



October 16, 2012

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

Re: Comments on CalEnviroScreen

Dear Dr. Faust:

As a member of the CalEPA CIPA Workgroup, I submit the following comments on the current draft of the OEHHA environmental justice screening model, CalEnviroScreen, on behalf of Environmental Health Coalition. I appreciate the opportunity to comment on the development of the model.

Environmental Health Coalition is (EHC) is a 32-year-old nonprofit organization. EHC builds grassroots campaigns to confront the unjust consequences of toxic pollution, discriminatory land use, and unsustainable energy policies. Through leader development, organizing and advocacy, EHC improves the health of children, families, neighborhoods, and the natural environment in the San Diego/Tijuana region.

For much of its 32 years, EHC has called for government planning and regulatory agencies to recognize the cumulative burdens of environmental pollution and socioeconomic vulnerability that impact our communities disproportionately. We have long recognized that San Diego's low income communities of color have dense concentrations of industrial and mobile pollution sources, together with lead-based paint in older housing, toxic pollutants in San Diego bay sediments, workplace toxic exposure, unequal access to health care, and the stresses of poverty and racism. The health burdens created by multiple and possibly synergistic health threats are not acknowledged or accounted for in traditional chemical-by-chemical and facility-by-facility regulatory processes.

As additional background, EHC was represented on the CalEPA Environmental Justice Advisory Committee, which made the recommendation that CalEPA move forward with development of a cumulative impacts model and implementation of precautionary approaches.

For these reasons we applaud CalEPA for moving ahead with development of a cumulative impacts model. We appreciate the hard work that OEHHA staff have done to develop the draft

CalEnviroScreen; we also appreciate your openness to feedback on the model. Following are specific comments on the cumulative impacts model.

1. At the earliest possible date, CalEPA should move to policy implementation to reduce the inequitable health burdens in the most impacted communities.
2. As you have heard from environmental justice advocates across the state, the Environmental Justice Screening Method is the preferred screening tool of environmental justice advocates and community organizations, including Environmental Health Coalition. The EJSM is ready to go, has had several years of development and testing in many communities, has been developed with input from communities, and has already been applied throughout the state. The EJSM was also developed with funding from a CalEPA agency, the Air Resources Board. Adoption of the EJSM as the CalEPA screening tool would save time and money, and allow policy implementation to begin sooner.
3. As specific suggestions and recommendations for CalEnviroScreen, we offer the following points, again with appreciation for the many opportunities for the public and the workgroup to comment.

Scale

Census tracts. As was stated by commenters at the CIPA workgroup meeting and at many of the regional workshops, the most appropriate unit of analysis for cumulative impacts is census tracts, not zipcodes. Even in urban areas, zipcodes are large areas and can include large variations in the environmental and demographic characteristics of the communities within them. Small, highly impacted communities within large zipcodes may be missed if zipcodes are used as the unit of analysis.

Scalability. For maximum usefulness for communities and local governments, the ranking should be scalable, so that it can be applied at statewide, regional, citywide, or smaller scales.

Environmental hazard indicators

Proximity. We recommend following the EJSM proximity hazards assessment, using a distance-weighted approach and air pollution sources and hazardous land use data sources including CHAPIS, AB2588 Hot Spots emitters, chrome platers, DTSC identified remediation sites, and hazardous land uses as defined by ARB in their *Air Quality and Community Land Use Handbook*.

Pesticides. Include pesticides. Pesticides are key environmental contaminants in many environmental justice communities in California. The current draft of CalEnviroScreen uses total

pounds of pesticide use as a metric for potential exposure to pesticides; this seems appropriate given that it is a screening model.

Toxic air contaminants. Include NATA cancer risk and non-cancer health risk values. The NATA data provide estimates of health risk from toxic air contaminants, estimates that are useful as supplements to the exposure indicators that are currently used in CalEnviroScreen. The NATA non-cancer risk estimates are particularly useful, as they include the health risk from diesel exhaust – a toxic exposure that is not otherwise accounted for in the current model.

Diesel particulate matter. It is important to include a measure of diesel particulate matter exposure for two reasons: (1) Diesel PM is the air pollutant of greatest concern in communities with heavy port, rail, and truck traffic, and has been identified by ARB as the cause of about 70% of cancer risk from ambient air in California; and (2) Diesel PM may have a hot spot distribution effect. According to the US EPA's *Health Assessment Document for Diesel Engine Exhaust*, "Nationwide, data in 1998 indicated that DE as measured by DPM made up about 6% of the total ambient PM2.5 inventory (i.e., particles with aerodynamic diameter of 2.5 micrometers or less) and about 23% of the inventory, if natural and miscellaneous sources of PM2.5 are excluded. Estimates of the DPM percentage of the total inventory in urban centers are higher. For example, estimates range from 10% to 36% in some urban areas in California, Colorado, and Arizona." (p.1-2). This set of figures suggests that levels of diesel may be high in communities that overall do not have markedly high PM2.5 levels, and that the PM2.5 indicator alone is insufficient to screen for communities with high health hazards from ambient air pollution. Estimates of diesel PM concentrations at the census tract level are available from ARB.

Social Vulnerability Indicators

Linguistic isolation. Linguistic isolation is a key facet of socioeconomic vulnerability in many EJ communities throughout the state; as many commenters have noted, linguistic isolation reduces the ability to respond to emergencies in a timely fashion. Linguistic isolation is linked to health in many other ways, such as limiting access to health care, limiting comprehension of worker health and safety information, and limiting participation in health surveys. Additionally, analysis done by the EJSR researchers found that linguistic isolation was independently linked to both proximity to a TRI facility and to cancer risk from air toxics. (Pastor, Morello-Frosch, and Sadd, *Final Report*, table 2.5. Available at <http://www.arb.ca.gov/research/apr/past/04-308.pdf>)

Health Indicators

Life expectancy. Consider adding life expectancy as a health indicator. Use incidence rates rather than mortality for disease statistics. Sensitivity analysis is needed on health indicators to determine the degree of variability they add to the model.

Process

1. Community validation of data. EJSM researchers worked with environmental justice communities through all the phases of model development, and worked with community organizations again to ground truth the model in several communities. We recommend Cal-EnviroScreen create more significant opportunities to engage environmental justice communities in methodology development, testing and use.

Thank you for the opportunity to comment on CalEnviroScreen. It has been a pleasure to work on the CIPA Stakeholder Advisory Committee, and I am optimistic that the final model will work well as a tool to screen for communities with disproportionate environmental burdens and health disparities.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joy Williams".

Joy Williams
Research Director
