



CENTER FOR  
CREATIVE  
LAND  
RECYCLING

*Redesigning Land for  
Sustainable Communities*

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Mr. John Faust  
Office of Environmental Health Hazard Assessment  
1515 Clay Street, Suite 1600  
Oakland, CA 94612

Thank you for the continued opportunity to comment on the California Communities Environmental Health Screening Tool (CalEnviroScreen). The Center for Creative Land Recycling (CCLR) is a nonprofit organization founded on the belief that intelligent, innovative land use is the key to ensuring a healthy future for both our communities and our environment. Our mission is to enable communities to develop sustainably and equitably through land recycling – restoring underutilized, blighted sites to productive use. We applaud the efforts of Cal/EPA to direct resources to environmental justice (EJ) communities, which often bear a disproportionate share of environmental burdens, including brownfield sites on which we focus our mission. However, we are concerned that improper application of the tool may have substantial unintended negative consequences for the very communities it is intended to help. In addition, we believe there are several areas in the methods of CalEnviroScreen which should be addressed prior to its final release to ensure that it has a transparent, scientifically-defensible foundation.

**1. Clear and definitive language in the tool and accompanying memo should prohibit its application under CEQA to prevent misuse by opponents of community-supported development within EJ communities.**

While we appreciate the obvious effort that has been made to respond to concerns regarding the application of CalEnviroScreen under the California Environmental Quality Act (CEQA), the current language in the tool's preface and the accompanying guidance memo is not clear enough to prevent misuse. We strongly believe that without unequivocal statements that CalEnviroScreen cannot be used for any part of CEQA permitting or regulatory processes at the state, regional or local level, the potential exists for opponents of community-supported projects to delay or prevent creation of much-needed housing and jobs.

Specifically, we suggest that the sentence reading "Additionally, the results generated by CalEnviroScreen are not intended to be used for California Environmental Quality Act (CEQA) purposes" on page 2 of the accompanying memo be changed to read "Additionally, the results generated by CalEnviroScreen are not intended to be **and should not be** used for California Environmental Quality Act (CEQA) purposes." In addition, we suggest that this same sentence be inserted into the preface of the CalEnviroScreen in the first paragraph of page 2. Harmonizing the language between both documents is a common-sense approach

to avoid any ambiguities and to ensure that users of the tool are fully and accurately informed of the appropriate and inappropriate uses of the tool.

It is important to underscore the severity of potential impacts on high-scoring EJ communities which could arise from application of CalEnviroScreen in a CEQA context. Without clear and consistent guidance regarding proper use of the tool, the **CalEnviroScreen may have the unintended effect of driving investment away from EJ communities** by providing project opponents with a fair argument that any environmental impact within an identified EJ community – no matter how small – is “cumulatively significant,” thus pushing the project into a lengthy and expensive EIR. The additional regulatory burden would disproportionately impact those community-benefitting projects that already operate at the margins of economic feasibility, such as affordable housing and parks, creating a disincentive to invest in the very communities that could benefit the most from economic growth and development.

**2. Census tracts are more appropriate level of analysis for identifying EJ communities, and releasing the tool at the zip code level is unnecessary and may be misinterpreted.**

Nearly every public commenter has reiterated the fact that zip codes are too large of an area to properly capture the often extremely localized nature of environmental justice concerns. We are pleased that Cal/EPA has committed to releasing CalEnviroScreen at the census tract level, but believe that initially releasing the tool at the zip code level is unnecessary and potentially misleading. If census tracts are a better unit of measure (as is agreed upon by almost every stakeholder, and acknowledged by Cal/EPA in moving to provide census tract level estimates), then what purpose will zip code scoring serve? If funding decisions are made based on the zip code version of CalEnviroScreen, a serious possibility exists to miss the true EJ communities.

To illustrate this possibility, we examined zip code 94303 in San Mateo County, which covers a portion of the City of Palo Alto and the entirety of the City of East Palo Alto. While Palo Alto is known nationwide as the home of many wealthy tech companies, East Palo Alto is a low-income, minority community with active industrial sites. In our experience with Bay Area communities, East Palo Alto is the very definition of an environmental justice area. However, zip code 94303 only ranked in the top 25% of zip codes in the state in CalEnviroScreen. If the areas were to be defined by census tracts, then the same zip code would be broken up into roughly 7 census tracts. We compared the six socioeconomic and demographic indicators readily available from the Census Bureau to see how the census tracts that make up zip code 94303 vary. The results are shown on the next page.

Although both of the above-listed census tracts are fully contained within the same zip code, the average percentile for the evaluated indicators is wildly different, with the census tract in East Palo Alto almost 50 percentiles higher than the census tract in Palo Alto. This clear distinction is entirely masked when these communities are viewed at a zip code level. Although this example does not include all the indicators in CalEnviroScreen, our knowledge of the communities of East Palo Alto suggests that including environmental and health variables would only increase the disparities. If funding decisions or

any other use of CalEnviroScreen were made based on zip code rankings, then EJ communities within East Palo Alto would appear less impacted, while affluent neighborhoods within Palo Alto would erroneously appear disadvantaged.

Indicator	CT 6120 (East Palo Alto)		CT 5111 (Palo Alto)		Zip Code 94303	
	Score	Percentile	Score	Percentile	Score	Percentile
Age	23.8	38.4	32.4	93.3	26.2	57.5
Education	39.5	84.4	0.4	0.8	21.2	69.2
Language	22.9	85.5	3.2	25.9	14.7	81.8
Poverty	54.5	81.5	7.3	5.0	34.4	54.5
Race	96.8	93.1	26.2	15.9	75.3	81.2
<b>Average</b>		<b>76.58</b>		<b>28.3</b>		<b>68.8</b>

As illustrated by this and other examples we found during our analysis, we strongly recommend that CalEnviroScreen not be released at the zip code level. Instead, release of the final indicator should wait until data is available at the census tract level.

**3. The process for scoring cleanup sites does not accurately capture the environmental burden and creates an unnecessary perception of risk.**

Because CCLR’s expertise is brownfield redevelopment, we are particularly concerned with a number of issues in the current methodology of the Cleanup Sites indicator. Combined, these issues lead to a score that is an inaccurate measure of the environmental burden of contaminated land.

The most significant concern is the lack of justification for the weighting given to cleanup sites. Why is an increase in 2 points appropriate as a site moves to a higher status category, while an increase in 3 is justified for sites moving to a higher site type category? Why is a range of 2 to 12 appropriate – is the risk or burden of the lowest category actually 1/6 that of the highest? Without any explanation for these values, the numbers appear to have been arbitrarily chosen. A clear, science-based explanation for the rankings should be provided.

Another important concern is that sites which are categorized as “certified” “completed” or “no further action” are given a score at all. If a brownfield has been cleaned up and issued a “no further action” decision by the regulatory agency, then this indicates that there is no risk from contamination to future users of the site. In addition, our experience has shown that many sites in EnviroStor, when eventually evaluated, are found to have no contamination. For both these types of sites, any weighting at all would seem inappropriate. Under the current weighting, state response sites which have been cleaned to the highest residential standards are weighted only one point more than corrective action sites which are known to be contaminated but are on backlog. The weighting of sites which have been cleaned up presents an inaccurate picture of the true environmental risk.

A significant challenge for communities dealing with environmental cleanup lies in understanding the concepts of risk management and answering the question “How clean is clean?” Retaining weightings for cleaned up or closed sites will simply add to community fears that sites which have been certified as safe are actually dangerous threats to their health.

We strongly suggest that sites which have been cleaned up to unrestricted or residential standards and those which were found to require no cleanup be completely removed and given no weight. Furthermore, we believe that the somewhat overly simplistic format of the weighting table, which only considers two variables (several of which are not even defined), is inappropriate and a more refined approach is needed.

#### **4. The methodology of the tool is often unclear and still needs substantial refinement.**

It is clear that many of the excellent comments made regarding methodology at the academic and community meetings have been incorporated into this draft, and we hope that Cal/EPA will continue to improve the methodology to create a tool that is defensible and ultimately provides resources to our disadvantaged communities. Below are questions and recommendations on many of the indicators which we strongly believe need to be addressed before the tool can be utilized.

##### *Considering the Size of the Zip Code in Indicator Scores*

Five indicators add the sum of all the hazards within their boundaries: Cleanup Sites, Toxic Releases, Groundwater Threats, Solid and Hazardous Waste Facilities, and Impaired Water Bodies. Because zip codes (and census tracts) vary widely in area, this means that larger zip codes may be over-represented in these indicators than smaller ones with potentially higher levels of pollution burden. We suggest instead measuring the density of these indicators by dividing the raw score by the area of the zip code, or, in the case of Impaired Water Bodies, the percentage of the zip code which is covered by water. This will ensure that the pollution burden in smaller and more arid zip codes is accurately measured.

##### *Multiplicative Model Format*

We support the comments made by the academic community and at the January CIPA workgroup meeting that the multiplicative model is not appropriate for this tool. In earlier drafts of the document, the scale chosen for the Population Characteristics components was supported by the 2010 “Building a Scientific Foundation” document: “The range of 1 to 3 for socioeconomic factors and sensitive populations scores was based on scientific evidence suggesting that several-fold differences in response to environmental pollutants exist for certain populations based on either socioeconomic factors or biological traits.” This does not support the current model’s a ten-fold increase in pollution burden based on population characteristics. We instead support the suggestion for categorizing communities as high, medium, or low level for the Pollution Burden and Population Characteristics categories with a simple matrix, resulting in nine separate categories. For instance, a community might be “high Pollution Burden, medium Population Characteristics” or “low Pollution Burden, low Population Characteristics.” The results are simpler to understand than a number, present a clearer picture of the factors driving a community’s score, and avoid many of the technical problems with the current method.

### *PM2.5 Concentrations*

Why was 50 km chosen as the distance from an air monitor over which the readings were no longer accurate? There should be a scientific reason supporting this distance rather than a larger or smaller one.

### *Diesel Particulate Matter*

The port and railyard diesel isopleths are not available online. We understand that the goal of the tool was to use only publicly-available data.

In the methods section, it is stated that “some isopleths from the HRAs were updated to reflect current diesel PM emissions”? Why not all? Which ones, and by what criteria? More detail is necessary, and could accompany the above data release.

### *Traffic Density*

When attempting to replicate this indicator, it appeared that the online Traffic Volume Linkage Tool only allows a buffer around a single point. What methodology was used to input boundaries of a zip code using this tool?

### *Cleanup Sites*

The methodology says that Superfund sites were assigned a score of 12. But many Superfund sites have a different status on EnviroStor, such as Certified O&M. These should be weighted lower, according to the weighting table, but the current explanation of the methodology makes it appear that they are not. This needs to be clarified or corrected.

In the weighting table for cleanup sites, there isn't a definition for “Completed” or “Backlog.” In addition, the EnviroStor database includes several types and statuses of sites which are not addressed, so it is unclear if these sites are included when calculating this indicator. These include the site types of Historical, Military Evaluation, and Tiered Permit and the status of “De-listed.” More explanation is needed to understand how sites were weighted.

### *Groundwater Threats*

Much like the Cleanup Sites indicator, the weighting table for Groundwater Threats has no clear explanation, and as a result appears somewhat arbitrary. It also lacks explanations for what each of the categories signifies. More explanation should be provided to clarify the rankings produced by this indicator.

### *Solid and Hazardous Waste Facilities*

It is unclear whether these sites were geocoded as points or as parcels/polygons? This would impact how the buffer zones are drawn, and as some waste facilities are very large, it may make more sense if their full area was included.

*Age: Children and Elderly*

We found that at the zip code level, the percentage of people over 65 was significantly negatively correlated with poverty levels – for every 1% increase in the elderly population, the percentage of the population in poverty goes down by 0.48%. While there is support for inclusion of the elderly in the sensitive population more susceptible to pollution, there is a concern of highlighting more affluent retirement communities. A good illustration is the table shown above of Palo Alto and East Palo Alto – for both analyzed census tracts, the outlying indicator percentile was age, and this was primarily driven by the elderly population, not that of children. Removing the percentage of the population above 65 from the tool makes this indicator “line up” with what other indicators suggest may be the affected EJ communities, and prevents washing out of the data. We suggest doing sensitivity testing to see the effects of including only children under this indicator, and would like to see a discussion of these results.

*Poverty*

Because housing prices and other cost-of-living expenses vary widely across California, we believe that the poverty indicator should be adjusted for these differences. The fact that it is not may explain why some extremely poor Bay Area communities score relatively low on the poverty measure – high cost of living in the Bay leads to higher burdens which are not reflected in the current scoring. One option would be to incorporate the data from the very well-done “Housing + Transportation Affordability Index” (<http://htaindex.cnt.org>), which calculates the cost of housing and transportation for an average family down to the census tract level. This could be added to the poverty indicator or included separately.

We appreciate the extent of Cal/EPA’s stakeholder engagement efforts regarding the CalEnviroScreen, and thank you for the opportunity to remain involved with the development of the tool. The changes made to CalEnviroScreen in response to comments received on the first draft clearly illustrate Cal/EPA’s willingness to listen to stakeholders, and we hope that continued dialogue will ensure that CalEnviroScreen is a scientifically sound and practical tool for improving conditions within our state’s most disadvantaged communities.

Sincerely,



Stephanie Shakofsky  
Executive Director