February 1, 2013

Mr. Matthew Rodriguez
Secretary
California Environmental Protection Agency
1001 I Street
Sacramento, CA 95814

RE: Second Draft of the California Communities Environmental Health Screening Tool (CalEnviroScreen)

Dear Secretary Rodriguez:

The undersigned local and regional government representatives appreciate the opportunity to comment on the second draft of the California Communities Environmental Health Screening Tool (“CalEnviroScreen”). As we have made you aware, this process and the outcome will have significant impacts to the local communities we represent. Local government representatives must have a strong role and input into the development and use of the tool commensurate with our responsibilities to our constituents and our local authority. To that end, we appreciate your responsiveness to our requests for additional meetings with local and regional government representatives.

We recognize that this second draft was developed during the ongoing dialogue with local and regional government representatives and was therefore unable to fully reflect the concerns we raised in the meetings with Cal/EPA and OEHHA staff. However, we also recognize that the intention is to finalize this first version of the tool by March 1 and therefore there will be no additional opportunity for input. Consequently, it is improbable that the myriad technical concerns with the construction of the tool can be corrected during the current process and it is therefore critical that the guidance documents clearly specify the limited areas where it may be appropriate for CalEnviroScreen to be utilized in incentive type programs. It is equally critical that the guidance documents explain both why CalEnviroScreen is limited in its utility, and clearly state the areas where its application cannot be justified.

The attached comments provide the necessary distinctions to reflect the concerns on the limitations and use of CalEnviroScreen, without raising the technical concerns in the construction of the tool. Hopefully the attached changes will allow Cal/EPA to meet its timely mandate under SB 535 (De Leon) without creating the opportunity for misuse of CalEnviroScreen in other applications. While you certainly cannot guarantee its misuse, the language you include is critical to efforts to defend against its improper application.

Thank you for your consideration,

Lisa Bartlett, Council Member, City of Dana Point;
President
Association of California Cities – Orange County

Sam Olivito, Executive Director
California Contract Cities Association
Guidance Memorandum

CalEnviroScreen

The CalEnviroScreen presents the next step toward identifying areas in California that may be disproportionately impacted by pollution and adverse socioeconomic conditions. It is important to stress that this is a living document and tool. It is not intended as the final document or tool and Cal/EPA and OEHHA are hoping that by seeing the tool in operation, readers will be able to provide informed feedback on the overall methodology and suggest refinements for continued revisions.

CalEnviroScreen uses existing environmental, health, and socioeconomic data to create a relative score for communities across the state. An area with a high score would be expected to experience a higher proportion of environmental conditions that may negatively affect the residents and/or a lower health and socioeconomic status, as compared to areas with low scores. However, it is impossible to determine what difference between scores is significant or where differential impacts could be perceived. The score only presents a broad picture of the burdens different areas may experience from environmental pollutants multiplied by the perceived vulnerability or ability of the residents to respond to these burdens.

It is important to note the limitations of this version of CalEnviroScreen. The tool provides only a relative ranking of communities by consolidating a selected group of available datasets into a simplified summary score, rather than a traditional, science-based risk assessment. Accordingly, the tool is not intended to be and should not be used for focused risk assessment for a specific area or site, or as the basis for regulatory, permitting or land use decisions. Additionally, the results generated by CalEnviroScreen are not intended to be and should not be used for California Environmental Quality Act (CEQA) purposes.

This first version of CalEnviroScreen incorporates changes to the methodology and indicators received from various participants in public workshops held throughout the state. A few examples include:

- The public health effect component was removed. Two proposed health indicators from this group, asthma emergency department visits and rate of low birth weight infants, were incorporated into the sensitive population component;

- Indicators from the exposure and environmental effects components are now evaluated together as Pollution Burden, while population sensitivity and socioeconomic factors are evaluated together as Population Characteristics;

- A diesel particulate matter concentration indicator and a linguistic isolation indicator were added;

- The pesticide use indicator was modified by removing data that were only available at the county level;

- Solid waste facilities and hazardous waste facilities were updated to reflect changes to the tool's weighting scheme.
GUIDANCE FOR POTENTIAL Uses OF RESULTS

CalEnviroScreen does not create any new programs or regulatory requirements. Instead, the tool provides information that will enable state decision makers to focus their time, resources and programs on those portions of the state that are in greater need of assistance because they may have higher environmental burdens and greater vulnerability to, or reduced ability to withstand, these burdens as compared to other areas. For example, CalEnviroScreen will perform Cal/EPA’s implementation of the mandate to identify disadvantaged communities contained in SB 535. The bill requires Cal/EPA to identify disadvantaged communities based on geographic, socioeconomic, public health, and environmental hazard criteria. It also requires that the investment plan developed and submitted to the Legislature pursuant to AB 1532 (John A. Perez), Chapter 807, Statutes of 2012, allocate 25 percent of available proceeds from the carbon auctions under California’s Global Warming Solutions Act of 2006 to projects that will benefit disadvantaged communities, and at least 10 percent of the available moneys directly in such communities. Since CalEnviroScreen has been developed by OEHHA under the guidance of Cal/EPA to identify areas that may be disproportionately affected by pollution and those areas whose populations are socioeconomically disadvantaged, it is well suited for the purposes described by SB 535.

CalEnviroScreen will also be useful in the administration of the Agency’s Environmental Justice Small Grant Program, and may guide other grant programs as well as environmental educational and community programs throughout the state. It will also help to inform Agency boards or departments when they are budgeting scarce resources for cleanup and abatement projects. CalEnviroScreen will also help to guide boards or departments in the Agency when planning their community engagement and outreach efforts. Further, knowing which areas of the State may have higher relative environmental and socioeconomic burdens will provide Cal/EPA and its boards, departments, and office (BDOs) with additional insights on the potential implications of their activities and decisions.

It is important to note the limitations of this version of CalEnviroScreen. The tool provides only a relative ranking of communities by consolidating a selected group of available datasets into a simplified summary score, rather than a traditional, science-based risk assessment. Accordingly, the tool is not intended to be and should not be used for focused risk assessment for a specific area or site, or as the basis for regulatory, permitting or land use decisions. Additionally, the results generated by CalEnviroScreen are not intended to be and should not be used for California Environmental Quality Act (CEQA) purposes.

However, local and regional governments, including regional air districts, water districts, and planning and transit agencies, may also find uses for this tool that are similar to the uses by Cal/EPA described above, such as guiding their investment of resources and community outreach efforts. While the tool does not create any legal obligation for any government entities, Cal/EPA will be a resource to local and regional governments to discuss the appropriateness of similar discretionary uses including the possibility of identify neighborhoods that could be targeted for cleaning up blight and promoting development to bring in jobs and increase stability. As an example, the tool could assist efforts to develop planning and financial incentives to retain jobs and create new, sustainable business enterprises in disproportionately impacted communities. Of course, it will be important to work with organizations such as economic development corporations, workforce investment boards, local chambers of commerce, and others to develop strategies to help businesses in the identified areas thrive and to attract new businesses and services into the identified areas.
Finally, CalEnviroScreen provides a broad environmental and socioeconomic snapshot of a given region. While the data gathered in developing the tool could be useful for decision makers when considering existing pollution sources in an area, in order to guide investment of resources, community outreach and similar uses as described above, more precise data are often available to local governments and would be more relevant in such considerations.
In October 2004, the California Environmental Protection Agency (Cal/EPA) adopted its Environmental Justice Action Plan as part of its compliance with Public Resources Code Section 71110 which requires the Agency to, among other things, “conduc its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races cultures, and income levels, including minority populations and low-income populations of the state;” and “improve research and data collection for programs within the agency relating to the health of, and environment of, people of all races, cultures, and income levels, including minority populations and low-income populations of the state.”

For purposes of this work, “environmental justice” means “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies.”

The Environmental Justice Plan provides opportunities for Cal/EPA and its Boards, Directors, and Offices (BDOs) to take the initial steps toward addressing complex environmental justice issues, including for example socioeconomic, environmental, and health effects. In furtherance of the Plan, Cal/EPA also created a working group to evaluate potential approaches for addressing different potential regulatory approaches that may be considered in the future, such as the "precautionary principle." This working group has also worked to evaluate methodologies for cumulative impacts in health risk assessments. The Plan includes several action steps. The action step identified in Section 2.2 is to “Develop Guidance on Cumulative Impacts.” Section 3.2 explains that Section 2.2 will be carried out by the Office of Environmental Health and Hazard Assessment (OEHHA).

For this reason, Cal/EPA’s Office of Environmental Health Hazard Assessment (OEHHA) developed a tool for summarizing existing data on multiple pollutants and health and socioeconomic stressors in communities: the California Communities Environmental Health Screening Tool (CalEnviroScreen).

This tool is provides an initial framework toward developing guidance on how to address cumulative impacts in funding and assistance programs run by Cal/EPA and its BDOs, and as such helps implement at the Agency’s 2004 Environmental Justice Action Plan and helps achieve the Agency’s environmental justice goals. This tool will help the Agency comply with statutory mandates to conduct its activities in a manner that ensures the fair treatment of all Californians, including minority and low-income populations. In addition, this tool will assist Cal/EPA in complying with Senate Bill 535 (De León, Chapter 830, Statutes of 2012), which requires the Agency to

1 Public Resources Code Section 71110.
2 Government Code Section 65040.12(e)
3 The CalEPA Action Plan Pilot Project adopted a definition of “cumulative impacts“ for the purpose of the Environmental Justice Plan on February 16, 2005. It should be noted that this definition is different from, and bears no relationship or relevancy to, the definition of “cumulative impacts” under the California Environmental Quality Act (CEQA). This tool is not intended, and may not appropriately be used for, any CEQA evaluation or study.
to identify “disadvantaged communities” in California for purposes of allocating revenue to those communities from the Greenhouse Gas Reduction Fund.

CalEnviroScreen shows which zip codes of the state may have higher vulnerabilities and burdens as compared to other areas, and therefore would be considered more highly ranked in allocations of financial and programmatic assistance. In a time of limited resources, this tool will provide significant insight into how State decision makers can focus available time, resources, and programs to improve the environmental health of Californians, particularly those most burdened by socioeconomic, health, and pollution stressors. The uses of the tool at the state level are limited to incentive programs including administering environmental justice grants, prioritizing site-cleanup activities, and identifying opportunities for sustainable economic development in heavily impacted neighborhoods.

It is important to note the limitations of this version of CalEnviroScreen. The tool provides only a relative ranking of communities by consolidating a selected group of available datasets into a simplified summary score, and as such is neither a science-based risk assessment, nor site-specific cumulative impacts assessment. Accordingly, the tool is not intended to be and may not be used as a risk assessment for a specific area or site, or as the basis for any regulatory, permitting or land use decisions or studies (including but not limited to the cumulative impacts analysis required under the California Environmental Quality Act (CEQA)).

Other government entities and interested parties may identify other uses of this tool and the information it provides that are similar to the uses by Cal/EPA described above, such as guiding their discretionary investment of resources and community outreach efforts. However, the screening tool does not create any legal obligation or recommended approach for any government entity to use or apply this tool in any funding, regulatory, or planning context. In addition, the tool does not create any legal obligation or recommended approach by any agency or party to conduct additional detailed cumulative or other analysis for the staff reports written for individual rulemaking.

CalEnviroScreen uses existing environmental, health, and socioeconomic data to create a relative score for communities across the state. An area with a high score would be expected to experience a higher proportion of environmental conditions that could negatively affect the socioeconomic status or health of residents as compared to areas with low scores. However, this tool does not provide any basis for determining when differences between scores are significant in relation to public health or the environment, or whether any score accurately describes public health and environmental conditions... Solely for the purpose of distributing potential funding resources and programmatic assistance, these scores provide one metric by which a composite score of select socioeconomic, health and environmental factors in one area may compare to the same different factors in a different area. It is not a substitute for a focused risk assessment for a given community or site, and it cannot predict or quantify specific health risks or effects associated with cumulative exposures identified for a given community or individual.

Transparency and public input into government decision making and policy development are the cornerstones of environmental justice. In that spirit, the framework for the CalEnviroScreen was developed with the assistance of the Cumulative Impacts and Precautionary Approaches (CIPA) Work Group, consisting of representatives of business and non-governmental organizations, academia and government. The CIPA Work
Group reviewed the report and provided critical feedback and input that will continue to guide the development of this living document and tool. While there was not consensus among the Work Group, we appreciate the considerable time and effort that the Work Group has devoted to this project since 2008, and we look forward to continuing our productive dialogue with the Work Group and all interested parties as we look to further revise the tool.

In addition to the contribution made by the CIPA Work Group, Cal/EPA received input on a previous draft of this document at a series of regional and stakeholder-specific public workshops as well as a day-long academic workshop. (Additional information on these workshops as well as the CIPA Work Group meetings and the development of the tool are available at www.oehha.ca.gov/ej/index.html.) Input from California communities, businesses, local governments, California tribes, community-based organizations, and other stakeholders as well as academia was critical in the development of this project and is reflected in changes in the current document. Changes include reconsidering the model and how public health status is handled; adding indicators for diesel particulate matter and linguistic isolation; removing county-scale data from the analysis and sometimes replacing it with data at a more local scale.

Cal/EPA remains committed to an open and public process as future revisions to the tool are considered. To that end we additionally acknowledge that work in this field continues and refinements of the CalEnviroScreen tool will also be needed. Thus, over the next several years we plan to continually update the tool and consider improvements to the indicators used, the geographic scale, the methodology employed, and the accessibility of the tool to the public.

**Introduction**

This document describes a data-based method for identifying multiple pollution sources and other factors that may affect the health or environmental quality in a community, while accounting for a community’s perceived vulnerability to environmental exposures in tandem with other socioeconomic factors. Factors that may contribute to negative effects on a community are often referred to as "stressors". The CalEnviroScreen method can be used to provide a relative ranking of California’s communities based upon the stressors utilized in the development of the tool. This can help inform decisions at Cal/EPA’s boards and departments by prioritizing places that may most benefit from state investments such as public health, environmental, health and wellness, and economic development grants, as well as environmental and public health compliance assistance programs. This document is a follow-up to Cal/EPA’s and OEHHA’s 2010 report, Cumulative Impacts: Building a Scientific Foundation.

Purpose of the statewide analysis was conducted:

- **Statewide Evaluation**
  - To demonstrate the application of a practical methodology for ranking communities based upon multiple pollution sources and stressors that takes into
account a community’s potential vulnerability to pollution from a lower health and socioeconomic status.

- To provide a baseline assessment and methodology, which can be expanded upon, updated and improved periodically as important additional information becomes available.
- To rank communities in California according to pollution from multiple sources and those that may be most vulnerable to its effects, taking into account their socioeconomic characteristics and underlying health status.
- To provide as final output a relative, rather than absolute, ranking of the combination of the factors considered.

Community impact assessment from multiple sources and stressors is a complex problem that is difficult to approach with traditional risk assessment practices. Chemical-by-chemical, source-by-source, route-by-route risk assessment approaches are not best suited to the assessment of community-scale impacts, especially for identifying the most impacted places across all of California. Also, while traditional risk assessment may account for the heightened sensitivities of some groups, such as children and the elderly, it has not considered other community characteristics that may also affect vulnerability to pollution, such as socioeconomic factors or underlying health status.

Given the limits of traditional risk assessment, OEHHA developed a workable approach to conduct a statewide ranking of communities reflecting some of the potential stressors. The method emerges from basic risk assessment concepts but it is not a substitute for a focused risk assessment for a given community or site, and it cannot predict or quantify specific health risks or effects associated with individual or cumulative exposures identified for a given community or individual. It is an attempt to be sufficiently expansive to incorporate the multiple factors that reflect some additional community impacts that have not been included in traditional risk assessments. However, the tool only presents a broad picture of the burdens and vulnerabilities different areas may face from environmental pollutants combined with that communities socioeconomic and health status.

It is important to note the limitations of this version of CalEnviroScreen. The tool provides only a relative ranking of communities by consolidating a selected group of available datasets into a simplified summary score, rather than a traditional, science-based risk assessment or cumulative impacts analysis. Accordingly, the tool is not intended to be and should not be used for focused risk assessment or cumulative impacts analysis for a specific area or site, or as the basis for regulatory, permitting or land use decisions. Additionally, the results generated by CalEnviroScreen are not intended to be and shall not be used by any party for California Environmental Quality Act (CEQA) purposes.

This report provides an overall description of the methodological approach used in CalEnviroScreen. It also describes the criteria for the selections of scale of analysis and the selection of indicators. Specific indicators are described, data representing the indicators for the different areas of the state were obtained and analyzed and are presented here as statewide maps. All the indicators for a locale are then combined to score
communities. The report concludes by providing scores for the different areas of the state, presented in maps, as well as highlighting communities scoring in the top 5, 10 and 15 percent.