CENTER *for* BIOLOGICAL DIVERSITY

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Via Electronic Mail

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Re: Comments Following the April 2008 Meeting of the SCAQMD Greenhouse Gas Significance Threshold Working Group

This letter provides addition comments from the Center for Biological Diversity ("the Center") on issues raised during the first meeting of the SCAQMD Greenhouse Gas Significance Threshold Working Group ("Working Group") on April 30, 2008 as summarized in the Minutes from that meeting.

1. Policy & Design Considerations

Consistent with CEQA's legal framework, the policy objective of a greenhouse gas significance threshold should be simply to ensure that emissions resulting from projects approved under CEQA do not interfere with the deep emissions cuts necessary to stabilize the climate by 2050. Policy considerations that focus exclusively on AB 32 are flawed because they ignore critical 2050 emission reduction targets and do not reflect CEQA's requirement that significance be determined based on scientific data rather than regulatory standards. While the emission reduction targets embodied in AB 32 and Executive Order S-3-05 can inform a determination of significance thresholds, this is because they reflect scientific data on needed emissions reductions.

Under, CEQA a determination of the significance of an environment impact calls for "careful judgment ... based to the extent possible on scientific and factual data." CEQA Guideline § 15064(b). In the case of greenhouse gas emissions, the science and factual data call for deep emission reductions by 2050 in order to stabilize the climate. As set forth in the Center's April 17, 2008 letter to the Working Group, 80% emissions reductions from 1990 levels embodied in Executive Order S-3-05 were previously thought to keep atmospheric concentrations of greenhouse gases below a potential tipping point, whereupon ecological changes become dramatically more rapid and uncontrollable. However, recent observations of the dramatic loss of sea ice in the arctic suggest that climactic feedback loops may have already begun and atmospheric concentrations must be kept at much lower levels to avoid climatic destabilization. Therefore, the emission reduction pathways set by AB 32 and Executive Order

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S-3-05 would appear to represent bare minimum reductions and, as our scientific understanding progresses, may ultimately be determined to be insufficient to stabilize the climate.

From a CEQA perspective, AB 32 and Executive Order S-3-05 inform a determination of a significance threshold for greenhouse gas emissions to the extent that they establish emission reduction benchmarks consistent with scientific and factual data. Under CEQA, because a lead agency must "still consider any fair argument that a certain environmental effect may be significant" even where a project complies with a regulatory threshold, blind reliance on any regulatory regime is not determinative of the significance of a project impact. *Protect the Historic Amador Waterways v. Amador Water Agency*, 116 Cal. App. 4th 1099, 1109 (2004). Accordingly, it is important to clarify that using AB 32 "as a guideline in developing the significance thresholds" as proposed in the Minutes is appropriate only to the extent that these reductions are consistent with scientific and factual data regarding the needed emissions reductions trajectory, not because AB 32, as a regulatory regime, predetermines significance under CEQA.

In addition, any valid policy objective must look beyond 2020 to 2050 emission reduction targets. The scientific and factual data are clear that reaching 1990 emission levels by 2020 is only the first step toward climate stabilization. As the physical changes to the environment and emissions resulting from projects approved today will most certainly endure past 2020, there does not appear to be any legitimate basis to adopt policy objectives that myopically focus on 2020 emission reduction targets.

2. Direct GHG Emissions or Lifecycle

The Staff proposal to set a bright line between "direct" and "lifecycle" emissions runs contrary to CEQA's informational purpose and the required analysis of indirect and direct project effects.[1] The reason for excluding life cycle emissions provided by SCAQMD staff is because "lifecycle emission calculations will be difficult as the process could occur outside of California. Further, information to calculate life cycle emissions is not readily available." (Minutes at 3.) This concern addresses the potentially speculative nature of quantifying these emissions, not the question of whether an analysis of lifecycle emissions is contemplated under CEQA. Staff concerns about the inability to currently calculate lifecycle emissions are already addressed under CEQA's existing mechanisms. Under CEQA, an agency is only obliged to "use its best efforts to find out and disclose all that it reasonably can." CEQA Guidelines § 15144. If, after good faith efforts, a lead agency finds that it cannot calculate life cycle emissions, it need only explain the basis for the inability to assess these emissions.

Chief among CEQA's purposes "is that of providing public agencies and the general public with detailed information about the effects of a proposed project on the environment."

[1] The Minutes now clarify that "direct GHG emissions" would include "electricity generation as well as indirect impacts such as potable water, electricity, and municipal waste services." (Minutes at 3.) Traffic generation is not specifically listed but it is also presumably included within the scope of CEQA review. The Center appreciates this clarification. As one Working Group member noted at the April meeting, capturing as many sources of project emissions is critical because it allows for additional mitigation measures, such as water conservation and waste reduction, which target these sources.

San Franciscans for Reasonable Growth v. City & County of San Francisco, 151 Cal. App. 3d 61, 72 (1984). Including information on lifecycle emissions where feasible will ultimately allow for the opportunity to make more environmentally sound decisions. For example, cement production is a highly carbon intensive process regardless of where it is manufactured. Mixing cement with fly ash can reduce these emissions for a particular project. However, by precluding a consideration of lifecycle emissions from CEQA review, this mitigation need not be considered. As another example, the greenhouse gases generated by the combustion of extracted oil and gas resulting from leases for oil and gas exploration is readily quantifiable. Excluding a calculation of these downstream emissions from environmental review would minimize the true environmental costs of the project and thereby frustrate CEQA's informational purpose. The same is true for readily quantifiable emissions generated outside California borders. For example, in the context of a port expansion that would generate additional shipping traffic from overseas, an EIR can and should provide information on the increase in emissions generated from the entire lengths of these new vessel trips.

A lifecycle emissions analysis is also consistent with CEQA review of "effects" or "impacts" that include "[i]ndirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable." CEQA Guidelines § 15358(a). "[I]ndirect or secondary effects may include . . . related effects on air and water and other natural systems, including ecosystems." *Id.*

CEQA's treatment of environment impacts is intended to evolve with our knowledge of these impacts. If and when models become available to calculate lifecycle emissions, this should become part of a CEQA analysis. Categorically excluding these emissions from analysis is unnecessary and contrary to CEQA's informational mandate. A possible approach and one more consistent with CEQA, whereby SCAQMD could provide guidance to lead agencies on emissions calculations, is to reference available models to calculate emissions from various emissions sources. A reference list could be updated, perhaps through the SCAQMD website, as new modeling and methodology are developed to refine or capture emissions from sources that may not otherwise have been analyzed.

3. Black Carbon

The Minutes address the possibility of including black carbon within a greenhouse gas analysis. The Center believes black carbon should be considered in a GHG analysis as soon as methodologies are available to quantify black carbon emissions. Black carbon has both a direct warming effect, by absorbing incoming solar radiation in the atmosphere and converting it to heat radiation, and an indirect warming effect, by reducing the reflectivity of snow and ice.[2] With a short atmospheric lifetime of 4.6 to 7.3 days, reductions in black carbon emissions will have an immediate positive effect on the climate as well as public health.[3] The largest source of

[2] Hansen, J. & Nazarenko, L., *Soot climate forcing via snow and ice albedos*, PNAS Vol. 101 No. 2 423-428 (Jan. 13, 2004).

[3] Reddy M.S. & Boucher O., Climate impact of black carbon emitted from energy consumption in the world's regions. *Geophysical Research Letters*. 34: L11802 (2007); Ramanathan, V. & Carmichael, G., *Global and Regional Climate Changes Due to Black Carbon*, Nature Geoscience at 224 (2008), available at www.nature.com/geoscience

black carbon in developed countries is from combustion of diesel fuel. Current regulations that target particulate matter may not necessarily significantly reduce black carbon emissions. Thus, although black carbon is a constituent of particulate matter, specific action to reduce black carbon is essential for maximum climate and health benefits. The Center encourages SCAQMD to identify methodologies to quantify black carbon emissions as well as measures to mitigate these emissions.

Thank you for your consideration. The Center looks forward to further discussing the critical role of CEQA in reducing greenhouse gas emissions in the Working Group. Please do not hesitate to contact Matthew Vespa at (415) 436-9682 x.309 or mvespa@biologicaldiversity.org if you have any questions or concerns.

Sincerely,

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