



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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GRACE ROBINSON CHAN
Chief Engineer and General Manager

October 16, 2012
File No.: 31-380.10B

Dr. John Faust
Office of Environmental Health Hazard Assessment
1515 Clay St., Suite 1600
Oakland, California 94612

Dear Dr. Faust:

Comments on the Draft California Communities Environmental Health Screening Tool (CalEnviroScreen)

The Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate this opportunity to comment on the Draft California Communities Environmental Health Screening Tool (CalEnviroScreen). The Sanitation Districts are a consortium of 23 special districts that provide environmentally sound, cost effective management of wastewater and solid wastes for about 5.7 million people in Los Angeles County and, in the process, convert these wastes into resources such as reclaimed water, energy and recycled materials.

The Sanitation Districts are concerned that the proposed model will serve as the basis for regulation, as well as other unintended and inappropriate purposes, despite the model's lack of a rigorous scientific foundation. The governor, for example, has signed two bills in this term (AB 1532 and SB 535) that will divert cap and trade revenue to communities defined in a manner strikingly similar to CalEnviroScreen's proposal. The diversion of these monies based on a *screening tool* is hard to justify when OEHHA has the means to develop a more rigorous approach.

We are also concerned that this imprecise screening tool will actually undermine targeted risk reduction efforts. Instead of focusing on communities requiring immediate attention, the wide-spread misinterpretation of screening results will create a regulatory bottleneck as alarmed communities compete for risk abatement resources.

It's also clear that many of the problems that plagued its 2010 predecessor (Cumulative Impacts: Building a Scientific Foundation) remain unresolved. Most of these center on the model's lack of scientific rigor such as confounding variables, equal weighting of metrics regardless of actual (or any) adverse impact and the underlying

formula itself which multiplies the population/socioeconomic scores with environmental rankings. These limitations were addressed in our letter from September 23, 2010 (attached), as well as from other commenters like CCEEB. Although OEHHA has conducted numerous public workshops throughout the state, it's not clear how OEHHA will address comments from these workshops or resolve the limitations discussed earlier. For example, it is not clear if the Cumulative Impacts and Precautionary Approaches Workgroup even met once in a public forum since the release of the 2010 document to guide this latest effort. OEHHA should explain how it will address the unresolved limitations called out earlier, and how comments from the recent workshops will inform the final product.

Too many of the environmental "effects" rely on statistical analysis and lack a direct relationship to an adverse health impact. Although a stronger case exists where exposure is well documented (i.e., workplace exposures), where the exposure is inferred, it is much harder to conclusively demonstrate cause and effect in a scientifically valid way. This is particularly true for the Environmental Effect indicators. These effects and adverse health impacts are linked mainly by statistical approaches and, worse for some, upon the shaky notion that their mere presence creates stress.

It's not clear why the Environmental Effect indicators, several steps removed from real adverse health impacts, carry the same weight in the model as actual environmental exposures, like O₃ and PM_{2.5}. For example, the model may give the same environmental impact score for a solid waste landfill with no direct exposure or health impact to the community, as for a direct exposure of ozone or PM_{2.5}. We ask that OEHHA explain and detail the caveats behind the assumptions establishing the linkage between emissions, exposures and health impacts, and then re-focus its model on better metrics with direct impacts.

In developing any tool that describes community exposure and resultant health effects, OEHHA should consider real world studies that examine environmental exposures. For example, as described in Cancers in the Urban Environment, urban cancers were the subject of an exhaustive study by Dr. Thomas Mack from the USC Keck School of Medicine. That 2004 study surveyed by census tract the incidence of roughly 80 types of cancers in Los Angeles County for a 26-year period. This study uncovered very few cancer clusters despite this basin's historic struggle with urban air pollution. None of the cancers were attributable to any specific stationary source. In that publication, Dr. Mack concludes, "As of this writing, no evidence of a malignancy caused by strictly environmental carcinogen has yet been confirmed." In light of CalEnviroScreen's reliance on inferred and inconclusive connections, we urge OEHHA to tread lightly in its conclusions on its use in the regulatory arena. We strongly believe that screening tools should be supported by a rigorous validation process, including community-based monitoring.

Other real-world studies that examine environmental exposures are the MATES II and MATES III studies conducted by the South Coast Air Quality Management District (SCAQMD). Data collected by these studies clearly demonstrate considerable decreases in overall community toxics exposure, and pointed to specific and important sources of health risk that conflict with the conventional wisdom that stationary sources drive the risk. Contrary to the physical evidence, the public and press will likely view the results of the CalEnviroScreen as rigorous and legitimate metrics disregarding its uncertainties and assumptions and other, more prominent risk drivers. Worse yet, the screening tool both ignores relevant information when calculating risk while burying the contributing factors into one number that masks whether a high score is due to a high environmental burden or severe socio-economic duress. The strategies to remedy either condition are vastly different, and community leaders need a decision-making tool that illuminates legitimate concerns, not obscures them. The formula result occludes whether a stationary source is the greatest environmental burden, or if the burden is from mobile sources. Both the SCAQMD's MATES II and MATES III studies concluded mobile sources are more impactful. These exhaustive, real-world studies are examples of why a more revealing process should be developed that assigns appropriate weights to each burden.

It was clear at the recent public workshops that community activists embraced the Screening Tool's results as authoritative measures of exposures and impacts, pouring over the details to ensure that the metrics for their community or narrow interest were calculated and assigned correctly. This intense scrutiny shows the heightened level of exactitude being applied to and expected from this *screening tool*. We're not certain if OEHHA or CalEPA is prepared to manage the inflated expectations of these stakeholders. OEHHA should adopt a defensible scientific approach that is better able to withstand public scrutiny.

Finally, we feel that a campaign to inform the public on risks in their proper context will result in greater support for effective proposals that seek to reduce emissions and exposures.

We appreciate your consideration of our comments on CalEnviroScreen, and look forward to future revisions of this work should there be any. If you have any questions regarding these comments, please do not hesitate to contact me at (562) 908-4288, extension 2460.

Very truly yours,

Grace Robinson Chan

A handwritten signature in black ink that reads "Frank R. Caponi". The signature is written in a cursive style with a long, sweeping underline that extends to the left.

Frank R. Caponi
Supervising Engineer
Air Quality Engineering
Technical Services Department

GMA:FRC:PG:bb



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STEPHEN R. MAGUIN
Chief Engineer and General Manager

September 23, 2010
File No.: 31-380.10B

Ms. Joan Denton, Ph.D.
Director
Office of Environmental Health Hazard Assessment
1001 I Street
Sacramento, California 95814

Dear Director Denton:

Comments on the Public Review Draft for Cumulative Impacts: Building a Scientific Foundation

The Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate this opportunity to comment on the Public Review Draft for Cumulative Impacts: Building a Scientific Foundation (Review Draft). The Sanitation Districts are a consortium of 23 special districts that provide environmentally sound, cost effective management of wastewater and solid wastes for about 5.7 million people in Los Angeles County and, in the process, convert these wastes into resources such as reclaimed water, energy and recycled materials. We are concerned that the proposed cumulative impacts framework and screening methodology will artificially exaggerate perceived impacts from well-controlled facilities, including those operated and maintained by the Sanitation Districts.

It is our understanding that the proposed methodology would tentatively identify communities with disproportionate cumulative impacts (CI). However, we are very concerned that the conservative and imprecise nature of this screening approach will actually undermine targeted risk reduction efforts. Instead of focusing on communities requiring immediate attention, the wide-spread misinterpretation of screening results will create a regulatory bottleneck as alarmed communities compete for limited risk abatement resources. The public and press will likely view these results as rigorous and legitimate metrics disregarding the underlying highly conservative assumptions and other, more prominent risk drivers. As an example, it is a common misconception that environmental exposures are increasing, whereas data collected by the South Coast Air Quality Management District (SCAQMD) in their MATES II and MATES III studies demonstrate considerable decreases in exposure.

Because it is difficult to un-ring the bell, we believe that a defensible scientific approach should be utilized to estimate cumulative impacts rather than the proposed subjective screening methodology. We believe that such an approach will tend to expedite real risk reductions in impacted communities.

We support the comments by the California Council for Environmental and Economic Balance that call for a more rigorous and scientifically defensible approach (enclosed). Furthermore, we ask that OEHHA explain and detail the caveats behind the assumptions establishing the causal linkage between emissions, exposures and health impacts, and address the limitations of the metric as a decision-making tool.

The following summarizes our other comments on the Review Draft:

- The overall score will rank communities at risk, yet burying the contributing factors into one number masks whether a high score is due to an alarmingly high environmental burden or severe economic duress. The strategies to remedy either condition are vastly different, and community leaders need a decision-making tool that illuminates the concern, not obscures it. Moreover, the formula result occludes whether a stationary source is the greatest burden, or if the burden is from mobile sources. The conclusion of SCAQMD's MATES III study is that the latter is often more impactful. Accordingly, a more revealing metric should be utilized.
- Although the Review Draft mentions examples of adverse health impacts triggered by environmental burdens, it neglects to explain that each illustration carries with it considerable caveats diluting the conclusions. For example, demonstrations are based on statistical analysis and do not necessarily establish a causal relationship. Although the case may be stronger where exposure is well documented (workplace exposure for example), in cases where the exposure is inferred, it is much harder to conclusively demonstrate cause and effect.

As described in Cancers in the Urban Environment, urban cancers were the subject of an exhaustive study by Dr. Thomas Mack from the USC Keck School of Medicine. That 2004 study surveyed by census tract the incidence of roughly 80 types of cancers in Los Angeles County for a 26-year period. This study uncovered very few cancer clusters despite this basin's historic struggle with urban air pollution, and the vast majority of cancers were not attributable to specific sources.

In the very last sentence of that same publication, Dr. Mack also states, "As of this writing, no evidence of a malignancy caused by strictly

environmental carcinogen has yet been confirmed." In light of this inferred, and inconclusive connection, we urge OEHHA to tread lightly in its conclusions on how such screening tools could be used in the regulatory arena. We strongly believe that screening tools should be supported by a rigorous validation process, including community-based monitoring.

- Finally, we feel that an appropriate campaign to inform the public on risks in their proper context will result in greater support for effective proposals that seek to reduce emissions and exposures.

We appreciate your consideration of our comments on the Review Draft, and look forward to future revisions of this work. If you have any questions regarding these comments, please do not hesitate to contact me at (562) 908-4288, extension 2412.

Very truly yours,
Stephen R. Maguin



David L. Rothbart
Supervising Engineer
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DLR:FRC:PG:bb
Enclosure