



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

**Draft Bay Area 2010  
Clean Air Plan**

**Public Review  
Written Comments & District  
Responses**

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RESPONSE TO WRITTEN COMMENTS SUBMITTED ON THE DRAFT BAY AREA 2010 CLEAN AIR PLAN

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<b>Letter #</b>	<b>Date</b>	<b>Contact</b>	<b>Affiliation</b>
1	4/26/2010		Ditching Dirty Diesel Collaborative
2	4/26/2010	Hilda Lafebre	Peninsula Corridor Joint Powers Board
3	4/26/2010	Hilda Lafebre	San Mateo County Transit District
4	4/26/2010	Hilda Lafebre	San Mateo County Transportation Authority
5	4/30/2010	Roy Molseed	Santa Clara Valley Transportation Authority
6	4/30/2010	Bill Quinn	California Council for Environmental and Economic Balance
7	4/7/2010	Greg Karras	Communities for a Better Environment
8	4/30/2010	John Berge	Pacific Merchant Shipping Association
9	4/30/2010	Kirk Marckwald	California Railroad Industry
10	4/26/2010	Patricia Weisselberg	Families for Clean Air
11	4/26/2010	Jenny Bard/ Andy Katz	Bay Area Clean Air Task Force
12	4/17/2010	Elizabeth Rotter	Belgrave House
13	4/26/2010	Amy S. Cohen	Bay Area Environmental Health Collaborative
14	4/22/2010	RK Bose	
15	4/14/2010	Tom Kelly	KyotoUSA
16	4/23/2010	Madeline Hovland	
17	4/21/2010	Mary McAllister	
18	4/23/2010	Adam Montgomery/Michon A. Coleman	San Mateo County Association of Realtors
19	4/26/2010	Greg Karras	Communities for a Better Environment
20	4/8/2010	Michael J. Vukelich	Michael J. Vukelich and Associates

Comment Letter #: 00  
Master Responses to Comments

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Response to Comments:

**MR-1 All Clean Air Plan (CAP) control measure descriptions should provide a clear implementation timeline, well-defined implementation actions, and measureable outcomes.**

The Bay Area 2010 Clean Air Plan (CAP) provides a comprehensive strategy to reduce emissions and concentrations of air pollutants, and to protect public health. The control measure descriptions in CAP Volume II provide a summary of each proposed measure, including key implementation actions, estimated emission reductions, and implementation costs. The CAP is a planning document. While summary descriptions of each control measure are provided, the details of control measure implementation will be determined after the CAP is adopted by the Bay Area Air Quality Management District (Air District, or BAAQMD) Board of Directors. Air District staff will work with interested parties in determining how best to implement the control measures, and measure their outcomes. Factors that may impact how control measures are implemented include the level of resources available to the Air District and its partners, opportunities for collaboration with other stakeholders, future regulatory actions by the Air Resources Board or other entities, etc. Control measures that will be implemented by adopting or amending regulations will be developed through the Air District's existing rule-development process.

**MR-2 Reducing exposure to toxic air contaminants (TACS), such as diesel particulate matter, must be at the forefront of land-use planning to improve air quality, especially in impacted communities.**

Air District staff agrees that it is important to link land-use planning and air quality planning to reduce public exposure to fine PM and toxic air contaminants. This is a key goal of the CAP. The CAP includes multiple control measures to reduce emissions of, and population exposure to, these pollutants related to the goods movement sector and heavy-duty diesel engines, including:

- MSM A-3: Green Fleets,
- MSM B-1: Fleet Modernization for Medium- and Heavy-Duty On-Road Vehicles,
- MSM B-3: Efficient Drive Trains,
- MSM C-1: Construction and Farming Equipment, and
- TCM B-4: Goods Movement Improvements and Emission Reduction Strategies.

The CAP also identifies a new category of control measures, entitled *Land Use and Local Impact Measures* (LUMs). The key purpose of the LUMs is to address the connection between land use, transportation, air quality, and public health. The LUMs, as described in Volume II of the CAP, include the following:

- LUM 1: Goods Movement
- LUM 2: Indirect Source Review
- LUM 3: Updated CEQA Guidelines and Enhanced CEQA Review
- LUM 4: Land Use Guidance
- LUM 5: Reduce Health Risk in Impacted Communities, and
- LUM 6 Enhanced Air Quality Monitoring.

As discussed in LUM 4, the Air District is committed to working with local jurisdictions to develop and implement Community Risk Reduction Plans (CRRPs) pursuant to the District's recently-updated guidelines for analyzing the air quality impacts of projects subject to CEQA. CRRPs will serve as comprehensive multi-year plans prepared by local cities or counties, in cooperation with the BAAQMD, to reduce population exposure to toxic air pollutants.

Since impacted communities currently experience higher emissions and populations exposure, on average, these areas should see the greatest reductions in emissions and exposure from implementation of the CAP control measures.

It should be emphasized that the Air District has no direct authority over land-use planning decisions; this authority rests with city and county governments. Therefore, as described in the control measures, the Air District's role in land-use planning decisions is limited to providing guidance and technical assistance, commenting on projects and general plans through the CEQA process, and recommending mitigation measures and best practices.

**MR-3 Implementation of the CAP should be based on a comprehensive and well-defined public participation process that ensures participation by representatives of impacted communities.**

Air District staff has performed extensive outreach on the 2010 CAP (see CAP Appendix B for a list of CAP workshops), and considered the input and suggestions provided by interested parties. Staff has summarized oral and written comments received throughout the CAP development process; this information is available on the CAP webpage.

Air District staff is committed to working with interested stakeholders, including community groups in impacted communities, as the District moves forward to implement the CAP and specific control measures defined in the CAP. Staff will encourage input from interested parties through the District's rule development process, the CARE Task Force, and other means of outreach and communication.

**MR-4 Mature trees play an important role in sequestering carbon emissions. But large trees are threatened by policies to remove non-native species of trees and/or restore grassland in lieu of trees. The BAAQMD should oppose removal of existing trees, whether native or non-native.**

Trees, including large, mature trees, do help to sequester CO<sub>2</sub>. However, although Energy and Climate Measure (ECM) 4 recognizes that tree-planting should be part of a comprehensive urban forestry program, the focus of this measure is on planting shade trees in urban areas to help offset “urban heat island” effects. The Air District does not play a direct role in tree-planting or maintenance. The Air District recognizes that local governments, park districts, and other entities base their decisions about tree-planting, maintenance, and removal and replacement on a wide range of factors, in addition to air quality and climate.



April 26, 2010

Mr. David Burch  
 Principal Planner, BAAQMD  
 939 Ellis Street  
 San Francisco, CA 94109

Re: 2010 Clean Air Plan

Dear Mr. Burch,

We are writing to urge you to take leadership in reducing diesel pollution and other air toxins that pose significant local health risks in the San Francisco Bay Area through the 2010 Clean Air Plan. The Ditching Dirty Diesel (DDD) Collaborative is a coalition of over twenty grassroots organizations, environmental and health non-profit groups, labor unions, and agencies that advocates to reduce diesel pollution in low-income communities of color in the San Francisco Bay Area. Our members include residents from neighborhoods that face high levels of toxic air pollution from freight transport and its related impacts on community health and quality of life.

On September 11, 2009 DDD commented on what was then the Air District's Draft 2009 Clean Air Plan (CAP). As stressed in those comments, we would like to underscore our support for developing a multi-pollutant strategy to reduce ozone, particulate matter, and their precursors throughout the greater San Francisco Bay Area. This is a vast improvement on previous plans that solely investigated ozone and we are encouraged by the number of measures that could have a positive impact in our communities.

Nevertheless, we hope that you will be able to provide clarity regarding the CAP's process and substantive commitments to reduce these emissions. Many of the proposed measures lack a clear timeline, a process for implementation, and measurable outcomes. Furthermore, we would like to see greater emphasis placed on the following guiding principles:

2010-1-1

1. Public health impacts—especially from freight-related diesel particulate matter (PM)—must be at the forefront of land-use planning measures to improve air quality.
2. Control measures must recognize and address the environmental injustice of *disproportionate* impacts of freight transport and diesel PM on low-income communities of color.

2010-1-2

2010-1-3

3. The Air District must create effective channels for public participation to inform and implement control measures, particularly from communities that have historically been under-represented in environmental decision-making.

2010-1-4

To that end, we offer the following comments on the Draft 2010 Clean Air Plan.

### ***Prioritizing Public Health Impacts in Land-Use Planning Measures***

In recent years, there has been an increasing effort to improve air quality through better land-use and transportation planning. Legislation like Senate Bill (SB) 375, aims to reduce emissions of pollutants and greenhouse gases (GHGs) by prioritizing residential and commercial development along major transportation corridors. While such transit-oriented development and mixed land-uses can greatly reduce vehicle miles traveled by cars and light trucks in the region, it can also exacerbate public health impacts from freight transport. As such, the Air District must take a strong role in ensuring that regional plans do not result in land use conflicts that increase exposure to diesel PM and other freight transport impacts. In particular, we would like you to address the following shortcomings in the Land-Use Measures (LUMs).

2010-1-5

1. As part of the effort to increase efficiencies in regional freight distribution systems (LUM 1), DDD would like to see the Air District play an active role in the development of a *regional* truck route. Currently, the development of truck routes has been at the initiative of cities and counties. While these efforts have succeeded in reducing exposure to freight-related air pollution in some areas, many localities that do not have enforceable, health-protective truck routes face disproportionate public health impacts. In many cases, local restrictions on truck traffic (e.g. the truck ban on Interstate 580) have pushed truck traffic into other areas, predominantly in low-income communities of color. These shortcomings of local truck route initiatives illustrate the need for greater regional coordination. The Air District should engage with other regional planning agencies, like the Metropolitan Transportation Commission and the Association of Bay Area Governments, to develop an enforceable, health-protective truck route for the regional freight distribution system.
2. While shifting freight transport from truck to rail and barge (LUM 1) could reduce emissions and exposure associated with goods movement, it is important to also identify strategies to reduce emissions from rail and barge transport. For example, the Air District should join the South Coast Air Quality Management District in advocating for California Air Resources Board (CARB) to adopt enforceable measures to reduce diesel pollution from rail yard operations and for a uniform national container fee policy.
3. Air transportation of freight should be included in the discussion of mode shift (LUM 1). The Air District should examine opportunities to reduce emissions and exposure from this mode of freight transport in this measure or by creating a new measure.

2010-1-6

2010-1-7

2010-1-8

4. The development of "Best Practices for Goods Movement Land Uses" (LUM 1) should align with and inform the development of a regional Sustainable Community Strategy under SB375 in order to ensure that conflicts between residential and goods movement land uses do not occur in Priority Development Areas. Best Practices should also inform the development of Community Risk Reduction Plans (CRRPs, LUM 4). 2010-1-9
5. The development of the Indirect Source Rule must explicitly address the potential for transit-oriented development to increase exposure to freight-related air pollution. This language should be added to "Issues/Impediments" (LUM 2). 2010-1-10

### ***Prioritizing Communities Disproportionately Impacted from Freight Transport***

In LUM 1 the Clean Air Plan states: "Sensitive receptors and vulnerable populations near these goods movement corridors have been identified through the District's Community Air Risk Evaluation Program as being disproportionately impacted by elevated concentrations of toxic air contaminants, when compared to other areas of the Bay Area." As such, we urge the Air District to adopt an additional purpose for LUMs 1 and 2:

*"To prioritize control measures in communities disproportionately impacted by pollution from goods movement, as identified through the District's Community Air Risk Evaluation Program."*

This purpose should be made operational in subsequent implementation actions:

1. The Air District should lead a regional, comprehensive approach to increasing *regional* efficiency in freight distribution systems (LUM 1) without increasing *local* impacts to communities. Ditching Dirty Diesel would like to see a commitment to the development and implementation of a regional truck route that would minimize impacts to community health. There must be a lead agency to coordinate the current efforts of local jurisdictions to ensure that truck traffic is not merely "pushed out" of one impacted community into another or raise land use conflicts between two adjacent jurisdictions. 2010-1-12
2. The Air District must articulate its authority to enforce CARB's air toxics control measures (LUM 1) and outline how enforcement responsibility will be shared with local law enforcement agencies (e.g. county and city police) and state and federal agencies (e.g. EPA Region 9). The Air District must also articulate how money collected from citations will be spent. DDD supports the allocation of citation money to diesel emission reduction strategies in impacted communities. 2010-1-13
3. Partnership and demonstration projects to reduce emissions and exposure associated with goods movement (LUM 1) should be prioritized in CARE 2010-1-14

communities. For example, ports and other magnet sources could be required to submit annual summaries of their diesel reduction efforts and meet with the local community to discuss these summaries. Major decisions related to demonstration projects should be discussed in meetings of the CARE Task Force.

4. Promote more health-protective standards in communities disproportionately impacted by freight transportation and prioritize emissions reduction strategies in these communities. (LUM 2)

2010-1-15

Additionally, we offer the following recommendations for how the goals of environmental justice can be realized:

1. Although a land use measure specifically targets communities disproportionately impacted by goods movement, it lacks specificity, a firm commitment to emissions reductions, and fails to mention reducing diesel emissions, specifically from magnet sources in cumulative impact analyses (LUM 5).

2010-1-16

2. The Community Risk Reduction Plans (CRRPs) proposed in LUM 4 are currently not strong or enforceable enough to achieve reductions in risks in impacted communities. Measurable targets are needed.

2010-1-17

3. The Air District should prioritize the placement of air quality monitors in CARE communities. Furthermore, data and information about health impacts in communities most impacted should also be made available and accessible (LUM 6).

2010-1-18

4. While we are pleased to see a Magnet Source Rule included in the Clean Air Plan (FSM 11), we believe that it should be prioritized as a regular Mobile Source and Land Use measure, not a Further Study Measures, and should be implemented immediately in order to reduce diesel PM associated with warehouse, ports, rail yards, and transfer stations. Studies should be done for every magnet source in impacted communities and made publicly available so that the public can make informed comments. This measure should also explicitly involve impacted communities and commit to creating action plans to prioritize various emissions reductions strategies and provide a timeline.

2010-1-19

### ***Creating Effective Channels for Public Participation***

DDD believes in strong public participation to inform and achieve improved public health outcomes for the most impacted communities in the Bay Area. Towards this end, we hope that the CAP will have a comprehensive public participation and implementation process that is clearly outlined and fully resourced. The CAP does not adequately

2010-1-20

describe who will implement and enforce the various control measures. We recommend adopting and using the Bay Area Environmental Health Collaborative's *Proposed Bay Area Public Participation Protocol* (Attachment 1) and keeping stakeholders engaged throughout the implementation of the CAP.

In addition, we the following recommendations about how to improve public participation in the following land-use measures:

1. A commitment to multi-stakeholder, collaborative partnerships (LUM 1) must outline how affected communities will be at the table. This regional implementation action alludes to "activities already underway, like the Green Ports Initiative and the Port of Oakland's Maritime Air Quality Improvement Plan (MAQIP)". However, these initiatives fell far short of what Bay Area residents deserve. The failures of the MAQIP, especially, attest to the importance of a genuine public participation process that ensures that community has adequate and real opportunities to give input and has access to decision-makers (See Attachment 2). The Clean Air Plan must recognize these past shortcomings and address how collaborative regional efforts will address them in the future. For example, in the past, DDD has recommended that the Air District create a (funded) "public interest" technical and community / public health peer review group for reviewing emissions reduction plans and emissions inventories submitted by each port (as part of the Green Ports Initiative). 2010-1-21
2. Impacted communities should be at the table and part of a collaborative enforcement program (LUM 1). The Air District should create a mechanism for community enforcement actions, such as working with community-based organizations to identify idling hotspots, and a process for better communication and responses. 2010-1-22
3. In the development of the Indirect Source Review Rule (LUM 2), participation must include representation from communities disproportionately impacted by goods movement and diesel emissions. Impacted communities should also be involved in determining the distribution of the fees collected for mitigations. 2010-1-23
4. Land Use Guidance in the CAP (LUM 4) is vague throughout and it is unclear what the outcomes will be. The Clean Air Communities Initiative (CACI) has no clear timelines or measurable outcomes. The Air District should provide a summary of what has already come out of the CACI so that the public is better able to participate in this initiative. Similarly, there are no timelines or measurable outcomes for the development of Community Risk Reduction Plans. 2010-1-24
5. Community-based participatory research projects should inform the Air District's efforts to reduce Health Risk in Impacted Communities (LUM 5) and to enhance air quality monitoring (LUM 6). 2010-1-25

6. The Air District should address language access and usability to the non-technical public to the CARE database (LUM 5).

2010-1-26

In closing, we hope the Air District takes continued steps to address freight transport-related activities that are an important source of air pollution-related local health risks. We thank you for your consideration of our comments and recommendations.

2010-1-27

We look forward to working with you to maximize health protections via the implementation of the 2010 Clean Air Plan.

Sincerely,

The Ditching Dirty Diesel Collaborative

Participating organizations in the Ditching Dirty Diesel Collaborative include: Bay Area Healthy 880 Communities, Bayview Hunters Point Community Advocates, Center for Environmental Health (CEH), Communities for a Better Environment (CBE), Contra Costa Health Services, Natural Resources Defense Council (NRDC), Pacific Institute (PI), and West Oakland Environmental Indicators Project (EIP)

Attachment 1: BAEHC's *Proposed Bay Area Public Participation Protocol*

Attachment 2: Statement from Swati Prakash on the Port of Oakland's Maritime Air Quality Improvement Plan—May 27, 2009

Comment Letter #: 2010-1

Date: April 26, 2010

From: Ditching Dirty Diesel Coalition

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Response to Comments:

1-1 See Master Response 1 (MR-1)

1-2 See MR-2

1-3 See MR-2

1-4 See MR-3

1-5 See MR-2

1-6 Under the provisions of the California Vehicle Code, Caltrans has authority to designate truck routes on state highways (Section 35651). Cities and counties are empowered to establish truck routes within their jurisdictions (Sections 35701 and 35712). As described in the "Signage and truck routes" item in LUM 1, Air District staff is prepared to take an active role to protect impacted communities by providing technical support to assist local agencies in determining appropriate truck routes. However, LUM 1 does not envision that the Air District would take the lead role to develop a regional truck route network.

1-7 See MR-1. In implementing LUM 1 and related CAP control measures, Air District staff will look for opportunities to reduce emissions from rail and barge operations. Support of container fees at seaports is included as an element in the CAP Leadership Platform: see Table 4-7 in CAP Volume I.

1-8 See MR-1. Although there may be merit to the suggestion that air freight should be included within the scope of LUM 1, this control measure already includes many implementation actions that will require significant resources to implement. Due to resource constraints, Air District staff does not believe that it would be prudent to commit to additional implementation actions in LUM 1 at this time. This suggestion will be reconsidered when the 2010 CAP is updated in future years.

1-9 Comment noted. One of the Air District's key concerns is to ensure that regional and local efforts to promote focused growth are implemented in a way that protects Bay Area residents from exposure to harmful air pollutants. This was an important consideration in developing the Land Use Measures (LUMs) for the CAP, as well as in the Air District's revised CEQA guidelines.

- 1-10 See response 1-9 above. The scope and specific requirements of an indirect source review (ISR) regulation will be determined through the Air District's rule development process. Air District staff encourages interested parties to participate in the ISR rule development process. An ISR regulation may be one of the mechanisms that the Air District employs to address potential issues related to population exposure to existing sources of emissions in new transit-oriented developments.
- 1-11 In response to this comment, the following text has been added to the "Purpose" section of LUM 1: *A key objective of this measure is to reduce air quality impacts related to goods movement in communities identified by the Air District's Community Air Risk Evaluation (CARE) program.*
- 1-12 Please see response to comment 1-6 above.
- 1-13 The Air District's Mobile Source Compliance Plan (MSCP) is based upon a Memorandum of Understanding (MOU) between the Air Resources Board and BAAQMD. The MOU defines the role and responsibilities of each agency. For additional information regarding the MSCP, see this link on the BAAQMD website: <http://www.baaqmd.gov/Divisions/Compliance-and-Enforcement.aspx>. Under the terms of the MOU, when the Air District issues citations which are litigated or settled by CARB, the penalties are shared equally by both parties. Revenues from penalties will be deposited into the District's General Revenue fund. This fund is used to support a wide range of air quality programs, including mobile source enforcement, such as implementation of the MSCP, as well as inspections of vehicles that will receive Air District grant funding.
- 1-14 See MR-1 and MR-2. The Air District will continue its efforts to reduce emissions from goods movement, placing highest priority on reducing exposure in impacted communities. The District will keep representatives and residents of impacted communities informed of its activities and efforts in this area by means of the CARE Task Force.
- 1-15 See response to comment 1-14 above.
- 1-16 As described in LUM 5, the BAAQMD will establish a system to track cumulative health risks related to emissions from stationary, mobile, and area sources. Emissions from magnet sources will be addressed as part of the area source emissions inventory category. LUM 5 focuses on tracking health risks from air toxics and directly-emitted PM. Diesel emissions will be included in the tracking system. Potential approaches to reduce emissions from magnet sources will be considered under Further Study Measure # 11 (Magnet Source Rule).
- 1-17 Community Risk Reduction Plans (CRRPs) are one option available to local agencies as a means of complying with the Air District's revised (June 2010) CEQA thresholds of significance for air toxics. Preliminary draft guidelines for CRRPs (May 2010), which are posted on the BAAQMD website, describe the basic elements of CRRPs, including monitoring requirements. Air District staff will work closely with local government staff, the CARE Task Force, and other interested

stakeholders as CRRPs are developed to ensure they reduce emissions and population exposures.

- 1-18 Comment noted. Please see MR-1 and MR-3. LUM 6 outlines strategies to enhance the Air District's air monitoring activities, including in CARE communities.
- 1-19 A magnet source rule may provide a means to reduce emissions and population exposure in impacted communities. However, this is included as a Further Study Measure in the CAP, because Air District staff believes that additional research and evaluation is needed before determining whether such a measure should be proposed as a formal control measure. Numerous other control measures specifically target reductions in diesel emissions and exposures.
- 1-20 Please see MR-3. The Air District is committed to working with interested stakeholders to implement CAP control measures and to keeping stakeholders informed of progress in control measure implementation.
- 1-21 Comment noted. Please see MR-1 and MR-3.
- 1-22 Comment noted. Please see MR-1 and MR-3.
- 1-23 Comment noted. Please see MR-1 and MR-3. The Air District has established an advisory work group, which includes community representatives, to provide input on indirect source review rule development.
- 1-24 See MR-1. LUM 4 represents an effort to concisely summarize the various programs and activities that the Air District is pursuing to address issues related to land use. The "Clean Air Communities Initiative" (CACI) is a term which describes the Air District's overall program to reduce emissions and population exposure in impacted communities. For more details, please see the description of CACI in Chapter 3 and the diagram labeled Figure 3-1.
- 1-25 Comment noted. Please see MR-1 and MR-3. Air District staff has collaborated with community members on the West Oakland Truck Survey and various air monitoring studies, and expects to continue such collaborative efforts.
- 1-26 Comment noted. Please see MR-1 and MR-3.
- 1-27 Comment noted. Please see MR-1 and MR-2.



Letter 2010-2

RECEIVED  
10 APR 27 AM 10:06  
BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

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April 26, 2010

Mr. Greg Tholen  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

**Re: Draft Bay Area 2010 Clean Air Plan- Draft Program Environmental Impact Report Comments**

Dear Mr. Tholen:

The Peninsula Corridor Joint Powers Board (JPB) is the operator of Caltrain, the commuter rail that serves communities in San Francisco, San Mateo and Santa Clara counties. The JPB is pleased to provide the following comments to the Draft Program Environmental Impact Report (Draft PEIR) for the Draft Bay Area 2010 Clean Air Plan (CAP).

To meet the requirements of the California Clean Air Act (CCAA), regions which do not meet the ozone standards need to prepare a plan that will assist in attaining the standards and to update these plans every three years. The Bay Area Air Quality Management District (BAAQMD), in conjunction with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are preparing the Bay Area 2010 CAP. The JPB supports this effort and the goals and objectives of the CAP to achieve the State ambient air quality standards.

As providers of public transportation through Caltrain's commuter rail, the JPB looks forward to the implementation of proposed Control Strategies to reduce vehicle trips, vehicle miles traveled and traffic congestion and therefore reducing the transportation related emissions.

2010-2-1

The nature of our operations will assist in implementing Transportation Control Measures (TCMs) that will improve and increase the use of rail services as promoted under TCM A-2, TCM C-1, TCM C-4, and TCM D-3. Also, as an implementer of efficient fare payment systems such as TransLink and late the Transit Hub Signage Program, JPB is very supportive of TCM B-2 for the use of technology to improve the efficiency of transit use.

2010-2-2

**PENINSULA CORRIDOR JOINT POWERS BOARD**

The implementation of strategic projects and initiatives such as the Caltrain Electrification Project and the Peninsula Rail Program (PRP) are examples of our commitment to assist the BAAQMD in meeting its regional air quality goals through the implementation of its Bay Area 2010 CAP. Thanks again for the opportunity to comment in this very important Bay Area regional air quality plan.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Hilda Lafebre". The signature is fluid and cursive, with a horizontal line underlining the name.

Hilda Lafebre, DBIA  
Manager, Capital Project & Environmental Planning

Cc: Marian Lee, Executive Officer, Planning & Development



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Letter 2010-3

April 26, 2010

Mr. Greg Tholen  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

**Re: Draft Bay Area 2010 Clean Air Plan- Draft Program Environmental Impact Report Comments**

Dear Mr. Tholen:

The San Mateo County Transit District (SamTrans) is an operator of bus, shuttle and paratransit services through the communities in San Mateo County. SamTrans is pleased to provide the following comments to the Draft Program Environmental Impact Report (Draft PEIR) for the Draft Bay Area 2010 Clean Air Plan (CAP).

To meet the requirements of the California Clean Air Act (CCAA), regions which do not meet the ozone standards need to prepare a plan that will assist in attaining the standards and to update these plans every three years. The Bay Area Air Quality Management District (BAAQMD), in conjunction with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are preparing the Bay Area 2010 CAP. SamTrans supports this effort and the goals and objectives of the CAP to achieve the State ambient air quality standards.

As providers of public transportation, SamTrans looks forward to the implementation of proposed Control Strategies to reduce vehicle trips, vehicle miles traveled and traffic congestion and therefore reducing the transportation related emissions.

2010-3-1

The nature of our operations will assist in implementing Transportation Control Measures (TCMs) that will improve and increase the use of bus and shuttle services as promoted under TCM A-1, TCM C-1, TCM C-2, TCM C-4, TCM D-2 and TCM D-3. Also, SamTrans is supportive of TCM B-2 for the use of technology to improve the efficiency of transit use.

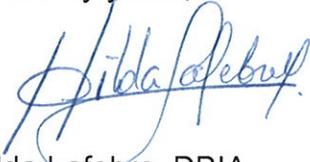
2010-3-2

**SAN MATEO COUNTY TRANSIT DISTRICT**

1250 San Carlos Ave. P.O. Box 3006  
San Carlos, CA 94070-1306 (650)508-6200

The implementation of strategic projects and initiatives such as El Camino-Grand Boulevard Initiative, the Comprehensive Operations Analysis (COA) and the Senior Mobility Initiative are examples of our commitment to assist the BAAQMD in meeting its regional air quality goals through the implementation of its Bay Area 2010 CAP.

Sincerely yours,

A handwritten signature in blue ink that reads "Hilda Lafebre". The signature is written in a cursive style with a horizontal line underlining the name.

Hilda Lafebre, DBIA  
Manager, Capital Project & Environmental Planning

Cc: Marian Lee, Executive Officer, Planning & Development



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Letter 2010-4

April 26, 2010

Mr. Greg Tholen  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

**Re: Draft Bay Area 2010 Clean Air Plan- Draft Program Environmental Impact Report Comments**

Dear Mr. Tholen:

The San Mateo County Transportation Authority (TA) is the manager and administrator of the Measure A half-cent sales tax dedicated for multi-modal transportation improvements in San Mateo County. The TA is pleased to provide the following comments to the Draft Program Environmental Impact Report (Draft PEIR) for the Draft Bay Area 2010 Clean Air Plan (CAP).

To meet the requirements of the California Clean Air Act (CCAA), regions which do not meet the ozone standards need to prepare a plan that will assist in attaining the standards and to update these plans every three years. The Bay Area Air Quality Management District (BAAQMD), in conjunction with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are preparing the Bay Area 2010 CAP. The TA supports this effort and the goals and objectives of the CAP to achieve the State ambient air quality standards.

As the TA has made significant investments in multi-modal improvements within the San Mateo County, it looks forward to the implementation of proposed Control Strategies to reduce transportation related emissions.

2010-4-1

The multimodal investment nature of the TA will assist in implementing Transportation Control Measures (TCMs) that will help in reducing vehicle trips, vehicle miles traveled and traffic congestion. Thanks again for the opportunity to comment on this very important Bay Area regional air quality plan.

2010-4-2

Sincerely yours,

Hilda Lafebre, DBIA  
Manager, Capital Project & Environmental Planning

Cc: Marian Lee, Executive Officer, Planning & Development

Comment Letter #: 2010-2

Date: April 26, 2010

From: Hilda Lafebre, Manager, Capital Project & Environmental Planner, Peninsular Corridor Joint Powers Board

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Response to Comments:

2-1 Comment noted. The Air District looks forward to working with the Peninsular Corridor Joint Powers Board to implement the transportation control measures in the CAP.

2-2 See response to comment 2-1 above.

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Comment Letter #: 2010-3

Date: April 26, 2010

From: Hilda Lafebre, Manager, Capital Project & Environmental Planner, San Mateo County Transit District

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Response to Comments:

3-1 Comment noted. The Air District looks forward to working with the San Mateo County Transit District to implement the transportation control measures in the CAP.

3-2 See response to comment 3-1 above.

3-3 See response to comment 3-1 above.

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Comment Letter #: 2010-4

Date: April 26, 2010

From: Hilda Lafebre, Manager, Capital Project & Environmental Planner, San Mateo County Transportation Authority

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Response to Comments:

4-1 The Air District looks forward to working with the San Mateo County Transportation Authority to implement the transportation control measures in the CAP.

4-2 See response to comment 4-1 above.



April 30, 2010

Letter 2010-5

Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

Attention: Greg Tholen

Subject: Bay Area 2010 Clean Air Plan

Dear Mr. Tholen:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Draft EIR for the Bay Area 2010 Clean Air Plan to reduce emissions. We have no comments at this time.

We appreciate the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

A handwritten signature in black ink, appearing to read "R Molseed", is written over the word "Sincerely,".

Roy Molseed  
Senior Environmental Planner

RM:kh

Comment Letter #: 2010-5

Date: April 30, 2010

From: Roy Molseed, Senior Environmental Planner, Santa Clara Valley Transportation Authority

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No comments.



**California Council for Environmental and Economic Balance**

100 Spear Street, Suite 805, San Francisco, California 94105  
415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

Letter 2010-6

April 30, 2010

Henry Hilken  
Director of Planning and Research  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

**RE: Draft 2010 Clean Air Plan**

Dear Henry,

The California Council for Environmental and Economic Balance (CCEEB) is a coalition of business, labor and public leaders that collaborates to advance strategies for a strong economy and a healthy environment. Our members operate numerous facilities within the boundaries of the Bay Area AQMD. We very much appreciate the opportunity to offer our comments on the draft 2010 Clean Air Plan.

CCEEB wishes to acknowledge the tremendous effort that District staff has made in developing the multi-pollutant approach to the Plan and in conducting a public process that has enabled stakeholder feedback. However, we still have concerns about the draft Plan and feel we must reiterate key questions about the analytic model that we first posed in our September 28, 2009 letter to the District.

**Monetizing Benefits in the MPEM is Unnecessary and Misleading**

CCEEB supports the development and use of the Multi-Pollutant Evaluation Method (MPEM) for examining relative benefits and tradeoffs of potential control measures and for prioritizing different control strategies. As the Plan states, "The MPEM is intended primarily for purposes of *comparing the relative dollar value of benefits* across control measures." [Page 1-11, emphasis added]

2010-6-1

However, CCEEB continues to disagree with attempts to translate health and climate benefits into dollars saved or costs avoided. Simply put, data gaps and scientific uncertainty makes quantification speculative, likely inaccurate, and possibly misleading to stakeholders and decision makers because it results in an absolute value without full justification. Moreover, there are qualitative methods that could be applied instead to make the same comparisons without needing to rely on uncertain estimates.

### Epidemiological and toxicological studies compound uncertainty

Underlying epidemiological studies are based on observation, and as such, are associated with substantial potential for bias, leading to results that can be exaggerated or even incorrect. Toxicological data from high-dose laboratory experiments are similarly uncertain when applied to low-dose human exposures. While these studies are absolutely necessary for furthering our understanding of the health effects of air pollution, the results create great uncertainty when distilled into simple "dollars saved" estimates.

2010-6-2

### Lack of availability of cost and benefit estimates

Cost and benefit estimates are missing for many measures, especially stationary source ones:

2010-6-3

- 27 percent of all measures have no cost estimate
- 15 percent of all measures have no benefit estimate
- 55 percent of stationary source measures have no cost estimate
- 33 percent of stationary source measures have no benefit estimate

The socio-economic impact analysis for stationary source measures finds no significant cost impacts, but because of the missing estimates, this finding is questionable. The omitted information is important and should be included, especially since several measures seem to have a disproportionate cost when compared to the benefit (e.g. SSMs 5 and 12; MSMs A-1, A-2, B-2 and C-2; and TCM C-1).

### Questions regarding how costs and benefits are assessed

In the socio-economic impact analysis, it states that construction and other activities account for nearly 1/3 of all benefits. Presumably, a similar proportion of the estimated 26,500 jobs directly created would also be attributable to construction. These job gains are then weighed against job losses (5,200), for a net gain of 23,700 jobs. However, construction jobs are short-term in duration, whereas lost jobs are permanent positions. Furthermore, construction jobs typically include workers from outside the region, whereas lost jobs are almost exclusively filled by Bay Area residents. Are our assumptions correct? If so, how does the analysis account for temporal differences in job duration and differences in where workers reside, or does it treat these things as equal? Also, there seems to be about 2,400 lost jobs not accounted for in the net. We would appreciate clarification.

2010-6-4

Similarly, the analysis seems to suggest that economic inputs, such as purchase of control equipment and technologies, result in beneficial *regional* economic activity. We further note that construction-related activity is treated as a benefit, not a cost. However, in reality, many of these purchases would be from manufacturers outside of the Bay Area, just as not all construction activity provides direct economic benefits to the region. We ask the District to help clarify our understanding by providing greater detail.

2010-6-5

Finally, the analysis explains that of the \$3.3 billion in expected benefits, \$1 billion is attributable to construction and related activities and \$641 million stems from improved air quality. Is the remaining \$1.66 billion related to public health, or is health considered as part of the air quality benefits? That is, what accounts for the additional \$1.66 billion in benefits?

2010-6-6

Scope of costs and benefits are not consistent for each measure

In general, it is unclear which costs are included in the analysis for each measure. For example, SSM 5 seems to be based wholly on compliance costs. LUM 2 includes some but not all compliance costs. LUM 3 looks at District administrative costs, but not at all at the cost of environmental review and mitigation. MSM A-1 includes the total cost of all incentives needed to accelerate fleet turnover, only a fraction of which are funded by the District. Because of this unevenness, we suggest specifying for each measure those costs borne by the District, those by compliance entities, and those by partner agencies or municipalities. These distinctions would also help when articulating total costs of the Plan and in avoiding "apples-and-oranges" comparisons.

2010-6-7

This same concern applies to benefits as well. For example, benefits derived from SSM 10 are directly related to District mandates. With TCM D-3, on the other hand, benefits largely stem from work at the MTC and other regional partners. For Energy and Climate measures, it is difficult to distinguish between benefits attributable to District activity and those that stem from efforts at other agencies and organizations. That is, the District cannot accurately determine the extent to which its efforts influence consumer choices and investments.

Finally, the MPEM considers indirect health benefits from a control strategy (e.g., work and school days, avoided pain, enjoyment and leisure time) but not indirect costs (e.g., health impacts from lost jobs and investment or the value derived from other societal benefits deferred). This approach consistently exaggerates benefits compared to costs.

GHG benefit estimates highly speculative

Estimating monetary benefits from greenhouse gases is highly speculative and based on significant scientific uncertainties and value assumptions. More importantly, no action by the District alone can affect local climate change impacts or climate patterns since the problem is a global one and requires global measures. Thus, there is no nexus between the proposed measures and the estimated benefits. This, in turn, exaggerates the benefits for any measure that decreases GHG emissions – important since GHG accounts for about 20 percent of all economic benefits derived from the Plan. CCEEB is not in any way arguing that climate change is of no concern to the District, but simply that quantifying monetary benefits is misleading.

2010-6-8

CCEEB recognizes the value in applying a common metric, such as monetized benefits, for making relative comparisons. However, for the reasons outlined above, we feel that aggregating total benefits is inaccurate and that these estimates should be removed from the draft Plan because the results are misleading. For example, the following appears in the Plan's executive summary: "Implementation of the proposed control

2010-6-9

measures in the 2010 CAP will, collectively, provide benefits with a monetary value in the range of \$270 million to \$1.5 billion per year, with a likely value on the order of \$770 million per year, in terms of reduced medical costs, increased life expectancy, and reduced impacts of climate change.”

CCEEB has consistently raised these points to District staff. At a minimum, CCEEB asks the District to include a discussion of how the MPEM interacts with cost-effectiveness tests mandated in the state's Health & Safety Code, how these calculations might differ, and how the results should be interpreted.

### **Proposed Measures Without Cost or Benefit Estimates Should Be Studied Further**

As we commented above, several measures are missing estimated costs, benefits, or both. CCEEB believes that any measure missing this information should be moved to the “Further Study Measures” category until such information is completed and available.

2010-6-10

In general, CCEEB believes that the District should focus on the “biggest bang for the buck,” i.e., those measures that reduce the greatest risks from exposure from the highest emitting sources in the most cost-effective manner. Without the missing information, it is unclear how potential measures are being prioritized.

### **Specific Comments on Proposed Measures**

SSM 4: Natural Gas Production and Processing – both the Air Resources Board and federal EPA are addressing fugitive emissions from natural gas. District regulations should harmonize with these efforts. The District should also make explicit how the GHG emissions reductions will be treated in terms of additionality under AB 32. Cost estimates are missing and should be completed.

2010-6-11

SSM 5: Vacuum Trucks – with a 2:1 cost/benefit ratio, this measure does not appear cost effective and should be re-categorized as a further study measure.

2010-6-12

SSM 6: General Particulate Matter Emission Limitation - Cost estimates are missing and should be completed; this measure should be re-categorized as a further study measure until then.

2010-6-13

SSM 15: Greenhouse Gases in Permitting, Energy Efficiency - Cost estimates are missing and should be completed; this measure should be re-categorized as a further study measure until then. This measure also seems to duplicate ARB requirements for GHG and co-benefit audits at large industrial facilities. We ask the District to include a discussion of how this measure interacts with AB 32, in particular, how this measure might affect what is considered “additional” under §38562 (d)(2). Finally, we note that across the state there is no consistent threshold of significance for GHG emissions. Thus, facilities required to undertake GHG mitigation measures under CEQA could be treated differently depending on whether or not the projects occur within the BAAQMD's jurisdiction.

2010-6-14

SSM 16: New Source Review Addressing PM2.5 - Cost estimates are missing and should be completed; this measure should be re-categorized as a further study measure until then. In terms of differential standards, this approach was ultimately rejected by staff in CEQA standards and in Reg. 2-5 amendments. Since it is no longer a staff recommendation, CCEEB asks that it be removed from SSM 16. Finally, we note that the highest sources of PM2.5 emissions in the Bay Area are mobile sources (37%) and wood burning (24%). The District does not account for future-year reductions from major ARB rules, such as on-road and off-road diesel rules and the "Pavley Bill" which seeks tailpipe reductions of GHG emissions. We encourage the District to include in its estimates reductions from these programs, and to focus its efforts on any remaining "gaps" in regulations. The key is to reduce risk from exposure, not simply emissions.

2010-6-15

SSM 17: New Source Review for Toxic Air Contaminants – this measure has already been adopted and, as such, is no longer a "potential" control measure. CCEEB supported staff recommendations on Reg. 2-5 amendments, which did not include differential standards. For the sake of consistency, we ask that concept of differential standards be removed from this measure or that this measure be removed from the Plan entirely.

2010-6-16

Mobile Source Measures – several of these measures appear significantly cost ineffective. CCEEB encourages the District to rank each measure in terms of cost effectiveness, with a focus on encouraging early compliance with ARB regulations. Finally, we ask that the District discuss in greater detail the funding sources for the newly proposed incentive programs, and make clear if these funds are being pulled from other existing programs.

2010-6-17

Energy and Conservation Measures – CCEEB notes that several of these measures duplicate programs at other agencies, particularly the state's two main energy agencies, the Public Utilities Commission (PUC) and the Energy Commission. We encourage the District to coordinate with utilities operating within the air basin and the PUC to ensure that ECMs 1 and 2 do not result in double counting of benefits.

2010-6-18

We also note that ECMs 1 and 3 account for consumer-side energy savings as part of the "costs" of the measure, thus showing a negative total cost. However, it is not clear (1) if consumer capital costs for building and equipment efficiency improvements have been included and, if so, based on what assumptions, and (2) what the direct District costs for these measures are. While energy efficiency and renewable energy projects payback investment over time, capital costs remain a serious hurdle to market penetration, and should not be overlooked.

2010-6-19

In general, the District seems to take credit for air emissions reductions that might better be associated with other long-standing programs to promote energy efficiency, renewable energy, and green building. The District estimates that these measures will contribute over \$78 million per year in societal benefits; we question the accuracy of this number.

2010-6-20

Finally, we ask that the District discuss in greater detail its direct costs and funding sources for outreach and advocacy programs on energy, and make clear if these funds are being pulled from other existing programs.

2010-6-21

Thank you again for allowing us to share our concerns. We look forward to discussing our comments further with staff.

Sincerely,



BILL QUINN  
CCEEB Chief Operating Officer

Comment Letter #: 2010-6

Date: April 30, 2010

From: Bill Quinn, Chief Operating Officer, California Council for Environmental and Economic Balance (CCEEB)

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Response to Comments:

- 6-1 Air District staff developed the MPEM to help assess the potential benefit of control measures in reducing emissions and ambient concentrations of the air pollutants addressed in the CAP, as well as the estimated value of such reductions in terms of protecting public health and the climate. The MPEM is based on the best available data and information, including air quality modeling results and epidemiological studies regarding the health impacts of exposure to air pollutants. Air District staff acknowledges that there is uncertainty involved in the MPEM estimates. To address this, District staff has performed an analysis of uncertainty regarding MPEM benefits; this probability analysis is available on the BAAQMD webpage for public review. Air District staff believe that the MPEM results can be used, with appropriate caveats as discussed on pages 4-27 and 4-28 of draft CAP Volume I, to help inform the policy-making process, in conjunction with other data such as cost-effectiveness (\$ per ton of ROG or NO<sub>x</sub> reduced).
- 6-2 Air District staff relied upon existing studies and methodologies, such as US EPA's BenMAP program, in creating the MPEM. Please see response to comment 6-1 above regarding uncertainties in the estimation of benefits and the "probability analysis" prepared to address this.
- 6-3 AS CCEEB notes, estimates of compliance costs are not yet available for some measures. On page 2 of the Socioeconomic Analysis, and elsewhere in the document, the report states that, "...**for those control measures where cost information is available**, impacts are less than significant across the board, based on the threshold of significance described on pages 29-30." [emphasis added] Please note that all control measures which will be implemented by adoption of a rule or regulation by the BAAQMD Board (e.g., stationary source rules and the indirect source review rule) will be developed by means of the District's existing rigorous rule development process; this includes analysis of emission reduction potential, compliance costs, and socio-economic impacts, and provides opportunities for public review and comment.
- 6-4 All costs and benefits in the analysis are annualized, and are therefore comparable during the period of CAP implementation, which is the focus of the Socioeconomic Analysis. CCEEB is correct that over the longer term, construction jobs would end, whereas permanent jobs lost would be ongoing. However, even on this basis the CAP creates a net gain in jobs for the region. Drawing on the figures in the tables in Chapter 5 of the report, the following table summarizes the net permanent job gains and losses. The direct net jobs benefit is 10,800 on a permanent basis, of which nearly 1,400 are due to improved public health; this is expected to result in increased household spending on retail goods and services due to longer life spans and more

earning power. Although CCEEB objects to monetizing the value of health benefits from CAP control measures, we believe that this is an appropriate economic method of calculating benefit from the CAP. Please note that even without the health benefits, the other business-to-business transactions and related multiplier effects would still result in a net gain in permanent jobs for the region.

<b>Net Permanent Jobs from CAP Measures</b>		
<b>Type of CAP Measure</b>	<b>Direct Jobs</b>	<b>Total Jobs</b>
Stationary Source Measures	300	600
Mobile Source Measures	700	1,200
Transportation Controls	9,600	12,600
Land Use Measures	600	1,200
Energy/Climate Measures	(400)	(500)
Health Benefits	1,400	2,800
<b>Total Net</b>	<b>10,800</b>	<b>15,100</b>

Regarding the number of construction workers who commute into the Bay Area from other regions compared to other kinds of workers, the economic model used in the analysis (IMPLAN input-output model) adjusts its household spending multipliers to account for net in-commuting to the region. This is done to avoid over-counting the payroll and household spending benefits of jobs held by workers residing outside the region.

The table in the Executive Summary draws from the individual rule category tables in Chapter 5, Regional Impacts. CCEEB is correct in noting that there was an error in the summation formula used in Excel to aggregate the jobs figures in the tables into the summary. The revised table is shown below. There is a minor change to the jobs lost under control costs and a significant reduction in total net jobs created. The correct net jobs created figure is 31,500 jobs (rather than 36,536 as shown in the April 5, 2010 draft) – this represents a net change of 5,000 fewer jobs created than indicated in the April 5, 2010 draft. However, this does not affect the overall findings of the analysis in Chapter 5 or other portions of the report. Also, the figures for output and income were correct as presented in the April 5, 2010 version of the report.

<b>Revised Summary of Multiplier Impacts from all Control Measures</b>				
<b>(Dollar Figures in Millions)</b>				
<b>Control Benefits</b>	<b>Direct Impacts</b>	<b>Indirect Impacts</b>	<b>Induced Impacts</b>	<b>Total Impacts</b>
Industry Output	\$3,318.1	\$982.9	\$1,612.7	\$5,913.8
Employment	26,500	4,800	10,100	41,400
Labor Income	\$1,730.1	\$370.2	\$559.0	\$2,659.3
<b>Control Costs</b>	<b>Direct Impacts</b>	<b>Indirect Impacts</b>	<b>Induced Impacts</b>	<b>Total Impacts</b>
Industry Output	(\$1,065.1)	(\$407.9)	(\$487.1)	(\$1,960.1)
Employment	(5,300)	(1,700)	(2,900)	(9,900)
Labor Income	(\$401.9)	(\$141.4)	(\$172.3)	(\$715.7)
<b>Net Control Impacts</b>	<b>Direct Impacts</b>	<b>Indirect Impacts</b>	<b>Induced Impacts</b>	<b>Total Impacts</b>
Industry Output	\$2,253.0	\$575.1	\$1,125.7	\$3,953.7
Employment	21,200	3,100	7,200	31,500
Labor Income	\$1,328.1	\$228.7	\$386.7	\$1,943.5

Source: ADE, Inc., data from IMPLAN Input-Output Model

6-5 The IMPLAN input-output model adjusts the economic multipliers to reflect the availability of local suppliers for production inputs such as control equipment and related technologies. Similar adjustments are made for construction materials and other inputs. The figures shown in the report reflect only a partial capture within the region of business-to-business transactions related to CAP compliance activities. There is no assumption that all of the required inputs can be supplied from within the region.

It is also important to note that while construction projects increase sales and income for construction industries, the portion of these costs that are locally funded are also shown as a regional cost in the analysis, and therefore offset the benefit to some extent.

6-6 The \$3.3 billion in benefits breaks down as follows: \$641 million for health and energy savings benefits<sup>1</sup>; \$630.4 million for private sector incentives and local/regional government payrolls to operate the mobile source and transportation control program measures; and \$2.047 billion for federally and state funded construction projects and purchase of locally produced transit equipment.

6-7 Please see MR-1. CCEEB is correct in noting that the Multi-Pollutant Evaluation Method (MPEM) considers indirect health benefits from control measures, but not indirect costs. However, the MPEM was developed to provide a means to estimate the **benefits** of control measures; the MPEM was never intended to estimate costs. Implementation costs, both direct and indirect, including compliance costs to regulated sources, are analyzed in the Socio-Economic Analysis.

CCEEB notes that, to make a fair comparison of costs versus benefits, it is important to analyze indirect costs and benefits on a comparable basis. CCEEB notes that some types of indirect costs may not be fully captured in the cost estimates provided in the Socio-Economic Analysis. While this may be true, it should also be noted, as discussed on pages 4-27 and 4-28 in the CAP, that the MPEM does not fully consider all health benefits related to improving air quality. Nor does the MPEM include other co-benefits provided by certain measures, such as improved mobility, reduced traffic congestion, enhanced safety for pedestrians and bicyclists, reduced water pollution, reduced damage to crops and vegetation, and personal property (tires, painted surfaces, etc).

In terms of the value derived from other societal benefits that must be deferred, the input/output model used in the Socio-Economic Analysis does capture the effect of the shift in spending from one sector to another. For control measures that would affect household spending, any increase in costs related to implementation of these measures is treated as a reduction in retail spending, based on the assumption that households would have fewer

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<sup>1</sup> This excludes health benefits for rules for which costs are not also available. The total health benefit, excluding energy savings, is estimated at \$770 million per year.

dollars to spend on discretionary items. The model captures the net effect on regional jobs of these shifts in spending, including costs incurred by stationary sources (businesses) to comply with air quality regulations.

- 6-8 Air District staff acknowledge that there is uncertainty associated with assigning a dollar value per ton of greenhouse gas emissions avoided. After reviewing the literature of studies which estimate the monetary benefit of reducing GHG emissions, Air District staff selected the figure of \$28 per metric ton of GHG reduced as a reasonable present value, as explained in Chapter 5 of the MPEM Technical Document (see the CAP webpage re: Resources and Technical Documents). Existing studies estimate the value of GHG reductions from \$10 per ton to \$75 per ton, so this figure is well within the range of estimated values in the studies performed to date.

While it is true, as CCEEB notes, that climate change is a global phenomenon, greenhouse gases (GHGs) emitted in the Bay Area clearly contribute to global warming. There is also strong evidence that the impacts of climate change will be experienced in the Bay Area, as well as at the global scale. Therefore, Air District staff disagree with CCEEB's assertion that there is no nexus between the CAP control strategy and the estimated GHG reduction benefits. Reducing GHG emissions in the Bay Area will have both local and global benefits that can and should be recognized in developing and evaluating the CAP.

- 6-9 Proposed control measures have both potential costs and potential benefits. In evaluating proposed control measures for air quality plans, including the 2010 CAP, the Air District estimates the cost-effectiveness of proposed control measures based upon ROG and NOx reductions, pursuant to the Health & Safety Code. However, although policy-makers have traditionally been presented with numerical estimates of the **cost** of control measures, they have not been provided with estimates as to the potential **benefit** of such measures. Air District staff developed the Multi-Pollutant Evaluation Method (MPEM) for the 2010 CAP in part to address this gap in information provided to our Board of Directors. One of the purposes of the MPEM is to estimate the monetary benefits of health and climate protection for proposed control measures. Although the MPEM benefits estimates are not directly comparable to traditional cost-effectiveness calculations, Air District staff believe that the estimates of benefit derived from the MPEM serve to complement the cost-effectiveness estimates, and help to provide policy-makers with a more complete understanding of potential costs and benefits of proposed control measures and the CAP control strategy as a whole.

- 6-10 Please see response to comment 6-3 above. Air District staff agree that it makes sense to prioritize adoption and implementation of those control measures that reduce health risks and population exposure in the most cost-effective manner. Based upon the analysis of relative risk of the various pollutants described in the CAP, staff believes that highest priority should be placed on measures to reduce emissions and ambient concentrations of PM2.5, especially measures that will be effective in reducing population exposure to PM2.5 in impacted communities.

- 6-11 Please see MR-1. Stationary source measures, including SSM 4, will be developed pursuant to the BAAQMD rule development process. In developing SSM 4, Air District staff will consider any ARB and/or US EPA requirements regarding fugitive emissions from natural gas production and processing.
- 6-12 More detailed estimates regarding the emission reductions and cost-effectiveness of proposed SSM 5 (vacuum trucks) will be developed through the rule-making process for this measure.
- 6-13 Estimates regarding the emission reductions and cost-effectiveness of proposed SSM 6 (general particulate matter emission limitation) will be developed through the rule-making process for this measure. It should be noted that the standards in this regulation have not been comprehensively updated since 1990; other air districts, such as the San Joaquin Valley UAPCD, currently have lower limits. Furthermore, the CAP highlights the importance of reducing PM emissions. Therefore, Air District staff believe that it makes sense to prioritize this measure in the CAP rule development calendar.
- 6-14 Cost estimates for SSM 15 (Greenhouse Gases in Permitting: Energy Efficiency) will be developed through the rule-making process for this measure. ARB and Air District staff are working together, through the California Air Pollution Control Officer Association (CAPCOA), to develop stationary source GHG regulations and implementation mechanisms. ARB has developed a statewide GHG emission inventory; the Air District has developed a GHG emission inventory specifically for Bay Area sources based on source specific information. The Air District has been developing emission inventories in consultation with ARB for decades and does not anticipate any insurmountable issues in reconciling our approaches or results. As suggested by CCEEB, text has been added to the description of SSM 15 in CAP Volume II to state that the Air District will coordinate this measure with Measure I.1 (Energy Efficiency and Co-Benefits Audits for Large Industrial Sources) in the AB32 Scoping Plan in order to avoid duplication.
- 6-15 Comment noted. Commenter suggests that reference to the concept of differential standards for impacted communities should be deleted, since differential standards were not included in the amendments to Regulation 2-5 adopted by the Board of Directors on January 6, 2010. However, the minutes of the Board discussion on this item indicate that a number of Board members asked that District staff further evaluate the possibility of differential standards. Therefore, this text has been retained.
- 6-16 Amendments to Regulation 2, Rule 5 (New Source Review for Toxic Air Contaminants) were adopted by the BAAQMD Board of Directors in January 2010. The description of SSM-17 has been revised to reflect the January 2010 amendments. Regarding the suggestion that reference to differential standards should be deleted, please see response to comment 6-15 above.
- 6-17 Estimated emission reductions and benefits for proposed control measures are based upon near-term emission reductions and consider potential public health and climate protection benefits only. It is important to bear in mind that Mobile Source Measures (as well as

Transportation Control Measures, and Energy and Climate Measures) may provide additional benefits in terms of diversifying energy and fuels, enhancing mobility, etc. In addition, the CAP emphasizes the need to identify root causes and make fundamental changes in our land use, transportation, and energy systems in order to address our long-term air quality and climate challenges. In this regard, the Mobile Source Measures are intended to facilitate the transition to more sustainable vehicles and fuels in the Bay Area.

- 6-18 Comment noted. The Air District is committed to working with partner entities, including the PUC and the Energy Commission, to address the point raised by CCEEB.
- 6-19 The table in the “Cost” section of ECM-1 (Energy Efficiency) shows both capital costs amortized over 20 years, as well as annual savings. The table in the “Cost” section of ECM-3 (Urban Heat Island Mitigation) shows the residential and commercial upfront capital costs separately. These costs estimates, based on available data, include consumer capital costs for building and equipment improvements. The costs to the Air District to implement these measures are unknown at this time, but are likely to be a small percentage of overall costs. All cost estimates will be refined during the implementation stage of the CAP. As noted by CCEEB, initial capital costs can indeed be an obstacle to market penetration. The Air District or other agencies may be able to help address this issue by means of policies and programs to help offset these upfront costs.
- 6-20 Estimated emissions reductions and costs for the Energy and Climate Measures will be analyzed in greater detail as these measures are further developed. Air District staff is aware of the need to base its emissions reduction estimates for these measures on those actions that will occur as a result of these measures, in order to avoid any double-counting for actions that will occur in response to other mandates or incentives.
- 6-21 Direct costs and funding sources to implement the Energy and Climate Measures will be determined during the implementation stage of the CAP. However, we do not anticipate that implementation of these measures will come at the expense of existing Air District programs.

April 7, 2010

Jack Broadbent, Air Pollution Control Officer  
Henry Hilken, Director of Planning, Rules and Research  
David Burch, Principal Environmental Planner  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

Letter 2010-7

Re: **BAAQMD 2010 Clean Air Plan, CBE's Health Risk Assessment Comments**

Dear Messrs. Broadbent, Hilken and Burch:

By this letter Communities for a Better Environment (CBE) comments on the need to address indoor exposures to air pollutants in the health risk assessment supporting BAAQMD staff's Draft 2010 Clean Air Plan (CAP) and supporting documentation (Draft). We will comment on other aspects of the Draft separately.

CBE supports staff's proposal to develop emission control measures based on the *cumulative impact* of multiple air pollutants. Staff estimates that emissions of pollutants it targets in the CAP, which often can be reduced by the same measures at the same sources, are associated with health impacts that cause between 1,140 to 5,060 premature deaths and cost approximately \$24 billion in the Bay Area every year.

2010-7-1

However, as staff acknowledges, its exposure assessment assumes that all exposures to this air pollution occur outdoors. It assumes we are in our backyards 24/7. But if we are somewhere else, where the air pollution is worse, this assumption will underestimate the true health risk, and thus the importance of reducing emissions from the sources causing that health risk. In fact, there is evidence that we mostly *are* somewhere else, where air quality is worse, and nearby sources contribute significantly to that pollution:

2010-7-2

- Outdoor air emissions penetrate indoor environments (it's not just indoor sources).
- Large nearby emission sources contribute significantly to indoor air pollution.
- Air quality is worse indoors than outdoors for some pollutants (including PM<sub>2.5</sub>).
- People spend most of their time indoors, exposed to this pollution (~90% on average).

This evidence includes Bay Area data from a household exposure study conducted in Richmond and Bolinas. CBE collaborated with the Silent Spring Institute and faculty of Brown University and U.C. Berkeley in this study, which was funded by the National Institute of Environmental Health Sciences. Relevant findings from this work are reported in the attached peer reviewed paper, and are summarized less formally below to help explain the recommendation that follows.

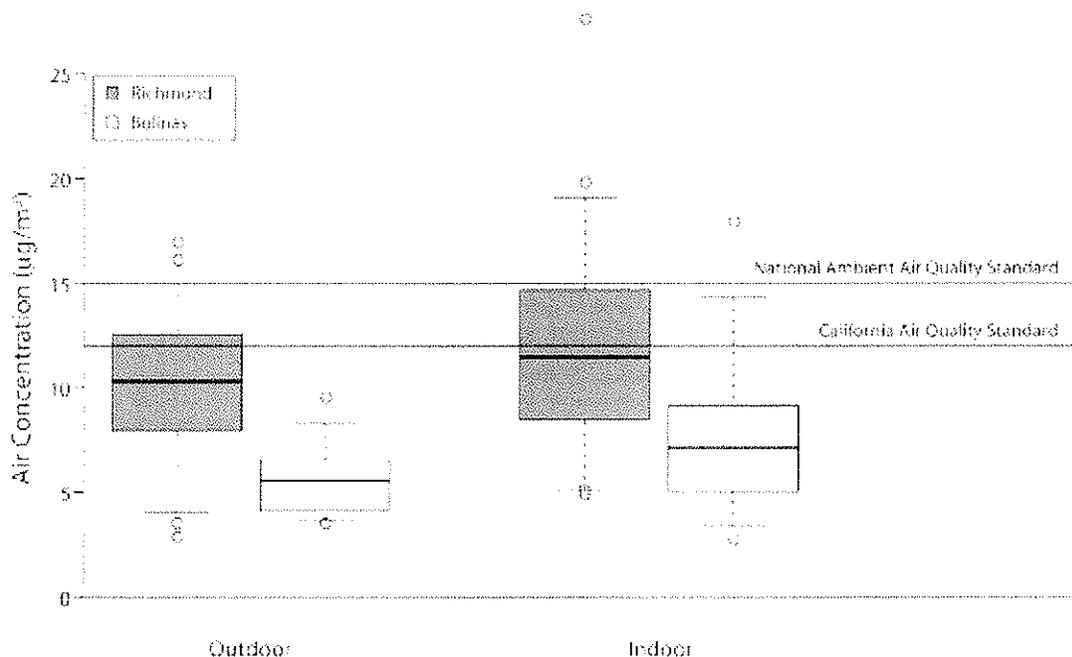
2010-7-3

**CBE Comment on CAP Exposure Assessment**  
**Page two**

Briefly, indoor and outdoor air from 40 homes in Richmond and 10 homes in Bolinas was sampled for analysis of 153 compounds. Outdoor air analysis detected 80 compounds in Richmond and 60 in Bolinas. Indoor air analysis detected 104 compounds in Richmond and 69 in Bolinas. Pollutant concentrations were generally higher in Richmond. Consistent with other work showing that outdoor air quality is an important contributor to indoor air quality, indoor concentrations were significantly correlated with outdoor concentrations for PM<sub>2.5</sub> and 16 other compounds. The correlations and levels for PM<sub>2.5</sub>, several PAHs, lanthanum and elemental carbon further suggested that outdoor air is an important source of indoor air pollution. Levels and correlations for vanadium, nickel and sulfates, which can be considered tracers for heavy oil combustion and/or refinery emissions, indicated that refining and shipping sources impacted indoor and outdoor air quality in Richmond. Richmond's median air concentrations indoors were higher than those outdoors for PM<sub>2.5</sub>, elemental carbon, organic carbon, eight PAHs, two phthalates, ammonia, and o-Phenylphenol. Indoor air PM<sub>2.5</sub> concentrations measured during August-October, a time of year when Bay Area PM levels are generally lower than their peak levels in winter, exceeded the state's annual ambient air quality standard (12 µg/m<sup>3</sup>) in nearly half the Richmond households.

2010-7-3

A figure from the attached peer reviewed report on this work illustrates results for PM<sub>2.5</sub>:



Note: Solid lines are medians; boxes are interquartile ranges; vertical lines are 50th and 95th percentiles; circles are extreme data points below the 50th percentile and above the 95th percentile; and horizontal dotted lines represent annual federal and state ambient air quality standards for PM<sub>2.5</sub>.

FIGURE 1—Levels of fine particulate matter (PM<sub>2.5</sub>) in homes in Richmond and Bolinas, CA: 2006.

**CBE Comment on CAP Exposure Assessment**  
**Page three**

Omitting indoor air evidence from the CAP could result in at least three potentially serious errors. First, by underestimating exposures, health risks, and thus the impetus for more emission reductions to prevent serious ongoing health impacts, the omission could lead to inadequate health protection region-wide. Second, by ignoring the portion of nearby emissions accumulating indoors—cycling between house dust and air to cause exposures long after emissions remaining outdoors disperse, for example—it may underestimate the importance of cutting nearby emissions and fail to protect communities experiencing disparately high emissions. Third, failure to support the Draft's pollutant exposure assumptions could leave proposed emission control measures that are needed to protect public health open to challenge by polluters. For these reasons, CBE, our members, and the public have a vital interest in BAAQMD action to correct the omission of indoor exposure assessment in this CAP.

2010-7-3

**Recommendation**

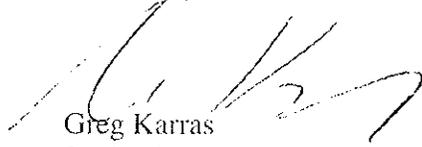
Ideally, CBE would like BAAQMD to build upon and extend the outdoor-indoor air pollution science so that we all might more accurately predict and prevent pollution-related health risks. Such work might start with a full, independent staff analysis of the issue for this Plan that identifies additional proposed control measures and monitoring. However, we understand from informal discussions that staff also seeks specific recommendations. With respect to health risk assessment, CBE recommends that BAAQMD include the following finding in the Plan to more accurately and more strongly support and prioritize the additional emission control measures needed to achieve air quality standards and protect public health in all Bay Area communities:

2010-7-4

The assumption that 100% of exposure to air pollutants occurs outdoors, while it made the technical analysis more manageable, is not correct, and may underestimate the health risk associated with air pollutants targeted in this Plan. In particular, emerging evidence indicates that outdoor air pollutants penetrate indoors, and that nearby emission sources worsen air quality indoors as well as outdoors and contribute significantly to indoor air concentrations exceeding outdoor concentrations for some air pollutants, such as  $PM_{2.5}$ . Therefore, measures to reduce emissions from sources in and near communities where there are higher concentrations of air pollutants and/or sources of cumulative emissions will be prioritized.

Please contact me (510-302-0430 x19) if you have a question about this comment and recommendation. Thanks, in advance, for your consideration of this important matter.

In Health,



Greg Karras  
Senior Scientist

Attachment: Brody et al., 2009. *Am J Public Health* 2009; 99(S3): S600-S609.

Comment Letter #: 2010-7

Date: April 7, 2010

From: Greg Karras, Senior Scientist, Communities for a Better Environment

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Response to Comments:

7-1 Comment noted.

7-2 Comment noted.

7-3 Comment noted.

7-4 Air District staff appreciates the information and suggestions that CBE provides regarding indoor air quality. The Air District has no statutory authority regarding indoor air quality. District staff agrees that it would be desirable to develop more precise information regarding population exposure to air pollutants, both outdoor and indoor. Incorporating information about indoor air quality in the Multi-Pollutant Evaluation Method (MPEM) is not possible within the timeframe of the 2010 CAP. However, Air District staff will consider this suggestion as a potential future enhancement to the MPEM.

Air District staff has prioritized implementation of measures to reduce emissions from sources proximate to impacted communities, and will continue its efforts to protect public health in these communities by means of the CARE program, implementation of CAP control measures, the Mobile Source Compliance Plan, targeted grants, etc.

**Alison Kirk**

**From:** Henry Hilken  
**Sent:** Monday, May 03, 2010 9:42 AM  
**To:** David Burch; David Vintze  
**Subject:** FW: 2010 CAP Comments

FYI

**From:** John Berge [mailto:JBerge@pmsaship.com]  
**Sent:** Friday, April 30, 2010 3:27 PM  
**To:** Alison Kirk; Henry Hilken  
**Cc:** Mike Jacob; John McLaurin  
**Subject:** 2010 CAP Comments

Letter 2010-8

Alison Kirk  
 BAAQMD

Re: Public comment on the draft 2010 Clean Air plan.

Ms. Kirk,

Although the close of comments for this draft plan was April 26, we understand that an extension was granted to close of business today.

The Pacific Merchant Shipping Association (PMSA) is a regional trade association representing dry cargo ocean carriers and marine terminal operators in the Bay Area ports. Our member companies carry over 90 percent of the containerized cargo transiting through the west coast ports. We support the Air Districts efforts to reduce air emissions and related health impacts and we look forward to working as partners with the Air District in achieving our mutual goals of cleaner air and a healthier environment.

Our organization would like to provide comment on only one item of the draft plan.

**Section D – Land Use and Local Impact Measures**  
**Item LUM-1**  
**Implementation Actions – Container Fees (page D-3 and D-5)**

PMSA would advise the Air District that the imposition of container fees on goods passing through Bay Area ports if levied by the state on an across the board basis are likely illegal taxes or duties and will not yield the types of revenues sought to fund air quality programs. Not only are containers themselves protected from local, state or other sub-national taxes, fees or tariffs through the International Conventions on Containers, of which the United States is a signatory, they are preempted by federal law and, in most instances, violative of the Commerce, Import-Export and Supremacy Clauses of the United States Constitution. If the container fees sought are to be collected at a port for the privilege of doing business at a port, then they are discriminatory charges imposed exclusively on interstate and foreign commerce and per se unconstitutional. However, if the district seeks to advocate for the imposition of true user fees or mitigation fees then such a fee should not be collected on a per container basis, but rather on the basis of an actual unit of use or pollution that is applicable to the public, freight or public infrastructure at-large. Such fees are less legally problematic than a container fee and may actually have a basis of support within the trade community when compared to a tax, fee or tariff imposed on a per container basis.

2010-9-1

Thank you for the opportunity to provide comment. Please feel free to contact our office if you have any questions or wish to discuss further.

Sincerely,  
 John Berge

Vice President  
Pacific Merchant Shipping Association  
250 Montgomery Street, Suite 700  
San Francisco, CA 94104  
(415) 352-0710 tel  
(415) 352-0717 fax  
jberge@pmsaship.com

# THE CALIFORNIA RAILROAD INDUSTRY

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April 30, 2010

Letter 2010-9

Henry Hilken  
Director of Planning and Research  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

## RE: Draft 2010 Clean Air Plan

The Class I freight railroads operating in California (the Railroads) appreciate the opportunity to comment on the Bay Area Air Quality Management District's (the District) Draft 2010 Clean Air Plan (CAP).

The CAP's LUM-1 includes a recommendation for the District to support a container fee:

*"The District will advocate for container fees to be imposed on goods passing through Bay Area ports to be used for environmental mitigation. Fees should be assessed to reflect the air quality impacts that result from goods movement activities, including PM, ozone precursors, air toxics and greenhouse gases. Funds will be used to improve air quality in areas most impacted by goods movement activities."*

The Railroads cannot support a container fee, as it would make the Bay Area ports less competitive and have a questionable legal basis.

First, the Bay Area ports would be placed at a competitive disadvantage with the implementation of a container fee. A local fee will most probably drive business away from the region. In fact, other ports on the west coast and nationwide are advertising that, unlike some California ports, they do not charge container fees and are using the requirement of such fees as a marketing tool against California ports. For example, the Port of Seattle frequently delivers the message that their environmental initiatives are "fee-free." Since much of the cargo arriving in the Bay Area is discretionary - meaning it is destined for locations outside of the state and can be brought into the country from ports in other states or even other nations - any additional port container fees would likely cause shippers to look for more cost-effective alternatives to the Bay Area's ports, damaging our local economy.

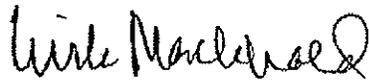
Additionally, a port container fee would violate the United States Constitution Commerce Clause and breach obligations under international trade agreements - such as Article VII of the General Agreement on Trade and Tariffs (GATT). Costly litigation could ensue and an international dispute at the World Trade Organization (WTO) could result. Both of these actions would drain valuable funds from other efforts.

2010-9-1

The Railroads support efforts to mitigate the air quality impact of goods movement in the District and hope to work with the BAAQMD and other stakeholders to continue to efficiently reduce emissions from goods movement.

Thank you for the opportunity to provide comments. If you have any questions or concerns, please call me at 415-215-4213 x 12 or Darcy Wheelers at x33.

Sincerely,

A handwritten signature in black ink that reads "Kirk Marckwald". The signature is written in a cursive style with a large, stylized "K" and "M".

Kirk Marckwald  
Principal, California Environmental Associates  
On behalf of the California Railroad Industry

Comment Letter #: 2010-8

Date: May 3, 2010

From: John Berge, Vice President, Pacific Merchant Shipping Association

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Response to Comments:

8-1 Comment noted. The Air District does not have direct authority to adopt or impose container fees. However, Air District staff believes that container fees could provide an important funding source for projects to reduce emissions from the goods movement sector, and thus help to achieve the goals of reducing diesel emissions and protecting communities that are impacted by goods movement.

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Comment Letter #: 2010-9

Date: April 30, 2010

From: Kirk Marckwald, Principal, California Environmental Associates, on behalf of the California Railroad Industry

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Response to Comments:

9-1 Comment noted. Please see response to comment 8-1 above.

Families for Clean Air Comments to the Draft 2010 Clean Air Plan

Introduction

In the 2010 Draft Clean Air Plan (CAP), the Bay Area Air Quality Management District concludes that it has already picked the "low-hanging fruit," declaring that it is difficult to find regulations and other control measures that provide significant reductions in criteria pollutants. Families For Clean Air ("FCA") respectfully disagrees. There is still some low-hanging fruit to be picked that would provide significant reductions in PM2.5, namely *stronger regulation and enforcement of residential and commercial wood burning, as well as targeted grants for wood smoke abatement projects in the communities that are most impacted by wood smoke.*

BAAQMD recognizes that exposure to PM2.5 is by far the leading public health risk from air pollution in the Bay Area, accounting for more than 90% of premature mortality related to air pollution (CAP p. ES-4). The largest single source of PM2.5 on days when Bay Area PM levels exceed the national 24-h PM 2.5 standard is locally-emitted wood smoke (CAP p. 2-48).

Although the negative health impacts of wood smoke (including aggravated asthma, respiratory symptoms, increased blood pressure, decreased lung function, heart disease, and premature mortality) are well understood, BAAQMD has not given year-round reduction of wood smoke the high priority that it deserves. Most of the District's efforts have focused on a media campaign to inform people of the ban on wood burning on winter Spare the Air days. Despite the District's well funded media campaign, there were still 9 days during the 2009- 2010 winter Spare the Air season when the Bay Area exceeded national ambient air quality standards for PM2.5. There were 13 exceedance days in the 2008-2009 season, an increase from the previous year when only a voluntary wood smoke reduction program was in place.

While FCA agrees that informing the public about winter Spare the Air days is important, the District also needs to take direct and tangible steps to reduce wood smoke pollution throughout the year, in much the same way that BAAQMD has focused efforts to reduce PM emissions from diesel engines.

Families for Clean Air proposes the following measures:

1. Additional funding for the District's wood smoke education and outreach efforts. In particular, information about the health hazards of wood smoke should be incorporated into BAAQMD curriculum materials for elementary, middle, and high school students.
2. Additional funding for wood smoke enforcement. More inspectors should be hired and assigned to patrol neighborhoods on evenings and weekends when most wood burning occurs. The "opacity rule" should be vigorously enforced.
3. Air monitoring in communities that, due to a culture of wood burning and/or

2010-10-1  
2010-10-2

geographic location, are most impacted by wood smoke pollution. Such communities could be identified by the number of wood smoke complaints from residents and/or by inspector's observations during their neighborhood patrols. The results of air monitoring in these neighborhoods should be used to develop and implement *effective* strategies to reduce community exposure to PM2.5 pollution.

2010-10-3

4. District funding for projects in rural, suburban, and low-income communities to assist households in which wood burning is the sole source of heat. In particular, the District should reach out to people who have requested exemptions from the wood burning curtailments on Spare the Air Days. Funds should be provided to change out wood burning stoves or fireplaces for propane heaters and/or to convert wood burning stoves and fireplaces to natural gas. FCA does not support programs that change out old wood stoves for EPA certified wood or pellet stoves because these kinds of stoves still emit substantial amounts of particulate and toxic pollution. In order to get the most "bang for its buck" in terms of PM2.5 emission reduction, District funds should target conversion to propane heat or natural gas.

2010-10-4

5. A well-funded, well publicized wood-chipper program in rural and suburban communities where people often have large amounts of wood debris on their property.

2010-10-5

6. A ban on wood burning in public buildings such as libraries or community centers. If an outright ban is not within the District's jurisdiction, then a requirement that such facilities obtain an air permit that would require them to install best achievable control technology to reduce their PM2.5 emissions.

2010-10-6

Public agencies should not be sending mixed messages about wood burning. While libraries, in particular, may believe wood burning fireplaces create a welcoming ambiance, in reality burning wood creates an unhealthy environment, especially for the senior citizens and pre-school age children who are frequent patrons of libraries. Also, many libraries are located close to residential neighborhoods, thus exposing local residents to wood smoke pollution.

7. District funding to convert wood burning fireplaces in public buildings to gas fireplaces.

2010-10-7

8. A permit program for restaurants with wood or charcoal ovens or grills requiring installation of best achievable control technology to reduce their PM2.5 emissions.

2010-10-8

Conclusion

According to the draft CAP, reducing PM2.5 emissions from wood burning, even by only a small percent, would create \$39 million in social benefits (CAP p. 1-14). BAAQMD investment in, and commitment to, the wood smoke regulation, enforcement, and control measures that FCA recommends will go a long way towards achieving those social benefits by improving the public health.

Comment Letter #: 2010-10

Date: April 26, 2010

From: Patricia Weisselberg

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Response to Comments:

The main point of this letter is that the Air District should take steps to reduce wood smoke pollution throughout the year. As noted by commenter, the Air District's efforts to reduce wood smoke to date have focused primarily on reducing wood smoke during the winter months. The current focus on reducing wood smoke during the winter months is based upon the fact that 1) exceedances of the 24-hour PM<sub>2.5</sub> standard generally occur during winter months only, and 2) wood smoke accounts for a much higher proportion of total PM concentrations during winter months than during other seasons. It should be noted that the Air District did adopt amendments to Regulation 6-2 in 2008 to reduce emissions from commercial wood-burning devices such as charcoal broilers; this will reduce emissions on a year-round basis. Nevertheless, in view of the health risks associated with exposure to wood smoke, there may be merit in considering measures that would further reduce wood smoke throughout the year. CAP Further Study Measures 10 and 12 will consider additional measures to enhance the Air District's efforts to reduce wood smoke.

Responses to specific suggestions in letter 2010-10 are provided below:

- 10-1 The Air District already distributes information regarding the negative health impacts of wood smoke in conjunction with its Winter Spare the Air program. The Air District currently partners with Enterprise for Education to implement a middle school and high school curriculum called the Clean Air Challenge. This program has trained over 500 science teachers in the Bay Area who are now utilizing these curriculum materials in their classrooms. The next edition of the Clean Air Challenge will be modified to include information regarding wood-burning. Air District staff is working with Enterprise for Education to include an insert/addendum addressing wood-burning in the current print edition.
- 10-2 The opacity standard in Regulation 6-3 is enforced already. Budgetary constraints are likely to preclude the hiring of additional inspectors in the near future.
- 10-3 The Air District already uses complaint data to assess "hot spot" areas for focused outreach and enforcement patrols.
- 10-4 Many households that use a wood burning device as their only source of heat do not have access to natural gas,, and propane may be prohibitively expensive for a household. There are federal programs which may assist low income households. See (<http://usgovinfo.about.com/od/federalbenefitprograms/p/weatherpro.htm> and also <http://www.epa.gov/burnwise/fedfunding.html>. In areas without natural gas an upgrade to an EPA-certified device may reduce wood smoke; see EPA's "burn wise" program. See <http://www.epa.gov/burnwise/how-to-guide.html>.

- 10-5 Comment noted. Please note that the Air District does have a chipper program in Napa County.
- 10-6 The suggestion to ban wood burning in public buildings will be considered the next time that Regulation 6-3 is reviewed for potential modification.
- 10-7 At this point in time the Air District does not have funding to implement a grant program for converting wood burning fireplaces in public buildings. Should funding become available in the future, this suggestion will be considered.
- 10-8 Pursuant to Further Study Measure 10 (Further Reductions from Commercial Cooking Equipment), Air District staff will analyze current emissions from wood or charcoal ovens and grills, and evaluate regulatory options to reduce emissions from these sources.

Core Members

**BAY AREA CLEAN AIR TASK FORCE**

American Lung Association  
of California  
Greater Bay Area  
[www.californialung.org](http://www.californialung.org)

Bayview Hunters Point  
Community Advocates  
[bhunterspoint@sbcglobal.net](http://bhunterspoint@sbcglobal.net)

Breathe California  
[www.ggbreathe.org](http://www.ggbreathe.org)

Friends of the Earth  
[www.foc.org](http://www.foc.org)

Natural Resources Defense  
Council  
[www.nrdc.org](http://www.nrdc.org)

Our Children's Earth  
Foundation  
[www.ocefoundation.org](http://www.ocefoundation.org)

RAMP: Regional Asthma  
Management & Prevention  
[www.rampasthma.org](http://www.rampasthma.org)

Sierra Club  
[www.sierraclub.org](http://www.sierraclub.org)

TRANSDEF  
[www.transdef.org](http://www.transdef.org)

Union of Concerned Scientists  
[www.ucsusa.org](http://www.ucsusa.org)

West Oakland Environmental  
Indicators Project  
[www.paciis.org](http://www.paciis.org)

April 26, 2010

Letter 2010-11

Alison Kirk  
Bay Area Air Quality Management District  
939 Ellis St.  
San Francisco, CA 94109  
Submitted via email: [akirk@baaqmd.gov](mailto:akirk@baaqmd.gov)

Ms. Kirk:

On behalf of the Bay Area Clean Air Task Force, we submit these comments on the Bay Area Air Quality Management District Clean Air Plan (CAP). The Task Force supports the multi-pollutant approach, and in general the broad effort to reduce air pollution in the Bay Area.

**Prioritize Measures Benefiting Residents of Impacted Communities First**

Air pollution is a serious health issue across the San Francisco Bay Area, and particularly in the most impacted communities. The Clean Air Plan identifies important air pollution control measures aimed at reducing pollutants across sectors. We strongly recommend that the regulatory calendar prioritize those measures that can provide health benefits to the impacted communities. BAAQMD has referred to impacted communities as "Priority Communities" in the CARE process. The final Clean Air Plan should analyze the likely locations of emissions reductions for Clean Air Plan measures, and identify those measures that can be accomplished in the early years and will benefit the most impacted areas. These measures should be planned for the regulatory calendar in the early years of the Clean Air Plan, if not immediately.

2010-11-1

**Full Valuation of Health Effects**

Page 1-12 should be updated to include the full list of health effects valuations identified by the Air Resources Board and other sources, including asthma attacks, lost work days, lost school attendance days, and days with reduced lung function.

2010-11-2

**Joint Planning by Regional Agencies**

We encourage recognition in the Clean Air Plan for there to be joint planning by regional agencies, including the Metropolitan Transportation Commission and Association of Bay Area Governments. We encourage for the agencies to work together on planning for emission reductions policies and enforcement.

2010-11-3

**SSM 6 (Particulate Matter limitations):** In this measure, BAAQMD proposes amending Regulation 6-1 with more stringent limits for PM such as those contained in similar rules promulgated by the San Joaquin and South Coast air districts. For example, the CAP notes that the South Coast's Rule 405 allows

2010-11-4

less than about 12 pounds per hour for facilities processing 20,000 pounds per hour of material, whereas BAAQMD Regulation 6-1 currently allows 19 pounds per hour of PM emissions for the same process rate.

BACATF urges the District to amend Regulation 6-1 to reduce PM emissions from stationary sources. However, the levels set should be based on the potential health impacts of PM emissions from a facility, not the quantity of materials being processed. BACATF recommends that this Regulation be amended such that PM emissions of all stationary and area sources are subject to air dispersion modeling and the most stringent health-based limitations to protect impacted communities and the most vulnerable residents.

### **SSM 17 – NSR for New Toxics**

BAAQMD's action to reduce the allowable risk for new or modified sources was a step in the right direction. BAAQMD should continue to reduce allowable risk under the NSR to reflect ongoing science recommended by OEHHA such as ingestion factors. BAAQMD should also take cumulative impacts of air pollution into account with a tiered approach or another method to address cumulative impacts. An approach considering essential community services may address the concerns with a tiered approach.

2010-11-5

Regarding tracking of TAC emissions, the District should expand its current cumulative tracking concept by adding additional tracking mechanisms for other pollutants. To more accurately track cumulative emissions, criteria air pollutants should be included, as well as pollution from existing and new indirect and "magnet" sources and construction projects. Because this measure relates only to TACs, expanded tracking of cumulative air pollution should be defined as a separate CAP measure.

**SSM 18 (Air Toxics Hotspots program revisions):** This measure proposes more stringent risk reduction requirements for existing sources covered by the Air Toxics Hot Spots law. However, the CAP notes that any increase in stringency would be contingent on the outcome of adopting OEHHA's cancer risk assessment procedures. BAEHC urges the District to lower "acceptable" risk levels for this program regardless of adopting OEHHA's updated risk methods. The District has clear authority to set standards that are *more stringent* than state standards. Further, BAAQMD has adopted this updated scientific methodology in the NSR, so this should be extended to all District programs.

2010-11-6

### **SSM Proposed Measure: Existing Source Rule**

The CAP should include a new **SSM** to reduce emissions from existing, or "grandfathered" sources. Industries with old and relatively high-emitting equipment are an ongoing problem for environmental justice communities in terms of odors as well as toxics and PM exposure. Such a measure would ensure that *all* facilities and sources, not just the ones currently targeted in the CAP, are upgraded to protect public health based on modern environmental health standards. This measure should also include the preparation of an emissions inventory for grandfathered sources. Although the CAP proposes many measures that will require more stringent emissions control, additional reductions are possible if sources applied BACT, and transitioned to the same rules as other sources that limit emissions.

2010-11-7

## Clean Construction Equipment Rule Needed for Impacted Communities

The use of best available control technology would be a cost effective way to address a major source of toxic risk in the priority communities. The District's research in the CARE program found that construction equipment is 29% of the weighted cancer risk in the priority communities, and in some communities such as Bayview-Hunters' Point, it is even higher. Use of retrofits and higher tier engines can cut up to 85% of the fine particulate matter emitted, so adoption of toxic best practices could potentially result in a 25% reduction in cancer risk in the priority communities. Air Resources Board studies comparing the costs and benefits of requiring higher tier engines and retrofits showed a **nine to one** ratio of health benefits and industry costs, demonstrating that cleaner diesel equipment is an extremely cost effective measure.

2010-11-8

The Clean Air Plan, in addressing the impacts of toxic diesel pollution from construction equipment in MSM C-1, only considers incentive funding. While prioritizing incentive funding is an important component of the CARE program, we urge inclusion in the Clean Air Plan a rule for requiring the use of clean construction equipment in the impacted communities. Although the Air Resources Board has adopted a regulation that phases in Tier 3 and 4 engines and diesel particulate filters, only 20 percent of the average fleet will be phased in by 2014, with potential additional roll-backs. The Air Resources Board did not apply the local knowledge of Air Districts to ensure that emission reductions are prioritized for impacted communities. Additionally, the Bay Area is in nonattainment for PM<sub>2.5</sub> and can work with USEPA to identify authority to develop a more stringent rule.

## Support Regional Truck Route Planning in LUM-1

We support Ditching Dirty Diesel Collaborative in their proposal for regional truck route planning in LUM-1 that would minimize impacts to community health. Many localities that do not have enforceable, health-protective truck routes face disproportionate public health impacts.

2010-11-9

## Indirect Source Rule Description Underestimates Benefits

The Emission Reductions Methodology for the Indirect Source Rule (ISR) LUM-2 is modeled after the San Joaquin Valley APCD ISR program. Although this example should be informative as to how a similar program may perform in the Bay Area, we hope that BAAQMD will consider more stringent performance standards and mitigation requirements than SJVAPCD. The emission reductions description should clearly state that the concept is in development, and BAAQMD will consider standards and mitigation levels more stringent than the example used.

2010-11-10

The ISR should also review and address the health impacts of diesel pollution and particulate matter if it is to be a review of indirect sources and provide needed emissions reductions.

## Community Risk Reduction Plans Lack Specificity (LUM-5)

The Community Risk Reduction Plans lack specificity, particularly in the absence of a clear reduction target, the scope of the emissions inventory to be reduced, and the mechanisms to ensure these reductions are achieved. We support the Bay Area Environmental Health Collaborative and Ditching Dirty Diesel Collaborative in raising the need for this to be discussed in the description of the CRRPs. The CRRPs need health protective standards and clear guidelines so they do not become merely plans that sit on a shelf, plans that merely take credit for existing rules, or a loophole around BAAQMD's CEQA Guidance for Toxic Risk.

2010-11-11

## **Further Study Measure Needed for Conservation Pricing for Energy**

The Clean Air Plan recommends an active pricing strategy for transportation demand management. The CAP should also include as a further study measure, or include in FSM-13 (Energy Efficiency and Renewable Energy) an effort aimed at working with the Public Utilities Commission, Energy Commission, Independent Systems Operator, and Pacific Gas and Electric and municipal utilities to identify best pricing practices to manage air pollution to prevent Spare the Air days. PG&E has begun a voluntary pricing program to manage its supply of electricity, but no agency has completed a comprehensive study that identifies the air quality benefits of minimizing electricity use, and more importantly, additional emissions from industrial sources for the Bay Area air basin on Spare the Air Days. The results of this study can be presented for consideration to agencies with authority to require such measures. With the Bay Area in nonattainment with the California Ozone standard, and likely to be in nonattainment for more stringent Federal Ozone standards, this is a feasible measure that could identify reductions in local pollution.

2010-11-12

## **TCM Proposal: County transportation plans must meet GHG reduction goals**

County congestion management agencies (CMA) adopt plans for projects and expenditures in the county, and counties additionally include Transportation Elements in their General Plans. It is a feasible measure for BAAQMD to direct for these plans to meet greenhouse gas reduction goals. The transportation plans do not address the mode shifts needed to mitigate climate change, and many include freeway expansions that would increase greenhouse gases. Although the plans are implemented by other agencies, this does not address the greenhouse gas impacts of these plans, so BAAQMD should play a greater role.

2010-11-13

## **TCM B-4: Goods Movement Plans Should Encourage Mode Shift**

We support efforts to encourage mode shift of freight transportation from truck to rail. However, these efforts should carefully consider the overall impact on emissions, particularly as they affect the most impacted communities. In discussing the emissions benefits of increased goods movement efficiency measures, the analysis should also discuss the role of induced demand. Measures that actually increase capacity would likely increase goods movement, and increase emissions. The Clean Air Plan should focus on efforts which reduce pollution, rather than encourage measures that may have the consequence of increasing pollution. The Plan should discuss strategies to manage and limit induced demand so as to maintain the emissions benefits of efficiency improvements.

2010-11-14

## **Magnet Source Rule Should be Pursued as Land Use Measure**

We support Ditching Dirty Diesel Collaborative in their suggestion to move the magnet source rule to become a scheduled LUM, and not a Further Study Measure. This approach to controlling emissions is needed in the most impacted communities. BAAQMD had begun a rulemaking process aimed at Ports, and should continue to pursue this rule as an effective strategy to achieve emissions reductions at key magnet sources.

2010-11-15

## **Leadership Platform 2-6: Incentives for Land Use Actions Should Ensure Additional Actions**

The CAP includes in its leadership platform the use of a potential carbon trading system to create credits for local government actions. This proposal raises additionality problems. The draft cap-

2010-11-16

and-trade regulation has not been adopted by the Air Resources Board, and the existing offset protocols do not address local land use actions that interact significantly with other capped sectors (particularly the transportation sector). This proposal raises concerns regarding the quality of such offsets and whether they are equivalent to the real reductions of emissions from sources within the cap. Local government actions may be difficult to quantify to the accuracy needed to identify the emissions, if any, that are not included within the other capped sectors. More specifically, the local land use action may claim credit for reduction in vehicle miles traveled and associated fuel use, but these reductions have already likely been included in the cap-and reduction target or SB 375 target set by the Air Resources Board. Overall, local government actions should be in addition to the reductions achieved to bring California greenhouse gas emissions to 1990 levels by 2020 under AB 32.

We applaud BAAQMD's support for additional incentives for local government land use actions, and encourage forward-thinking efforts to strengthen regional planning laws and incentives for local governments. We urge re-phrasing this Leadership Platform item to incorporate these concerns.

Sincerely,



Jenny Bard  
Co-Chair



Andy Katz  
Co-Chair

Comment Letter #: 2010-11

Date: April 26, 2010

From: Jenny Bard and Andy Katz, Co-Chairs of the Bay Area Clean Air Task Force

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Response to Comments:

- 11-1 Air District staff agrees that control measures that can provide health benefits to CARE impacted communities should be prioritized for adoption and implementation. Staff has, in fact, prioritized such measures in crafting the proposed rule development schedule shown in Table 4-9 of the CAP.
- 11-2 As suggested, the valuation of all health effects included in the Multi-Pollutant Evaluation Method will be shown in the *Valuation of Health Effects* section in the final version of CAP Chapter 1.
- 11-3 Comment noted. The Air District works with its regional partners, local partners, community members and other stakeholders throughout the air quality planning and implementation process, and will continue to do so.
- 11-4 Please see MR-1. The Air District encourages the Clean Air Task Force and other interested parties to participate in the rule-making process regarding amendments to Regulation 6-1, Particulate Matter limitation.
- 11-5 The Air District will continue its efforts to protect public health in impacted communities through a multi-faceted effort that includes New Source Review, the CARE program, targeted grants, targeted enforcement of CARB's diesel air toxics control measures (ATCMs), the cumulative impact thresholds in its June 2010 CEQA guidelines, and other measures described in the CAP.
- The cumulative risk-tracking system described in LUM 5 will focus on risk related to air toxics and directly-emitted PM<sub>2.5</sub>. Also, please note that LUM 6 (Enhanced Air Quality Monitoring) seeks to improve air quality monitoring in impacted communities; this measure is not limited to toxic air contaminants.
- 11-6 Comment noted. Revisions to the risk reduction requirements of the Air District's Air Toxic Hot Spot (ATHS) program will be considered through the District's rule-making process. As noted in the description of SSM 18, OEHHA is currently considering revising cancer risk assessment procedures to provide a greater margin of safety for protecting children. Due to the potential significance of these revisions in OEHHA risk assessment methodologies, District staff believes that it is prudent to consider changes to its ATHS risk reduction rule in conjunction with the OEHHA guideline revisions.

- 11-7 Communities for a Better Environment offers a similar suggestion in its April 26 comment letter. Please see response to Comment 19-5 below.
- 11-8 The Air District cannot adopt a rule to require best available control technology for construction equipment because Federal law preempts setting local emission standards for construction equipment. However, the revised (June 2010) BAAQMD CEQA Guidelines include significance thresholds for construction emissions and localized PM<sub>2.5</sub> concentrations, which should encourage the use of cleaner construction equipment for projects throughout the Bay Area (LUM 3). The Air District encourages cities and counties to develop Community Risk Reduction Plans as a means of addressing the thresholds for air toxics. Such plans would be an appropriate place to recommend or require the use of clean construction equipment in impacted communities. In addition, the Air District will encourage local jurisdictions to adopt green construction equipment emission requirements pursuant to Leadership Platform item 1-7 regarding support for green fleets.
- 11-9 Please see response to comment 1-6 above.
- 11-10 See MR-1. All estimates in CAP control measure descriptions regarding emission reductions and implementation costs are subject to further refinement during the rule-making process.
- 11-11 Please see response to comment 1-17. Expected elements of Community Risk Reduction Plans (CRRPs) are described in the preliminary draft guidelines for Community Risk Reduction Plans (May 2010), and will continue to be discussed with the CARE Task Force and other stakeholders. In order to allow for streamlining under CEQA, CRRPs must be certified by governing bodies; CRRP emission reduction targets will be enforceable through that process. For more information about CRRPs, please see MR-2, as well as the response to comment 13-9.
- 11-12 The following text has been added to FSM 13: *Collaborate with public agencies, such as the California Public Utilities Commission and the California Energy Commission, to promote energy efficiency, potentially including energy pricing policies to reduce demand on an on-going and/or episodic basis.*
- 11-13 The Air District has no direct role in shaping county transportation plans. However, as noted in TCM D-3, MTC will encourage congestion management agencies (CMAs) to develop transportation plans that will reduce GHG emissions. In addition, the CEQA thresholds for greenhouse gases adopted by the Air District Board on June 2, 2010, should help to ensure that GHGs are considered in the environmental review for regional transportation plans and general plans throughout the Bay Area.
- 11-14 Comment noted. The intent of the CAP control measures is to reduce overall emissions and exposures from the goods movement sector. Please note that LUM 1 (Goods Movement) also addresses mode shift to reduce emissions from the goods movement sector.
- 11-15 Please see response to comment 1-19 above.

11-16 The intent of Item 2-6 in the CAP Leadership Platform is to provide an incentive for local governments to pursue greenhouse gas reductions over and above any requirements. This item does not commit the Air District to support any specific proposal. The Air District would only agree to support a proposal that is carefully crafted, so as to avoid the potential pitfalls that the Clean Air Task Force identifies in its comment.

**Alison Kirk**

**From:** Belgrave House [neff@belgravehouse.com]  
**Sent:** Saturday, April 17, 2010 9:07 AM  
**To:** Alison Kirk  
**Subject:** Clean Air Plan for Bay Area

Letter 2010-12

Though the plan as written has many good features, it does not address some potent issues. The plan describes benefits of planting street trees, but says nothing about the destruction of healthy, mature trees. When these healthy, mature trees are destroyed, all the carbon they've sequestered is once again released. There are groups planning to destroy hundreds/thousands of healthy, mature trees when the rest of us are concerned with issues of global warming.

2010-12

Carbon sequestration is proportional to biomass, so small street trees are no replacement for mature trees--at least for many years.

This is an important issue that the 2010 Clean Air Plan should address. Standards should be set for the destruction of healthy trees, and they should be high ones, indeed. Taking down beautiful trees/forests is against all logic when the pertinent facts are taken into account.

Elizabeth Rotter  
190 Belgrave Avenue  
San Francisco, CA 94117-4228

Comment Letter #: 2010-12

Date: April 17, 2010

From: Elizabeth Rotter, Belgrave House

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Response to Comments:

12-1 Please see MR-4.



Environmental Justice Air Quality Coalition • Immigrant Power for Environmental Health and Justice • Bay Area Clean Air Task Force • Contra Costa Asthma Coalition • Environmental Law and Justice Clinic • Regional Asthma Management and Prevention Initiative

Letter 2010-13

Submitted via email: [akirk@baaqmd.gov](mailto:akirk@baaqmd.gov)

April 26, 2010

Dear Ms. Kirk:

On behalf of the Bay Area Environmental Health Collaborative (BAEHC), thank you for this opportunity to submit these comments on the proposed Draft 2010 Clean Air Plan (CAP). BAEHC is a broad collaborative of five environmental health and justice coalitions, representing over 20 organizations working to reduce cumulative air pollution impacts in Bay Area neighborhoods, especially in highly impacted communities, and to expand opportunities for meaningful and informed public participation in decision-making that affects public health.

BAEHC has been actively engaged in various Air District activities, advocating implementation of enforceable measures to limit and reduce cumulative pollution with a focus on the most overburdened communities. We believe that addressing disparities in communities identified through the District's CARE Program should be the agency's immediate priority and the focus of the CAP.

2010-13-1

The District now faces a prime opportunity to set a clear agenda for reducing cumulative exposures and eliminating disparities in overburdened communities. Such decisive action would be consistent with CARE Program findings of inequities in the impacted communities, and with the Cumulative Impact Resolution unanimously adopted by the Board of Directors in July 2008, which committed the District to exploring new tools, methods and enforceable measures to reduce disproportionate cumulative impacts.

BAEHC supports the District's *multi-pollutant approach* and the inclusion of toxic air contaminants (TACs), particulate matter (PM), and greenhouse gases (GHGs) in the CAP. BAEHC also supports the CAP's focus on *outcomes* to improve health and reduce the effects of climate change. Further, we strongly support the CAP's inclusion of the "Summary of Costs and Disbenefits" of air pollution (see CAP, Appendix A). The estimated cost of proposed regulation has too often been the focus, rather than the high health and welfare costs of *not* regulating or the *benefits* of more health protective standards. The compelling data presented in the CAP support swift implementation of the strongest enforceable regulations to protect public health, prioritizing benefits for the most impacted communities.

2010-13-2

***I. Environmental justice, specifically reducing pollution in overburdened communities, should be a central guiding principle in developing and implementing the CAP***

**SSM 17 (NSR for Air Toxics):** In this measure, the District proposes to revise Regulation 2-5 (Toxics NSR) to incorporate updated OEHHA methods into risk assessment procedures and to track toxicity-weighted TAC emissions in CARE communities as a way of characterizing cumulative impacts. Due to existing health and exposure burdens in these areas, as the District notes, "the Board directed staff to further consider setting different standards in the CARE communities for permit issuance under this rule"

BAEHC c/o Environmental Law and Justice Clinic, Golden Gate University School of Law  
536 Mission Street, San Francisco, California 94105-2968 • Tel. 415.442.6666 • Fax. 415.896.2450 • [www.baehc.org](http://www.baehc.org)  
Contact: Amy S. Cohen, Campaign Director • [acohen@ggu.edu](mailto:acohen@ggu.edu)

(see CAP at A-50). The District has the immediate opportunity to take affirmative steps towards addressing adverse cumulative impacts by adopting more health-protective permitting standards for CARE communities, as it proposed to do in 2009 before withdrawing its proposal from the Board's consideration. BAEHC was disappointed that the Toxics NSR revisions adopted by the Board in January 2010 failed to incorporate more stringent protections in CARE communities, as originally proposed in earlier rule drafts. BAEHC strongly urges the District to prioritize revising this regulation to incorporate more stringent permitting standards in the CARE communities. Consistent with the Pollution Reduction Protocol BAEHC proposed to the District in 2009 (attached), BAEHC believes that no new pollution should be permitted in these areas, with few exceptions for essential services and projects that would result in net reductions. While BAEHC supports incorporating updated more health protective OEHHA methods, we do not support continuing to permit additional health risk in these already overburdened communities.

2010-13-3

Regarding tracking of TAC emissions, the District should expand its current cumulative tracking concept by adding additional tracking mechanisms for other pollutants. To more accurately track cumulative emissions, criteria air pollutants should be included, as well as pollution from existing and new indirect and "magnet" sources and construction projects. Because this measure relates only to TACs, expanded tracking of cumulative air pollution should be defined as a separate CAP measure.

2010-13-4

**SSM 18 (Air Toxics Hotspots program revisions):** This measure proposes more stringent risk reduction requirements for existing sources covered by the Air Toxics Hotspots law. However, the CAP notes that any increase in stringency would be contingent on the outcome of adopting OEHHA's cancer risk assessment procedures. BAEHC urges the District to lower "acceptable" risk levels for this program regardless of adopting OEHHA's updated risk methods. The District has clear authority to set standards that are *more stringent* than state standards. The definition of "acceptable risk" is a policy decision regarding the management of estimated risk levels, whereas OEHHA's risk assessment revisions are a technical refinement of risk assessment procedures. These two activities, risk assessment and risk management, should be separate, not linked. We urge the District to require additional risk reductions at the highest risk facilities in the region to minimize localized impacts.

2010-13-5

The CAP should include a new **SSM** to reduce emissions from "grandfathered" sources. While the CAP proposes several SSMs that will reduce emissions from a variety of existing sources, BAEHC recommends that an additional measure be added to identify and reduce emissions from grandfathered sources throughout the region. Industries with old and relatively high-emitting equipment are an ongoing problem for environmental justice communities in terms of odors as well as toxics and PM exposure. Such a measure would ensure that *all* facilities and sources, not just the ones currently targeted in the CAP, are upgraded to protect public health based on modern environmental health standards. This measure should also include the preparation of an emissions inventory for grandfathered sources.

2010-13-6

**LUM 1 (Goods Movement):** BAEHC supports the comments of the Ditching Dirty Diesel Collaborative (DDDC) to add an additional purpose and related implementation actions to focus reductions and resources on communities disproportionately impacted by freight transport and goods movement. The CAP should clarify that efforts to increase regional efficiency should not come at the expense of local impacts. See also comments below regarding the need for a strong regional multi-stakeholder collaborative process and clear enforcement and oversight for this measure.

2010-13-7

**LUM 2 (Indirect Source Review rule):** An ISR rule should be defined broadly to focus not only on VMTs resulting from new development but should include any modifications to existing sources,

construction impacts, and also PM and not only diesel PM. LUM 2 should be prioritized and should include the greatest mitigation possible to avoid increased pollution and promote reductions with any new growth or infill development. The District should also incorporate FSM 11 (Magnet Source rule) into this rule and prioritize its development for immediate implementation, rather than as a further study measure. Clear goals, timelines, and outcomes that are both measurable and enforceable must be included.

2010-13-8

**LUM 3 (Updated CEQA Guidelines and Review):** The guidelines should recommend broadening CEQA review to ensure that cumulative impacts are fully evaluated before siting and permitting new pollution in already overburdened areas. The District has the immediate opportunity to take affirmative steps towards addressing adverse cumulative impacts by adopting more health-protective standards for CARE communities in the guidelines. Board Option 1 of the proposed CEQA Guidelines is a step in the right direction, but even greater protections are needed. BAEHC believes that *no* new pollution should be permitted in the priority impacted communities, with few exceptions. Any proposed project that would result in increased emissions in overburdened areas such as the CARE communities should be considered to have "significant" impacts. The cumulative threshold should be expanded to ensure a more thorough evaluation of potential health risks to the most vulnerable populations. Moreover, proposed projects meeting "thresholds of significance" should not be automatically exempt from CEQA review as there may still be a "fair argument" of potentially significant impacts, which could never be presented if the project is not subject to review. In addition, compliance with a qualified "community risk reduction plan" (CRRP) should be in addition to, not instead of, compliance with the most stringent applicable thresholds. Finally, PM mitigation measures should be incorporated into both the Guidelines and the CRRPs.

2010-13-9

**LUM 4 (Land Use Guidance):** This measure is stated merely as a summary of available programs and resources for the District to help local land use planning benefit air quality and reduce VMTs. No concrete guidance is included. The measure lacks a clear timeline and measurable outcomes. Moreover, the stated focus is VMTs and reducing GHGs and exposure to TACs. PM<sub>2.5</sub> should be included as well as other activities and sources such as construction, development, and goods movement. The goal should be avoiding conflicts between the health of residents and operation of industrial, mobile and area sources as well as emissions from other indirect and magnet sources. The measure should be clarified to clearly apply to projects that would be impacted by existing sources, such as new residents in infill housing, for example. The CRRPs lack any specificity or measurable goals, timelines and outcomes. It is still unclear what the CRRPs would entail, what the District's role would be, how reductions would be ensured, how the plans would be implemented and enforced, and what collaborative public process would be used to invite stakeholder input and evaluation. As noted above, compliance with a qualified CRRP should be in addition to, and not instead of, compliance with applicable standards.

2010-13-10

**LUM 5 (Reduce Health Risk in Impacted Communities):** Like LUM 4, this measure is vague with no clear outcomes, timeline, or indicators of progress. It is merely described as a list of actions and programs comprising elements of the District's emissions risk reduction strategy in the impacted CARE communities. The title is a misnomer, as no reductions are attributable to this measure. There is no process for monitoring and evaluating the District's progress in achieving any potential reductions from other measures (e.g., SSMs 16-18), or for the system to track cumulative health risks over time and ensure that appropriate reductions are urgently pursued in the most impacted areas. See also above for comments regarding CRRPs in LUM 4. BAEHC has proposed a Pollution Reduction Protocol that would not only prevent pollution from worsening in overburdened areas, but would reduce risks over time with implementation of strong measures such as those included elsewhere in the CAP. BAEHC again urges the District to limit any new pollution in the priority impacted communities, with limited exceptions for essential services or projects that would result in net reductions.

2010-13-11

**LUM 6 (Enhanced Air Quality Monitoring):** Additional monitoring in impacted communities should be supported and accompanied by strong community participation, as noted further below.

For stationary sources, specific enforceable **SSMs** affecting overburdened communities should be prioritized for rule development and implementation. **SSMs** proposed for categories of sources commonly sited in impacted communities (e.g., refinery sources) should be prioritized for rule development and implementation, with the goal of maximizing emissions reductions from the most high-risk sources in the most heavily impacted areas. Strong enforcement of these measures is critical. While the District plans to rely on existing enforcement mechanisms, we believe that more aggressive enforcement of repeat violators would result in better assurance of compliance. A stronger enforcement plan would help ensure that the District can achieve the emissions reductions anticipated in the CAP.

2010-13-12

Finally, because construction is a significant source of exposure and risk in the communities identified through the CARE program, the CAP should include a new **MSM** to require use of clean construction equipment. Requiring use of best available control technology and best practices could significantly reduce PM exposures and associated risk in these areas, and could help the region achieve attainment of federal PM standards.

2010-13-13

***II. Effective public participation by impacted communities should be an essential component of the CAP***

For measures where no specific regulation is proposed, there is no public process to provide critical input, oversight and evaluation of the District's progress and effectiveness of these measures. To reduce local health and environmental impacts such as those anticipated by the LUMs and other CAP measures, the District must incorporate strong public participation into the CAP.

2010-13-14

**SSM 17 (Toxics NSR) and SSM 16 (NSR-PM):** The District should expand existing public notice requirements to inform potentially affected residents of all proposed permits in the impacted communities identified by the CARE Program and provide an opportunity for public comment and hearings. This is consistent with the Public Participation Protocol BAEHC proposed to the Air District in 2009 (attached). Specific areas, sources and source categories should be prioritized for enhanced public participation.

2010-13-15

**LUM 1 (Goods Movement):** BAEHC supports the comments of the DDDC, in particular the need for a multi-stakeholder collaborative process with affected community representatives at the table. Only through such a process will local impacts be highlighted to ensure that any effort to increase regional goods movement efficiency does not come at the expense of already disproportionately impacted communities. A mechanism for community oversight and enforcement should also be included, for example to address idling in impacted communities and determine how citation funds should be allocated.

2010-13-16

**LUM 2 (Indirect Source Review rule):** Public processes including the ISR Working Group should include representatives from the CARE communities who are disproportionately impacted by diesel and other PM emissions. There must also be public and community input, oversight and evaluation of the distribution of fees under this rule. Again, **FSM 11 (Magnet Source rule)** should be incorporated into LUM 2 and prioritized for immediate development and implementation. A broad stakeholder process including residents affected by a variety of magnet sources should be convened to define "magnet," identify sources, and set clear goals, timelines and measurable outcomes.

2010-13-17

**LUM 3 (Updated CEQA Guidelines and Review):** CEQA review and public notice procedures should be broadened to ensure expanded notice and opportunities for public comment in the CARE communities. Because of already significant adverse health impacts in these communities, BAEHC believes that no new pollution should be permitted in these areas with limited exceptions. Until then, proposed projects meeting proposed risk standards under the CEQA guidelines should not be automatically exempt from CEQA review. Even if a project complies with “thresholds of significance” under CEQA, there may still be a “fair argument” of potentially significant impacts, and cumulative impacts in particular. Consequently, such projects should not evade CEQA review and the opportunity for the public to present evidence of potential significance.

2010-13-18

**LUM 4 (Land Use Guidance):** There is no clear process for the public and especially impacted communities to participate in the development of whatever “guidance” the District plans to provide to local land use planning agencies. A meaningful collaborative process with representation from affected communities and public health advocates is critical as the District determines its role and guidance in the development and implementation of the CRRPs in particular. BAEHC would like to provide input and review a draft CRRP plan when one is available.

2010-13-19

**LUM 5 (Reduce Health Risk in Impacted Communities):** There is no clear process for the public and especially impacted communities to provide input, monitor and evaluate the District’s progress and outcomes of this vague measure. See also the comment regarding CRRPs in LUM 4 above. We support DDDC’s comments calling for input from organizations with experience conducting community based participatory research projects as the District establishes a system for tracking cumulative health risks and adds new air monitoring in CARE communities under **LUM 6 (Enhanced Air Quality Monitoring)**. Impacted residents should be involved in prioritizing needs and areas for additional monitoring, and the District should ensure that the data is accessible data to the non-technical public.

2010-13-20

**III. The CAP should include much more ambitious goals for particulate matter (PM) reductions for public health protection**

While we are pleased that the District includes fine particulate (PM<sub>2.5</sub>) reduction measures in the CAP, the District has set an overly modest goal for PM reductions. The CAP establishes a goal for reducing population exposure to PM<sub>2.5</sub> by a mere 10 percent reduction by 2015, whereas the diesel PM goal is 85 percent reduction by 2020, and GHG goals are reductions to 1990 levels by 2020 and 40% below 1990 levels by 2035.

2010-13-21

This is inconsistent with the District’s own findings. The District identifies directly emitted PM as the most hazardous air pollutant in the region, with fine PM (PM<sub>2.5</sub>) responsible for more than 90% of premature deaths associated with air pollution (see CAP at ES-4). As shown in the accompanying table (adapted from CAP table 1-2), the District identifies directly emitted PM<sub>2.5</sub> (without diesel) as the second most important pollutant with respect to health and welfare benefits obtained from reduction measures.

BAAQMD’s Assessment of the Relative Health/Social Benefits of a 1 Ton per Year Reduction of Various Air Pollutants	
Diesel PM <sub>2.5</sub>	96.1
Direct PM <sub>2.5</sub> (no diesel)	95.5

Ammonia	11.2
SO <sub>2</sub>	7.9
1,3 Butadiene	6.3
Benzene	2.5
NOx	1.5
Formaldehyde	1.2
Acetaldehyde	1.1
ROG	1.0
CO <sub>2</sub> equivalent	0.03

BAEHC urges the District to include more ambitious PM reduction goals in the CAP by strengthening its current measures or developing additional measures to obtain deeper cuts in PM emissions. Since a relatively large portion of PM emissions come from mobile sources, the District should work to obtain stronger commitments from its regional agency partners to meet this goal, especially MTC.

Second, the CAP should specifically address the needs of environmental justice communities in its PM reduction measures. The District says it is "concerned with reducing pollution exposure throughout the region, but we place special emphasis on reducing population exposure and health impacts in the Bay Area communities that are most heavily impacted by air pollution" (see CAP at 1-14). Certain emission reductions may have substantial benefits for localized communities that may not appear to be significant when averaged on a regional basis. The District should consider all localized sources of PM in highly impacted communities and propose the health-based reduction measures to protect these communities, even if daily "tons-per-day" reductions are relatively small on a regional basis.

2010 -  
13-22

Third, the CAP incorrectly dismisses the continued need to protect against PM<sub>10</sub> pollution, which consists of PM<sub>2.5</sub> plus coarse particulate. For example, in a discussion of the federal PM standards the CAP says that the PM<sub>10</sub> standard has been "largely superseded" by the PM<sub>2.5</sub> standard (see CAP at 2-33). On the contrary, the U.S. EPA carefully considered whether to protect populations from coarse particles (PM<sub>2.5-10</sub>) and concluded it is appropriate to do so, and is currently proposing to use the federal PM<sub>10</sub> NAAQS standard to accomplish this.<sup>1</sup> The current 24-hour federal PM<sub>10</sub> standard (150 ug/m<sup>3</sup>) is relatively high compared to concentrations experienced in the Bay Area such that an updated federal PM<sub>10</sub> standard might not be of much practical consequence for the region. However, PM<sub>10</sub> levels in the Bay Area exceed the more stringent California 24-hour PM<sub>10</sub> standards. In its last close look at PM toxicity, California's OEHHA also concluded that there is a need to protect against coarse particulate exposure. In 2002, OEHHA stated that "premature mortality appears to be associated not only with PM<sub>10</sub>, but also with both fine and coarse particles," and it proposed standards for both PM<sub>2.5</sub> and PM<sub>10</sub>.<sup>2</sup>

2010 -  
13-23

BAEHC urges the District not to dismiss the significance of PM<sub>10</sub> as a public health issue since both fine and coarse particulate can produce localized impacts in communities, and since there are several important PM source categories (including a variety of stationary and area sources) that emit relatively

<sup>1</sup> For example, see "Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards, First External Review Draft, March 2010," at <http://www.epa.gov/ttn/naaqs/standards/pm/data/20100308firstdraftmpa.pdf>

<sup>2</sup> See "Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates, May 3, 2002," at <http://www.arb.ca.gov/research/aaqs/std-rs/pm-final/pm-final.htm>

higher amounts of coarse particles. Accordingly, the CAP should include measures specifically targeted to reduce sources that are high in coarse particulate.

**SSM 6 (Particulate Matter limitations):** In this measure, BAAQMD proposes amending Regulation 6-1 with more stringent limits for PM such as those contained in similar rules promulgated by the San Joaquin and South Coast air districts. For example, the CAP notes that the South Coast's Rule 405 allows less than about 12 pounds per hour for facilities processing 20,000 pounds per hour of material, whereas BAAQMD Regulation 6-1 currently allows 19 pounds per hour of PM emissions for the same process rate. BAEHC urges the District to amend Regulation 6-1 to reduce PM emissions from stationary sources. However, the levels set should be based on the potential health impacts of PM emissions from a facility, not the quantity of materials being processed. BAEHC recommends that this Regulation be amended such that PM emissions of all stationary and area sources are subject to air dispersion modeling and the most stringent health-based limitations to protect impacted communities and the most vulnerable residents.

2010-  
13-24

**SSM 16 (NSR for PM 2.5):** In this measure, BAAQMD proposes to amend Regulation 2-2 (NSR) to include emission reductions of PM<sub>2.5</sub> from new and modified sources, with the possibility of more stringent requirements in CARE priority communities. The District states that the purpose of the measure is to address proposed non-attainment of the region with the new federal 24-hour PM<sub>2.5</sub> standard. The driving purpose, however, should be local health protection in the most impacted communities. BAEHC supports tighter controls on PM<sub>2.5</sub> emissions from new and modified sources. Because the District has identified PM as the most hazardous pollutant for which more protective standards would yield substantial health benefits, more stringent permitting regulations for the CARE communities should be prioritized to reduce PM emissions affecting the most sensitive populations in the region. Furthermore, consistent with our previous comment on coarse PM, the District should also include PM<sub>10</sub> in any revised NSR regulation. Finally, these standards should be health-based.

2010-  
13-25

For additional comments regarding more stringent PM regulations, please refer to LUM measures above.

#### ***IV. Energy and climate change measures should prioritize reducing local impacts on communities***

We are pleased the District has included measures to mitigate GHGs and also to encourage energy efficiency and renewable energy. While reductions in the region as a whole are necessary, however, implementation of proposed ECMs and related measures should be prioritized according to potential impacts on the communities that would be most impacted and could therefore receive the greatest benefits. The goal should not only be reducing GHGs in the region as a whole, but also reducing the demand for energy and the effects of climate change as they impact local residents.

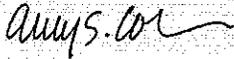
2010-  
13-26

Proposed CAP measures to mitigate GHGs (**SSM 15**: GHGs in permitting, energy efficiency; **FSM 9**: GHG mitigation in BACT), promote energy efficiency (**SSM 15**, **ECM 1**, **FSM 13**) and renewable energy (**ECM 2**, **FSM 13**) could help reduce the local demand for energy and also reduce the effects of climate change. The District should coordinate and collaborate with other agencies to ensure the greatest reductions, and should provide incentives and grants to promote less polluting alternatives. Implementation of **ECM 3** (urban island heat mitigation) and **ECM 4** (shade tree planting) should focus

on the Bay Area census tracts with the greatest population vulnerability for heat wave impacts, as identified by recently published scientific research.<sup>3</sup>

Thank you again for this opportunity to submit comments on this important plan. We appreciate your consideration.

Best regards,



Amy S. Cohen, Campaign Director  
On behalf of the Bay Area Environmental Health Collaborative

Cc: Jack Broadbent, APCO  
Henry Hilken, Director of Planning

Attachments:

- BAEHC Proposed Bay Area Pollution Reduction Protocol (revised February 2010)
- BAEHC Proposed Bay Area Public Participation Protocol (March 2009)

<sup>3</sup> "Mapping Community Determinants of Heat Vulnerability," Colleen E. Reid, et al., volume 117 | number 11 | November 2009  
• *Environmental Health Perspectives*

Comment Letter #: 2010-13

Date: April 26, 2010

From: Amy S. Cohen, Campaign Director, Bay Area Environmental Health Collaborative

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Response to Comments:

13-1 The CAP provides a comprehensive plan to improve air quality and protect public health throughout the region. But the CAP also makes it clear that protecting impacted communities is a key priority for this plan, and for the Air District as a whole.

13-2 Comment noted. BAEHC's support for the overall goals of the CAP is appreciated.

13-3 The Air District is committed to using the full range of tools at its disposal to help protect impacted communities. As described in MR-2, the CAP control strategy is designed to provide the greatest benefit in the most impacted communities. For more information on SSM 17, please see response to comment 11-5.

13-4 Please see response to comment 11-5 above.

13-5 Please see response to comment 11-6 above.

13-6 Please see response to comment 19-5 below.

13-7 Please see response to comment 1-11 above.

13-8 Please see response to comments 1-10 (ISR) and 1-19 (magnet source rule) above.

13-9 Air District staff agrees that cumulative impacts should be fully evaluated before siting and permitting any new emission sources in impacted communities. The Air District is committed to assisting local governments in developing Community Risk Reduction Plans (CRRPs) to reduce overall emissions and risks in impacted communities, rather than addressing new pollution sources or receptors on a case-by-case basis. The CRRP approach recommended in the Air District's CEQA Guidelines is intended to encourage local jurisdictions to take a proactive approach to reducing overall air toxics and PM2.5 emissions and exposure from new and existing sources. The emission reduction target for a CRRP could specify a no-net-increase target. A CRRP would also include comprehensive, community-wide strategies, and mitigation measures to achieve the greatest reductions in emissions of, and exposure to, PM2.5 and air toxics.

The Air District's June 2010 CEQA Guidelines do not recommend any CEQA exemptions; exemptions may only be taken as allowable by existing CEQA statutes. Proposed projects meeting the Air District's significance thresholds would not be automatically exempt from CEQA

review; as discussed on page D-5 in Appendix D of the District's CEQA Guidelines, the "fair argument" standard would still apply to such projects.

13-10 Please see response to comment 1-24 above. Regarding Community Risk Reduction Plans, please see responses to comments 1-17 and 13-9 above.

13-11 Please see MR-1. Air District staff will solicit input from the CARE Task Force as we move forward to implement the health risk tracking system described in LUM 5.

13-12 Please see MR-2, as well as response to comment 11-1 above.

13-13 Please see response to comment 11-8 above.

13-14 See MR-3.

13-15 The Air District currently provides public notice of permit actions as follows:

- New major stationary sources, and major modifications of existing stationary sources
- New/modified sources of hazardous substances located within 1000 feet of a K-12 school site
- Thermal power plants > 50 MW subject to CEC licensing
- Title V permit actions (except minor revisions and administrative amendments)
- Emission Reduction Credit (ERC) and Interchangeable Emission Reduction Credit (IERC) applications over 40 tons per year
- Initial permits for Large Confined Animal Facilities

All permit actions are posted on the BAAQMD website. Those listed in the bullets above are posted before the permit action is taken, and opportunity to submit comments is provided.

The Air District also provides public notice for AB2588 (air toxics hot spots) for existing facilities with health risks above notification thresholds (not specifically tied to a permit action).

In addition to providing notice regarding specific permits, the Air District engages in outreach regarding any proposed revisions to stationary source regulations, such as changes to the District's Regulation 2, Rule 5: New Source Review for Toxic Air Contaminants. This gives the public and interested parties an opportunity to comment on levels of toxic air emissions that would need best available toxics control, and levels that would be denied permits. However, once thresholds have been established through the rule-making process, District staff believes that the current practice of processing permits on an administrative or "ministerial" basis is the most appropriate. To engage in a public review and comment process for every permit would inhibit the District's ability to process permits in a timely fashion. It would also require significant additional resources; this is especially problematic, given the resource constraints that the District is currently experiencing.

District staff believes a better way to reduce risk from both existing and new stationary sources that require permits is to develop and implement Community Risk Reduction Plans (CRRPs) for

impacted communities, pursuant to the District's revised (June 2010) CEQA guidelines. CRRPs can function as comprehensive plans that address all causes of risk, not just new and modified permits.

13-16 See MR-3.

13-17 See MR-3. Air District staff encourages interested parties, including representatives of impacted communities, to participate in the development of the Indirect Source Review regulation, and welcomes input regarding the expenditure of any revenues generated by such a regulation. See response to comment 1-19 above regarding magnet sources.

13-18 Air District staff agrees that public input is important to ensure thorough environmental review of proposed projects subject to CEQA review. However, public outreach and noticing for projects subject to CEQA is the responsibility of the lead agency. See response to comment 13-9 above regarding the "fair argument" standard.

13-19 See comment 11-11 regarding guidelines for Community Risk Reduction Plans. The CRRP process will provide opportunity for stakeholders to review and provide input on proposed plans.

13-20 Air District staff agrees that it will be essential to work closely with representatives of impacted communities in implementation of LUM 5 and LUM 6. Staff believes that the District's CARE Task Force should be the primary venue to engage with stakeholders as to the most effective way to implement these measures.

13-21 The PM<sub>2.5</sub> performance objective in the CAP is based on the estimated reduction in ambient PM<sub>2.5</sub> concentrations needed to achieve the federal 24-hour PM<sub>2.5</sub> standard. Air District staff believes that this health-based standard is the most appropriate benchmark to use as the basis for the PM<sub>2.5</sub> performance objective. However, analysis performed for the CAP, as discussed both in Chapter 1 and in Appendix A, does point to PM<sub>2.5</sub> as the air pollutant that poses the greatest health risk to Bay Area residents. Furthermore, epidemiological research suggests that there may be health effects from PM<sub>2.5</sub> levels below the current federal standards. Even if we achieve the CAP performance target of a 10% reduction in population exposure to PM<sub>2.5</sub>, this will not fully address the health risks related to PM<sub>2.5</sub>. Therefore, Air District staff recognize the need to make all feasible efforts to reduce PM emissions and exposure to the greatest extent possible.

13-22 Comment noted. Given the information presented in the CAP regarding the potential health impacts of exposure to fine PM, Air District staff will place emphasis on reducing PM emissions and exposures in impacted communities in implementing CAP control measures.

13-23 Given the evidence regarding the health impacts related to exposure to fine particulate matter (PM<sub>2.5</sub>), the CAP focuses on the importance of reducing emissions, ambient concentrations, and exposure to this pollutant. However, District staff agrees that it is important to reduce

PM10 as well as PM2.5. Please note that, in most cases, CAP measures to reduce PM2.5 emissions should also help to reduce PM10. In response to this comment, Air District staff has deleted the phrase “largely superseded” on CAP page 2-33 in order to clarify that fact that PM2.5 standards complement, but do not supersede, PM10 standards.

- 13-24 Comment noted. SSM 6 (Particulate Matter limitations) will be implemented pursuant to the Air District’s rule development process. Air District staff encourages interested parties to actively participate in the process to develop proposed amendments to Regulation 6-1.
- 13-25 Comment states that the purpose of SSM 16 (NSR for PM2.5) should be local health protection in the most impacted communities. Please note that the description of this measure in the March 2010 version of the draft CAP reads as follows: *Purpose: Reduce emissions of PM2.5 from new and modified permitted sources and to address the cumulative air quality impacts of stationary sources on sensitive receptors and impacted communities.* In developing proposed amendments to Regulation 2-2, Air District staff will consider the maximum feasible reductions in particulate matter and will consider the health impacts of emissions from these sources. Regarding PM10, please see response to comment 13-23 above.
- 13-26 Comment noted. Air District staff welcomes the participation of BAEHC and other interested parties as we move forward to fully define and implement the Energy and Climate Measures in the CAP.

**Alison Kirk**

**From:** Rk Bose [fk94131@yahoo.com]  
**Sent:** Thursday, April 22, 2010 6:26 PM  
**To:** Alison Kirk  
**Subject:** Comment on 2010 Clean Air Plan

Letter 2010-14

Thank you for developing a good plan for cleaner air. This is going to be very valuable for the Bay Area.

I have two comments to make.

1. One area that the plan does not address is the presence of allergens.

Allergies cause substantial distress and potentially life-threatening conditions to a large number of Bay Area residents. Nationwide, some 40 million people report that they suffer from indoor/outdoor allergies. (Source: Asthma and Allergy Foundation of America - [http://www.aafa.org/display.cfm?id=9&sub=30#\\_ftn1](http://www.aafa.org/display.cfm?id=9&sub=30#_ftn1))

Allergens can be from multiple sources, both natural and manmade. Some of the recommended actions of the Plan will benefit allergy-sufferers by reducing the amount of chemical allergens in the atmosphere. However, I would like to suggest this issue be explicitly considered.

Not only is allergy-prevalence increasing nationwide, there may be a specific problem in the Bay Area as a result of wildland "restorations" that remove trees, thereby encouraging the growth of unmown grass and weeds. Though tree pollens can be allergenic – some, like oak or walnut more than others – it is the pollens of grass and weeds that are the most problematic.

2. The plan should explicitly have as an objective maintaining the tree cover.

Eucalyptus is one of the key tree species of California in general and the Bay Area in particular. Several projects are planned to fell hundreds of thousands of these trees (by some estimates, up to a million) in the name of fire hazard reduction, essentially negating efforts to expand tree cover with new plantings.

Eucalyptus is a high-VOC species. However, this is also true of some of the species to be substituted, mainly oak (which is also considerably more allergenic). The substitutes are also slow-growing, and thus less efficient at sequestering carbon.

Young eucalyptus saplings emit five times as much isoprene as do mature trees. But when eucalyptus is felled, it regenerates, unless prevented from doing so by repeated annual use of toxic herbicides such as glyphosate and triclopyr (which have their own impact, though primarily on soils and water rather than air). If this fails – as can happen with such expansive long-term projects – the young regenerating trees will emit more VOCs. (They are also much more flammable than the mature trees, thus defeating that purpose also.)

Other targeted trees are Acacia (because it's "invasive") and Monterey Pine and Monterey Cypress (as non-native).

The agencies responsible for most open spaces in the Bay Area appear to have little recognition for the value of trees on a local basis. Their policies have tended to favor grassland and shrubs. Only a heightened institutional interest in tree-cover can hope to preserve it.

Otherwise, tree-planting efforts will be trivial relative to destruction, and result in considerable net loss of trees. A ten-year net increase of 1.4 million trees (volume 2, E-18) would be optimistic, and possibly illusory. Newly planted trees, moreover, have smaller canopies than the established mature trees that will be felled. This would make the estimated 1% increase in tree cover difficult to achieve in the absence of steps to conserve existing trees.

2010-14-1

2010-14-2

The new initiative, to conduct a census of San Francisco's trees (reported in the San Francisco Chronicle, 22 April 2010) is a step in the right direction.

Sincerely,

RK Bose,

San Francisco

Comment Letter #: 2010-14

Date: April 22, 2010

From: RK Bose

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- 14-1 Comment noted. Pollen is a biogenic type of particulate matter, produced from natural sources. Although pollen does contribute to overall PM levels, the Air District focuses on reducing emissions from anthropogenic (man-made) sources in its air quality planning and rule-making activities, since its regulatory authority is focused on anthropogenic sources of emissions.
- 14-2 Air District staff appreciates the information provided regarding the benefits of maintaining existing tree cover, as well as the potential disbenefits related to removing mature, established trees. Please see response MR-4 above. Also, please note that the Air District does not play any role in decisions by local agencies regarding tree planting, maintenance, or removal.

**Alison Kirk**

**From:** Tom Kelly (KyotoUSA) [kyotousa@sbcglobal.net]

Letter 2010-15

**Sent:** Wednesday, April 14, 2010 4:56 PM

**To:** Alison Kirk

**Subject:** FW: Comments on the DRAFT BAY AREA 2010 CLEAN AIR PLAN

Dave, Alison,

I have several comments on the DRAFT BAY AREA 2010 CLEAN AIR PLAN, VOLUME II, Section E, Energy and Climate Measures (March 2010)

- 1) The following paragraph is not accurate.

"In general, it is difficult for schools and school districts to access governmental funding resources to upgrade their facilities because, unlike city and county governments, schools and school districts have very little capital with which to leverage financing, and very limited resources to navigate the paperwork and research needed to develop effective proposals. The 2009 American Recovery and Renewal Act has provided funding and financing for building upgrades, however this funding is not available for schools to add solar power, as photovoltaic systems are not considered part of a school facility."

2010-15-1

School districts regularly take advantage of state new school construction and modernization funds to replace or upgrade existing school structures. ARRA made several funding mechanisms available to school districts that they have exploited. The ARRA funding came in the form of Qualified School Construction Bonds (QSCBs) and Qualified Energy Conservation Bonds (QECBs) which many school districts have received. Much of the money is being used for construction, but a number of schools are using the bonds for renewable energy projects.

Where they do run into some difficulty in applying for funding is when it comes from a source with which they are unfamiliar. I've seen this happen recently with school district efforts to respond to funding opportunities from the EPA for school bus replacement and the BAAQMD's Conoco Phillips settlement funds.

- 2) The net metering cap in California is now 5%.

2010-15-2

- 3) The chart on page 9 refers to "average cost per kW" - it should be "per kWh". You also estimate the cost per kWh at \$0.125 which I think is much too low (it will also vary from utility to utility). Remember, the PV systems are in place for 25 years so you have to consider the value of the avoided energy both over time and at what point the kWh are generated. Summer values are high when less energy is used, winter values are low when more is consumed.

2010-15-3

- 4) "Berkeley First" has been replaced by PACE (Property Assessed Clean Energy).

2010-15-4

- 5) The document states that "Numerous state and utility sponsored incentive programs exist which provide rebates or financing for purchasing and installing energy efficient technologies. Finding the utility rebates is fairly straight-forward, but those offered by the state are often difficult to locate. You might consider providing links to those incentives. For example, the "Database of State Incentives for Renewable Energy" (DSIRE) is

2010-15-4

always a good place to look as they generally cover the field accurately. ]

I wasn't able to review the document in depth, but based on what I did catch, you might find it useful to have some outside experts take a closer look at it. Good luck!

Tom Kelly

KyotoUSA  
HELIOS Project  
800 Hearst Avenue  
Berkeley, CA 94710

(510) 704-8628 (w)

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e-mail: [kyotousa@sbcglobal.net](mailto:kyotousa@sbcglobal.net)

Visit us at: [www.kyotousa.org](http://www.kyotousa.org) and [www.heliosproject.net](http://www.heliosproject.net)

(KyotoUSA is a sponsored project of the Sequoia Foundation)

Comment Letter #: 2010-15

Date: April 14, 2010

From: Tom Kelly, KyotoUSA

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- 15-1 In response to this comment, Air District staff deleted the paragraph cited in this comment and replaced it with the following text in the Regulatory Context and Background section of ECM 1: *Recently, public schools have been taking advantage of low interest financing provided by a variety of federally backed zero (or near zero) interest bonds to develop energy efficiency and renewable energy projects. In many cases, this type of financing can make energy projects revenue positive for the school districts. These energy savings can reduce the overall carbon emissions from schools and provide additional revenue to school districts. Energy efficiency and renewable energy projects can be more complicated than the typical construction projects school districts are used to, and many school districts lack the in-house capacity to evaluate and implement energy projects themselves. However, there are a growing number of state and federal sources that can provide assistance to school districts to design and carry out energy-related projects.*
- 15-2 This paragraph has been updated to reflect California's new net metering cap of 5%.
- 15-3 The notation in the table "Average cost per kW" has been changed to "Average cost per kWh". Because future energy costs are speculative, the Air District is choosing to make a conservative estimate of future energy costs by using PG&E's current average cost per kWh in our financial assessment of ECM-2.
- 15-4 Clarification has been added to the text to indicate that the "Berkeley First" program is now known as Berkeley PACE (Property Assessed Clean Energy).
- 15-5 After further discussion regarding this comment, Air District staff and commenter came to mutual agreement that the informational links provided in the "Resources" section in the April 2010 draft description of ECM 2 are sufficient and appropriate. Therefore, no change has been made.

Alison Kirk

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**From:** Madeline Hovland [mhovland@mindspring.com]  
**Sent:** Friday, April 23, 2010 3:43 PM  
**To:** Alison Kirk  
**Subject:** Public Comment on 2010 Clean Air Plan

*Letter 2010-16*

To: Bay Area Air Quality Management District

The 2010 Clean Air Plan describes the benefits of planting urban trees to improve air quality, but it does not mention the importance of keeping and cherishing the trees we already have. I urge you to correct this omission in the Plan. It is important to properly maintain and preserve the many healthy, mature trees that are presently thriving in the Bay Area. Hundreds of thousands of trees are endangered by various tree clearing projects now underway in the Berkeley and Oakland Hills.

*2010-16*

Large, tall trees sequester more carbon dioxide than newly planted trees. When trees are destroyed, that carbon is released into the atmosphere, where it causes further damage.

Whether a tree is nonnative or native should not determine if it should be removed. Destroying healthy nonnative trees will only harm the environment. The District should adopt a species-neutral policy when evaluating whether a tree should remain standing. To do otherwise will subvert the goal of the clean air program.

Thank you for your consideration of this comment.

Madeline Hovland  
781 Alvarado Road  
Berkeley, CA 94705

April 23, 2010

Comment Letter #: 2010-16

Date: April 23, 2010

From: Madeline Hovland

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16-1 See response to comment MR-4 above. Also, please note that the Air District does not play any role in decisions by local agencies regarding tree planting, maintenance, or removal.

Letter 2010-17

**David Burch**

**From:** Mary McAllister [marymcallister@comcast.net]  
**Sent:** Wednesday, April 21, 2010 1:18 PM  
**To:** Alison Kirk  
**Subject:** BAAQMD 2010 Clean Air Plan - Public Comment

**TO:** Bay Area Air Quality Management District  
**FROM:** Mary McAllister  
**RE:** Public Comment on "2010 Clean Air Plan"

Although the draft plan describes the benefits of tree planting (CAP, Volume 2, Section E, page E-17) for air quality and proposes specific actions to increase tree planting in the Bay Area, it is silent on the issue of destroying healthy, mature trees. This is a missed opportunity that should be corrected before the plan is published.

Because of the strength and influence of the native plant movement, there are many projects throughout the Bay Area that have destroyed thousands of healthy, mature, non-native trees and propose to destroy millions more in the future. The following is a list of the projects of which I am aware:

- The Natural Areas Program of the Recreation and Parks Department in the City of San Francisco has destroyed thousands of non-native trees in the so-called natural areas. Its management plan has also identified 18,500 non-native trees for destruction in the future on one-third of the acres of city-owned parkland. Countless trees less than 15 feet tall will also be destroyed, that have not been quantified because the management plan chooses not to define them as trees.
- University of California at Berkeley has destroyed thousands of trees on its properties and has two pending FEMA applications (one in collaboration with the City of Oakland and the East Bay Regional Park District) that propose to destroy tens of thousands more trees on 395 acres in the Berkeley-Oakland hills.
- The East Bay Regional Park District approved its "Wildfire Hazard Reduction and Resource Management Plan" on April 20, 2010. This plan proposes to destroy hundreds of thousands of non-native trees (eucalypts, pines, acacia) on over 1,500 acres of parkland. Although the plan is based on the assumption that such tree-destruction will reduce fire hazard, it is more likely to increase fire hazard by promoting a more flammable landscape of chaparral and grassland.
- There are many similar projects on the properties of the federal government under the jurisdiction of the Golden Gate National Recreation Area, the Pt Reyes National Seashore, and the San Francisco Presidio Trust.

There are undoubtedly many other similar projects of which I am unaware. In sum, we should assume that millions of healthy, mature, non-native trees have been or will be destroyed throughout the Bay Area.

2010-17-1

The Bay Area Quality Management District should take a position in opposition to such needless destruction in its 2010 Clean Air Plan. All of the benefits of trees presently described in the draft plan apply equally to existing trees. Many tons of sequestered carbon will be released into the atmosphere when these trees are destroyed and decay. And going forward, their ability to absorb carbon will be lost forever. What is the point of planting thousands of small street trees if you are simultaneously destroying millions of existing mature trees? Since carbon sequestration is directly proportional to biomass, the young street trees will not be a substitute for the mature trees for many years beyond the life of the Clean Air Plan.

In evaluating the prevailing bias in favor of native trees, the pervasive existence of a fatal disease amongst the oaks—Sudden Oak Death—must be taken into account. If all of the non-native trees are destroyed and Sudden Oak Death decimates the native oak, what will remain? Few trees will remain and air quality will suffer accordingly.

Let me be clear about my personal interest in this issue. I do not prefer non-native to native trees. I have a beautiful oak tree in my front yard which is one of my most important assets. It would break my heart to lose it. However, the non-native trees are here, they are healthy, and the dominant species (eucalypts) are expected to live for another 100 to 200 years. They are well adapted to our climate. They are performing a vital function in our environment...sequestering carbon, retaining moisture, stabilizing steep hillsides, providing a windbreak. It is irresponsible and foolish to destroy them just because some people prefer native plants and trees.

Thank you for your consideration.

Mary McAllister  
Oakland, CA 94611

Comment Letter #: 2010-17

Date: April 21, 2010

From: Mary McAllister

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17-1 Please see response MR-4 above, as well as response to letters 2010-14 and 2010-16.



Letter: 2010-19

April 23, 2010

Honorable Dan Wagenknecht  
Chair, Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

**Re: Draft Bay Area 2010 Clean Air Plan**

Dear Chair Wagenknecht and Board Members:

Thank you for the opportunity to comment on behalf of San Mateo County Association of REALTORS® (SAMCAR) and Silicon Valley Association of REALTORS® (SILVAR) regarding the Draft Bay Area 2010 Clean Air Plan and Draft Environmental Impact Report.

SAMCAR and SILVAR represent close to 8,000 real estate professionals in the Bay Area and serve as advocates for affordable housing, balanced communities and the protection of private property rights. Our Associations understand the importance of the Clean Air Plan and we appreciate the opportunity to be a part of the process.

However, we have a concern regarding one of the proposed further study measures that is included in the Draft Bay Area 2010 Clean Air Plan (Volume 2 Section F). As such, we would like to comment regarding the District's proposal to evaluate the feasibility of requiring an upgrade or replacement of existing fireplaces and/or wood stoves when an existing home is sold or changes ownership (point of sale).

2010-19-1

We respect and applaud the District's efforts in reducing fine particulate matter (PM), as determined in the plan to be a serious health concern. However, requiring an upgrade or a replacement of existing fireplaces and/or wood stoves at point of sale is not an efficient or effective way to address this problem. For example, according to the San Mateo County, there are approximately 254, 103 households<sup>1</sup> in San Mateo County. In 2009, only 4,068<sup>2</sup> homes were sold in San Mateo County, which equals a turnover rate of less than 2 percent annually. Not accounting for repeat sales, under the current San Mateo County turnover rate, it would take over 60 years for this mandate to reach every home in the County, requiring a chimney or a stove upgrade. Point of sale also casts a very wide net by failing to use any metric to determine or take actions against properties discharging high PM levels, and instead waits for them to transfer ownership before taking any action. Again, reducing particulate matter is important but as indicated above, addressing this issue at point of sale is poor public policy. Given the importance of reducing particulate matter, point of sale is the least effective and efficient method by which to achieve these objectives.

<sup>1</sup> San Mateo County General Plan: Housing Element, July 2004, p. 14.21.

<sup>2</sup> Data provided by San Mateo County Association of Realtors, based on statistics compiled by MLS Listings, Inc. Reports available at: <http://www.samcar.org/stats>

It is also not clear what impact this further study measure may have on the owner's ability to sell his/her own property. In rare cases chimney and stove upgrade costs may be negligible, but they can cost upwards of several thousands of dollars to replace. This mandate will inequitably affect home owners attempting to sell their property quickly due to economic hardship or change in employment, burdening them with additional, speculative cost at a time when they can least afford it. If expensive road blocks are forced on sellers a consequence will be an increase in properties going into some form of distress. Further, requiring an upgrade as a precondition to sell ones property will require a government inspection to ensure that the upgrade was completed, adding additional delays and costs to the transaction.

2010-18-2

On July 9, 2008 the Air District adopted a wood-burning rule (Regulation 6, Rule 3) that prohibits the use of wood-burning devices such as fireplaces, woodstoves, or stoves when a *Spare the Air Alert* is in effect. As a result household wood burning was reduced by approximately 50 percent throughout the entire season.<sup>3</sup> We believe that is a good indication that the *Spare the Air Alert* is working. In our view, the Spare the Air Alert is a more proactive and effective way of addressing PM concentration reduction than requiring an upgrade of fireplaces/wood stoves at point of sale.

2010-18-3

SAMCAR and SILVAR understand the importance of air quality and we applaud the District for addressing such an important issue. However we believe that asking property owners to replace their chimneys and wood stoves as a precondition to sell ones property is an inefficient way to decrease air PM levels. We believe that the proposed further study measure, if considered, will unfairly burden a small group of property owners, leaving the vast majority of the community and significant emitters exempt from enforcement. A year and a half ago, the District took a step forward by asking all of the people in the Bay Area to do their part and reduce wood smoke pollution. We urge the District to continue to educate the public regarding the Spare the Air Alert and the Wood Burning Rule to ensure the entire public is aware of the program and responsible for contributing to the effort.

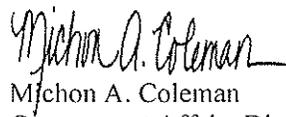
2010-18-4

Our Associations would welcome the opportunity to explore alternatives that will ensure the health and safety of Bay Area residents, in a manner that does not impose inefficient and expensive burdens. We respectfully urge the District not to consider requiring an upgrade or replacement of existing fireplaces/or wood stoves when an existing home is sold or changes ownership.

Sincerely,



Adam Montgomery  
Government Affairs Director  
Silicon Valley  
Association of REALTORS®  
19400 Stevens Creek Blvd. #100  
Cupertino, CA 95014



Michon A. Coleman  
Government Affairs Director  
San Mateo County  
Association of REALTORS®  
850 Woodside Way  
San Mateo, CA 94401

<sup>3</sup> Winter Spare the Air Study: 2008-2009 Winter Smoke Reason, Bay Area Air Quality Management District, March 2009, p.30.

Comment Letter #: 2010-18

Date: April 23, 2010

From: Adam Montgomery, Silicon Valley Association of Realtors, and Michon A. Coleman, San Mateo County Association of Realtors

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18-1 Analysis performed for the CAP indicates that exposure to fine particulate matter (PM2.5) poses the greatest health risk to Bay Area residents of any air pollutant. In addition, the Bay Area was recently (Dec. 2009) designated as non-attainment for the national 24-hour PM2.5 standard. The purpose of FSM 12 is to identify potential enhancements to the District's existing wood smoke program that merit further study.

The fact that the point-of-sale idea is included in the list of potential enhancements in FSM 12 does not constitute a commitment to adopt such a measure. A decision as to whether to pursue such a measure will be based upon further analysis. Issues regarding cost, effectiveness, equity, and related impacts will be considered in evaluating whether to propose any point-of-sale requirements. Any proposed regulation related to point-of-sale requirements would be developed through the Air District's rule-making process, which provides opportunity for input from interested parties.

Air District staff appreciates the concerns expressed in this comment letter regarding the efficacy of a point-of-sale requirement. It should be noted, however, that there is well-established precedent for this approach. For example, home sellers and purchasers are already subject to a variety of notification and upgrade requirements, including such things as water flow-limiters and insulation. Compliance with such standards may impose costs on the home seller or buyer; such requirements are subject to disclosure, as well as inspection to comply with transfer requirements.

18-2 See response to 18-1. The Air District will consider this comment in evaluating the merits of any proposal that would impose point-of-sale requirements.

18-3 Comment noted. The Air District is still evaluating the results of the first two seasons of its wood smoke regulation (Regulation 6-3). Available evidence suggests that the District's Winter Spare the Air program is helping to reduce wood smoke emissions, as discussed in CAP Chapter 3. However, despite this progress, it is likely that the region will need to further reduce emissions of wood smoke in order to achieve applicable PM2.5 standards.

18-4 Please see response to comment 18-1 above.

Letter 2010-19

April 26, 2010

Jack Broadbent, Air Pollution Control Officer  
Henry Hilken, Director of Planning, Rules and Research  
David Burch, Principal Environmental Planner  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

Re: **BAAQMD 2010 Clean Air Plan, CBE's Comments on Feasible Measures**

Dear Messrs. Broadbent, Hilken and Burch:

By this letter Communities for a Better Environment (CBE) comments on the need to include additional feasible air pollutant emissions reduction measures in BAAQMD staff's Draft 2010 Clean Air Plan (CAP). Our previous comments, regarding the need to address indoor exposures to air pollutants from nearby outdoor sources in staff's health risk assessment for the CAP, are attached hereto.

BAAQMD staff proposes to develop emission reduction measures based on the cumulative impact of multiple pollutants. Staff estimates that 16 air pollutants<sup>1</sup> cause 1,140 to 5,060 premature deaths in the Bay Area every year with a central estimate of 2,840 deaths/year.<sup>2</sup> Staff shows that reducing this pollution will create net jobs growth. Staff now estimates that its proposed emission reduction measures could avoid approximately 85 deaths/year. Board action on the CAP is anticipated in September.

CBE supports staff's proposal to develop measures based on the cumulative impact of multiple pollutants. We appreciate staff's work to further document that cutting emissions creates jobs. However, by staff's own current estimates, all its proposed measures together will stop less than eight percent of the thousands of pollution-related deaths staff estimates annually. Additional emission reduction measures are needed.

It is time to go beyond the pollutant-by-pollutant, source-by-source approach that has limited action to protect our health. CBE urges staff to add the following specific measures to its proposal.

**1. Adopt a measure to reduce cumulative impacts of methane emissions from multiple sources.** This measure would amend the definitions of volatile organic compounds (VOCs) in all relevant BAAQMD regulations and rules to include methane in the VOCs controlled. Methane is a volatile organic compound. Based on staff's estimates, methane accounts for 48-50% of total Bay Area VOC emissions.<sup>3</sup> However, in general, BAAQMD's previous and existing emission control rules have not addressed methane because climate impacts were not considered and it was erroneously presumed that methane did not contribute to ozone pollution. Staff's documentation for the CAP acknowledges that methane emissions contribute to both climate disruption and ground-

2010-19-1

level ozone pollution. Further, methane emission control has been found to be “a powerful lever” for reducing both climate and ozone pollution.<sup>4</sup> The fact that methane emissions generally have not been included in measures that have already been found feasible for reducing other VOC emissions from the same sources indicates that significant emission reductions are available from this measure.

**2. Adopt a measure to reduce fossil fuel combustion by 20% at oil refineries by 2020 through improved efficiency.** This measure would require each of the five major Bay Area refineries to reduce its total fuel combustion per unit production (Btu/barrel oil refined) by 20% over ten years. That 20%-by-2020 requirement would cut combustion emissions of all pollutants from refineries, including CO<sub>2</sub> and PM<sub>2.5</sub> among others, by roughly 20%, thereby aligning local refinery emission trends with statewide climate goals and greatly improving health protection for highly-impacted nearby communities. Oil refineries are among the largest industrial emitters of greenhouse gases in the Bay Area and the state, and among California’s biggest industrial climate polluters, refineries cause the vast majority (93%) of the population-weighted health risk from PM in nearby low income communities of color.<sup>5</sup>

2010-19-2

The feasibility of this measure is supported by the industry’s acknowledgment that it can improve efficiency,<sup>6</sup> the cost-effectiveness of improved efficiency acknowledged by staff,<sup>7</sup> the large number of old refinery process units that can be replaced,<sup>8</sup> the greater efficiency of modern replacement equipment designs,<sup>9</sup> and data showing that across U.S. refining regions, an average of 32% less fuel combustion/barrel refined is already achieved via materials input substitution alone.<sup>10</sup> Further, together with measures 3, 4 and 5 below, this measure will help to accelerate the replacement of old equipment that burns fossil fuels with renewable energy generation such as on-site and off-site solar and wind power applications. Finally, the fact that refinery crude input volume and energy use are already measured and reported to public agencies such as USEIA shows that compliance with this measure can be readily monitored and enforced.

**3. Adopt a measure to require and fund a 20% reduction in fossil fuel combustion by mobile and power generation sources by 2020.** This measure would require BAAQMD and MTC to plan for, fund through increased fees charged to fossil fuel producers subject to BAAQMD permits, and achieve a 20%-by-2020 reduction in total fuel burned by Bay Area transportation and electric power generation. The requirement would be met through expanded programs to reduce vehicle miles traveled (VMT) and to replace fossil fueled vehicles and power generators with renewable energy vehicles and generators. Funding fees would be assessed based on fossil fuels production and funds needed to achieve the 20%-by-2020 reduction. The measure would cut all combustion emissions from mobile sources and power plants, including CO<sub>2</sub> and PM<sub>2.5</sub> emissions, by roughly 20%.<sup>11</sup> This measure would support and greatly expand already-proposed measures to reduce VMT and phase-in renewable energy vehicles and generators. Staff’s descriptions of those measures shows they are limited in staff’s current proposal by the currently limited funds allocated to support them. Yet staff estimates that in the Bay Area alone the oil refining industry enjoys annual profits of \$970 million on revenues totaling \$17 billion annually.<sup>12</sup> It is beyond reasonable dispute that refiners have some

2010-19-3

responsibility for their products which, when used as directed, cause serious pollution that this measure would mitigate. Finally, the measure would interact with and mutually support the next measure discussed below.

**4. Adopt a measure to require fuel substitution analysis and implementation.** This measure would require the maximum feasible reduction in emissions achievable through fuel substitution, as BACT/BARCT for stationary sources in permit reviews, and as a necessary qualification for funding of vehicle and/or generator replacement projects and programs with the “polluting product” fees described above. It would also require refineries to replace self-generated and grid-purchased power with renewable (e.g., solar, wind) power. Materials input substitution has long been recognized as the first priority in pollution prevention and waste reduction. A subset of materials input substitution, fuels substitution has strong precedents in air quality policy (e.g., BAAQMD prohibits power plants that can burn natural gas from burning oil). Ten staff-proposed mobile source, transportation or energy and climate measures in the CAP already involve fuel substitution.<sup>13</sup> Bay Area refineries use hundreds of megawatts of self-generated and/or grid-purchased electricity collectively. Refiners and utilities alike can switch to cleaner portfolios that self-generate and/or purchase more of this power from renewable sources such as solar and wind power generation. The measure would cut all combustion emissions including CO<sub>2</sub> and PM<sub>2.5</sub> emissions from refineries, vehicles and power plants; reduce air pollution health risk region wide and especially in highly-impacted communities, and support the growth of renewable energy and green jobs.

2010-19-4

**5. Adopt a measure to require all “grandfathered” and “non-new source review” sources at each facility where BAAQMD permits air pollutant emissions to apply the best available emission control technology (BACT/BARCT) upon permit review.** There are at least 100 permitted emission sources that BAAQMD lists as “grandfathered” or “non-new source review.”<sup>14</sup> This indicates that BACT controls—i.e., all feasible measures—have not been applied to these sources. For example:

2010-19-5

- Potrero Power Plant units 4, 5, and 6 (San Francisco) are distillate oil-fired turbines that lack any add-on emission controls except for water injection.
- Owens Brockway glass melting furnace C (Oakland) has no control device even though its other natural gas-fired glass melting furnaces have add-on control devices. Furnace C is allowed to emit up to 212.7 tons of nitrogen oxides (NO<sub>x</sub>)/year.<sup>15</sup>
- The Chevron Richmond, Shell Martinez, Tesoro Avon, and Valero Benicia refineries operate catalytic cracking units without selective catalytic reduction (SCR) for NO<sub>x</sub> control or sulfur dioxide (SO<sub>2</sub>) scrubbers.<sup>16</sup> Cat-crackers are the major source of routine NO<sub>x</sub>, SO<sub>2</sub> and particulate matter (PM) emissions from refineries according to USEPA.<sup>17</sup> Chevron’s cat-cracker emits approximately 1,250 tons of SO<sub>2</sub>/year.<sup>18</sup>
- Inefficient old boilers are still permitted to emit at Chevron’s #1 Power Plant<sup>19</sup> even though they are 70 and 80 years old<sup>20</sup> and can be replaced with more efficient steam/power cogeneration. Chevron cancelled permitting to replace them in 2008.<sup>21</sup>

## **CBE Comment on 2010 CAP Measures**

**April 26, 2010**

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- Many pressure relief devices (PRDs) at Bay Area refineries, which can emit many tons in minutes when they “lift,” are still designed to dump directly to the ambient air even though other PRDs at the same refineries are controlled by vapor recovery.
- At least 200 storage tanks with permits to emit at Bay Area refineries are listed by BAAQMD permits as either fixed roof tanks that lack vapor recovery or external floating roof tanks without domes to further reduce their emissions.<sup>22</sup>

2014-11-3

Applying controls that are already applied to other similar sources would cut emissions of all the various CAP pollutants from various older industrial sources to improve health protection, especially for highly-impacted communities near the old plants.

### **Conclusion**

For the reasons described here, CBE respectfully urges BAAQMD staff to add each of the five measures discussed above to its proposed 2010 Clean Air Plan. Supporting attachments to this comment are listed below. Citations and notes identified in the text are given in the following pages. Please contact me at (510) 302-0430 x19 if you have a question about these comments.

In Health,

Greg Karras  
Senior Scientist

### **Attachments**

1. CBE's April 7, 2010 comments on the CAP and supporting documents; including the attachment: Brody et al., 2009. *Am J Public Health* 2009; 99(S3): S600-S609.
2. Jacobson, 2010. *Environ Sci Technol* 44(7): 2497-2502.
3. Pastor et al., 2010. *Minding the Climate Gap*.
4. Gadalla et al., 2005. *Environ Sci Technol*. 39(17): 6860-6870.
5. CBE, 2009. *Refinery GHG emissions from dirty crude: Preliminary estimate based on oil input quality, process intensity and energy intensity of U.S. oil refineries, 2003-2007*.
6. Brandt and Farrel, 2007. *Clim. Change* 84: 241.
7. National Energy Technology Laboratory Report DOE/NETL-2009/1392.

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### Notes

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<sup>1</sup> The 16 air pollutants included in the Plan and staff's health risk assessment, which represent only a subset of all air pollutants, are: reactive organic gases (ROG); oxides of nitrogen (NOx); fine particulate matter (PM<sub>2.5</sub>); ammonia (NH<sub>3</sub>); sulfur dioxide (SO<sub>2</sub>); diesel particulate matter; benzene; 1,3 Butadiene; formaldehyde; acetaldehyde; carbon dioxide (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); hydroflourocarbons; perflourocarbons, and sulfur hexafluoride.

<sup>2</sup> The real health risk is likely greater than staff estimates for at least five reasons. First, as shown by CBE's April 7, 2010 comments and peer reviewed research provided in Attachment 1, staff's assumption of outdoor exposure 100% of the time underestimates health risk because it does not account for indoor exposure to pollutants from nearby outdoor sources. Second, staff's estimate does not account for increased ozone and fine particulate matter exposures due to the "urban heat dome" effect from concentrated greenhouse emissions that is documented by the peer reviewed work provided in Attachment 2. Third, staff estimates impacts from only a subset of all air pollutants. Fourth, as staff's response to peer review comments on the multi-pollutant analysis acknowledges, staff has not yet completed analysis of impacts in the most highly exposed communities. Fifth, as discussed in the text supporting CBE measure 6, potential future emissions from some major pollutant sources that disparately impact those same highly exposed communities are reasonably likely to increase more than staff now estimates.

<sup>3</sup> Staff estimates reactive organic gas (ROG) emissions in the CAP, Vol. I, Table 2-3. Staff estimates methane emissions in Table K of BAAQMD, 2008. *Source Inventory of Bay Area Greenhouse Gas Emissions*. Methane accounts for 48-50% of total VOC emissions (ROG+methane) based on comparison of the 2005 and 2009 ROG emissions estimates with the 2007 methane emissions estimate, and 0.9072 short tons/metric ton.

<sup>4</sup> See e.g., Fiore et al. *Linking ozone pollution and climate change: The case for controlling methane*. Harvard University, 2002.

<sup>5</sup> Pastor et al., 2010. *Minding the Climate Gap* (attached hereto).

<sup>6</sup> For example, Chevron's Application for Authority to Construct and Permit to Operate submitted to BAAQMD on June 17, 2005 admits that replacing and modifying existing process units will improve energy efficiency at the Richmond Refinery. Replacement of the old catalytic reformers and the 70-80 year old boilers contemplated in that application was deferred indefinitely by Chevron in late 2008 and early 2009 and has not been done.

<sup>7</sup> "Investing in energy efficiency is almost always cost-effective because there is a direct return on the investment in the form of a reduction in energy expenditures." Draft Bay Area 2010 Clean Air Plan, Volume II, page E-3.

<sup>8</sup> For example, comparison of staff's response to CBE's Public Records Act request of September 18, 2009 with the current Title V Permit indicates that at least 115 sources that are still permitted to emit at the Chevron Richmond refinery were first installed at least 40 years ago. See also the discussion and evidence for CBE measure 5.

<sup>9</sup> See e.g., Gadalla et al., 2005. *Environ Sci Technol*. 39(17): 6860-6870 (Attached).

<sup>10</sup> The 32% difference from material input substitution is based on data reported by USEIA and *Oil & Gas Journal* for refineries nationwide over five years and CBE's attached preliminary analysis (CBE, 2009). Analysis of this large, high-quality data set

linked oil quality-driven energy to its processing mechanism quantitatively, allowing a more precise prediction of emissions from refining lower-quality oils. On average, refineries in East Coast/Midwest PADDs 1 and 2 refined higher quality (lighter, lower sulfur) crude and burned 522,000 Btu/barrel refined, 32% less than refineries in West Coast PADD 5, which refined lower quality oil burned and burned 770,000 Btu/b. Follow-up analysis using more data and more sophisticated methods confirms those results (unpublished data), and other research independently supports this dramatic effect of oil input quality on refinery fuel combustion for process energy (Brandt and Farrel, 2007. *Clim Change* 84, 241: and Gerdes and Skone, 2009. National Energy Technology Laboratory Report DOE/NETL-2009/1362).

<sup>11</sup> Further supporting the feasibility of this 20%-by-2020 cut in fossil fuel burned with expanded funding, staff already proposes 26 measures that seek to reduce emissions via reduced fuel combustion. See CAP measures SSM 15; MSM A-1, A-2, A-3, A-4, B-3 and C-3; TCM A-2, B-2, B-4, C-1, C-2, C-3, C-4, D-1, D-2, D-3, E-2 and E-3; LUM-1, 2 and 4; and ECM 1, 2, 3, and 4.

<sup>12</sup> BAAQMD, 2010. Draft Clean Air Plan 2010 Socioeconomic Impact Analysis.

<sup>13</sup> Draft CAP measures MSM A-1, A-2, A-3, B-3 and C-3; TCM D-1, D-2 and D-3; and ECM-2 and 3 explicitly or implicitly seek emissions cuts via fuel substitution.

<sup>14</sup> Equipment lists, current Title V permits issued by BAAQMD ([www.baaqmd.gov](http://www.baaqmd.gov)).

<sup>15</sup> Title V Permit, Facility A0030 lists no abatement device for source S-10.

<sup>16</sup> Title V permits for facilities/sources A0010/S-4285; A0011/S-1426; B2758 & B2759/S-802; and B2626/S-5.

<sup>17</sup> EPA's AP 42 assessment of petroleum refining.

<sup>18</sup> BAAQMD response to CBE's Public Records Act request of September 18, 2009.

<sup>19</sup> Title V permit for Facility A0010.

<sup>20</sup> Application for Authority to Construct and Permit to Operate submitted June 17, 2005.

<sup>21</sup> See California Energy Commission Docket No. 07-SPPE-1, Order No. 08-1008-5.

<sup>22</sup> Equipment lists, current Title V permits issued by BAAQMD ([www.baaqmd.gov](http://www.baaqmd.gov)).

Comment Letter #: 2010-19

Date: April 7, 2010

From: Greg Karras, Senior Scientist, Communities for a Better Environment

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- 19-1 The Bay Area emission inventory shows that approximately 500 tons of methane are emitted per day. The vast majority of that – nearly 70% - is emitted from landfills. Another 22% of methane emissions are from biogenic sources, and thus beyond the Air District’s jurisdiction. The Air District already controls landfill emissions via Regulation 8, Rule 34: Solid Waste Disposal Sites. Pursuant to AB32, CARB has adopted a statewide measure to reduce methane from landfill operations. The CARB measure complements Reg. 8, Rule 34 and will require increased surveillance of the surface cap on landfills. This element of the Landfill Methane Control Measure is expected to reduce methane emissions by 130 tons per day statewide. Air District staff also intends to consider increasing the stringency of Reg. 8, Rule 34, should doing so prove feasible. The Air District has included limitations on methane emissions in rules where the inclusion is appropriate since the 1990’s; for example, in petroleum refinery fugitive emissions rules. In many district rules, however, such as paint and coating rules, including methane would have no impact, because there are no methane emissions emitted in the source category.
- 19-2 The Air District has not proposed greenhouse gas reduction measures for oil refineries because they are targeted under AB32’s Cap and Trade program. Also, California gasoline and diesel standards require additional energy to produce this fuel compared to conventional gasoline and diesel. In response to this comment, the following text has been added to the list of actions that the District will evaluate and potentially implement in FSM 13 (Energy Efficiency and Renewable Energy): *Study opportunities to reduce energy use at petroleum refineries and other facilities*. Also see response to comment 19-4 below.
- 19-3 Permit fee increases are limited by state law to an amount no greater than the costs of implementing and enforcing the permit, and additionally limited to a yearly increase of no more than 10%. Therefore, permit fees are not a viable funding source to fund programs to reduce emissions of greenhouse gases from the transportation and energy sectors.

As noted by CBE, the potential emission reductions from control measures - such as Mobile Source Measures to promote alternative fuel vehicles, Transportation Control Measures to reduce vehicle miles of travel (VMT), and Energy and Climate Measures to promote renewable forms of energy - will depend to a significant extent on how much funding is available for incentive programs. However, as explained above, the suggestion to increase permit fees on fossil fuel producers does not appear to be a viable means to generate revenue to fund such programs. As described in LUM 2, Air District staff will develop a proposal for an Indirect Source Review regulation; revenues generated by an ISR regulation could potentially provide funding for such purposes. Revenue to fund reductions in GHGs from the transportation and energy sectors could also potentially be generated through other means, such as gas taxes,

GHG fees, etc. However, such mechanisms are beyond the Air District's direct authority. The CAP does discuss various transportation pricing measures that, if implemented, could generate revenues to fund such programs (see TCMs E-1, E-2, and E-3). However, significant obstacles must be addressed in order to build the requisite political support for any such pricing measures.

19-4 Refiners have already made significant capital investments in power generation from what would otherwise be waste products. These waste gases (refinery fuel gases) are derived mostly from cracking heavier refining feed stocks and are not able to be simply re-formed into usable product. The use of these waste gases to supply heat for refinery furnaces and power is more efficient and produces less greenhouse gases than creating the infrastructure to use renewable energy at the refineries. In addition, if the waste gases are not used to generate power, the refineries still must dispose of them, probably by flaring. Power-generating utilities mostly burn natural gas. It should also be noted that the State's Renewable Portfolio Standard sets aggressive targets to promote the use of renewable energy by utilities: see <http://www.cpuc.ca.gov/PUC/energy/Renewables/index.htm>

19-5 In developing the 2010 CAP, Air District staff reviewed permits issued before 1980 to analyze potential emission reductions from older facilities. There are 867 pre-1980 sources in refineries, plus more than 2800 such permits outside of refineries. Of the non-refinery permits, over 700 of these sources are liquid storage tanks, almost 100 are boilers, 230 of them are emergency generators, and almost 500 are dry material storage, conveying and working equipment. The remaining sources include chemical reactors, non-organic liquid processes such as anodizing tanks, wastewater treatment operations such as clarifiers and treatment ponds, landfills, loading racks, paint booths, printing presses, ovens and wipe cleaning operations. These are subject to general regulations and rules, such as Regulation 6: Particulate Matter, and specific rules such as various Regulation 8 rules. Four hundred and eighty-four (484) of the 867 pre-1980 refinery sources are tanks. Many of the remainder are refinery process units, and combustion sources such as boilers that provide heat and steam for the process units. The refinery sources also include loading racks, flares, other abatement devices and wastewater treatment units. Basic refinery unit emissions mostly consist of combustion emissions, limited by Regulation 9, Rule 10: Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators and Process Heaters in Petroleum Refineries, and fugitive emissions, limited by Regulation 8, Rule 18: Equipment Leaks.

Refinery flares are also subject to Regulation 12, Rule 11 and 12. Air District staff is currently considering revisions to Reg. 9-10. Reg. 8-18 is already the most stringent in California (and elsewhere). Further study measure FSM-5 contemplates the use of remote sensing equipment to further reduce emissions from remote or "inaccessible" valves. The other permitted units are also controlled – wastewater treatment by Regulation 8, Rule 8, last amended in 2004, and loading racks by Regulation 8, Rule 33 or Rule 6. Reg. 8-33 was amended in April, 2009.

Air District staff does not believe that a control measure to impose BACT requirements on older permits is the best way to reduce emissions from these sources. The process of reviewing

source categories for significant sources of emissions, reviewing other districts' rules and emissions limits, and identifying problem sources has proved to be a better approach to reducing stationary source emissions in the District. A BACT requirement for older sources may not result in more stringent control than would a retrofit rule for that source category. In addition, BACT has a cost ceiling for equipment where control has not been established in practice. In many cases, BACT is simply compliance with existing rules.

Responses to specific suggestions on pages 3-4 of the CBE letter are provided below:

Staff reviewed emission limitations for oil-fired turbines in 2007 as part of the rule development process that resulted in amendments to Regulation 9, Rule 9: Nitrogen Oxides and Carbon Monoxide from Stationary Gas-Fired Turbines. Under Reg. 9-9, the turbines at the Potrero Hill plant are only allowed to operate 400 hours per year. In the past three years, the turbines have operated, on average, 108 hours per year. Staff found limited technology available to control these turbines and found post-combustion controls, such as selective catalytic reduction, not to be cost effective.

Furnace C at Owens Brockway's facility in Oakland is the subject of Stationary Source Control Measure SSM-14.

The catalytic cracking units at the refineries mentioned do not vent to atmosphere. The emissions from these units are further processed in CO boilers or, in Chevron's case, other units. Some of these combustion units are controlled by SCR, and they are all subject to Regulation 9, Rule 10: Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators and Process Heaters in Petroleum Refineries. Staff is currently undergoing the process of amending Reg. 9-10 under 2005 Ozone Strategy Further Study Measure FS-14 and 2010 Clean Air Plan Control Measure SSM-10. Emissions of sulfur dioxide from refineries will be further investigated under Further Study Measure FSM-7.

Chevron's boiler #1 is also subject to Reg. 9-10. It is equipped with Ultra Low-NOx Burners.

Pressure Relief Devices are subject to Regulation 8, Rule 28: Pressure Relief Devices in Petroleum Refineries and Chemical Plants. This rule was amended in 2005 and requires control if devices relieve twice in a five year period. Since the rule amendments, there have been 1400 lbs hydrocarbons released reported by the petroleum refineries, and one release of 13,850 lbs by Huntway Refining (now Valero Benicia Asphalt Plant).

Organic liquid storage tanks are subject to Regulation 8, Rule 5. Reg. 8-5 was amended in 1999, 2002 and 2006 to incorporate more stringent requirements. Staff also looked at additional requirements that did not prove to be cost effective, including a requirement to dome tanks.

Submitted at April 8, 2010 CAP Workshop in Oakland

Letter 2010-20

MICHAEL J. VUKELICH & ASSOCIATES

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**Through out the job killing 500 page Air Board plan. Shred it Burn it.**

**We can't stand this continuous Air Board tyranny. Our air is too clean.**

**Our outside air is three times cleaner than the air in Jack Broadbent's house.**

**I challenge Jack to an air pollution test. We will test the air pollution in Jack's house and the air pollution down wind from the Chevron refinery in Richmond.**

**I'll bet Jack \$10,000 that the Chevron air is cleaner than Jack's air.**

**It's time to stop this Air Board tyranny.**

**I have lived 80 years never more than 5 miles from the Chevron refinery and within 20 miles from our 4 other local refineries. I never get sick.**

**In 1930 when I was born 1 mile from the Chevron Refinery in Richmond my estimated life span was 60 years. Now 80 years later, here I am very healthy. Why?**

**The air board is a liar. Our outside air makes us live longer. The Air Board is a liar.**

**Our outside air makes us live longer. The Air Board has killed millions of jobs.**

**They must stop their tyranny. Now! Before they kill the remaining producing jobs we still have.**

**The Air Board has covered up the truth how our inside air is more polluted than our outside air. 3 or 4 times. We spend about 21 hours a day in the polluted inside air and only 3 hours a day in our clean outside air. Why is the air board covering up this fact? All because of money. The average Air Board Staff member is a millionaire. He will receive over \$4-million during his life time when you include his wages, benefits and retirement income. What a waste of our taxpayers money. No wonder our State and Counties are bankrupt.**

**You attack Agriculture with the diesel pump, and tractor engine lies and the cow gas lies. Methane comes from the ground. Millions of tons of methane passes from under the oceans every day. The cow gas is infinitesimal. Residential fire places do not pollute our air. One giant forest fire produces more smoke and pollution than all the fire places produced for the last 100 years. Get Real.**

**50 years ago we had some dirty outside air. Industry and car companies now know what to do. Now our air is clean.**

**We must shred this 500 page plan. It's time to disband the Air Board before we loose our farms and our few remaining production jobs.**

**Sincerely,**

**Mike Vukelich**

Comment Letter #: 2010-20

Date: April 8, 2010

From: Michael Vukelich & Associates, El Sobrante, California

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20-1 This comment letter asserts that the draft CAP will have a negative impact on jobs. The Air District commissioned a Socio-Economic Analysis on the draft CAP to evaluate the economic impacts of the CAP. This analysis, which is available on the District website, finds that, although certain control measures may have a negative impact on specific industries, the CAP control strategy as a whole will provide a net benefit for the Bay Area in terms of job creation and economic growth. All stationary source control measures that are proposed in the CAP will undergo further analysis of cost-effectiveness and socio-economic impacts pursuant to the District's rule development process.

In response to the comment regarding indoor air quality, please see the response to comment 7-4 above.