



Governmental Services
Planning & Urban Design
Environmental Studies
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November 26, 2008

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Subject: Comments on the California Air Resources Board's *Preliminary Draft Staff Proposal, Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act*, October 24, 2008

The Planning Center's environmental team appreciates the California Air Resources Board's (CARB) proactive efforts in preparing significance thresholds for project-related greenhouse gas (GHG) emissions under the California Environmental Quality Act (CEQA). We offer the following specific points for CARB's consideration.

1. CARB states that its task is limited, that it will not attempt to address every type of project, but it does not explain why it is limited nor define what falls within the parameters of the task.

In the introduction, CARB states that the effort they are undertaking is a limited one. In the preliminary draft proposal, interim thresholds were only developed for two of the seven sectors: Industrial and Commercial/Residential. This raises several questions: First, why is the task limited, and what is it limited by? If CARB is to set GHG thresholds for all CEQA analyses in the state, does this mean that other sectors will be addressed later? Or are we to assume that all CEQA projects will fall into one of these two sectors? The uncertainty of the actual parameters of this proposal make it impossible to accurately assess the thresholds, because it is not entirely clear what the thresholds will apply to.

2. CARB has defined Industrial and Commercial/Residential as sectors, but the proposal treats them as land use categories.

The Scoping Plan identifies the relative contribution of GHG emissions from the following seven sector types¹:

- Transportation
- Electricity
- Industrial

¹ CARB's Greenhouse Gas Sector Portal website defines these sectors slightly different. However, the only difference between how CARB identifies the sectors in the Scoping Plan and how CARB identifies them on their website is that industrial-source emissions are broken down into emissions from manufacturing and emissions from oil and gas refining while agricultural-source emissions are broken down into separate categories for emissions from foresting and emissions from agricultural activities.

- Commercial and Residential
- Agricultural
- High Global Warming Potential (GWP)
- Recycling and Waste

Sectors are “end-use” sectors” that inventory sources of anthropogenic GHG emissions. For instance, the Commercial and Residential sector includes GHG emissions from fuel combustion in buildings for space heating and cooling (excluding electricity use) and water heating. The Transportation sector includes combustion of motor gasoline, jet fuel, distillate fuel, etc.

The preliminary draft proposal states that different GHG thresholds of significance should apply to projects in different sectors. The reasons stated include that (1) some sectors contribute more GHG emissions in the state and (2) there are differing levels of emissions reductions expected from different sectors in order to meet California’s climate objectives (i.e., 30 percent reduction from business as usual). However, the draft proposal seems to treat the two sectors addressed—Industrial and Commercial and Residential—as land use categories because it folds other emission sources into the CEQA analysis of these sectors. Thresholds/performance standards for the other sectors (Transportation, Electricity, Waste, and Recycling) are called “sub-sources,” when in fact these emission sources are not within the Industrial or Commercial and Residential sectors but are sectors themselves. In fact, the Transportation sector represents the largest source of GHG emissions in the state. Consequently, the statement that a sector-specific approach is consistent with CARB’s proposed scoping plan is not correct, as the approach identified is not a sector-specific approach but an approach based on land use type.

3. CARB’s tiered approach should require quantification of emissions sources based on the GHG emissions sectors identified in the Scoping Plan (Transportation, Electricity, Industrial, Commercial and Residential, Agricultural, High Global Warming Potential, and Recycling and Waste).

It is clear that land use types generate emissions from multiple sectors. For a residential or commercial project example, the primary source of emissions is transportation; the next major contribution is from energy use—the embodied energy of water (transport, use, and disposal) and energy associated with waste disposal. Likewise, emissions generated by industrial uses also encompass multiple sectors (Industrial, Transportation, Electricity, Recycling and Waste, and potentially High GWP). CARB’s logic for why different thresholds are applicable to different sectors is based on the fact that some sectors contribute more to global climate change, and different GHG emissions reductions are anticipated from different sectors. Therefore, the thresholds of significance should not be applied for land use types under CEQA, but for the individual sector types themselves: Transportation, Electricity, Industrial, Commercial and Residential, Agricultural, High GWP, and Recycling and Waste. This approach would be consistent with the approach outlined on page 4 of the preliminary draft proposal.

The primary tool used to identify project-related emissions under CEQA is the URBEMIS computer model. URBEMIS2007 can identify emissions associated with the Transportation sector and stationary-source emissions for the Commercial and Residential sector or Industrial sector. (Note: URBEMIS does not model all unique sources of industrial emissions covered under a New Source Review Permit that would also be classified under the Industrial sector of the Scoping Plan.) While the model does not quantify emissions from off-site energy use, those emission factors are generally available, and would fall under the Electricity sector.

Based on this modeling, separate thresholds of significance should instead be developed, at a minimum, for the following emissions sources:

1. Transportation sources – for emissions reductions associated with the Transportation sector

2. Commercial and residential stationary sources – to achieve emissions reductions associated with the Commercial and Residential sector
3. Industrial stationary sources – for emissions reductions associated with the Industrial sector

In addition, separate thresholds of significance should be developed for the following emissions sources, if available or known:

4. Off-site energy use – for emissions reductions associated with the Electricity sector
5. Waste disposal – for emissions reductions associated with the Recycling and Waste sector
6. High GWP sources – to achieve emissions reductions associated with the High GWP sector

Once developed, individual thresholds should not be double counted in other sectors. For instance, the Commercial and Residential Sector should not contain separate performance standards for transportation emissions. Currently, the preliminary draft threshold approach includes performance standards for other sectors within the Industrial sector (Attachment A) and Commercial and Residential sector (Attachment B) approach.

Establishing different thresholds for project land use types instead of the actual emission sources does not give accurate answers to the CEQA question, “would the project substantially contribute to global climate change impacts in California?” If some land use types contribute more to global climate change impacts, then these projects need to be identified under CEQA. If you evaluate significance thresholds based on the emission source, as defined by the sectors of the Scoping Plan, then you are evaluating the relative contribution of each project/land use type equally to these sectors and their relative contribution to global climate change impacts in California.

This approach would also account for land uses as that do not fit neatly into an “industrial” or “residential/commercial” land use type, or that fit into multiple categories. Since using a sector-specific approach, as opposed to a land use approach, is the goal identified on page 4, the second draft proposal should be updated to reflect this. Separate standards should be identified for each sector, and these standards should be applied to all projects equally, regardless of land use type.

4. Industrial land uses only require comparison of stationary-source emissions to a threshold whereas residential land uses require comparison of all emissions (stationary, transportation, energy, waste, etc.) to a threshold.

The 7,000 Mtons of CO_{3e} per year, identified under Attachment A, *Preliminary Draft Proposal for Industrial Projects*, potentially eliminates a major source of industrial emissions—transportation sources. While step No. 2 requires that a land use first meet “interim performance standards,” performance standards themselves are not thresholds and do not necessarily require project proponents to even calculate GHG emissions from transportation sources. For example, if the performance standard for use of transport refrigeration units (TRU) was established to require level 3 verified diesel emission control strategy, it wouldn’t matter how much emissions were generated by the TRUs or how many TRUs were onsite. The significance thresholds for GHG emissions would treat a facility that requires 40 TRUs that idle onsite for eight hours the same as a facility that has 20 TRUs that idle onsite for four hours.

We also disagree that the threshold established, 7,000 Mtons of CO_{2e}, encompasses 90 percent of the industrial sector GHG emissions because of the wide variety of land use types that could be classified as “industrial.” For example, an intermodal facility generates a substantial amount of emissions from transportation, by truck and rail. The magnitude of these emissions could far outweigh emissions from on-site equipment, even with compliance with performance standards. (As a comparison, the analysis of

project-related criteria pollutant emissions includes all sources of project-related emissions [on- and off-site] within the air basin.) This approach also does not take into account industries that require a substantial number of employees, which results in more vehicle trips and therefore more exhaust emissions.

As a sector, Industrial emissions only include stationary-source emissions, but emissions from other sectors generated by the project also need to be quantified and thresholds established. Because the significance threshold for industrial land uses is based solely on stationary-source emissions, it can result in large source of GHG emissions being undocumented in the significance conclusions, and therefore undisclosed in the CEQA document. For example, a warehousing-type industrial project can also result in substantial emissions of GHG emissions from truck travel off-site. In addition, commercial and residential land uses have to account for both transportation and nontransportation emissions sources. Since all these emissions occur within California, they should all be accounted for in the project-related GHG analysis.

5. Performance standards should be used as mitigation for emissions sources that exceed applicable threshold criteria. Otherwise, some performance standards may be pseudo-regulation.

Use of a performance standard as a threshold may result in pseudo-regulation if all projects have to exceed existing regulations by a certain percentage or meet a certain quantified performance criteria. For example, if a performance standard was established for the Electricity sector emissions that required all projects to exceed Title 24 Building and Energy Efficiency Standards by 10 percent, this would require all new construction to exceed the requirements of existing regulations. This type of performance standard should instead be specified as mitigation measures in the event emissions exceed the thresholds identified for the sector, and should be grouped by sector.

Using performance standards as mitigation eliminates the possibility that capped emissions sectors and increasingly stringent regulations will overlap with the performance standards. In essence, this strategy would assume that for projects that do not exceed the proposed significance threshold, the state's strategy outlined in the Scoping Plan would be sufficient to achieve the emissions reduction. However, for large projects that are likely to exceed these thresholds, the performance standards ensure that the project incorporates additional actions/design features to ensure emissions reductions are on target with the Scoping Plan.

6. CARB should adopt the GHG thresholds and the Community Protocol for Climate Action Plans at the same time. In addition, not all Climate Actions Plans may be subject to CEQA.

Because the primary objective of No. 2 in the tiered approach in Attachment B, *Preliminary Draft Proposal for Residential and Commercial Projects*, is to first evaluate compliance of a project with an approved Climate Action Plan/Greenhouse Gas Emission Reduction Plan, CARB should adopt the GHG emissions thresholds at the same time as guidelines for local jurisdictions to prepare this type of plan.

The protocols for GHG assessments adopted on September 25, 2008, were for emissions sources a jurisdiction has direct control over (municipal buildings, jurisdiction-owned vehicles, etc.). However, the majority of projects are not initiated by the jurisdiction, but by individual property owners. Consequently, it appears that the primary target of a Climate Action Plan would be emissions outside direct authority of the jurisdiction. Therefore, additional protocols (i.e., the Community Protocol) should be specifically tailored for a Climate Action Plan that achieves the goal of CARB's GHG emissions tiered approach. The guidelines established by CARB, at a minimum, should include methodology and approach for:

- o Sources of GHG emissions to be included in the GHG emissions inventory (electricity use, energy from water use and treatment, transportation emissions, stationary source emissions, etc.);
- o Modeling tools freely available for download on CARB's website to establish a unified approach;
- o Methodology for development of a GHG emissions inventory;
- o A minimum GHG emissions reduction goal, consistent with the goal identified in the Scoping Plan of 15 percent or more below 2020 emissions;
- o Methodology for developing implementation strategies;
- o Methodology for quantifying GHG emissions reductions; and
- o Methodology for developing a monitoring program.

The implementation strategy identified by a jurisdiction may not necessarily result in changes to existing land uses within a City, even though the Scoping Plan suggests that land use changes are the primary method of reducing VMT. If that is the case, no discretionary action may be necessary, and development and implementation of a Climate Action Plan may not be defined as a "project" under CEQA. The requirement to have a Climate Action Plan go through the CEQA process, therefore, may not be warranted for all Climate Action Plans that seek other means to effectively reduce GHG emissions.

7. CARB should consider an amortized construction emissions threshold.

In general, the severity of the impact from project-related construction emissions should be weighted much lower in terms of having the capability to significantly contribute to global climate change impacts. One reason that GHG emissions affect climate is because of the longevity of the air pollutant. Therefore, operational emissions, which accumulate year by year, should be given a much higher priority than construction emissions in a GHG emissions analysis under CEQA. The exception is projects that result in construction emissions over a substantial number of years. Consequently, CARB should consider a separate threshold for construction emissions that is amortized over the period of construction activities.

8. CARB should consider nonquantitative performance standards or per-capita performance standards for projects.

To effect change through CEQA, as is currently being asked of projects, requires outside-the-box approaches/methodologies to really evaluate whether the way we are building a project or using the land would hinder our efforts to achieve the GHG emissions targets of AB 32. In general, the distinction between a small project and large project in the context of global climate change is minute because the GHG emissions we are concerned about are anthropogenic. That is, it is people and their activities (e.g., driving, using heaters, using industrial equipment) that generate the emissions and not the land use itself. Because projects do not generate people and population growth is determined by other factors, significance thresholds need to have some built-in flexibility to evaluate how a project really affects the state's efforts to reduce GHG emissions.

Historically, the majority of air quality management districts/air pollution control districts have not considered differences in the size of the project when setting thresholds for emissions of criteria pollutants. In general, the districts consider all emissions to be new emissions. This is primarily because these emissions are confined within the air basin. Therefore, a project can result in changes in the demographics of the air basin, resulting in higher emissions within the air basin and affecting concentrations. However, the impacts of GHGs are not confined to an air basin. The "air basin" in this

context is global, so it doesn't matter if a household relocates from New York to California and generates new car trips in our state. Emissions generated are not new emissions, but an increase in emissions from the way we use our land compared to the way we ought to be using our land. Achieving the emissions reductions of AB 32 requires individuals and project proponents to change business as usual, and therefore CARB should consider establishing per-capita performance criteria.

This approach is dramatically different than the traditional threshold approach, but the global climate change requires lead agencies to evaluate more closely how a project and land uses fit in with overall GHG reduction goals. And even a small project can affect how people relate to their community. Take, for example, a small gas station: If this new gas station is not equipped to accommodate the alternative fuels of the future, then it perpetuates the use of gas/diesel, and may have higher carbon content per energy output, as opposed to a fueling station that provides cleaner fuels.

Consequently, performance standards may be better drafted based on economic output or per capita instead of as a threshold based on total emissions. In fact, the Scoping Plan specifically relates emissions on a per-capita basis. As stated in the Scoping Plan, to achieve the emissions reduction targets of AB 32, we need to reduce per capita emissions from an average of 14 tons of CO_{2e} per person to 10 tons of CO₂ per person.

9. Common land use types should be defined more clearly in the land use-based approach.

If a land use-based approach is ultimately chosen by CARB as the preferred strategy, the list of common land use types should be expanded and/or clarified in the second draft of the draft proposal. However, this point would become moot if the significance thresholds are revised to be based on a sector-based approach, as recommended.

Currently, the preliminary draft proposal only includes: (1) Industrial and (2) Residential/Commercial land use types. However, there are no definitions for what constitutes industrial, residential, or commercial land uses and no accounting for land uses that do not fit neatly into these categories. If a land use-based approach is selected, a number of clarifications would be necessary. For example:

Industrial: In general, when cities/counties designate "industrial" land uses in their general plans they permit a broad range of land use types: for instance, light industrial, warehousing/distribution, assembly, light manufacturing, research and development, storage, repair facilities, etc. However, the emission sources associated with each of these land uses can vary dramatically. It is therefore recommended that CARB's vision of what constitutes an "industrial" land use be further defined. If the broad definition of "industrial" land use does not encompass some of these land use types (e.g., warehousing, storage) and they fall under the other category (i.e., residential/commercial), then this should be identified in the second preliminary draft proposal.

Schools, Hospitals, Churches, Parks, and Other Land Use Types: It is unclear what category other land use types that are not inherently industrial, commercial, or residential in nature fall under. In general, hospitals contain many industrial-type uses (labs, a central plant, mechanical equipment rooms, etc.); however, hospitals typically fall under the "institutional" land use category along with school, churches, and parks. The second draft proposal should also clarify whether office uses (including medical offices), other nonretail types of commercial, and mixed-use land uses fall under the residential/commercial land use category.

Specific Plans with Both Industrial and Commercial/Residential Land Uses: Some large specific plans include both industrial land use types and commercial/residential land use types. Consequently, these land uses would fall under both categories and it would be unclear which tiered

approach should be followed, resulting in a potential piecemealing of approaches/significance thresholds.

CONCLUSION

The Planning Center appreciates this opportunity to comment on CARB's first *Preliminary Draft Staff Proposal, Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act*, and would like to be informed of further CARB's efforts regarding this issue.

Sincerely,

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