CENTER *for* BIOLOGICAL DIVERSITY

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Via Electronic Mail

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Re: Comments on ARB Preliminary Draft Proposal, Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases Under CEQA

Thank you for the opportunity to comment on ARB's recommended approaches for setting interim significance thresholds for greenhouse gas emissions under CEQA ("Proposed Thresholds"). The Center for Biological Diversity ("the Center") is a non-profit conservation organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center's Climate Law Institute works to reduce greenhouse gas emissions to protect biological diversity, our environment, and public health. We educate the public about the impacts of climate change on our world, including the animals and plants that live in it, and to build the political will to enact solutions. The Center has over 40,000 members throughout California and the western United States. The Center has authored a white paper on CEQA and global warming entitled *The California Environmental Quality Act: On the Front Lines of California's Fight Against Global Warming* (Sept. 2007), available at http://www.biologicaldiversity.org/publications/papers/CBD-CEQA-white-paper.pdf.

The Center appreciates ARB's efforts in working toward the development of thresholds of significance for GHGs. In particular, the Center is encouraged that ARB recognizes that the environmental objective for a GHG threshold is to avoid dangerous climate change. The Center is also pleased that ARB's proposal provides for a backstop, above which a project's GHG contribution would be considered significant, and that

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performance standards require all projects to take measures to reduce their greenhouse gas emissions in order to determine project impacts are less than significant. Both of these provisions are critical to a legally defensible threshold of significance. Below are specific comments that respond to some of ARB's specific requests for public comment as well as some additional thoughts on the Proposed Thresholds.

1. Dangerous Climate Change is Now Predicted at Levels Far Lower than 450 ppm

As recognized in the Proposed Thresholds, our environmental objective with regard to controlling greenhouse gas emissions is to avoid dangerous anthropogenic interference (DAI) with the climate system. Indeed, the prevention of DAI with the climate is also the objective adopted by the international community. As set forth in the United Nations Framework Convention on Climate Change, to which the United States is a party: "The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."[1]

The Proposed Thresholds state the emission reduction scenario set by AB 32 and Executive Order S-3-05, whereby emissions are reduced to 1990 levels by 2020 and then to 80% below 1990 levels by 2050, "is consistent with the scientific consensus of the reductions needed to stabilize atmospheric levels of GHGs at 450 ppm by mid-century." (Proposed Thresholds at 3.) However, some climate scientists, including NASA's premier climatologist, James Hansen, now conclude that emission reductions must be far greater than those intended to cap atmospheric emissions at 450 ppm in order to avoid dangerous climate change.[2] These conclusions are based in part on the alarming and unpredicted rate of loss of Arctic sea ice and other recent climate change observations that have occurred since Executive Order S-3-05 was passed. According to Hansen, "[i]f humanity wishes to preserve a planet similar to that on which civilization developed, paleoclimate evidence and ongoing climate change suggest that CO_2 will need to be reduced from its current 385 ppm to at most 350 ppm."[3] Therefore, in keeping with both the latest science and precautionary principles, ARB should ensure that the Proposed Thresholds do not interfere with attainment of emission reduction targets that aim to stabilize atmospheric concentrations of greenhouse gas emissions at 350 ppm.

2. The Level at Which Residential and Commercial Projects Will Have a Significant Cumulative Impact on Global Warming

[1] United Nations Framework Convention on Climate Change (UNFCCC), art. 2, May 9, 1992, *available at* http://unfccc.int/essential_background/convention/background/items/1349.php.

[2] Hansen, J. et al., *Target Atmospheric CO_2: Where Should Humanity Aim?* (April 2008) available at http://www.columbia.edu/~jeh1.

[3] *Id.*

As the Proposed Thresholds recognize, projects generating a certain level of emissions should be presumptively considered significant. This is consistent with how CEQA treats other types of impacts. Large projects that have large impacts are deemed significant even where a project may have adopted all feasible measures to reduce this impact. Indeed, the more new emissions are added to the atmosphere, the more difficult it will be to attain the emission reduction targets required for climate stabilization. Global warming is a grave problem that we cannot afford to make any worse by emitting even more greenhouse gases into the atmosphere. Given the deep emission cuts necessary to stabilize the climate, a net zero threshold is the most scientifically supportable threshold for greenhouse gas emissions.

ARB asserts in its Proposed Thresholds that "non-zero thresholds can be supported by substantial evidence." (Proposed Thresholds at 4.) As the Proposed Thresholds acknowledge, the threshold of significance for GHGs "must be sufficiently stringent to make substantial contributions to reducing the State's GHG emissions peak, to causing that peak to occur sooner, and to putting California on track to meet its interim (2020) and long-term (2050) emissions reduction targets." (Proposed Thresholds at 4.) The further the threshold from zero, the less scientific and factual support for the threshold's effectiveness at meeting its environmental objective. *See* Guidelines § 15064(b) ("[t]he determination of whether a project may have a significant effect on the environment calls for careful judgment … based to the extent possible on scientific and factual data."). To support a non-zero threshold, ARB will have to explain why the collective emissions that are not captured under its proposal will not interfere with efforts to avoid dangerous climate change. Based on the deep cuts necessary to stabilize the climate, the CAPCOA analysis regarding the effectiveness of various thresholds,[4] and the increasing belief that a 350 ppm rather than 450 ppm atmospheric concentration of GHGs, is necessary to avoid dangerous climate change, it would appear that an "X" number for residential and commercial projects that exceeds a 90% capture rate[5] cannot be supported by substantial evidence and "resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect." *Protect the Historic Amador Waterways v. Amador Water Agency*, 116 Cal. App. 4th 1099, 1109 (2004).

3. Performance Standards

The Center is encouraged that ARB has adopted a feasible yet aggressive standard for energy usage that all residential and commercial projects must adopt to determine that a project has a less than significant impact on global warming. Standards for transportation, water use, and waste should be equally forward thinking. LEED for

[4] In analyzing possible thresholds of significance, CAPCOA determined that thresholds highly effective at reducing emissions and highly consistent with AB 32 and Executive Order S-3-05 are a threshold of zero and a 900-ton CO_2 Eq threshold. CAPCOA also determined that a 90% reduction from business-as-usual, effective immediately, is necessary to meet the emission reduction targets set by Executive Order S-3-05. (CAPCOA at 33.)

[5] This assumes that all residential and commercial projects will be required to adopt performance critieria as set forth in the Proposed Threhsolds in order to reach a less than significant determination.

Neighborhood Development (LEED ND) by the U.S. Green Building Council offers criteria that may be useful in setting performance standards for various aspects of a project's carbon footprint. More information on LEED ND is available at http://www.usgbc.org/LEED/ND/.

Transportation

LEED ND's "Smart Location & Linkage" sets forth criteria for project site location that may provide a useful performance standard for a project's transportation related impacts. The intent of Smart Location & Linkage standard is to "[e]ncourage development within and near existing communities or public transportation infrastructure" and "reduce vehicle trips and miles traveled and support walking as a transportation choice."[6] Because site locations that reduce VMT are a critical component of a low-carbon future, it is appropriate for projects that do not meet one of several possible location criteria to be considered to have a significant global warming impact. Project site location requirements are listed as follows:

OPTION 1

Locate the **project** on an **infill site**;

OR

OPTION 2

Locate the project near existing or planned **adequate transit service** so that at least 50% of dwelling units and business entrances within the project are within ¼ mile **walk distance** of bus or streetcar stops or within ½ mile walk distance of bus rapid transit stops, light or heavy passenger rail stations and ferry terminals. In the case of planned service, show that the relevant transit agency has committed in a legally binding warrant that **adequate transit service** will be provided at or before the beginning of the transit agency's first service year after 50% of the dwelling units and/or businesses within the project are occupied and has identified all funding necessary to do so;

OR

OPTION 3

Locate the project near existing neighborhood shops, services, and facilities so that the **project boundary** is within ¼ mile walk distance of at least four, or within ½ mile walk distance of at least 6, of the **diverse uses** defined in Appendix A.[7] Uses may

[6] U.S. Green Building Council, Pilot Version, LEED for Neighborhood Development System ("LEED ND") (June 2007) at 6.

[7] These uses are Bank, Child care facility (licensed), Community/civic center, Convenience store, Hair care, Hardware store, Health club or outdoor recreation facility, Laundry/dry cleaner, Library, Medical/dental office, Pharmacy (stand-alone), Place of worship, Police/fire station, Post office, Restaurant, School, Senior care facility, Supermarket, Theater

not be counted in two categories, e.g an office building may be counted only once even if it is also a major employment center. A mixed use building containing several uses as distinct enterprises would count each as a separate use, but no more than half of the minimum number of diverse uses can be situated in a single building. A single retail store of any type (such as a big box retail store that sells both clothing and household goods) may only be counted once even if it sells products associated with multiple use types;

OR

OPTION 4

Locate the project within a region served by a Metropolitan Planning Organization (MPO) and within a transportation analysis zone for which MPO research demonstrates that the average annual home-based and/or non-home-based rate of **Vehicle Miles Traveled (VMT)** per capita is lower than the average annual rate of the metropolitan region as a whole. The research must be derived from transportation surveys conducted within ten years of the date of submission for LEED for Neighborhood Development certification;

OR

OPTION 5

Locate the project within a region served by a Metropolitan Planning Organization (MPO) and demonstrate through peer-reviewed analysis that the average annual home-based and/or non-home-based rate of Vehicle Miles Traveled (VMT) per capita of the project will be lower than the average annual rate shown by MPO research for the metropolitan region as a whole. The MPO research must be derived from transportation surveys conducted within ten years of the date of submission for LEED for Neighborhood Development certification. The analysis prepared for the project must be conducted by a qualified transportation professional and reviewed and supported by a second qualified transportation professional who is not affiliated with either the sponsor of the project or the first analyst.

Water Usage

Similar to the proposed performance standards for energy use, water usage performance criteria should also aim for a 30% reduction from baseline conditions. According to LEED ND, a 30% reduction can be achieved in indoor water use by incorporating lavatory faucets and shower heads with an average flow rate of ≤ 2.0 GPM and a toilet flow rate, including dual-flush toilets, of ≤ 1.3 GPF.[8]

With regard to water usage from landscaping, LEED for New Construction Version 2.2 calls for a reduction in potable water consumption for irrigation by 50% from a calculated mid-summer baseline case. Reductions can be attributed through any

[8] LEED ND at 101-102.

combination of plant species, irrigation efficiency, use of captured rainwater, use or recycled wastewater, and use of water treated and conveyed by a public agency specifically for non-potable uses.[9]

Waste

Construction

> Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris.[10]

Operational

> Reuse, recycle, or compost 50% of ongoing consumables waste steam.[11]

4. Potential for Piecemealing

The approach to significance proposed by ARB does not appear to have the unintended consequence of encouraging piecemealing. First, CEQA already has legal standards to address the temptation to piecemeal in order to avoid full disclosure of a project's impacts. Second, the incentive to piecemeal a project to avoid a finding of significance for global warming impacts does not appear to be any different than for other types of impacts. To the contrary, in the case of greenhouse gas emissions, no matter how large the project, it may still presumably mitigate to a less than significant level by adopting all feasible onsite mitigation, the performance criteria or their equivalent, and then offsite mitigation.[12] Accordingly, a stringent threshold that meets the objective of avoiding dangerous climate change should not be derailed due to purported piecemealing concerns.

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[9] U.S. Green Building Council, Green Building Rating System for New Construction & Major Renovations, Version 2.2 (Oct. 2005) at 27. Although LEED for New Construction targets commercial structures, LEED for Homes awards varying points for reducing irrigation demand from 45-60 or more percent, which suggests that a 50% reduction in water use from irrigation is feasible for both residential and commercial structures. U.S. Green Building Council, LEED for Homes (Jan. 2008) at 49. However, the LEED standards for reduced water usage are aimed at reducing potable water consumption, not greenhouse gas emissions. If use of recycled water or treated conveyed water is as energy intensive a process as the conveyance of potable water, it may not be appropriate to rely on these measures to reduce a project's global warming impacts.

[10] LEED ND at 137.

[11] U.S. Green Building Council, Green Building Rating System for Existing Development (LEED ED) (Sept. 2008) at 56.

[12] From the discussion during and following ARB's October 27th meeting, it is the Center's understanding that a project with emissions that exceed X may still reach a less-than-significant determination provided it is able to mitigate to X through on-site and off-site mitigation and incorporates the applicable performance criteria or their equivalent. If this is in fact the case, clarification in the next iteration of the Proposed Thresholds would be helpful.

Thank you for your consideration. Please do not hesitate to contact Matthew Vespa at (415) 436-9682 x.309 mvespa@biologicaldiversity.org if you have any questions or concerns.

Sincerely,

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