



September 23, 2010

Ms. Jocelyn Suero
Office of Environmental Health Hazard Assessment
1515 Clay St., Suite 1600
Oakland, CA 94612

Via email to jsuero@oehha.ca.gov

Re: Comments on Draft Report: “Cumulative Impacts: Building a Scientific Foundation” and CI Model

Dear Ms. Suero:

Environmental Health Coalition (EHC) is a 30-year-old, nonprofit environmental justice 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. I am the Research Director and a member of the Cumulative Impacts/Precautionary Approaches Work Group, and made email comments on the Draft Report to the workgroup during the September 2 workgroup meeting. I appreciate the opportunity to submit additional comments, which are as follows.

Overall Comments

As an overarching comment, the cumulative impacts model (“the model”) is very promising. It is potentially applicable to a wide range of circumstances in which environmental hazards and vulnerabilities occur in California. It includes the definitions of Environmental Justice and Cumulative Impacts developed by the Environmental Justice Working Group of CalEPA. It reflects current scientific knowledge about the interactions of environmental and socioeconomic factors in health, and the multiplicative nature of the effects. The five broad categories of risk factors -- exposures, environmental effects, public health effects, sensitive populations, and socioeconomic factors -- encompass the key dimensions of environmental justice. The initial list of potential indicators is appropriate; we are pleased to note that a broad range of socioeconomic factors is included. A few possible additions to the indicators are suggested below.

Indicators

The potential indicators listed in Table 2 of the draft report include important and appropriate exposure indicators. The list would be strengthened by also including a measure of proximity to large emission sources such as those listed in the ARB Land Use Guidance document; this is important because proximity to large sources entails potential exposure to accidental releases and emissions that may not be measured or modeled otherwise. Another key exposure metric is ambient concentration of diesel particulate matter, as estimated by ARB or USEPA; given that approximately 70% of cancer risk from ambient air is attributable to diesel, according to ARB, a measure of diesel exposure should be included. Regarding criteria pollutant exposure, ozone may be problematic for analysis of cumulative impacts at a community scale, since it is a secondary pollutant that does not have a “hot spot” type of spatial distribution. Toxic air contaminant exposures must include pesticides that are used in California agriculture.

Regarding public health effects, at a minimum, a reproductive health outcome such as preterm birth or low birth weight, and a measure of respiratory health such as asthma hospitalization are essential.

Implementation

As protocols are developed for use of the model, it will be important to include a ground-truthing component to ensure that exposures and sensitive populations have been accurately identified.

Finally, the relationship of the OEHHA model to the other California-funded cumulative impacts model needs to be clarified. The Environmental Justice Screening Model (EJSM), developed by researchers Manuel Pastor, James Sadd, and Rachel Morello-Frosch, and funded by the California Air Resources Board, is much further along in development and testing. Currently, data and maps for the Los Angeles, San Francisco Bay area, and San Diego County areas have been compiled and will be ground-truthed in our communities in the coming months. Similar data and maps for the San Joaquin Valley are in progress. At this point, the EJSM represents the state of the art, and the continued development of the OEHHA model requires consideration about the most appropriate use of each model. The EJSM, for example, provides high-resolution analysis that is particularly useful at a regional or community scale, whereas the OEHHA model may be more feasible for state level analyses.

Thank you for the opportunity to comment on the developing OEHHA cumulative impacts model, as well as the opportunity to serve on the workgroup.

Sincerely,

Joy Williams