This has not been put to the test in SB County, but if a project is proposed, the CEQA lead agency (likely SB County Planning & Development) would need to determine the extent of impacts in all the resource areas required to be analyzed under CEQA, including GHGs. This is required by the CEQA process.

Q: Wasn't there a Venoco project in the Los Alamos area that did fracking?

A: Yes there was a project that involved fracking a few years ago, APCD cannot speak to the Planning & Development lead agency permit actions on that one.

Workshop participants were also asked to provide additional input or comments. When the commenter stated their name and affiliation as part of the comment, that information was included in the comment.

Comment: Linda Krop with the Environmental Defense Center. We've been providing input to APCD and other agencies for a number of years on this topic. First comment is that this is not a new requirement;



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agencies have always had the responsibility to address any potential significant impacts, and GHGs are no exception. Both SB 97 and the implementing guidelines state that. If agencies are not doing it, they are violating the law. With respect to the options presented, we are in favor of a zero emission threshold. This is outlined as a credible option by CAPCOA in their Climate Change and CEQA report from 2008. There is scientific justification for that. It is based on the most current global stabilization target. It does not stop projects, it simply allows them to go forward but guarantees mitigation. There are so many ways to feasibly mitigate GHGs now. No need to be afraid of a zero emission threshold. State Lands Commission does use a zero emission threshold in their environmental documents consistently. They recently certified an EIR for the Venoco Lease 421 project and they identified potential mitigation measures. That's what we support and advocate for. I will also take the opportunity to comment on the other options that were laid out. In terms of the bright line threshold, this was identified as a hypothetical approach by the APCD in 2011, we had a similar workshop 3 years ago. At that time there was a hypothetical to use a bright line threshold of 10,000 tons a year. My comment on this would be to favor a zero threshold. But if a bright line is used, it's important to use it appropriately. A bright line threshold is intended to capture as much of the emission source as possible. Other air districts have used 90 or 95% capture. If you're going to use a bright line, use it knowing that's the principle behind it. Using reporting requirements as a bright line has been discounted – CAPCOA, CARB, everybody says don't do that. The third option that was discussed that was the AB 32 target, which is totally inappropriate for two main reasons. First of all, the target was based on an outdated target from the IPCC of 427 million metric tons, and we know that that's too high. AB 32 is on the books and there are things that the state is doing to get to that target, but in terms of identifying significant impacts it's meaningless. The other irrelevance of AB 32 is that it only addresses a 2020 target. Any projects that are permitted by APCD or other agencies are not going to be dismantled in 2020. It's the wrong target, and it only lasts until 2020, so that should not be used. Finally, I was surprised to not see an approach based on the 2050 target, and that is identified in CAPCOA's CEQA and Climate Change report as a potential approach. So even though I don't like those kinds of approaches, if you're going to use a future target then it should at least be a 2050 target instead of 2020, because projects aren't going to stop in 2020.

Comment: My understanding of the bright line is that there was a 10,000 metric ton threshold. I know that on a weekly basis there are applications for smaller oil and gas projects that would be well under the threshold. And bigger projects can be broken down into smaller projects. So to me, it doesn't make sense to have a fixed threshold. Either some kind of percentage threshold or a zero threshold would apply to the cumulative effects of the projects or still have a significant GHG emissions. The bright line doesn't make any sense because projects can be divvied up into smaller projects. Also, I understand that there are projects in the permit pipeline right now which, based on existing EIRS of other projects, could potentially generate as much as 500 metric tons of CO₂ emissions. So, that's based on what I've heard is a 7,700 well site potential. So if that were to be realized, it would be equivalent to almost the entire county's existing CO₂ emissions. So, what's the APCD's take on that? *APCD Response: We are not aware of those numbers, or the EIR that it's based on. (Another commenter attempted to clarify that County Planning & Development put out notice for a request for permit of that number of wells for SME.)* The commenter concluded that a zero threshold would be the appropriate choice, given that these huge projects are in the pipeline; and also that a bright line threshold doesn't address the cumulative effect of a large number of smaller projects.



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Comment: A few points to highlight: The League of Women Voters believes that it's certainly time for the District to adopt a threshold for GHG emissions from stationary sources. A formal threshold will add an element of certainty to the environmental analysis, and this will benefit both applicants and the lead agencies. The League considers climate change to be an extremely serious problem, one that needs to be attacked by all means possible. In this case a threshold of zero would be ideal. However, we recognize that practical considerations may be raised, and consequently we would accept a somewhat higher threshold, with a proposed 10,000 metric tons per year as an upper limit. We would prefer to see something below that. The threshold should recognize emissions from all phases of the project as a single amount. No piecemealing. Almost every day we read of new evidence of the harm these GHGs are inflicting on us today. And the impact will be even greater on future generations. The League urges you, the District, to adopt as low a threshold as possible.

Comment: Supporting the zero threshold, controlling emissions from small sources. I'd like to see the parts per million, and the weight measure, turned into a calculus that picks out the individual sources of GHG rather than saying tons. Rather than refer to the total tons, try and measure out what parts are methane, what parts are H₂O, what parts are carbon from fuels. This would help people reading and writing CEQA documents to understand the specific components.

Comment: Michael Chiacos representing the Community Environmental Council. Thank you for taking this topic up again, we did make comments when the District was looking at thresholds for GHGs a few years ago. We'd like to advocate for a zero emission threshold. These are industrial sources that are making a lot of profit, and they can afford to pay to mitigate this pollution. Otherwise society has to pay for the pollution that they create. If you're looking at a bright line of 10,000 metric tons, that's a lot of pollution, equivalent to about 2,000 cars. That level that the County chose to apply to the Santa Maria Energy project is actually a very high level. If there is a bright line that's chosen, it should be a much lower level. Similar to what EDC is saying, in terms of capturing at least 95% of emissions. We're also concerned that business as usual projections don't account for increase oil production. We're hoping that Cap and Trade will lower emissions statewide, but in the next 5-10 years, Cap and Trade doesn't do very much. A lot of these allowances are given away for free, and we're not going to see much from Cap and Trade in the near term. So it's very important for the APCD to set a lower threshold immediately. Oil and gas projects are equal to the emissions from whole cities. Very large sources. Zero emissions threshold.

Comment: Worked for Greenpeace in 1987, tracking these issues for a long time. Always thought I'd be dead before it go too bad, but it's already getting bad. Suggest moving to 2050 targets as soon as possible. Definitely add GHGs as a significant criteria. I'm starting to understand the cumulative threshold standard to use. I would also argue for a zero threshold to be used, and if it has to be negotiated to maybe 95% reduction. Pretty much anything that has business as usual written on it before has to get scratched.

Comment: Jackie Campbell with City of Carpinteria. Please be thoughtful about the standard that you adopt. There still can be small projects that can be caught in a CEQA analysis where perhaps they don't have any other type of environmental impact but they're going to create some GHG emissions and that might throw what might be a minor project into a more thorough review process. I hope that you consider that. Also regarding direct and indirect emissions – provide guidance on how far out to go in

evaluating associated indirect impacts. Not all polluters are for-profit. City of Carpinteria operates a pool which we have a permit for.

Comment: Three related comments. First, climate scientists agree that if our temperature goes up 2 degrees centigrade (quoting James Hansen of NASA), game over for the climate, we will see uncontrollable and unpredictable weather events everywhere. We are currently at a 1 degree centigrade increase, and we have a window of perhaps 15 years to keep that increase from increasing. Urge everyone in the position of regulatory power to keep that in mind and that zero emissions is necessary for the good of all of us. I see the problem with a bright line threshold being that oil companies know that this bright line exists. In Mission Hills in Lompoc, a 9-well project was requested and doesn't have to go through an EIR or public comment because it's just approved, it's under the threshold, and that's not okay. I attended this meeting in Santa Maria and it struck me that other than questions, the only positions that were stated were positions like mine, asking for zero emissions. The other attendees listened and don't make a position. We all have the ability to go in and have a private stakeholder conference. But I would like it on the record that a private stakeholder conference is very different from a public forum. I'm disappointed that I'm not hearing anything public from industry representatives, but I know there will be lots of stakeholder meetings.

Comment: I also want to be on record that I vote for a zero emission threshold.

Comment: While there is not fracking, there is a ramp-up in steam injection projects. In terms of GHG emissions that is the most GHG intensive form of oil production in the world. That's what they're doing in the Tar Sands and here, and that's why that's a concern. If you think about the Cap and Trade and a percentage off, the concept is that you've got an existing source of emissions and if you ramp it down every year it will eventually go down, in Santa Barbara County and in CA as a whole, where you have large potential shale oil reserves and heavy oil that weren't economically viable to go after, they didn't have the technologically to pursue it before and now you are, so you're in a situation where you're potentially increasing production quite a bit, then a percentage off doesn't help you, you shave a percentage off something that is increasing and still goes up. Nor does a 10,000 limit, which is a lot – a fleet of 2000 cars would be a significant source of emissions – so the only way to actually not increase emissions is if you have a zero threshold. And if that zero threshold is real and those offsets are really offsetting those emissions, then you also have to do additional work to actually make it go down, to get an 80% reduction. It's not only the zero, it's the steps beyond that as well. At this point a few people mentioned the term "sub-zero" threshold.

Comment: Pointing out why a business as usual approach (BAU) doesn't make sense. For example, if you have a project that will emit 100,000 metric tons per year, and you use a 16% reduction from BAU, they can emit 84,000 tons per year with no mitigation and it's not significant. You have another project that emits 10,000 tons per year, you knock off 1,600. If they emit anything more than 8,400, then they're significant. So 84,000 is not significant but 8,500 is. Doesn't make any sense from an environmental perspective.

Comment: How do you respond to that, and to those points? What is your process for consideration?

APCD response: we're not responding to any specific proposals at this point. It's a good point, and we'll



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consider it. We are looking at what other agencies are doing. We are looking for your input on the options we presented today. We will propose more workshops. We are recording this. We are here to take in everything at this point and we will synthesize information and look at themes.

Comment: You say you have a recorder here but there is no microphone. Most likely what you are taping will not be understandable. Next time please bring a microphone.

Comment: Building on my previous comment, instead of referring to GHGs in terms of tons, please would elaborate on the potency of the different elements that make up a "ton" of GHG emissions, because a ton of methane is different than a ton of another GHG pollutant (*this commenter was referring to the "global warming potential" of different GHGs*). *APCD Response: We do account for the potency in our calculations and state things in terms of CO2 equivalent, or CO2e. You are asking for more of a breakout of the specific pollutants. In terms of our inventory and large combustion sources, a majority of the emissions are CO2; a very small portion is methane, even when you consider the global warming potential of methane.*

Comment: More clarification, regarding the Cap and Trade program, it uses the CO2e measurement also. It is a statewide cap, and it's a climate cap. And if you believe in it, if you think that the emissions are being tracked and verified, it does require a 3% emissions reduction per year, across the state, no matter where the emission sources are in California. So sources can move around – they could be in Santa Barbara County, they could be in Bakersfield, or they could be in Northern California. It would still require a 3% reduction across the board in California. So, if you believe in Cap and Trade, it should provide the substantial reductions that CARB says that it is going to. Somewhere on the order of 30% from these stationary sources, statewide. No matter where they're located. (*Another commenter interjected: provided there aren't new sources*). It does account for new sources. New sources are included in that inventory, and they are also subject to the cap. It's a declining cap that includes new sources.

Comment: I have talked to the scientist at the California Air Resources Board who does the carbon intensity scores on all of the oil fields in California who did say that they could meet their guidelines of the percentage reduction and still see an increase in GHG emissions if production increases. So that is a risk and it's not built into that percentage reduction. (*Other commenter: I'd like to hear more about that, that's not my understanding.*)

APCD staff comment: the Cap and Trade program is complicated and we're all trying to understand it as the program is rolled out. A commenter interjected and said that the mechanisms and the reporting requirements are certainly complicated but that the ultimate goal is easily stated.

Comment: Thank you again for holding this workshop, and making it possible for us to have some input. I appreciate your receptive way of listening to the comments.

Comment: I'm for a "sub-zero" threshold. If the 2050 goal is an 80% reduction, you can't just have a flatline, you've got to go downhill. You have to mitigate more than you emit, basically. *APCD response: If you're seriously proposing that, we'd like to hear more about it in a written comment, and identify the mechanism to implement it. If you propose that new projects compensate for more than they're*



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emitting, please clearly state that. *(Another commenter identified that the 2050 goal does allow for some growth, so what the commenter is proposing would be much more restrictive than the 2050 goal.)* There was more discussion between these participants about 2050 goals and what reductions are needed to get there. The commenter stated that everything has to go carbon negative. *APCD staff clarified that the overarching goal of the AB 32 Scoping Plan is to reduce emissions in all sectors to reach the 2050 target.*

Comment: A general announcement that at 7:30 tonight at the Unitarian Universalist Society there is a meeting of the Citizens Climate Lobby on this topic, all are invited.

APCD staff reiterated that we are looking for input by June 5, and requests for stakeholder meetings by May 22 (note that both of those dates were extended after the workshop). Please send us your comments and questions, and Molly Pearson is the central point of contact for this project.



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Public Comment = PC

Staff Response = SR

PC: (referencing Slide 33) I don't have any problems with the process that you have here. But on the benchmark, I think we want to take a look at the defining of that benchmark. That is indeed an AB 32 ARB benchmark, but the benchmarks are defined a little differently than you suggest here. That's actually an "average minus ten percent" because the AB 32 program had a ten percent reduction off of that. So, you may want to use that number, but you may want to explain the benchmark itself, because you are doing a reduction from that performance, which is the baseline.

SR: *(Refer to the 4 page Supplemental Document) It is a 90% of (I don't want to use the term BAU)... that value was the actual value that was codified in the Cap and Trade regulation as the benchmark.*

SR: *It's on Page 2 of the supplemental document, and it shows the population of projects; we acknowledge that it is a pretty efficient level that they have set it at.*

PC: I have a lot of questions, but I will just read two right now. The first question I have is, when will we see an actual draft of the guidelines for us to provide comments back to you? And, will that draft include the proposed exemptions that you have identified as Appendix A? Because we didn't see that for this workshop. To really provide the kind of substantive comments that you are looking for it would be helpful for me to see the proposed guidelines and the document that's going to go to the Board. So that way, I can get my arms around it and provide some real good comments back. I will provide comments to the 4 options that have been provided today. Can you give me an idea on when we can see an actual draft guidelines document?

SR: *One thing to keep in mind is, where we go with the thresholds, after we get input back and refine our thinking and see where we land, that's going to really inform us as to how that CEQA document has to shape up. So, it's kind of a stepwise function here. Our goal would be to take whatever options or guidance we have to our Community Advisory Council. And at that point, I would envision we would take Appendix A and any changes associated with that there, and there is an opportunity for public comment as part of that process. So there is still a public component and review of that and anything we take to our CAC would be available, as we would post it for the CAC meeting.*

PC: As it is now, I don't know what exemptions you are proposing. You mentioned it in the workshop here, but I haven't see anything.

SR: *We have existing exemptions in Appendix A, and those might shift around based on whatever the GHG significance levels become. So, I can't really provide you anything meaningful at this point.*

PC: My question is, when do you think you will be able to provide something meaningful with regards to a draft CEQA guidelines document and an Appendix, for stakeholders to review?

SR: *We are soliciting written comments up until Jan. 9 and then after that we're planning to go to work and move forward.*



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PC: The second question I have is, here was a comment made on or around Slide 11 about offsets versus energy efficiency and you indicated that offsets would be considered as a last resort. So, I was hoping you could expand on that a little bit because, if I'm a facility and I'm going to get a permit and the APCD is going to be a lead agency and my permit action is going to trigger CEQA mitigation for greenhouse gas, it might not trigger for criteria pollutants, but it could potentially trigger for greenhouse gas. Now, the understanding I got from your statement was that the option to mitigate through offsets would be not looked at favorably in lieu of doing some sort of energy efficiency for other related projects or unrelated infrastructure within my facility. Is that something you could expand on?

SR: *Let's find exactly what you're referencing (other commenters identified that it was in a bullet on Slide 11 and also on Slide 40).*

That was actually summarizing a comment that we heard from the public; that wasn't a statement that we made. We always have a preference for onsite, but there is no non-allowance of it.

PC: So if the option is there to mitigate through offsets, then that's something that the facility can look at, rather than, "well you have to do this first before we're going to look at offsets"?

SR: *Yeah, we might establish a hierarchy in a guidance document or even in a condition of approval.*

PC: So again, if I'm mitigating my greenhouse gases, the idea is to get it below the threshold, right? It doesn't matter how I do that, whether I do it through energy efficient equipment at my facility or through available offsets. As long as I'm mitigating below and getting the greenhouse gas reductions, that's really the goal, isn't it?

SR: *Right, but we can still set a priority list as to how we would envision that occurring, and there might be options within that list. We've heard a lot of input from decision makers on some of the more recent projects that there is a really strong desire to focus on local mitigation and onsite measures that could be incorporated, if they are feasible to incorporate into the project design. We don't have a hard and fast procedure.*

PC: Will that be clarified in the CEQA guidelines, this hierarchy that you are discussing/proposing?

SR: *We would probably express a preference for it. All air districts do express a preference because of our mission to reduce criteria pollutants along with GHGs. So if there is co-benefits we would always prefer it.*

So this obviously came up with the Santa Maria Energy EIR and what it boils down to is, yes, local mitigation is preferred. But also there is a cost and fairness balance that go with this. So I don't know if we want to tie ourselves to a hierarchy at this time, I think that it is something that needs to be looked at as the CEQA document unfolds. That's my preference, I can't say that's the way it is going to be. The Santa Maria Energy EIR went through not this agency, but the County Planning & Development agency. So, that's the way it turned out there. As a responsible agency, we did have input on that.

PC: I like that you are talking about, if you do have to do offset or mitigation, it's based on your actuals, as opposed to your potential to emit. Because a lot of projects start out with a high throughput and over



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time they do decline. But it can go up and down, but the actuals I think is very important. The other thing is that you can offset over time, on an annual basis, as opposed to the whole 30 years of the project up front. Because again you don't know, 20 years from now, what you are actually going to be emitting. So I appreciate you guys incorporating that in here. But I think it's important, if there is going to be offsets, that you define what constitutes an offset. Especially if you're not in the Cap and Trade Program. And then last, as the Cap and Trade Program changes, then you should be adjusting your program equivalently, so that you don't have two obligations: one for Santa Barbara County APCD and then one for Cap and Trade, which are duplicative.

SR: So you are kind of commenting on that point that was raised in our slides about going back and revising our percentage, if there is a "business as usual" type percentage, if that was an option.

PC: You don't want to go back and get caught in two different programs and have dueling offsets or even double offsets based on how the programs are working because you are in fact reducing your impacts.

SR: Well that's what we were trying to show in those slides, those graphics, is that it's an overlay. Some CEQA thresholds we are looking at might require more mitigation than Cap and Trade, but Cap and Trade is integrated into that.

PC: But if you're already in the Cap and Trade Program, are you going to have to do that mitigation obligation and Santa Barbara County obligation? Double? Or is it going to be...

SR: No. We're saying, for the CEQA mitigation, if the source is a Cap and Trade subject entity, the reductions required as part of Cap and Trade can fulfill a portion of the CEQA mitigation option. And so those bars in those graphs try to depict that. Some are bright blue, and some are light blue. The bright blue was the portion from Cap and Trade that would count towards the overall CEQA mitigation.

PC: A technicality: under Cap and Trade right now, if you had a compliance obligation in the first year of the compliance period- say you were 28,000 tons - but the second year you dropped below it. You are still in Cap and Trade for two more years.

SR: So that's an interesting point. If we look at that annually, through a monitoring and mitigation type program, you would still be in the Cap and Trade Program. Yeah that's an odd one, so we have to look at how to define how Cap and Trade mitigation applies in that case. So you have to demonstrate three years you are below a threshold.

PC: You have to demonstrate three years below the threshold.

PC: If you look at one of your tables that has the process on it, it doesn't matter which one, if you are going to have to do an environmental document and you say "yes" and you drop down to that second box where it says "CEQA document" and then you have, in parentheses, "MND or EIR", I'm going to say 99% of the time, if it's less than significant, then it's a Mitigated Negative Declaration. It's not an EIR. So when you slide over to "no, it's potentially significant," that's when you do your EIR.



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SR: Yeah, that would be required for that impact specifically we just don't know if an EIR is required for other impact areas.

PC: I would just rather stay with this issue and not confuse it. If this is your threshold for greenhouse gas emissions, it's going to be a threshold that's going to be a Negative Declaration or a determination to do an ND if GHG is the only issue. If you exceed it, then you're going to an EIR. So you might want to change this graphic a little bit to say "EIR is potentially significant," that's when you're going to analyze it. But, the last point is, the next step is adoption of EIR via statement of overriding considerations if you exceed the threshold. And then, the last point is, how many EIRs have you processed, if this is going to be the APCD's greenhouse gas threshold?

SR: We haven't done any EIRs as a CEQA lead agency for this impact. We haven't adopted a threshold, we have been doing it case by case up until now. But we have never had a project under our lead agency action that has led to an EIR.

PC: My question is on the same point and actually goes a little further than this. If you go to Slide 29 it's a little simpler process flow diagram. So I was looking at it as, the question in the very first box where we start from is not whether the project is exempt from CEQA, but rather whether the project is subject to CEQA at all. And it has kind of been reversed because if the project is subject to CEQA we are going to go to the right; if it is not subject to CEQA then no further analysis of course. If we are going to say yes, it is subject to CEQA then we are going to move to the right and it says that "GHG emissions from the stationary source - this is presuming that all other impacts are less than significant - are less than (if this were the threshold) 10,000 tons, then it's less than significant. So to me, that means this project would be exempt. It's below a threshold of significance, it's not causing any significant impact, why are we writing a MND or an EIR there? It seems to me that that would be a project that's exempt. And if the project has emissions that do exceed the 10,000 ton threshold, then yes, and the question is can you mitigate them to less than significance, yes, you would do that with a MND. Can you not mitigate them to less than significance? And you are going to have to adopt a statement of overriding considerations as part of your EIR, then no. I thought that these diagrams were confusing, I didn't think they made sense in the way I would apply CEQA.

SR: You are assuming it is a project that only has GHG issues.

PC: Yes, exactly.

SR: We didn't really approach this with that assumption.

PC: I think for these thresholds that is how you should do it.

SR: I think that's a good comment. If understand what you're saying I appreciate your point of view. Because I know that South Coast has used that rationale on a couple of their projects that they were a lead agency on. So I understand what you're saying, and that's an interesting comment.

At the beginning I did say, "if CEQA is required...for all discretionary actions". So we were assuming this was a discretionary action where CEQA applies, so that's why we didn't include that in our flow chart.



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PC: Then how do you make sense out of this process flow diagram because if the emissions are less than 10,000 tons, which is, in this scenario, the suggested threshold, how do you classify that impact?

SR: *I see what you are saying we can make it more deliberate, we kind of made a little summary and we can make it have a little bit more steps in it.*

PC: Can you go to Slide 37, it's the 3rd bullet point that I'm confused with. It says that for Option 4 – when you are actually in a stage when you are looking at a BAU scenario. I think the 3rd bullet point says that "it assumes that the BAU emission scenario would equate to the project GHG emissions as proposed in the permit application." Are you then saying that there is no separation between the hypothetical baseline, if the project was built in 2006, and it being built today? I'm not quite sure what you are going to. Because, it's the separation between the two that you apply the 15.3% to, to see if you are significant.

SR: *We are proposing a "business as usual" that isn't tied to a 2006 baseline.*

PC: What is your BAU emission scenario?

SR: *It is exactly what it says here, it is what is proposed in the permit application. We are trying to avoid the concept that... (a commenter said, "The straw man concern?") Yes, and the case law that says that you can't look at a hypothetical future scenario that would never be permitted. So we're trying to avoid that.*

PC: I do think that, if you are conflating baseline, and a hypothetical scenario. I do think if you look at the Newhall Ranch case in particular, the appellate court takes that to task, and clarifies the fact that the hypothetical baseline for the analysis is not the same baseline that they are talking about under CEQA, where you can run afoul. We can have some discussion on this. But (referencing an OPR comment letter) and to that case for support that this hypothetical baseline argument is not a CEQA argument it is just the mechanics of the analysis. And I would be happy to talk to you about that. But again there is quite a bit of case law out there that supports a BAU analysis. So I guess what you are saying is that there is no separation between the two and then you apply 15% reduction?

SR: *Are we saying that we would consider project emissions, those that were in excess of baseline so baseline is inherently included in the...*

PC: Let's flip to the actual graphs themselves. For example, on page 39 we have the first example 4a. It's showing a declining cap, but why is it declining 15%? Are those actual project emissions declining 15%?

SR: *No, I wouldn't even use the term cap, we are just trying to show a project where the emissions over time each year gradually go down to a level that's below the 10,000 screening. That's why we are showing the actual emissions decreasing. It could have been a constant line, maybe we should have showed as a constant line. We're not trying to show a declining cap.*

PC: It's just an assumption that that project happened to have a declining cap?



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SR: *I wouldn't even use the term cap. It's declining emissions over time, so your obligation is still 15% of your emissions, but it gets less and less over time until you drop below that screening threshold. So that's what we are trying to show here. So it's a 15% reduction from what you are actually proposing not a 15% reduction from something you might have proposed that would be emitting more.*

PC: So let's make this a more normal project that's not subject to Cap and Trade, so the actual emissions line would be across, and then you would have mitigation below that bar.

SR: *Yes, so if you assume the green line to be constant and the black line to be constant then the mitigation would just be the delta between the two.*

PC: Yeah, I guess I'm just confused about this idea of, you treat your hypothetical baseline in the project the same. Because that's not what this BAU analysis is really all about.

PC: (Referring to Slide 27 and 30) On the Zero Threshold and the Bright Line you almost have exactly the same line there under actual emissions. But then you also state the same thing, a "large project." But then when you go to Slide 36, all of a sudden the emissions go above 40,000, and you mention an inefficient project, I'm assuming a large inefficient project. Normally when you are making comparisons, which one is better or which one should be chosen, you have to choose between the same thing. And right now, for me, this one appears dirtier because it is "inefficient". And the other two, which I like (the Zero and Bright Line), are "efficient." And then in last one, also when you go from the reductions in BAU and the project is larger, all of a sudden the amount of emissions go to 50,000. Your line is not at 40,000, it jumps up to 50,000. So in essence, for me, we are not comparing apples and apples.

SR: *So you would prefer if the large project was always at the same number for our examples?*

PC: You should mention what happens when you are reducing from the BAU and the project is at 40,000 MT so what is going to happen? Is it going to go beyond that? Because here I am seeing...

SR: *I'm not sure why we chose a different value. I hear you. You would like to see a large project with the same amount of emissions for all examples.*

PC: Yes, you should do that.

SR: *It may have just been for scaling purposes. We are trying to convey a lot in this image, it may have just looked better once you got the level up a little bit.*

SR: *And I think we were illustrating them each individually, versus thinking about a comparison between them. So we could go back and it make it more of a comparison between the options versus just illustrating what the one option itself is doing. That's how we were going about it first.*

SR: *We could have our small project and apply all the thresholds to the small project and it would be a fixed amount, like maybe 12,000 MT. And the large would always be a fixed amount.*

PC: Now we are trying to discuss which of the 4 presented you guys would want to go with. And for me I think the public needs to have the same standard.



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SR: Yes, we can standardize them.

PC: Well I'm trying to understand BAU. And my understanding of BAU, as it is interpreted through AB 32, is it's a combination of things. One of which is, they included the baseline emissions in the 2006 inventory. And then, they project going forward "business as usual" (in other words, growth). And that's where they come back, then, to this 15.3. Or in the case of the assumption in 2050 with 80%, of 35. These are apples and oranges. You are completely taking out the "business as usual", the projected growth that is inherently put in to AB 32 Scoping Plan going forward. Am I missing something here?

SR: I think it is hard to relate the Scoping Plan methodology to a project level basis. I don't think it is a parallel.

PC: Well don't they take the assumption of growth in all these industries when they do that, projected growth? That's why they had to go through in 2011 and revise that, based on the recession. Because their projection modelings were not accurate, because of a reduction of business growth. How is it irrelevant?

SR: Well it was for various reasons that they did that, but they do account for growth.

PC: Let me just jump in for a second, because I think that the "business as usual" analysis, the reduction from "business as usual" to show consistency with AB 32, is really a direct outgrowth of the Scoping Plan. It's an application of the Scoping Plan to something at the project level. You look at transportation sources, you look at direct sources, you look at waste sources, you look at the whole ball of wax from your project, and what you do is actually your hypothetical baseline is "If the project was built before AB 32 was promulgated." It really looks at the progress that the state has already made to reduce GHG emissions. And then it looks at the project and says, well what more does it have to do, to meet 2020 obligations. So I wish I had the Scoping Plan in front of me...

SR: Well I understand how the Scoping Plan works. To me it is, if you can provide comment on how that relates to project level emissions. We would really appreciate that. We have been struggling with that. How would you grow out your project emissions to build a business as usual if it's like some of these examples we've provided? How do you project that growth?

PC: It's really elementary. What you do is, you look at your different project sources of emissions - transportation, specific sources, etc., and you put it into CalEEMod, and you push the button, and it tells you.

SR: Stationary sources aren't really addressed by CalEEMod unfortunately. Those are more land use type - commercial and residential. I see where you are coming from, and we look forward to your comments.

PC: If you just look at the SME example, that was a BAU analysis, and we can talk about it later but the example is right there.

PC: From our point of view, we don't even want you to be considering the "business as usual", or number 3 either, the Performance-Based Standard. These are options that don't capture very many greenhouse gas emissions at all. We have consistently argued for a Zero Threshold. This is really the best



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approach to ensure that new projects do their fair share to not contribute to worsening climate change. And if this isn't feasible, then one of the Bright Line Thresholds should be considered. Even 10,000 metric tons is very high. It was adopted in San Luis Obispo and in South Coast and Bay Area because they looked at a 90-95 capture rate and that's how they got the 10,000. When the Air District here looked at this a few years ago, I think the 10,000 threshold only captured maybe half of the emissions. So that's one of my questions, if you could look at what would a 10,000 Bright Line Threshold and what would a 1,000 Bright Line Threshold capture in terms of Santa Barbara County emissions. I think that would be very beneficial. 10,000 metric tons is the pollution from 2,000 cars (the average car). That's a huge amount of pollution they shouldn't be able to just put that into the air.

PC: I just want a clarification on this BAU thing. Are you, in acting as a special agency regarding these options, are you talking about project emissions or BAU? Because that dictates what kind of comment we'll make. Because BAU is one comment, and then project emissions is another comment. Is it BAU?

SR: *That was the terminology we were going to use, it's supported by case law. But again each case has a little bit different approach, and some cases have actually defined what BAU should be. But we think for stationary source projects that probably just what you are asking for in your permit application should be your "business as usual." But, we would appreciate hearing if you think for stationary sources that the "business as usual" scenario should be done some other way, we would like to hear that.*

PC: No I'm just wondering if you want a definition of BAU in the comment.

SR: *Yeah, how do you determine that? It was certainly not a simple analysis when we looked at the Santa Maria Energy EIR. We hashed and rehashed, what is "business as usual" for this type of project? And, it's difficult - to project that forward.*

PC: When we are talking about the questions at the very end, whether we should be looking at the 15% or the 35% goals, or whether we should revise these percentages as the state revises their plan, I guess my comment is that, I think that some of the comments from the public, they're just trying to outthink the room, or maybe outthink the state. We have a statewide program to meet certain goals in terms of GHG, and I just caution us that, why don't we stick with the folks that are doing millions of dollars of research, and implementing a big program, and if they decide to revise the program based on updated data, it makes sense to revise our approach as well.

SR: *Yeah good input, we are seeking that input.*

Yeah, let me talk about that for a second. Going beyond 2020, that is a head scratcher. How to get there, how to do that. And so, this is a way of possibly doing that. Sacramento has just put out their proposal and it does have an update, maybe a 5 year look back to see what it is and make the adjustments. It's a possibility. Please give us your comments on that.

PC: What we really need to focus on here with the 15% versus the 35% is, if the state has already defined levels for combustion and 80% of greenhouse gas emissions in this country are from sources of combustion. And that is heavily regulated at the state level in Air Toxic Control Measures. You can no longer buy dirty back-up generators - they have to be super-ultra clean. We can't buy one that's dirty.



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And so, we are already able to achieve a much cleaner engine. But we can't go to 35% today because we can't buy that engine. We can't handcuff ourselves to something we cannot achieve today.

PC: Sort of building on that, understanding that then if you do have to mitigate for what's not available with technology, we need to define what appropriate mitigation processes will be acceptable before we can even agree to what our deduction is going to be. It's sort of like the emission reduction credit program for the rest of the... NOx and ROC. What if there is nothing available down the road, when everybody is mitigating right and left? You really have to start thinking about that. Because what she's saying is, there may not be any other technologies to be more fuel efficient in some areas.

SR: We are thinking about that. In fact we have a project with the Bren School going on right now, to look at potential options for mitigation.

PC: Well I'm just thinking, are there voluntary credits, that are being done elsewhere in the country, that will be acceptable? And, is it the Climate Action Reserve? Is that going to be appropriate verification? Then people can start arguing about what is acceptable.

SR: Well we started talking about this upfront in terms of providing guidance on that. And I would assume that, coupled with our threshold, we would have some guidance on that.

PC: You have to because you can't be arguing that on a project-by-project basis within a CEQA forum. You have to have some...like, how much is it going to cost me to do this mitigation? Or at least some kind of a range.

SR: It's a valid comment.

PC: It's not that we are saying we don't want to do it, it is just the mechanisms and you don't want to spend 3 years fighting over what is a proper offset.

SR: We haven't developed any magic bullets yet, so there has to be some flexibility.

PC: Well, that's just my comment for thinking about a holistic program that is going to work.

SR: Good comment.

PC: I see in all the slides the Bright Line at 10,000 metric tons, so screen at 10,000 metric tons. I know there are some districts in the state that talk about 10,000 metric tons as their CEQA threshold, there are other districts in the state that have 25,000 metric tons as their CEQA mitigation threshold. So, is the 10,000 that I'm seeing in the handouts here, is that a "Bright Line," or is that something that is also open to public comment? One gentleman suggested a lower number, I'm suggesting a higher number.

SR: We are open to that input.

PC: So the 10,000 is not a set value. It is just what you assigned for the purposes of your examples, correct?



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SR: We have thrown it out there in our slides because it is very commonly used as a screening threshold. A lot of districts have officially adopted it, and some districts are using it, and it is being used by our local agencies to screen out projects. It is one number that we could use.

We threw out a range based on input we heard and zero is kind of the lowest bright line, so that's out there.

PC: So it is still open to comment?

SR: It is not set, open to comment.

PC: I'm worried about a couple things, like how can a level be insignificant? How is insignificance measured? Is that a percentage of the total of the district pollution? You have a figure for the whole thing, and then you say this is less than 1% of that total, so it's insignificant? How do you define insignificance?

SR: Are you talking about a specific option?

PC: No.

SR: That's exactly the question at hand, really. How are we going to define significance?

PC: You don't know yet.

SR: We have set out 4 different options of mechanisms to determine whether a project is significant.

SR: That's what the threshold does, it explains how you are going to determine what that significant level is.

PC: I know how they do it for traffic intersections. That is clear to me. This needs to be worked out entirely. A couple comments, you have these targets set, rules and regulations set by "the District." That means by the county, right?

SR: Actually no, we are a special district.

PC: How many of these things are there in CA?

SR: There are 35 Air Quality Districts.

PC: Thirty-five? That troubles me, anyway I think it's troublesome to some other people. That you can have very disparate situations across 35 and then it leads to businesses saying for example "Well I'm going there, I'm not going there." And that is a very unhealthy situation for California. I just wanted to vent on that. I don't have a solution to it, but I do think that taking our guidance and having some central control from Sacramento is absolutely essential here. If we are all going to be divided up into 35 little things I don't think ultimately it is going to work. I breathe the air in California, not just in my backyard.

SR: I agree. I have actually asked Sacramento to do just that, but they are very hesitant because they see CEQA as a local decision, not a statewide decision. And so they want it hashed out like we are hashing it



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out, right here today. That's the only answer I have for you. I think it would be better, but it is just not going to come.

PC: I agree with you completely and from what I read, apparently the County of Santa Barbara Planning and Development, they have a Long Range Planning Division, and they develop a Climate Action Strategy and also will do an Action Plan. Why cannot we work together with them and get the same numbers? Because when you are being exposed, it is not just - okay, this is exposure here in Santa Barbara. We are being exposed to whatever is pollution in Santa Maria, in LA, it all comes down. So it has to be general. You have to kind of like avoid an epidemic, by talking with everybody, and vaccinate people around.

SR: Well as an air quality agency and as other air quality agencies in the state have already done, and are in the process of doing, or will do, it's our obligation to set a greenhouse gas threshold. We are the experts on greenhouse gas thresholds. That does not mean that other lead agencies can't decide that they don't want to use that one, and use something else.

PC: It's because we are too strict? Or because we are too lenient?

SR: It depends on that other lead agency and how they view what we come up with.

PC: And then one last question. In the supplementary explanation of the Performance-Based Measure approach, it states in one paragraph, "If the reported actual metric ton per year of CO₂ exceeds the significance threshold, then mitigation will be required for that year down to the significance threshold." What I was going to ask is, is then the company that is doing that, are they going to be fined? Or, are they just going to say you need to reduce your threshold, and then be nice? Because, if there are no fines, most likely people are going to continue to do the same. And for me, sometimes the fines, you can use them for mitigation or for something else.

SR: If that were a threshold approach that was ultimately pursued and we were a lead agency, those conditions in the CEQA documents that we were issuing and our Board approved, would have enforceable conditions in them. And then, they would be carried into our permits, which are enforceable. So there would be an avenue or for whatever the appropriate enforcement was, to go out and get those offsets.

PC: I'm trying to gain some perspective here, understanding that this is the threshold that you apply when you are the lead agency, what are those occasions? If you can't quantify it, how many times a year, can you give me some examples?

SR: Well for stationary source projects we aren't very often a lead agency.

SR: Typically we are not, for development projects. That would go to the county or the cities. But if there is an existing facility that has already been developed, an oil field or wherever, then that project potentially we would be the lead agency for that, if it is already consistent with the lead agency's prior planning approval. So there are some occasions. Like Vandenberg Air Force Base, we would be the lead agency. The Imerys Mine in Lompoc, where a lot of times we are the lead agency there because there is



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nothing else for the typical lead agency to do. So, we have occasion to be lead agency, but mostly we are responsible.

PC: For a follow-up, there is the opportunity for other agencies - planning agencies, State Lands Commission for projects offshore - to employ the threshold goal. What strikes me as a little bit difficult in this manner. In the county for example, it's obligated to look at all the GHG emissions of the project that's operational, not just what comes from those stationary sources. And I noticed that other air districts, when they do develop the threshold, they at least come up - sometimes they have two Bright Line Thresholds. For example, Bay Area – they have 10,000 for stationary source components and they have 1,100 for the rest of the emissions from the project, including the use of electricity and indirect. So just curious, how other local agencies who may want to use the threshold, how do they translate that into what they need to have a defensible document that captures, if it is an oil project, the truck trips, the construction related impacts, the emissions, etcetera? If you could at least consider, if you are not going down that road, providing some guidance.

SR: I think our guidance, if we are not going to go down that road. Our guidance would be to suggest that lead agencies could incorporate those ancillary emissions into the total emissions projection and then the mitigation would just be adjusted accordingly. It wouldn't really impact what our threshold level would be. Those other sorts of emissions aren't considered in setting the threshold, they are just part of what the mitigation obligation would be, and so that could be adjusted by other agencies.

SR: I think we have commented on Land Use Projects where we are a responsible agency we have always said you should quantify all your indirect source emissions. We have consistently said that. We were just trying to highlight that a lot of our lead agency discretion is really just for, say, a point source. We are not making a decision of the land use, we are just making a decision of replacing some of the equipment or adding a piece of equipment. The other land use decision has already been made. It is just a little different situation.

PC: Following up on that, but when you are the lead agency and you are preparing the CEQA document and you are really focused on the stationary source emissions. If you are looking at the boiler, what's the efficiency gain since 2006 and now? Not that much on the boiler, right. So if you are just looking at the stationary source itself it doesn't move that much. But, aren't you also going to have a transportation section of your CEQA document?

SR: Oh yes.

PC: And then do you count up the air emissions, and those were also put on to the boiler? I would think that you would also take your GHG emissions and account for those? There's the solid waste section, there's the construction section, right? Where you are assuming construction emissions and all that. See that's where I think with the BAU analysis, you can't just focus on the stationary equipment if you are building the entire CEQA document as the lead agency, because once you have the transportation section that would account for that. That's kind of what I was waving my hands about.

SR: If I am clarifying, we have a guidance document called "Scope and Content of Environmental Impact" that says this is how you do CEQA, this is how you quantify all your GHG emissions and we have a lot of



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input into the CalEEMod and looking at all those different indirect sources. We give that guidance to lead agencies and say you need to consider that in your land use approval. It's just that when it comes down to us being a lead agency we are not generally doing the whole land use approval.

PC: Well I get it. But you are saying as lead agency...

SR: We are producing this document for others to use. So I think that point is very important.

PC: When you have a - we all know Santa Barbara County, in the world, is geographically unique, with certain industries. But when you have a small stationary source or heavy transportation or other impact that has greenhouse gas impacts, somehow your statement has to say, well...it's unclear what is subject to mitigation, whether it is just the stationary source, I understand here that when you are the lead agency that you only deal with stationary sources, but somehow you have to give the agency some additional...

SR: When we are a responsible agency we give a lot of guidance about that, what sort of emissions that they put in the impact analysis. But when we undertake our lead agency action, we will have to look at the whole of our decision.

PC: But then how about cumulative emissions, like at UCSB? That's usually things that are skipped over. The county is evolving, and somehow the GHG impacts and we folks, and yourselves, on climate change...I don't know whether it's a different project for the CAC, or something else, but cumulative and indirect impacts mitigation needs to be discussed.

SR: So if it is UCSB, they would be the lead agency. Unless they didn't do CEQA for that project, and then we might end up being the lead agency.

SR: So I'm not sure what your point is for us to just consider that further...

PC: Your project statement is, "consider revisions to the APCD Environmental Review Guidelines." But everybody in the county looks toward you as the experts. And you say you throw it out with every EIR.

SR: It is a different document she is talking about... yeah we have two different documents: one is more of a broader...

PC: But we are getting down to mitigation and you are the only document that talks about mitigation. Is indirect and area sources...

SR: CEQA says you have to look at direct and indirect related to your approval. So if our approval involves indirect sources, CEQA says we need to include that.

PC: For the purpose of this meeting, my vote is 4. Either 3 or 4. We need to tie this somehow to AB 32. We need to tie it to something that is reasonable. There is no way that Santa Barbara County can leap to Zero Threshold. That is unacceptable for the industry, unacceptable for homebuilders, unacceptable for the city, county, hospitals, everyone. So we need to stay in the real world, and it's either 3 or 4. And, tying it to what is happening at the state level, tying it to the opportunities for Cap and Trade and offsets that currently exist, because right now there are no mitigation measures certified in Santa Barbara



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County for GHG. So, for the foreseeable future we need to stay with something that currently exists that has had success. So my vote is for looking with you on either 3 or 4 as the options.

SR: Just to add to what we are after here, we are still seeking input on any specific options as to why or why not they might be preferable. And since option 3 is a relatively new option, any specific input on that would be really helpful.

PC: I just want to build on the previous comment. But I have a different take because I want to look at – you’ve got your bigger projects over 25,000 metric tons - and then, you have the subset between 10,000 and 25,000. I don’t think that the mitigation obligation should be higher for a smaller project than it should be for a larger project. So, I would support a bright line but then have the reduction amount equivalent to what the Cap and Trade Program is. If you are going to have a bright line at 10,000, then your mitigation obligation is going to be the same percentage of your project emissions as Cap and Trade.

SR: We actually explored that option and there are some legal complications with an option like that. It essentially translates into a sliding threshold. If I understand what you are suggesting and so...

PC: So can you expand just a little on that? Sliding...

SR: Well, it looks a lot like a regulation. Basically, we are trying to mimic what the Cap and Trade is achieving for sources over 25,000, at that level between 10,000 and 25,000. And, if you are going to do a regulation, you should do a regulation, that’s sort of the feedback we got. So that was one concern, and also just having a threshold that changes over time is a concern. So setting it at a fixed percentage was kind of deemed more appropriate for this type of a decision. And if we need to go change the percentage, instead of it changing every year, if we need to change that percentage we go back our Board and revise our threshold. That was sort of the feedback that we got.

PC: Well then keep it at 25,000 and then just keep it all at the state level.

PC: What is the decision making process and timeline?

SR: We don’t have a goal for when we are going to get to the CAC, but that’s why we want your feedback soon so we can set a timeline for getting it to our Advisory Council.

PC: I just want to follow-up on that comment, I think it really begs the recognition of Cap and Trade as a mitigation program. So anything above 25,000 in the State of California falls under this mitigation program. You have to account for your emissions, you have to provide your allowances. What we are proposing here is something where, in Santa Barbara County where 10,000 is significant, but the state doesn’t pick-up mitigation until 25,000. So how does Santa Barbara fill in the gap? You could easily just establish your bright line test at 25,000 to be consistent with the state of California. I’m not proposing that necessarily, but I’m just trying to say that those folks in between 10,000 and 25,000, yeah you are right, they are not subject to Cap and Trade mitigation, maybe Santa Barbara mitigation, I don’t know, but Cap and Trade is a mitigation program that should be recognized.

SR: Going back, I’m sorry I can’t give you a date.



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PC: So it goes to CAC and then it will eventually go to the Board? Who makes this call?

SR: The advisory council – we'll go to them with our proposal - and they will make a recommendation to proceed with an option to the Board.

PC: I just had a question about that process, so who at the District decides which threshold to go with? So you are going to give a recommendation on one particular threshold option?

SR: We are going to narrow it down to two.

PC: So the way it works is we go through this whole process and then the district will come up with two based on feedback and it won't be in a vacuum, it will be very transparent. Is there going to be another workshop? Or a stakeholders meeting?

SR: We will probably have two CAC meetings. One of them will be a workshop/CAC meeting combination.

PC: And so the CAC will pick 1 of the 2, but it will be an open CAC meeting where the public can attend and influence the meeting?

SR: Yes, well every CAC meeting has a public comment component.

PC: I just had a little clarification in this process that does not preclude you standing up at the CAC or the Board and recommend another option.

PC: And the legal reasoning you anecdotally put out there about the problems with using BAU assumption in that gap between 10,000 and 25,000, could you formalize that in a letter and spit it out to me? I'm having difficulty understanding that, is that a legal opinion from somebody?

SR: Well, if I understood the commenter, it wasn't a BAU, it was following a Cap and Trade ratchet down approach.

PC: But then you have a problem with tying that gap of those folks between 10,000 and 25,000 who are in limbo who don't qualify for Cap and Trade but who might be deemed significant if you set a 10,000 or 0 threshold...that the reduction, the state is saying to meet its goals, but there is no problem with that?

SR: No I think our examples indicate that, right?

SR: It would be a straight 15%.

PC: It is just an immediate and continual, but the problem is what instruments can be used to do the mitigation? That's a big problem for small sources.

PC: I would also like to see a pollution prevention element here. Pollution prevention is a win-win for business, for the District, for the air, and the principle behind it is that if someone wants to go implement a better technology - say I want to go buy a boiler and replace my boilers with one that meets South Coast Standards - then I would like to see something that gives me a bonus or a credit or



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something that encourages me, not discourages, but encourages, so mitigates costs, something that will encourage businesses to go with the cleanest technology.

SR: Well, I think a threshold...

PC: A win-win. Not a threshold. No not punitive, not a prohibitory rule. A bonus, a plus.

SR: I'm just saying inherently a threshold helps businesses make that decision.

PC: Well that's not what I'm talking about, that's not pollution prevention. You are not putting a little bonus in there, something that would give someone the added incentive fiscally to go with cleaner technology.

SR: So you are talking about a fiscal incentive, a monetary incentive?

PC: Something where they go, "I get better approval, I don't have offsets required because I'm going with South Coast cleaner technology." Something that gives people an incentive to go with the cleanest possible technology.

SR: For greenhouse gases, yeah I'm not sure if going with South Coast technology will help with greenhouse gases, but if want to put in a super-efficient piece of equipment that will help you with your emissions. But you are proposing some sort of incentive...

Good comment.

On March 25, 2015 at 6:30 pm, a joint public workshop and District Community Advisory Council (CAC) meeting was convened in Buellton at the Santa Ynez Marriott. Roll call was taken for the CAC, the meeting agenda was reviewed, and District staff gave a presentation on the Environmental Review Guidelines update, summarizing the contents of the staff report that was prepared and distributed to the CAC and to the public in advance of the meeting. Following the staff presentation, the CAC and the public were given the opportunity to ask clarifying questions about the presentation and the staff report. After the question-and-answer period was completed, each member of the public was given three minutes to provide comment.

Questions and Answers

Q: Thanks, good summary of a very complex subject. I have a question about the pie chart, early on, greenhouse gas inventory circa 2007, where the slide's indicating that the only thing on the pie chart that we're looking at is the 19% that are stationary sources. You also reference area sources and electricity consumption. I was wondering if you could further define area sources. And, for electricity, do you mean production, or do you actually mean consumption?

A: I can clarify that, on the electricity, it's consumption. Because we don't have really any significant electricity generators or power plants here in the county, so it's consumption. Actually Brent might be able to talk about area sources, what's in the area sources portion of the inventory, it's things like landfill gas emissions that are not captured and combusted. To my knowledge, the area sources in our inventory here are accounting for gas stations and drycleaners, generally, they're very small. And those actually don't emit much GHG. So as far as the GHG stuff, we can look into that; our Clean Air Plan actually has a better explanation.

Q: I have a question about jurisdiction. The question came up last week, or I'm losing track of the weeks and meetings, but at the APCD board meeting, there seemed to be some question about when APCD would be the lead agency versus when the county would be the lead agency. Can someone clarify, I know generally speaking, if it's in the unincorporated area of the county, where most of our oil and gas development is, then it would be county jurisdiction. But you made a comment that it's also APCD so I'm trying to understand.

A: I can take a stab at it, Mr. Van Mullem may also might want to add something. But yeah, so we're obviously a CEQA lead agency when it's our project. When it's our Clean Air Plan, or it's a rule we're bringing forward, or if it's a permit action where there was no land use decision made. Basically, it may be an existing source where they're changing out a piece of equipment, and they don't need a revision to their development plan or their use permit, and then we're coming in and because we're making a discretionary decision, we need to cover our bases with CEQA. So, we don't end up doing very many CEQA documents. It's mostly for fairly small projects and they might fit into an exemption we have in our Environmental Review Guidelines, or they might fit into a CEQA exemption – one of the categorical exemptions. So, other cases where we might be a lead agency are federal places like Vandenberg Air



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Force Base, if they did a NEPA document and they didn't address CEQA. Ideally, the federal agency would do a joint NEPA/CEQA document. But if they haven't, we need to make sure we're doing our due diligence on CEQA. So, there are those unique situations that come up where we do take a CEQA lead role. But you're right, for a lot of oil and gas projects in unincorporated areas it's going to be the County of Santa Barbara that's the CEQA lead. Did I cover that? Does anyone want to add anything to that?

Q: Why don't we have this, you explained a little bit why the quote unquote zero threshold was not considered, but what I don't understand is, you have had approximately, according to page 4-3, there were many groups that asked for this zero, and also you had a petition with over 400 people. And normally when I view EIRs or anything like that, all points that were even implied or so forth need to be addressed. And not just say, we the District found that it was too expensive or anything like that, consequently we are not going to analyze. I think that, in my opinion, it should have been analyzed deeper, and not just say, we are not analyzing it.

A: *So, we're trying to deal with clarifying questions. Was there a question in there? Specifically, why didn't we analyze it more?*

Q: On page 4-3, you say, "A zero threshold would impose a substantial administrative burden to the District, without a corresponding climate benefit." Was a study done to make that statement?

A: *Well, we're basing it on the evidence we provided, which was: small amount of GHG emissions...so, small amount of mitigation. That was sort of, our analysis that we were presenting. I'm not sure if anyone wants to add any more response to that. That's the best I can say is that we've looked and there's not that much benefit to mitigating...you certainly have to quantify and disclose, if you're in the CEQA realm, that those emissions are occurring, if you're doing a neg dec or an EIR. But as far as mitigation requirements, we didn't think that it was really necessary to go there. I'm not sure if I've answered your question but...I think we're getting into commentary, and I'd like to really just get some clarification and people to understand what's in our report.*

Q: And I just have a follow-up question to that, maybe it's more of a question, because...you use the term small amount in that it's a small amount of additional reductions. And I'm wondering, if I'm reading this right, you said a 10,000 ton threshold, it covers 82% of emissions, so that would still leave, in your example, 183,000 tons of emissions. And I'm wondering, how do you qualify that as a small amount? Because that seems very large to me. 183,000 tons, that's like 36,000 cars. It's like, almost the entire reduction planned for the Climate Action Plan. So, define small.

A: *So, the point about small amounts is really geared toward each individual project. And the big concern there is not just the mitigation part of individual projects. But also the administrative cost of going through and preparing an initial study and mitigated negative declaration for an individual project that may have 500 metric tons of CO₂, or 1,000 tons of CO₂. So, yes, it is true that that category of 400 sources collectively does have a substantial amount of CO₂ emissions, but each individual one, which would have to go through CEQA individually, individually have very low levels of emissions.*



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Q: And then, on the 10,000 threshold, you say that piecemealing is a potential problem, where lots of projects come in just under it. But it's not clear how that's addressed. So, how would that be addressed, that problem?

A: *The big focus that we have in permitting, is making sure that the project is fully defined up front. And the way we address that is, we look at if a source comes in for an application for one permit, and then comes back later for an application for a second permit, that's part of the first step of the analysis in the completeness of the application, is, are these applications related? And so, if we see that multiple applications are for a related purpose at the same source, in a short period of time, we'll define that as one project, and analyze those as one project. And we do that already for our New Source Review rules, and we would envision using the same approach for CEQA.*

Q: And a short period of time is like a year later, or two years later...?

A: *The standard in New Source Review, is if an Authority to Construct application comes in within one year of when a Permit to Operate is issued. And so typically, given the time lag between issuing one Authority to Construct, another Permit to Operate, then another Authority to Construct, it usually works out, if it's within a couple of years of each other.*

Q: Going back to that question that was asked earlier about, you locate a bright line threshold, and the biggest issue you're talking about is the administrative burden and what that might be. This morning before the County Planning Commission it was proposed that you could reduce the bright line down to a thousand, and then those middle projects – the 95 and the 73 that get to 178,000 metric tons - projects up to 10,000 – could be covered in a programmatic EIR, such that those could come out of that, tier off of that, come out with mitigated negative declarations, avoiding that preparation of an individual EIR.

A: *Are you asking us what we think of that concept?*

Q: Could you do that?

A: *Could you do that. You know, this is something we didn't hear from the public, this has been almost a year process, so we really haven't analyzed that potential. It sounds like it may be some... (The questioner explained further: It kind of grows out of the numbers that you had in the report.) When you look at the numbers...the vast majority of projects were the small de minimis ones. And then the question was, you have that middle category...which again, yeah, maybe you don't want to put the administrative burden on those projects because individually they're small. But collectively, they are at least a bundle - that basically, you could consider, collectively, as those things - take away the administrative burden. Then deal with over 98% capture rate. So, it's just a different way of basically, get the threshold as a bright line, but do away with that administrative burden that you're concerned about.) So, I guess I'm not understanding...the concept of a program EIR – it would be done for a project. You do an EIR because there's a project. So what is the project? (The questioner explained further: No. The program EIR would look at, essentially, the cumulative effect of the projects which are reasonably foreseeable...however many there are there...50 some projects would be in that category. So you do a program EIR that in this case, would look at the effect of those 50 projects. You'd look at the cumulative. Again, it would have to be funded, individually over time, either the District or the County, do a*

programmatic EIR.) *I happen to have watched the Planning Commission discussion of this item. And, it seems that the concept would be that you would have a project, maybe to do a GHG reduction plan, and then do a program EIR on that project? I mean, CEQA requires an EIR when there's a project before you. So, it's usually a program EIR would be done for a Clean Air Plan, or a General Plan, or something. (The questioner stated: And, that's not a bad way to do it.) OK. I'm just trying to understand... (The questioner explained: Again, let me get this...question...when does APCD get involved? And again, at least I understood, the lead agency, are usually only on the larger issues...when you're doing the Clean Air Plan, changing your requirements, or what have you. Not down to the project level except in those unique cases. But yes, it could be on a greenhouse reduction plan.) Interesting concept. And I think we need to move on with clarifying questions, and then take public comment, because we've got a lot of people here and I want them to have a chance.*

Q: In section 3, you lay out what the other Districts have done in terms of where they set their threshold. And, there's nine other districts, and, for four of them, you specify the capture rate, and for five of them, there is no capture rate. So my question is, did these other districts not have a capture rate at all in their justification for their thresholds?

A: *So, the ones that have capture rates are South Coast, Bay Area, San Luis Obispo, Sacramento, and...San Diego. (someone asked: Could you state the page number?) Page 3-9 and Page 3-10. So, the ones that didn't - I mean, each district sort of took its own process, and Mojave, East Kern, San Joaquin, and Mendocino – those are the ones that didn't do a capture rate sort of analysis. I can't really speak to exactly what their process was, but some of them it looks like they just relied on existing thresholds for regulations, or something like that. And then of course San Joaquin Valley took a very comprehensive but very different approach in looking at developing performance standards for each industry type.*

Q: John Gilliland with M. S. Hatch Consulting, I have a few questions. CEQA, you have mitigation measures, and one of the mitigation measures is greenhouse gas offsets. The Air Resources Board is developing regulations that will remove the surplus factor in your definition of emission reduction credits. As with criteria pollutants, emission offsets are a critical thing in California, and I see how greenhouse gases will go the same way. So the lower the threshold will go, the more it is going to stress greenhouse gas emission offsets, as you go with this bright line. So, I guess it's a commentary, I'm voicing a concern about greenhouse gas offsets. A question I have is, within appendix A of the staff report, you talk about some of the exemptions, exclusions from requiring CEQA. One of those is you've changed from the de minimis level of 2.4 pounds per day to the BACT level of 25 pounds per day. You also indicate that Air Quality Impact Analysis and offsets would only apply to the first time. So, if you are a source that has already triggered offsets and you come in with an application say for a boiler that does not trigger BACT and you've already offset, my understanding is that you would not need to do a CEQA review as a lead agency. Is that correct?

A: *That provision is specifically for a situation where someone constructs a new facility, provides offsets and an AQIA for the new facility up front. That is a big in depth review and is definitely appropriate for CEQA. What we'll see then is they come back to install a new separator that may have only have half a pound a day of emissions. Because they are already over the offset threshold, they have to provide*



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offsets for those additional emissions. We don't think those types of projects are the types of things that CEQA was intended to address.

Q: Using your same example an emergency standby generator that only emits 15 pounds a day. In that situation I think the same example would apply. Is that correct?

A: *Yes, Appendix A has a specific exemption for an emergency standby generator.*

Q: So if I have a permitted piece of equipment, my source has triggered offsets and at a subsequent time I come back with a permit action that does not trigger BACT, then I am not subject to CEQA? So as long as I am not triggering BACT and I have already provided offsets I am not subject to CEQA review?

A: *For sources that are specifically exempt, we would, to use an example: for boilers the threshold is 20 MMBtu/hour, so a boiler at 21 MMBtu/hour would have to go through CEQA. And those numbers were set to be equivalent to 10,000 Metric tons per year.*

Q: The question is on the pie chart we looked at (from 2007). For those categories that are not being discussed in this workshop, is there some approach to reduce those emissions in those categories: mobile sources, on-road sources, etc. How are those being addressed?

A: *Through various AB 32 programs, and also local climate action plans.*

Q: So the approach on those other categories would be a percent reduction consistent with AB 32 Cap and Trade?

A: *The market-based categories are through cap and trade, the others are through specific command and control measures.*

Q: There is a 3 year revision cycle in the scoping plan.

A: *It is 5 years.*

Q Ok, 5. Do you foresee that you would review the reduction in BAU about on that cycle?

A: *As we detailed in our staff report we intend to as additional targets come out that get at post-2020 targets that are probably more aggressive in a percent reduction we would commit to coming back to the CAC and our Board to consider additional revisions to our threshold.*

Q: Is next year, 2016, the next cycle for ARB?

A: *No, they just did one (scoping plan revision) in 2014. But legislation, and more aggressive targets, could come out sooner. There are legislative bills out there now that could suggest more aggressive post-2020 targets.*

Q: There was a suggestion for a zero threshold. The Board should look into the fact that under the AB 32 model these emissions need to be offset on an annual cycle. The current price is \$12.50 per metric ton. It is expected to go up to about \$40 in a couple of years when natural gas and the utilities come into the program and the gasoline retailers come into the program. So, when we are talking about a zero



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threshold are we talking about mom and pop shops paying \$40 per ton for every offset, annually? And, it would be at least 500 to 1,000 metric tons.

A: So, it sounds like we are moving into commentary. So, are there additional clarifying questions?

Q: Is there anything in here that excludes a life cycle approach?

A: Our staff report does not specifically address that, but we rely on the CEQA guidelines amendments and the extent to which they require a life cycle assessment. And that was pretty much vetted during the development of the guidelines revisions. The life cycle stuff gets pretty speculative, so we have not specifically addressed it in our staff report, but we would open to comments if people want to see that.

Q: So you can still bring it up?

A: Folks might bring it up, there might be a fair argument that there's a project that has those types of emissions.

Q: Please tell me if the Governor's executive order, which called for by 2050 achieving an 80 percent reduction below 1990 levels, has been changed, and that's why you deleted it?

A: No, we deleted a discussion of case law that is going to be heard by the Supreme Court. So, we were advised by our counsel that the trial court decision no longer has any bearing. So we need to wait for the Supreme Court ruling to know what that case is going to tell us.

Q: But is the executive order of the Governor still standing?

A: Yes, we were not deleting the acknowledgement of that. There are other places in the staff report that talk about that and other executive orders that talk about long term reduction goals.

Public Comment

Comment: I am Linda Krop, Chief Counsel of the Environmental Defense Center. Thank very much for holding this workshop. I wanted to focus on a couple of points. One is that cumulative nature of this issue, and I want to respond to some of the assertions about the zero emission threshold. Cumulative Impacts are those that may not be significant from one project alone, but in combination with other projects may be cumulatively significant, and that was mentioned by staff earlier. What troubled me by the comment was that, although staff recognized that the small projects together could result in a collective substantial reduction in greenhouse gas impacts, because on an individual basis they would not be as significant, they would not be included in the threshold. But that is the whole point of cumulative impacts is that they are not significant when based on one project alone but collectively they are. As was mentioned, a 10,000 metric ton threshold would not compensate or mitigate 20 percent of the emissions. That is collectively significant, and so another reason to support the zero emission threshold.



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This is a scientific determination. Scientists have already determined that existing carbon levels in the atmosphere are unsustainable. That is why we are so concerned about adding new net emissions into the atmosphere, because we do feel those impacts here. And that's one reason why CAPCOA has identified that a zero emission threshold does have merit, because climate change impacts are caused by, quote, both large and small GHG generators, and because countless small sources around the globe combine to produce a substantial portion of global GHG emissions. And that is why we think it is important to include those. California State Lands Commission does include a zero emission threshold in local oil projects. And as an example to show that it is not overly burdensome for even the smaller projects, for the Venoco lease 421 project, the EIR showed that just changing one aspect of their operations would generate more reduction of emissions than the project as a whole was going to create. So, even for the smaller projects, it is very easy to mitigate these emissions. If a project is already exempt, it stays exempt. State law requires that. If project can be processed with a Neg Dec, it will still be processed with a Neg Dec. Because mitigation is feasible, it is available. So we would like to see a zero threshold considered.

With respect to the AB 32 reduction from business as usual, during the Planning Commission hearing this morning, County Counsel did say that if business as usual is the approach, that it should be a post-2020. Thank You.

Comment: My name is Jefferson Litten, representing the Community Environmental Council. CEC has spent the better part of the past decade addressing issues pertaining to energy and climate change. So we are happy to see the APCD taking up the issue tonight. Given the dire threats posed by climate change and given the fact that carbon dioxide is at unsustainable levels, as Linda mentioned, CEC advocates that all GHG emissions are significant and should be mitigated to the fullest extent possible. Thus, our first choice would be a zero emission threshold. If the APCD chooses not to adopt a zero emission threshold, CEC advocates for a bright line threshold of 1,000 metric tons. This allows for simplicity in implementation and would capture 98.6 percent of emissions coming out of the region. The presentation noted the administrative burden of setting a threshold that would capture too many sources. To address this administrative burden, CEC proposes that projects with emissions ranging from 1,000 to 10,000 metric tons carbon dioxide be subject to a programmatic EIR with pre-approved, standard mitigation procedures. With this set-up, 347 of the stationary projects in the county would not be subject to any environmental review, the remaining 60 projects that fall within this threshold could be eligible for the programmatic EIR, subject to standard mitigation, and receive a mitigated negative declaration. This would leave only the largest emitters, 12 sources according to the report, that would be subject to a full environmental review. So the programmatic EIR thus removes the administrative burden on the APCD and the county, while providing project developers with a suite of mitigation options and offering 98.6 percent capture.

Comment: This is Marianne Strange, representing Western States Petroleum Association. We want to thank the APCD for the work they have done: the staff and all the comments that have gone into this. We would like to have projects that have emissions that are less than 10,000 metric tons per year be deemed less than significant under CEQA and therefore compliant with CEQA. We would like if a project's greenhouse gas emissions are between 10,000 and 25,000 metric tons, in order to be deemed



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less than significant under CEQA, they must be reduced or mitigated by whatever the current AB 32 scoping plan business as usual reduction is determined to be that would achieve statewide greenhouse gas reduction mandates. In addition, to continue to be deemed less than significant under CEQA, and therefore compliant with CEQA, over the life of the project, the business as usual reduction should be determined to be what is current with the statewide reduction mandates. So currently we are at 15.3 percent. If that changes in the next scoping plan, the project is reviewed, and meets the future BAU standards. Thank you.

Comment: My name is Mary Ellen Brooks, I am president of the Citizens' Planning Association. We have earlier submitted a letter and we have also advocated for a zero emission threshold. We agree with many of the comments that were made earlier by EDC. I have not been to any of the public hearings and I am curious to see why the zero emission threshold was not included. I was very surprised to read the rationale. You say it is consistent with the science of climate change and then you go on to say it's challenging. Many things are challenging in life, and I would like to think that our area, and air pollution control, we are up to the challenge. As far as cost of environmental review, I think those costs probably could be addressed and I don't think that should be used as a reason not to consider the zero emission threshold. Financial burdens on agencies and project proponents, again, I think those could be addressed and shouldn't be used as rationale. With all the technological advances that are being made, as was mentioned earlier, I don't think it's beyond the realm of possibility or shouldn't be that challenging to have a zero threshold emission.

I got interested in and joined Citizen's Planning Association years ago when they were building the Lompoc separation plant, and I live about a mile from that. So I'm very, very concerned, on a personal level, about these emissions. Several years after that plant was built I saw in some obscure magazine article that our elementary school was on a list of schools where the pollution was affecting the children playing outside. I thought that was a pretty strong statement about what was going on up on the hill. We were told that was to shut down in 15 years. Well, here we are 30 years later and it is now a full operational plant. I think a zero emission threshold should be in the game. Thank you.

Comment: Thank you, I'm Ken Hough, Executive Director of the Santa Barbara County Action Network. For thirteen years we have been working to support affordable housing, protect open space, efficient transportation, and generally support sustainable communities. We have a 12 member Board of Directors, equally split between north and south county. Two of my board members, Janet Blevins and Bill Shelor are on this council and far more articulate than me, so I'll be brief. Recently, our Board unanimously endorsed a zero or as close to zero as possible threshold. A year ago, after advocating for a zero threshold on the Santa Maria Energy project, we settled for the 10,000 ton threshold. It was a lot better than 88,000 or 60,000 that was proposed by County staff at the beginning. In doing so, we urged the County to develop a threshold that could be used for all projects, so we are glad to see that happening. Since that time, the scientific evidence has mounted and we are now very concerned that all projects need to mitigate all of their greenhouse gas emissions. At today's hearing on the same subject at the County Planning Commission, the first speaker, Robert Bernstein, of the Sierra Club and also SBCAN made a good point. He said there is a zero threshold for him; he can't dump his garbage in the street. And he asked, why should there not be a zero threshold for dumping harmful emissions into our



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atmosphere. If we are to allow an industrial project to emit 10,000 tons, where is the motivation for individuals to turn down their heater, to drive less, install solar panels, or pay more money for a more efficient car? Many of us are doing a lot, at some expense and some inconvenience, to address this problem. It is discouraging to see industry allowed to emit thousands of tons when mitigations are in fact readily available. I agree with the things that Linda Krop and Jefferson Litten said, and SBCAN endorses a zero threshold or as close as possible to it.

Comment: My name is Rebecca August. I am a private citizen, I don't represent anyone but myself. I was really curious to hear that there had been so much effort to outreach to the public, because this is the first time that I heard about the APCD and what was happening here. And I heard about it through local environmental groups, not through any kind of media. I believe, like President Obama, the Vatican, and Dalai Lama, and Prince Charles, and 97 percent of climate scientists that climate change is a real threat to humanity. On behalf of my children, who are 15 and 18 and just beginning their lives, and your children, and the families that they will be raising in 2050, when they are my age, a date we can't seem to look beyond when we plan for things, I advocate for a zero threshold. I don't understand exactly why it has been taken off the table. If you set a higher threshold, as high as 10,000, industry will find a way to break up projects to avoid compliance. There is already too much carbon in the atmosphere, so whatever we add to it from today on will only make the ocean warmer, the weather more extreme. Any more than zero is too much, especially considering how much oil development is proposed in this county. Last week I read in the paper that the Air Pollution Control District and the Fire Department are suggesting that property owners do not burn brush piles and that we chip brush, which seems like a whole lot more trouble than just setting a match to it. But, we are responsible for how our actions affect the lives and the health of others, even if those actions take place on private property, and I applaud all efforts to encourage private citizens to reduce carbon emissions. But they must not be the only ones making changes and sacrifices. Industry must also be held to take meaningful action. Not in the future, but now. Thank you.