CENTER FOR
CREATIVE
LAND
RECYCLING

Redesigning Land for Sustainable Communities

October 16, 2012

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Thank you for the opportunity to comment on the Draft California Communities Environmental Health Screening Tool. The Center for Creative Land Recycling (CCLR) is a nonprofit organization that promotes infill development, redevelopment, and smart growth policies. We applaud the efforts of Cal/EPA to direct resources to environmental justice communities, which often bear a disproportionate share of environmental burdens, including brownfield sites on which we focus our mission. *However, we are concerned that the CalEnviroScreen tool in its current form may have substantial unintended negative consequences for the communities it is intended to help,* driving away opportunities for new economic development, affordable housing, and jobs. In addition, the methods of the tool need significant clarification and explanation to ensure transparency and to allow the information to be used by the widest possible audience. Specific comments and recommendations follow.

1. **Applying the tool in CEQA project reviews will drive economic development away from the places that most need it.**

We remain very concerned about the confusing direction Cal/EPA has been providing regarding the applicability of the screening tool in project reviews under CEQA. The July 30, 2012 Memorandum states on page 2 that the tool "cannot be used as a substitute for an analysis of the cumulative impact of any specific project for which an environmental review is required by CEQA." However, very same memo states on page 4 that the tool "could be used by decision makers carrying out their existing obligations under the California Environmental Quality Act," including "identifying cumulative impacts requiring environmental review," and "formulating appropriate alternatives and mitigation measures."

First, as noted in the July 30, 2012 memo, the definition of "cumulative impact" contained in CEQA is substantially different than the definition adopted by Cal/EPA. In particular, the Cal/EPA definition states that cumulative impacts "will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available." The incorporation of socio-economic factors makes the screening tool's concept of cumulative impacts wholly incompatible with the CEQA review process, which by law does not allow for the directly assessment of a project's social or economic impacts.

Second, any application of the screening tool in a CEQA analysis of cumulative impacts would most certainly disproportionately impact economic development efforts in those environmental justice communities with relatively high cumulative impact scores. In the context of a CEQA review, *any* impact by a project in a high scoring community may be interpreted as "significant," thus triggering unnecessary additional delay and expense that would be especially burdensome on those projects already operating at the margins of economic feasibility, such as affordable housing. The result will be effectively redlining communities and creating a disincentive to invest in the very communities that could benefit from such economic growth.

Affordable housing projects would face even more challenges should the tool be used to determine mitigation measures under CEQA, as your July 30, 2012 memo suggests. If applied in a CEQA review, a project that negatively impacts the community's cumulative impact score – or any component score for that matter – may be seen as creating an impact in need of mitigation. For affordable housing projects, this would create the perverse challenge of having to mitigate for the exact service that they are providing.

Recommendation: Add language to the Screening Tool document stating unequivocally that the tool is not to be used or relied on in any way for project reviews under the California Environmental Quality Act.

2. The current methodology needs substantial explanation and improvement.

The draft methodology does not provide any explanation or justification for why certain indicators were chosen instead of others, why the formula for calculating the final cumulative impact score was chosen, or how these choices will influence the final score of any given zip code.

In addition, the current method for calculating the final cumulative impact score results in implicit weighting that considers some indicators as more important than others. Any weighting should be clearly stated and supported by logical, scientific reasoning, and none is provided for the current draft. Even the multiplicative method used to calculate the final score is not justified. Especially if the tool will be available to a wide variety of groups working in environmental health, economic development, and community redevelopment, there is no reason to weight particular categories more highly than others. Improving availability of data is an important use of the tool, but if that data is lost in layers of scaling, weighting, and calculations, then it becomes more and more difficult to apply to a variety of situations.

Recommendation: Provide full explanation, scientific justification, and sensitivity analysis for all decisions regarding indicator choice and weighting.

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Comments on Individual Indicators

In addition to these general comments, we would like to submit the following comments on the individual indicators used in the tool.

Geographic Scale

For some indicators, not all zip codes were assigned a value. For instance, zip codes which were more than 50 km away from an air monitor did not have an estimate for ozone or PM 2.5 concentrations. For these zip codes, how was the missing value dealt with in the calculation of the component score? This information does not appear in the document.

The fact that census zip code tabulation areas (ZCTAs) do not align exactly with actual zip codes is a concern, especially given the changes in zip code areas that constantly happen. While using the geographic ZCTA entity is fine, any data reported by either zip or ZCTA prior to 2010 would not necessarily align to the 2010 ZCTAs. For these data, 2000 ZCTAs should be used.

The exclusion of rural areas which have low populations and therefore no ZCTA suggests that Cal/EPA believes that areas with few or no people cannot be environmental justice communities or are of less concern than more densely populated regions. If this is not the case, then scores for these areas should be calculated as well. If this is the case, then some measurement of an area's population should be considered in rating the areas to maintain logical consistency of the tool.

Using a smaller geographic scale, such as census blocks, would be preferable for more finely-scaled analysis. In the draft tool, the county-level data is applied to all zip codes within the county for multiple indicators (including pesticide use, which does not claim it will be updated like cancer and heart disease). Data not available at a smaller level could take the level for the entire larger area and still be consistent with current methods. Finer-scale analysis would avoid many of the problems of zip codes of varying area and population which are discussed below.

Ozone Concentrations and PM 2.5 Concentrations

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

There are even fewer PM 2.5 monitors than ozone monitors. What is the degree of confidence regarding calculated levels of air pollutants with current numbers of air monitors?

Air patterns obviously affect pollutant dispersal, yet the tool estimates that pollutant levels reduce linearly from each monitor. Why are more realistic assumptions not included in the model?

For determining traffic density, the "center" of the zip code was weighted for population. Why isn't that done in these sections as well? Wouldn't it make sense to be more concerned about the emissions where the most people are?

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Pesticide Use

Clearly, some pesticides are more toxic than others. Other indicators, such as toxic releases, weight the pollutants by hazard instead of just volume. Why does the data for pesticide use not do this?

Although pesticide use is in the "Exposures" category, no attempt is made to quantify varying ranges of exposure to pesticides used in different situations – for instance, agricultural users are likely much more highly exposed to agricultural pesticides than is the average person exposed to termite spraying in their home. Could such estimates of exposures be included, thus showing where exposures to pesticides are actually the highest? The current method may highlight some areas which have high use but low exposures, shifting focus from those which are truly the most affected.

Toxic Releases from Facilities

Because many zip codes are larger or smaller than others, simply adding all the releases within a given zip code makes no sense. This makes large zip codes have unrealistically high estimates, while smaller zip codes will have unrealistically low estimates. Instead, our suggestion is to identify a certain radius around each facility, and add all emissions whose buffer areas are within the zip code area. Then, the total number could be divided by the area of the zip code to obtain the average releases exposure within the zip code.

What percentile is assigned to zip codes which have a facility but no releases? Is it greater than 0? The methods section is unclear.

For determining the radius around facilities from which releases should be counted, air and water releases would likely have very different distribution of their effects. As a result, it makes sense to count releases to air further from a facility than releases to water.

As with ozone and PM 2.5, it makes sense to model the distribution of pollutants according to air and water movement patterns. A community downwind or downriver from many facilities will have a much higher exposure burden than is shown in the current methods. Better modeling would produce more accurate results.

Traffic Density

Why was the 2.5 km radius chosen? No explanation is given for this. The chosen radius should be based on scientific reasoning and not simply arbitrary.

Asthma

The methods state that any reported zip codes that do not align with ZCTAs were excluded from the analysis. Was this done for any other indicators? If not, why in this one? It is difficult to understand whether zips or ZCTAs are being used for other indicators due to the practice of referring to ZCTAs as zip codes, which they are not. *(This same comment also applies to Low Birth Weight)*

Using asthma emergency room visits rather than incidence of asthma weights the indicator towards areas where people cannot afford or do not have preventative care to control asthma. While this is a

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perfectly reasonable choice to make for a tool to identify EJ communities, this difference is not acknowledged, and the rationale behind its choice is not discussed. More explanation here is needed to help users of the tool understand what it measures and make the development of the tool more transparent. *(This same comment applies to Cancer and Heart Disease Rates)*

Cancer and Heart Disease Rates

To adjust for age, why not use California data, which might differ substantially from US data?

Cleanup Sites

EnviroStor only contains sites which have already been cleaned or are in the process of being cleaned. As a result, it is weighted towards not only places with many sites, but also towards places with a strong effort to identify and cleanup sites. This means that EJ communities whose brownfields have been largely ignored will be underrepresented by this indicator.

No justification is given for the weighting tables in Appendix A2. Why was the range of 2 to 12 chosen? How were individual weights chosen? Without a clearly stated scientific justification for these choices, the rankings appear arbitrary. This is a serious transparency problem. *(This same comment also applies to Leaking Underground Storage Tanks and Cleanup and Solid Waste Sites and Facilities and Hazardous Waste Facilities)*

Because all weighted sites in each zip code are summed, there is no control for the fact that some zip codes are larger than others. As a result, the scores will under-represent the contaminated sites within small zip codes and over-represent the contaminated sites within large zip codes. Values for this indicator should be scaled by either dividing the total number of sites in the zip code by the zip code's area, or by dividing the total area of cleanup sites by the zip code's area. *(This same comment applies to Leaking Underground Storage Tanks and Cleanup and Solid Waste Sites and Facilities and Hazardous Waste Facilities)*

Some of the weightings in the table in Appendix A2 are confusing. Using the provided definitions, "No Further Action" sites are those which were investigated and found to have no contamination. Why then are these sites given any weight at all?

Assigning any weight to "Certified" and "Certified Operation and Maintenance" sites implies that these sites present a hazard to communities. A serious challenge for groups dealing with environmental cleanup is explaining the concepts of risk management and answering the question "how clean is clean?" This table, by lumping sites into broad categories with no explanation, will simply add to local community fears that "Certified O&M" sites are actually dangerous threats to their health. This will undermine the legitimacy of regulatory agencies who try to explain to the public that sites with contamination but no exposures are not a threat to health.

Impaired Water Bodies

Simply adding up the number of impairments in all water bodies is not a valid indicator for contamination of water bodies, as it does not account for the fact that many zip codes may have no

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water bodies within their borders. As a result, they will receive a 0 or low percentile score on this indicator, even if they are the most polluted zip codes in the state. The indicator should be scaled by dividing by the number of water bodies within the zip code so as not to under-represent arid zip codes.

Sensitive Populations

While we understand the reasoning behind treating these two groups as one for the purpose of scoring each county (children are typically inversely related to the elderly), it seems inconsistent with the rest of the tool. Why not do the same for the other categories and score any zip code as high if it comes out with a high score for any one indicator within a component? There are surely good defenses for choosing either method, but they are not adequately articulated here.

The weighting table in Appendix A5 is uneven – the presence of elderly gives a region a higher score than the presence of children. We refer specifically to the fact that a zip code with 33-66% children and 66-85% elderly receives a score of 3, while a zip code with 66-85% children and 33-66% elderly only receives a score of 2. Is this intentional? Is it a typo?

Income

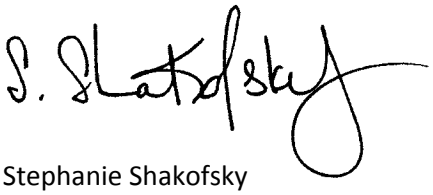
This should really be adjusted for cost-of-living. In particular, we notice that the Bay Area has much higher incomes than the rest of the state. While the Bay as a whole is fairly wealthy, the high cost of living means that the reported high incomes in the area are not so high in real terms. Including cost of living, or at the least cost of housing in the statistic will more accurately reflect the challenges facing individuals in urban communities.

Other

When the final tool is released, will the GIS layers for each indicator be available online, or will the data tables used in the analysis be available? Releasing more information would make the tool more useful, and would support verification of the tool's methods and ground-truthing of the data.

Once again, we appreciate the opportunity to comment on the draft tool. It is our hope that with further clarification as to the uses of the tool, additional transparency and development of the methodology, and an appropriate focus for added investment, the tool will avoid unintended consequences and improve conditions in environmental justice communities. We appreciate the opportunity to remain involved in the development of the tool, and look forward to the next opportunity to provide further comments.

Sincerely,



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