



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

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John B. Faust, Ph.D., Chief
Community Assessment and Research Section
Office of Environmental Health Hazard Assessment
1515 Clay St., Suite 1600
Oakland, CA 94612

Via Email to: CalEnviroScreen@oehha.ca.gov

Dear Dr. Faust:

Subject: Comments on CalEnviroScreen Version 3.0 Draft

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to provide comments on the draft of CalEnviroScreen 3.0 (CES 3.0). SCAQMD supports the Office of Environmental Health Hazard Assessment (OEHHA)'s efforts in the development of a screening tool to identify communities that are disproportionately burdened by pollution. Below are a few concerns or recommendations that SCAQMD staff believe deserve further consideration prior to finalizing CES 3.0.

1. Removal of the "Children and Elderly" Age Indicator

In the draft release of CES 3.0, age has been removed as an indicator due to concerns that the age variable as previously defined does not adequately represent the sensitive populations of children and the elderly. Clearly, children and the elderly are important sensitive population, so SCAQMD staff recommend that OEHHA explores the California Longitudinal Pupil Achievement Data System (CALPADS) to identify the sensitive population under the age of 10 who are at the same time socioeconomically vulnerable and may lack adequate resources to mitigate the health risks of environmental burdens. CALPADS collects student-level information including birth date and address, as well as English Learner identification and participation status for free or reduced price lunch, which can help to identify the more vulnerable segment of young-age population.

2. Proposed Improvements in the Methodology of Ozone Indicator

In CES 2.0, ozone levels were estimated using only the daily maximum 8-hour ozone concentrations that were above the California standard of 0.07 ppm. In the draft release, it is proposed that ozone concentrations below the state's ozone standard are to be included. SCAQMD staff support the proposed improvement. Inclusion of data below the standard is a

more appropriate approach to derive air pollution exposure estimates relevant to evaluating a wide array of health impacts.

3. Diesel PM Indicator

In reviewing the CES 3.0 diesel PM indicator for the South Coast Air Basin, we found that the spatial distribution of diesel PM is not consistent with the historical observations in SCAQMD. In CES 3.0, EMFAC 2013 and CEPAM are used to calculate on road and non-road diesel emissions, respectively. The resulting diesel PM indicator (Page 36 of the draft report) appears to be greatly impacted by non-road emissions. For example, the top 10%tile of diesel PM are mainly found in the Central LA, Long Beach, Ontario, San Bernardino areas, as well as the Los Angeles International Airport. Many census tracts in close proximity to Interstate-710 (I-710) do not register diesel PM level in the top 30%tile, despite the freeway being heavily impacted by large volume of heavy duty diesel vehicles from port-related activities. In 2012-2013, SCAQMD carried out an extensive monitoring and modeling effort to characterize air toxic risk across the South Coast Air Basin through the Multiple Air Toxics Exposure Study IV (MATES IV). While both CES 3.0 and MATES IV highlight the diesel exposure in the Central LA and Long Beach neighborhoods, high levels of diesel PM were observed along major traffic corridors such as I-710, I-5 and State Route 60 in MATES IV but such high levels are not seen in the CES 3.0 estimates. The contribution of diesel PM from on-road sources could be underestimated in CES 3.0, and further evaluation is recommended to validate the spatial distribution of diesel PM. Because diesel PM is a major contributor to air toxics risk, SCAQMD staff feel that addressing the modeling of diesel PM is an important issue.

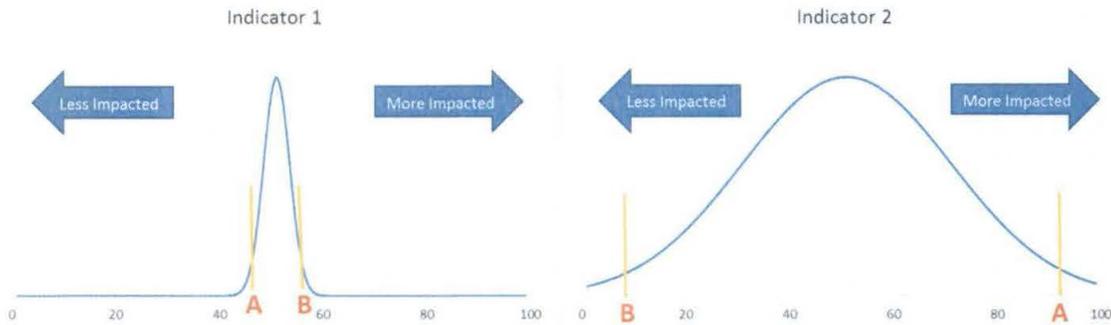
4. Toxic Release of Air

The Toxic Release Inventory (TRI) only captures facilities with ten or more employees that operate within specified industrial sectors or that use chemicals exceeding a certain threshold. More accurate data for air toxic emissions can be retrieved from other sources, such as the California Emission Inventory Development and Reporting System (CEIDARS).

5. Percentile Ranking

While the SCAQMD staff support the percentile ranking of the overall screening scores, we recommend a sensitivity analysis on the use of percentile ranking at the step of calculating scores for each individual indicator. This method reflects the ordinal ranking of census tracts, but it does not capture the cardinal distribution that can vary widely from indicator to indicator. Therefore, the method may give too much weight to an indicator with a "tall" distribution where the indicator values do not vary much from the most to the least impacted census tracts. Conversely, too little weight may be given to an indicator with a "flat" distribution that has a large dispersion of indicator values among census tracts. Take a hypothetical example (see figures below). Under indicator #1 that has a "tall" distribution, Census Tract A is ranked among the top 5% better-off tracts while its observed value is only slightly better than the median value of this indicator; whereas under indicator #2 that has a "flat" distribution, the same census tract is ranked among the bottom 5% worse-off tracts while its observed value is far worse than the median value. Census Tract B is the exact opposite: it ranks bottom 5% under indicator #1 and top 5% under indicator #2. Averaging the percentile rankings across indicators 1 and 2 would result in an average score of about 50

for both census tracts, but it can be argued that Census Tract A is in fact worse off than Census Tract B. The method used for the United Nations' Human Development Index, where each individual indicator is calculated as $(\text{Actual Value} - \text{Minimum Value}) \div (\text{Maximum Value} - \text{Minimum Value})$, may be considered for the recommended sensitivity test.



Thank you for the opportunity to provide input on the draft of CES 3.0, and for consideration of the comments and recommendations noted above. Should you have any questions or seek clarification on our submitted comments, please do not hesitate to contact me at 909-396-2239, or via email at pfine@aqmd.gov.

Sincerely,

Philip M. Fine, Ph.D.
Deputy Executive Officer
Planning, Rule Development & Area Sources

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178
Phone: 909-396-2239
Fax: 909-396-3648
e-mail: pmfine@aqmd.gov