BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

March 6, 2013

Mary D. Nichols, Chair
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Re: Development of an Investment Plan for the Auction Proceeds from the Cap-and-Trade Program

Dear Ms. Nichols:

I am writing to provide input on behalf of the Bay Area Air Quality Management District (District) in the development of the investment plan for use of proceeds from the auction of allowances under the ARB's Cap-and-Trade Regulation. The investment plan will identify the priority programs for investment of proceeds to support achievement of the State's greenhouse gas (GHG) emission reduction goals. The framework for the development of the investment plan has been established in AB 1532 (Pérez) and SB 535 (De León). The Department of Finance, in consulation with the ARB and other state agencies, will develop and submit the plan to the Legislature, and funding will subsequently be appropriated through the annual Budget Act consistent with the plan.

We have the following comments for your consideration:

(1) The Governor's proposed Fiscal Year 2013-14 budget identified the transporation sector as his top priority for the investment of auction proceeds. We agree with this position because transportation is the single greatest contributor to GHG emissions in the State, and substantial investments are needed in transportation projects involving mass transit, electrification of vehicles (and the associated infrastructure), and sustainable communities. Implementing these projects will also result in significant co-benefits in terms of reducing emissions and health risks from other types of air pollutants. In the transportation sector, investments in new technologies should focus on electric vehicles (EV) and EV infrastructure. Programs to buy-down the cost of EVs and EV charging infrastructure should be given a high priority, particularly in communities highly impacted by vehicle emissions.

(2) The distribution of funding in the most impacted communities must consider the number of vulnerable individuals that live in these communities.

The State's draft Concept Paper indicates that the new CalEnviroScreen tool developed by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) is to be used to meet the investment directives of SB 535 in terms of disadvantaged communities. As was pointed out in our recent comment letter to OEHHA on CalEnviroScreen (copy enclosed), Population Characteristics in the tool are based entirely on the rate of occurrence (i.e., the percent) of various indicators of vulnerability within an area, without consideration given to the number of vulnerable individuals that reside in the area. This approach would be less problematic if the tool scored areas based on census tracts, which have similar population totals, rather than zip codes, which have population totals that may vary substantially. OEHHA has indicated that future updates to CalEnviroScreen may use a census tract approach to identify impacted communities, but until this occurs additional demographic information will need to be applied to the CalEnviroScreen results to distribute available funding in an equitable manner to benefit the greatest number of vulnerable residents.

(3) The State should make use of the District's existing grant program resources to fund projects using auction proceeds that are allocated to the Bay Area.

District grant programs have provided in excess of $345 million over the last six years via competitive grant processes to private and public entities to reduce emissions of air pollutants (including GHGs) from mobile sources in the Bay Area. Successful projects include the repower, retrofit and replacement of heavy duty diesel engines (trucks, off-road equipment, marine vessels and locomotives, etc.), and bicycle, alternative fuels, advanced technology, and shuttle and ridesharing projects.

The District has operated grant programs for over 14 years during its administration of the Carl Moyer Program, and more recently the California Goods Movement Bond Program (I-Bond) and various AB 118 programs. Among the requirements of these programs are the AB 1390 mandate to expend at least 50 percent of Carl Moyer Program funding in disadvantaged communities, and a 2009 District Board of Directors' mandate to expend at least 25 percent of I-Bond funding in disadvantaged communities. The District has successfully exceeded these requirements in every year since their establishment, with annual expenditures of available funding in impacted communities exceeding 60 percent. The clearest example of the District's ability to target and administer this funding to immediate benefit in disadvantaged communities has been in the West Oakland Community, an area identified in a joint health risk assessment between our agencies as having cancer health risk attributable to air pollution of up to three times higher than the Bay Area average. Independent studies performed by UC Berkeley have demonstrated that emissions from drayage trucks serving the Port of Oakland (a main driver of air pollution-related health risk in the West Oakland Community) have been reduced by over 50 percent as a direct result of District grant funding and regulatory enforcement efforts.

In addition to these State programs, the District has also successfully administered numerous federal (e.g., Diesel Emission Reductions Act) and local grant programs which have reduced air pollutant emissions for over a decade. Included in the local grant programs are two that specifically targeted GHG emission reductions across a broad range of project types as follows.

(a) In 2007, the Air District's Board of Directors appropriated $3 million for Climate Protection Grants to Bay Area local governments and nonprofits for implementation of innovative projects to reduce GHG emissions. Over 50 separate projects were funded covering a wide variety of projects including developing local climate action plans, integration of climate considerations into general plans, educational programs on climate change, and support for solar and renewable energy programs (e.g., Berkeley Financing Initiative for Renewable and Solar Technology, and Marin County's Community Choice Aggregation).

(b) In 2007, the Attorney General of California (AG) entered into a Settlement Agreement with ConocoPhillips Company (Conoco) to resolve a dispute regarding the environmental impact of GHG emissions from the Clean Fuels Expansion Project at Conoco's refinery in Rodeo, California. On November 24, 2008, the AG and the District entered into a Memorandum of Understanding (MOU) delineating the District's authority to administer a GHG emission reduction grant program using funds from the Settlement Agreement. Under the terms of the MOU, the District conducted a successful grant program for GHG emission reductions that resulted in the allocation of $4 million for 55 separate energy efficiency and renewable energy projects in the cities of Rodeo, Hercules, Crockett, and Pinole.

The District believes that our extensive grant program experience uniquely positions our agency to administer Cap-and-Trade auction proceeds in a proven and accountable manner that achieves rapid, quantifiable, cost-effective and verified reductions of GHGs and other air pollutants, especially in disadvantaged communities.

(4) Provide funding to assist the implementation of local climate action plans

Over 30 Bay Area jurisdictions have adopted local climate action plans to reduce GHG emissions in their communities. These plans will support the region's sustainable communities strategy and will improve local air quality. Financial support from auction proceeds could greatly facilitate implementation of these plans.

(5) Support energy efficiency measures

Approximately one-fourth of the State's GHG emissions are from building energy use. While stringent energy efficiency standards for new buildings are important, it is also important to reduce energy use in existing buildings (e.g., two thirds of all buildings that will exist in 2050 have already been built). Auction proceeds should target

investments in technologies, policies, and programs that increase the energy efficiency, and use of renewable energy, in the statewide stock of existing buildings (e.g., residential insulation and other energy efficiency rebates).

(6) Consider adopting incentive program to reduce marine vessel speeds

Marine vessel fuel consumption and GHG emissions can be significantly reduced by reducing ship speeds. The Ports of Long Beach and Los Angeles have implemented successful programs that reward shipping operators with incentives for voluntarily reducing ship speeds when approaching the ports. A statewide program of this type could be funded with auction proceeds.

Thank you for your consideration of these comments. If you have any questions regarding this letter, or would like to discuss, please contact Brian Bateman, Health & Science Officer (415-749-4653, bbateman@baaqmd.gov).

With regards,

Jack P. Broadbent
Executive Officer/APCO

Enclosure: Jan. 23, 2013 BAAQMD Comment Letter on CalEnviroScreen

Copy of OEHHA letter (enclosure)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

January 23, 2013

Dr. John Faust
Chief, Community Assessment & Research Section
Office of Environmental Health Hazard Assessment
1515 Clay Street, Suite 1600
Oakland, CA 94612

Re: Second Public Review Draft of California Communities Environmental Health Screening Tool (CalEnviroScreen) and Draft Guidance

Dear Dr. Faust:

I am writing to provide comments on the Second Public Review Draft of CalEnviroScreen, and the draft guidance for potential uses of this tool, which were released for public review by Cal/EPA and OEHHA on January 3, 2013. These comments supplement the input provided by Dr. Phil Martien of my staff at the January 11, 2013 CIPA Work Group meeting. Cal/EPA and OEHHA have indicated that the first version of CalEnviroScreen will be released for use on March 1, 2013.

First, we would like to commend OEHHA in their development of this new screening tool. The development of a statewide screening methodology that considers pollution burden as well as indicators of vulnerability is particularly significant. CalEnviroScreen can serve as a valuable tool for agencies -- for example, for identifying areas within California that should be evaluated with more refined analyses of health risks.

As you may know, in 2004 our Air District initiated the Community Air Risk Evaluation (CARE) Program in the Bay Area (http://www.baaqmd.gov/Divisions/Planning-and-Research/CARE-Program.aspx). The CARE Program uses detailed regional modeling and monitoring data to establish spatial concentrations of air pollutants, which are then combined with demographic data to identify impacted communities (i.e., areas with higher pollutant exposures and higher densities of sensitive populations). Information derived from the CARE Program is used to focus emission reduction measures, including the distribution of Carl Moyer grant funding. The CARE Program's technical analysis is updated and improved on an ongoing basis.

CalEnviroScreen is being developed as a screening methodology to provide a broad picture of the burdens and vulnerabilities different areas face from environmental pollutants based on data that are available on a statewide basis. As such, indicators used in CalEnviroScreen have been selected in consideration of the availability and quality of such data at the necessary geographic scale statewide. As OEHHA has indicated, more precise data

are often available to local governments, and the use of these data may generate more refined results for these areas. We believe that this is the case with our CARE Program results (e.g., where fine particulate matter and toxic air contaminant exposures are estimated based on modeled air concentrations using detailed local emissions inventory data).

Our specific comments on the current draft version of CalEnviroScreen and the policy memorandum follow:

(1) Our primary concern with CalEnviroScreen is the methodology's lack of consideration of aggregate population health risks that result from environmental exposures. Population Characteristics in the tool are based entirely on the rate of various indicators within an area, without consideration given to the number of individuals present in the area (except that some low incidences or small counts have been excluded).
   a. While health risks to individuals and smaller communities should certainly not be neglected, the number of individuals in an exposed population ultimately factors into the likelihood of adverse health outcomes. The lack of consideration of aggregate population risk may be appropriate for some screening uses, but not others. For example, in our CARE Program analyses, we consider the number of sensitive individuals per unit area exposed to air pollutants in identifying disproportionally impacted communities for the allocation of Carl Moyer grant funding. Cal/EPA and OEHHA have indicated that CalEnviroScreen will inform Cal/EPA's implementation of the mandate to identify disadvantaged communities under SB 535, which in turn will affect the allocation of available funds from SB 32 carbon auctions. Depending on the manner in which this is ultimately done, use of the current CalEnviroScreen methodology could inappropriately bias the allocation of funds towards lower population areas.
   b. One way to address this issue in the methodology might be to determine scores using census tracts (or tract subunits), the areas of which are based on roughly equal population numbers. We understand that future versions of CalEnviroScreen may incorporate this approach.

(2) OEHHA may want to consider crowding (in dwellings) as an additional Socioeconomic Factor indicator. California has by far the highest rate of severely crowded households (defined as more than 1.5 persons per room) of any state (http://www.census.gov/hhes/www/housing/census/historic/crowding.html). Although it has been difficult to establish direct causal links between crowding and health effects due to a variety of confounding

factors, studies have shown that crowding is stressful for children as well as adults (see, for example: *Definitions of Crowding and the Effects of Crowding on Health*, Gray Matter Research Ltd., prepared for the Ministry of Social Policy, New Zealand, 2001), thereby potentially increasing vulnerabilities to cardiovascular problems and other stress-related pathologies. Data on crowding are available from the U.S. Census Bureau at the census tract level.

(3) The methodology for the exposure indicator "Toxic Releases from Facilities" could be improved.
   a. Emissions into the air from facilities would seem to be a much more important factor in exposures and health risks than emissions into waterways, and yet both are weighted equally.
   b. TRI emissions data are only available for certain types of facilities and are self-reported and not subject to agency review. Air district emissions inventory data (reported to CARB) would be a better indicator.
   c. Air concentration data from the 2005 NATA would also seem to be a more robust indicator than TRI emissions data.
   d. The CalEnviroScreen methodology ranks areas based on the total quantity of TRI hazard-weighted emissions occurring within census zip codes. This approach seems to differ from what is used for the other five exposure indicators, which focus on the concentration or density of the indicator within an area. For example, in the methodology for the Pesticide Use indicator, total pounds of selected pesticide active ingredients used in a census zip code are appropriately divided by the zip code's area. This should also be done for the "Toxic Releases from Facilities" indicator.

(4) All of the Pollution Burden and Population Characteristics indicators used in CalEnviroScreen are given equal weight in determining a final score, except for the four Environmental Effects indicators, which are weighted at one half the others. The reason for this is not discussed, but presumably it is related to a lack of a scientific basis to do otherwise. We believe that this topic should be addressed in more detail in the final methodology document, perhaps in the section on uncertainties.
   a. In terms of air pollutant exposures, we believe that adequate scientific evidence does exist to conclude that current exposures to fine particulate matter present much greater health risks than do current exposures to ozone. That being said, we note that the use of additional indicators in CalEnviroScreen for diesel PM concentrations and traffic density addresses this issue in an indirect manner.

Thank you for your consideration of these comments. If you have any questions regarding this letter, or would like to discuss, please contact Brian Bateman, Health & Science Officer (415-749-4653, bbateman@baaqmd.gov).

With regards,

Jack P. Broadbent
Executive Officer/APCO