

Comments on the

**Proposed Screening Method for Low-Income
Communities Highly Impacted by Air Pollution for
AB 32 Assessments**

The following is a compilation of written public comments made to CARB on the “Proposed Screening Method for Low-Income Communities Highly Impacted by Air Pollution for AB 32 Assessments”. Comments received as of May 28, 2010.

For the proposed screening method, please see –

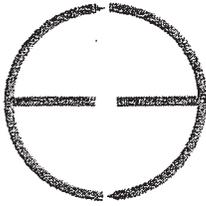
<http://www.arb.ca.gov/cc/ab32publichealth/ab32publichealth.htm>

Comment 1

Name Gerald Secundy
Affiliation California Council for Environmental and Economic Balance
CCEEB President
Email
Subject ARB Community Screening and Use of Results in Implementing AB32

See the original comment letter on the next page.

Attachment: Yes
Original File Name:
Submission Date/Time: Thursday, April 22, 2010



California Council for Environmental and Economic Balance

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415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

April 22, 2010

Lynn Terry, Deputy Executive Officer
Linda Murchison, Division Chief, Planning and Technical Support
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: ARB Community Screening and Use of Results in Implementing AB 32

Dear Lynn and Linda,

The California Council for Environmental and Economic Balance (CCEEB) is a coalition of business, labor and public leaders, which strives to advance collaborative strategies for a strong economy and healthy environment. On behalf of CCEEB, we wish to share our concerns with the Air Resources Board (ARB) Community Screening Method and pose questions about how this work pertains to AB 32. We thank you very much for this opportunity to share our views.

Weighting and Combining Factors is Subjective – Warrants Public Input

CCEEB has concerns with any approach that attempts to weight and combine air exposure data with socio-economic factors because the causal links between such factors are uncertain and largely unknown. Weighting involves significant assumptions on relative risk that can mask embedded political and policy questions under the guise of quantitative analysis. Weighting and combining can also lead decision makers to a false sense of security since ranked results often mask ambiguities in the underlying data and projections. Unless assumptions and policy decisions are made absolutely transparent and open for comment, the tool and its results may be used inappropriately and lead to flawed decisions.

Because weighting involves subjective decisions on key policy priorities, we strongly believe the method should be publicly vetted before any results are released. For example, work at U.S. EPA on a similar tool, the EJSEAT, has included numerous opportunities for stakeholder comments on the proposed method; and results have not been released yet given continued stakeholder and expert criticism.

Overall Process for Developing the Method

CCEEB understands that ARB staff will release a white paper describing the proposed method. Again, we strongly urge the ARB to release the white paper prior to releasing any results.

In the paper, we ask that the ARB include descriptions of:

1. Criteria for selecting inputs.
2. Methodologies employed for each GIS layer.
3. Weighting/scoring determination for each input or layer.
4. The process by which the ARB will publicly review and validate the screening method.

In addition to the white paper, CCEEB asks that the ARB make available individual GIS layers and any background materials related to the underlying assumptions and to provide adequate time for stakeholder review and comments before finalizing the method.

If the screening tool will be used beyond AB 32 and the ARB climate change program, then we encourage the ARB to hold public workshops specifically on the tool and to again clarify how the tool will be applied to policies and programs.

What is the purpose of the tool and how will results be used?

CCEEB believes that the design of any science-based analytic tool must be firmly tied to the policy question(s) that the tool is meant to address. Further, we understand that results of the community screening are meant to address:

H. & S.C. § 38570 (b)(1), which states that prior to inclusion of any market-based compliance mechanism, the ARB must, "... (c) consider the potential for direct, indirect, and cumulative emission impacts from these mechanisms, including *localized impacts in communities that are already impacted by air pollution.*"

-and-

ARB Resolution 08-47, which directs the Executive Officer, "... to identify *communities already adversely impacted by air pollution* as specified in Health and Safety Code section 38570 (b)(1) before the adoption of a cap-and-trade program," and, "... to develop a methodology using available information to assess the potential cumulative air pollution impacts of proposed regulations to implement the Scoping Plan."

If the listed communities are not the ones that will be assessed for air impacts and associated health impacts, then we respectfully ask the ARB for clarification as to why these communities are being identified and for what policy purposes. This understanding is fundamental for forming substantive comments on the methodology. We encourage ARB staff to include clarification as part of any white paper describing the screening method.

Different Sub-Populations in AB 32, for Different Policy Purposes

AB 32 provides special considerations for at least three different sub-populations of Californians, which should neither be confused nor combined. Depending on which sub-population or community is the focus of analysis, the method for identifying these communities will change. Further, the policy implications will be fundamentally different:

- 1) Low-income communities: activities undertaken to comply with AB32 regulations must not disproportionately impact low-income communities
- 2) Communities adversely impacted by air pollution: consider the potential for localized air impacts in communities that are already adversely impacted by air pollution, prior to including market-based compliance mechanisms
- 3) Disadvantaged communities: ensure AB 32 regulations, incentives, etc. "where appropriate and to the extent feasible, direct public and private investment toward the most disadvantaged communities in California..."

AB 32 requires any market-based compliance mechanism to be designed to prevent any increase in the emissions of toxic air contaminant or criteria pollutants. Additionally, as mentioned above, for communities *adversely impacted by air pollution*, the potential for localized impacts must be considered in cap-and-trade rulemaking. CCEEB believes that a community already adversely impacted by air pollution is one in which individuals are exposed to much higher levels of toxic and criteria emissions than the overall population average. We further support the requirement that potential for localized impacts due to cap and trade rulemaking be considered. Lessons learned from EPA's Acid Rain Program were:

1. Emission reductions typically happened at the largest sources due to economies of scale.
2. Greatest emission reductions occurred in the high-emitting states where cost per ton reductions was lowest.

Second, activities to comply with AB 32 regulations must not disproportionately impact *low-income communities* (§ 38562 (b)(2)). Not all adversely air impacted communities are low-income, just as not all low-income communities are adversely impacted by air pollution. For example, low-income communities can be located in desert, valley, or mountain regions where there may not be significant localized air impacts. Yet when compared to urban coastal communities, a number of these rural and semi-rural communities may have significantly higher AB 32 compliance costs due to higher heating and cooling loads based on their climatic locations as well as higher transportation costs due to longer commutes. As such, in analyses, these two communities--low income and adversely impacted communities--cannot be identified and scoped in the same way, and for policy purposes, should not be combined or confused.

Third, where applicable and to the extent feasible, the ARB must direct public and private investment toward the *most disadvantaged communities* in California (§ 38565). However, AB 32 fails to define "disadvantaged" – for example, disadvantage could relate to low-income communities, communities with high unemployment rates or large numbers of workers displaced from carbon-intensive industries, those most impacted by the effects of climate change, or those most burdened by compliance costs. In this

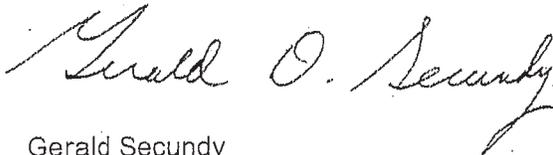
sense, the meaning of "disadvantaged" could depend on which element of the Scoping Plan is being considered at the time.

ARB should not treat "adversely impacted by air pollution" and "disadvantaged" communities as interchangeable. This could constrain investment opportunities to an inappropriately small universe of communities. Furthermore, investment choices must always be subordinate to the goal of maximizing total greenhouse gas reductions in the most cost-effectiveness manner. For this reason, comparison of different investment strategies should include estimates of potential negative or positive effects on total GHG reductions.

In terms of co-benefits more generally, AB 32 discusses "total benefits to California," "overall societal benefits," "total potential economic and noneconomic benefits," and "environmental and economic co-benefits for California". CCEEB believes this language suggests that any analysis aimed at maximizing co-benefits should be on a statewide or programmatic basis, that benefits should apply to all Californians, and that both economic and environmental co-benefits be jointly considered.

We sincerely thank you for the opportunity to comment, and look forward to providing additional comments once the white paper is released.

Sincerely,

A handwritten signature in cursive script that reads "Gerald O. Secundy". The signature is written in dark ink and is positioned above the typed name and title.

Gerald Secundy
CCEEB President

cc: James Goldstene, Executive Officer, ARB
Linda Rudolph, Chair, PHWG

Comment 2

Name Joan Greenwood
Affiliation Wrigley Area Neighborhood Alliance, Inc.
Vice President and Environmental Chair
Email jvg@targheeinc.com
Subject Identification of Low Income Neighborhoods

The neighborhoods along the I-710 corridor in Long Beach, especially those that are also directly adjacent to the I-405. I am the environmental chair for our neighborhood groups and currently working as an environmental consultant at CSC Targhee, Inc.

Attachment:

Original File Name:

Submission Date/Time: Wednesday, April 21, 2010 6:50 PM

Comment 3

Name Brigette Tollstrup
Affiliation Sacramento Metropolitan Air Quality Management District
Division Manager
Email BTOLLSTRUP@airquality.org
Subject Low Income communities impacted by air pollution

Could you tell me what was done to examine this for the Sacramento area?

Attachment:

Original File Name:

Submission Date/Time: Thursday, April 22, 2010 9:40 AM

Comment 4

Name Muriel Strand, P.E.
Affiliation www.sustainablecalpers.blogspot.com
www.sustainablesacramento.blogspot.com
Email auntym@earthlink.net
Subject multimedia environmental justice?

pondering the notice about "Proposed screening method to identify low-income communities which are highly impacted by air pollution." pursuant to AB32
i am wondering where in the process the EJ aspects of the various pollutants & media are integrated?

Attachment:

Original File Name:

Submission Date/Time: Friday, April 23, 2010 2:02 PM

Comment 5

Name Aleecia Macias
Affiliation California Energy Commission, Fuels & Transportation Division
Emerging Fuels & Technologies Office, Implementation Unit
Email amacias@energy.state.ca.us
Subject Release of ARB's proposed community screening method for AB32

Per our phone conversation, I'm sending an email with my question on the white paper that was release on April 21. As I mentioned, we are using the results of EJSM to determine if any of the projects we are proposing to fund (under the Alternative and Renewable Fuel and Vehicle Technology Program) are located in a highly impacted EJ area.

I noticed in the white paper that the Sacramento region is not included in the analysis. Can you tell me why? Your expedited response is appreciated.

Attachment:

Original File Name:

Submission Date/Time: Thursday, April 29, 2010 11:37 AM

Comment 6

Name James Hendry
Affiliation San Francisco Public Utilities Commission

Address
Email JHendry@sfwater.org

Subject Screening Assessment for Low Income communiites for purpose of AB32

I am curious at to why so few communities in the Bay Area AQMD made this list. While there are a large number of communities for the other air districts, for the Bay Area, it shows only three communities (Emeryville, West Oakland, Iron Triangle-Richmond.) This list is also unclear since the accompanying map of the Bay Area in Appendix B.4 shows a significant portion of both San Francisco and Oakland were included in the "Low-Income Areas Highly Impacted by Air Pollution for Consideration in AB 32 Cumulative Impact Assessments [for the] Bay Area AQMD. One of our main concerns has been areas such as Bayview/Hunters Point in San Francisco which have both a disproportionate public health impact and are close to major sources such as the Potrero power plant and major highways.

Any additional information you could provide would be appreciated.

Attachment:

Original File Name:

Submission Date/Time: Monday, May10, 2010 4:29 PM

Comment 7

Name Bruce Katayama
Affiliation Sacramento Metropolitan Air Pollution Control District
Email BKATAYAMA@airquality.org
Subject Proposed Screening Method for Low-Income Communities Highly Impacted by Air Pollution for AB32 Assessments

Attached is a letter containing Sacramento Metropolitan Air Quality Management District staff comments on ARB's "Proposed Screening Method for Low-Income Communities Highly Impacted by Air Pollution for AB32 Assessments." We will also be sending you a hard copy of the letter as well. Thank you.

Attachment: Yes
Original File Name: EJScreen_AB32_SMAQMDcomments.pdf
Submission Date/Time: Friday, May 14, 2010 12:26 PM

May 14, 2010

Charanya Varadarajan
Planning and Technical Support Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812-2815

Subject: Proposed Screening Method for Low-Income Communities Highly Impacted
by Air Pollution for AB 32 Assessments

Dear Charanya Varadarajan:

We appreciate the opportunity to comment on the "Proposed Screening Method for Low-Income Communities Highly Impacted by Air Pollution for AB 32 Assessments," dated April 21, 2010. The Sacramento Metropolitan Air Quality Management District staff noted that the proposed screening methodology evaluates multiple health risk and exposure indicators which include ozone, PM2.5, cancer and non-cancer risks from air toxics. However, the methodology only selects the highest (worst) ranked health risk and exposure indicator for each census tract, which is then averaged with the socio-economic rank for that census tract. No Sacramento communities are identified as highly impacted by air pollution using this methodology. Should the methodology instead consider the cumulative impacts from ozone, PM2.5, carcinogens, and non-cancer air toxics? Would any Sacramento communities be included if it were to weigh the effects of multiple pollutants?

If you have any questions regarding these comments, please contact me at (916) 874-4802 or Ms. Brigitte Tollstrup, Manager of the Program Coordination Division at (916) 874-4832. Thank you.

Sincerely,



Larry Greene
Executive Director/Air Pollution Control Officer

cc: Brigitte Tollstrup, SMAQMD
Charles Anderson, SMAQMD
Shelby Livingston, CARB
Scott King, CARB

Comment 8

Name Joy Williams
Affiliation Environmental Health Coalition
Research Director
Email Joy@environmentalhealth.org
Subject Comment letter on EJ Screening method

Environmental Health Coalition has comments on the ARB EJ Screening Method, which are contained in the attached letter. Thank you for the opportunity to comment.

Attachment: Yes
Original File Name: Comments on ARB EJ Screening method.doc
Submission Date/Time: Wednesday, May 19, 2010 11:51 AM

Environmental Health Coalition

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ehc@environmentalhealth.org ♦ www.environmentalhealth.org

May 19, 2010

Charanya Varadarajan
California Air Resources Board

Via email to cvaradar@arb.ca.gov

Re: Comments on ARB EJ Screening method

Dear Dr. Varadarajan:

Environmental Health Coalition is a 30-year-old, nonprofit, environmental justice organization that works in the San Diego-Tijuana region. We work on the inter-related issues of land use, air quality, and health in San Diego's low-income communities of color, and in Tijuana colonias that are downwind of maquiladora industrial parks. EHC was one of the stakeholder organizations that participated in development of ARB's Community Land Use Guidelines, and we have also been a participant in CalEPA's Cumulative Impacts/Precautionary Approaches workgroup. We applaud ARB for your efforts to develop cumulative impacts methodology and a screening method for identification of environmental justice communities. In particular, ARB's choice of the research team of Manuel Pastor, James Sadd, and Rachel Morello-Frosch indicates commitment to development of a robust model. At this point, their model should be considered the starting point for ARB for identification of EJ communities. In contrast, the EJ screening model developed by ARB staff is overly simplified, relies too heavily on ozone, and lacks a ground-truthing component. Our more detailed comments on the ARB model are as follows.

1. It is inappropriate to use ozone in an EJ screening model. Ozone is a region-wide pollutant with gradients trending uphill rather than discrete hot spots. In San Diego, ozone levels tend to be higher near the top of the inversion layer, and lower in the urban communities that have higher levels of industrial and mobile source pollutants. Reliance on ozone as a key indicator of disproportionate air quality impacts will produce a list of communities at or near 1,500 feet in elevation and will miss those with high levels of diesel, benzene, chromium, formaldehyde, traffic density, or other hot spot-type pollutants. It is thus not very useful for identification of communities with disproportionate air quality impacts.
2. Furthermore, in San Diego there are only 9 air monitoring stations that measure ozone, for a county of 4,261 square miles. Nine monitors do not provide enough

data points to accurately interpolate levels of ozone at the community level. The ARB method puts too much weight on a metric that lacks fine resolution at a community scale.

3. In contrast, the EJ Screening Method developed by Pastor, Sadd, and Morello-Frosch relies on a much wider set of data to identify communities with disproportionate air quality impacts. Their method factors in not only the numbers of emission sources in proximity to sensitive land uses, but also the presence in the community of major emission sources such as freeways, ports, refineries, and airports. It thus incorporates the environmental justice dimension of incompatible land use, as well as air quality and health hazard indicators. Given that ARB's Community Land Use Guidance recommends separation of sensitive receptors from exactly these types of emission sources, proximity to these sources should be included in any ARB EJ screening model.
4. ARB's method needs to include more social vulnerability indicators. Research done by the Pastor-Sadd-Frosch research team has found numerous factors that independently predict degree of risk for cancer or respiratory hazards from air pollutants, in addition to poverty status -- ethnicity, percent homeownership, population density, percent immigrants, and land use also have statistical links to health hazard and are appropriate supplemental metrics for identification of environmental justice communities.
5. The ARB method uses EPA's NATA cancer risk estimates, but does not use NATA diesel concentration estimates. Given ARB's conclusion that approximately 70% of the cancer risk from air pollution is due to diesel, this seems to be an odd omission, one that will fail to identify communities such as San Diego's Barrio Logan that have exceptionally high levels of diesel and moderate levels of other carcinogens.
6. ARB is also relying, to some extent, on diesel levels as modeled in its site-specific health risk assessments of major ports of California. However, site-specific port studies have been done for only 3 ports -- Los Angeles, Long Beach, and Oakland. No site-specific port diesel estimates have been done for San Diego or other California ports.
7. ARB's method of generalizing from census tracts to EJ communities does not work well in the San Diego region. San Diego does have at least 6 census tracts with NATA cancer risks greater than 100/million, 25 census tracts with NATA respiratory risk scores in the top 20% of California census tracts (i.e, greater than 13.5), and many census tracts with greater than 64% of the population below 200% of the poverty level. However, these tracts may not comprise 50% of the land area of a zip code, and no San Diego area communities are scored in the top 20% statewide for this reason.

8. We believe that San Diego's portside communities are in the top 20% statewide, and that the ARB method is flawed in failing to identify them. Areas of Escondido, Vista, El Cajon, and San Marcos may also rank highly in a statewide scheme. At the same time, ARB should consider a model that ranks communities on regional scales rather than statewide. Because many land use and siting decisions are made within regions rather than between regions, identification of EJ communities within regions is also necessary in order to protect communities from further disproportionate siting decisions.

9. Finally, ARB's method does not include communities as partners and does not include a ground-truthing mechanism that ensures that all significant emission sources have been identified and that distances to receptors are accurately accounted for in the model.

Thank you for the opportunity to comment on this matter.

Sincerely,

Joy Williams
Research Director

Cc: Ron Roberts
EJAC