

Summary of Written Comments Received and Air District Responses regarding September 2009 Draft Clean Air Plan Control Strategy

In late August 2009, the Bay Area Air Quality Management District (Air District) released a draft control strategy for the Bay Area Clean Air Plan (CAP). The Air District held public workshops on the draft control strategy in early September 2009. This document summarizes written comments submitted by interested parties on the draft CAP control strategy pursuant to the September 2009 workshops, and Air District staff responses.

For purposes of this summary document, the comments have been organized as follows:

Comments 1 through 6 address the CAP control strategy as a whole.

Comments 7 through 13 address Stationary Source Measures.

Comments 14 through 17 address Mobile Source Measures.

Comments 18 through 23 address Transportation Control Measures.

Comments 24 through 27 address Land Use and Local Impact Measures.

Comments 28 through 32 address Energy and Climate Measures.

Comment 33 addresses Further Study Measure 11.

Comments on the Control Strategy as a Whole

1. Diane Bailey, Natural Resources Defense Council (NRDC)

(letter dated 9/11/09)

a) Some measures exhibit trade-offs between pollutants. For example, certain abatement technologies can reduce criteria pollutants, while increasing energy demands and therefore creating slight increases in GHGs. While we understand that in select circumstances modest trade-offs may occur, we urge the Air District to do everything possible to avoid such trade-offs. Specifically, where a single measure for a source category may increase a pollutant, the Air District must explore additional measures for the same source category to mitigate the excess. If there are any instances of increases in toxic air pollutants that for any reason cannot be mitigated within the same source, those measures should be abandoned.

b) We also note that rigorous enforcement is critical to achieving the emission reductions envisioned in this Plan. The Air District should include a detailed enforcement strategy to ensure the efficacy of all the measures in the final Plan.

Response to Comment 1:

a) The 2010 CAP will include all feasible measures Air District staff could identify at this time. Thus, there are no “additional measures” that can be included to mitigate a potential increase in a pollutant from any individual control measures. There may be some instances where an incremental increase in any one pollutant, even toxic air contaminants, would be acceptable depending on the overall benefits in reducing other pollutants. However, in developing the CAP control measures, staff has not identified any significant trade-offs that would lead to an increase in TACs.

b) Air District staff will develop a CAP implementation plan. Control measures that are adopted as rules by the Air District Board will be subject to existing Air District enforcement mechanisms. Other measures that cannot be adopted as rules will be implemented via grants, partnerships, public outreach, etc.

2. David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF)

(letters dated 9/15, 9/17, 9/20, 9/22)

a) It would be helpful to collect each of the Sources sections from each measure and put them into an appendix to the report.

Response to Comment 2:

a) Complete control measure write-ups, which include the “Sources” sections will be included in the Appendix.

3. Richard A. Stedman, Monterey Bay Unified Air Pollution Control Air District (MBUAPCD)

(letters dated 8/25, 9/17)

a) (letter 8/25) MBUAPCD has reviewed the BAAQMD’s Multi-Pollutant Evaluation Method (MPEM) for evaluating cross-pollutant benefits in its 2009 Clean Air Plan. Although the creative five-step method analyzes impacts on the San Francisco Bay Area Air Basin (SFBAAB), it doesn’t consider the effect of the proposed measures on transport to downwind areas, specifically the NCCAB. The Air Resources Board’s recent recommendation to the EPA that The Pinnacles be designated a non-attainment area for the federal ozone standard underscores the basis for MBUAPCD’s request that the impact of SFBAAB emissions on transport into the NCCAB be more rigorously considered for measures that effect ozone precursor emissions.

As you are likely aware, the effect of changes in precursor emissions on ozone is not always straightforward because in addition to emissions, the formation of ozone downwind is also affected by the NO_x to VOC ratio. For example, while emissions of NO_x may reduce ozone in the

San Francisco Bay Area, once downwind of the SFBAAB, these emissions can produce increased ozone. The evaluation of ozone-related measures on transport could be done through both an emissions analysis and also by expanding the photochemical modeling domain to include the downwind NCCAB, as discussed in Appendix B of the document.

During the last year MBUAPCD undertook a review to update earlier studies that documented the patterns of transport in this air basin. We will be contacting you to share the results of our findings.

b) (letter 9/17) The study [mentioned in letter dated 8/25] has been completed and reviewed by staff, and I am pleased to provide a copy of *Ozone and Precursor Transport to the North Central Coast Air Basin (June 2009)* for your review. A summary of its findings includes:

- New analyses support the finding of transport into the NCCAB from:
 - Just offshore the SFBAAB, moving parallel to the coast, and then entering via Monterey Bay
 - From the SFBAAB, southward through the Santa Clara Valley to Hollister
 - Offshore of NCCAB directly west or southwest of Pinnacles and then through the NCCAB
 - East of the Pinnacles from the SVAB and northern SJVAB
- New analysis supports the findings of earlier photochemical modeling and ARB's triennial transport assessments
- Direct transport, during high 8-hour ozone events, occurs or originates in the SFBAAB and SJVAB
- Conclusions regarding transport are similar to the earlier one-hour NAAQS analysis
- Highest concentrations occur with northeast winds at moderate velocities, which results in transport from the SFBAAB that may also introduce SVAB and SJVAB emissions into the NCCAB
- Wildfires overwhelmingly affected ozone concentrations in June and July 2008
- Simple-to-run coarse scale models can be used to assess transport in Central CA
- The report confirms transport pathways and implies that the SFBAAB, SJVAB, and SVAB contribute to ozone formation on certain days, which would require mitigation
- The report confirms that transport patterns similar to the August 1990 photochemical modeling case (August 1990 SARMAP episode) comprise the majority of recent transport patterns and support the use of the 1990 case transport findings (the 1990 case showed sensitivity 10 ppb reduction in NCCAB ozone, with a 50% NO_x and ROG emissions reduction in SFBAAB)
- ARB should implement modeling sensitivity testing for the different meteorological regimes assessed in this report, when it conducts modeling for more recent episodes, including seasonal modeling to assess transport
- To further assess wildfire impacts on ozone, NO_x and ROG emissions, estimations of the 2008 fire season need to be done, which would be followed by a photochemical modeling of the impacts of wildfires

- Further work is needed to determine the average fire emissions during an ozone season, to provide a baseline fire emission estimation for future year photochemical modeling
- To refine and further document the findings of this study, photochemical modeling should be undertaken by ARB to assess the contributions of upwind air basins to exceedances of the federal and State ozone standards in the NCCAB

Response to Comment 3:

a) The Air District recognizes the importance of reducing transport of ozone precursors. However, at this point in time, the MPEM is not capable of evaluating the benefit of reducing transport of emissions beyond the Bay Area.

The issue surrounding NOx to VOC ratios within the Bay Area and the NCCAB will require comprehensive modeling to better understand the impacts of transported emissions within each air basin. The study cited in your 8/25/09 and 9/17/09 letters points out that the SJVAB and SVAB also transport emissions into the NCCAB and confirms that NOx and VOC reductions in the SFBAAB will reduce ozone levels within the NCCAB. We agree with the report findings that ARB should conduct additional modeling analysis to assist all air districts in understanding how to best address the transport issue.

b) The Air District remains committed to working with our neighboring air districts to understand the effects of transport of emissions between our respective air basins and identifying the most appropriate control strategies to limit the impacts each air basin may have on its neighbors.

4. Rory Cox, Local Clean Energy Alliance (LCEA)

(letter dated 9/23)

We applaud the Air District’s inclusion of particulate matter (PM), air toxics, and GHG’s to its update of the 2005 Ozone Strategy. This ground breaking work will likely have a wide reaching, positive effect on how the human health impacts of these emissions are analyzed and regulated. The Air District’s work on this should be considered a best practice and used as a model by other Air Management Air Districts; we look forward to sharing it with our colleagues.

As part of this ground breaking work, you are using a sophisticated and complex Multi Pollutant Evaluation Method which has five key steps:

1. Emissions
2. Concentrations
3. Population Exposure
4. Health Impacts
5. Health/Social Benefits

In your analysis of Ozone, particulate matter, and air toxics you are employing all the Steps 1 through 5, but for GHG you propose to use only Steps 1 and 5. We believe this decision to limit the analysis scope for GHG was initially proposed due to:

1. Concerns about difficulties in modeling the widespread, relatively small individual emissions that comprise the majority of emissions points, and often but not always the majority of a municipality's GHG emissions.
2. *And* the commonly held but incorrect belief that even billions of pounds of additional locally emitted GHG have no effect on the health of the local population.

We would like to address both of these issues. On the first issue, while the difficulty in modeling the large numbers of small scale emitters is a valid concern, there are two types of stationary source emitters that due to their enormous quantity of emissions *must* be modeled and are relatively easy to do so: fossil fuel power plants and fossil fuel refineries. As an example, the proposed Russell City Energy Center (RCEC), a 600 Megawatt, natural gas power plant currently seeking a federal Prevention of Significant Deterioration permit to operate adjacent to the ecologically sensitive habitat of the Hayward shoreline and directly upwind from a city of 149,000 people, will produce more GHG emissions than the combined, inventoried total of Hayward's municipal, industrial, residential, commercial and transportation GHG emissions. All these GHG emissions will come from the space equivalent of a single city block, should the project move forward. With the existing set of meteorological data for the site, the Air District's existing set of block by block census data, and the Air District's own prediction of RCEC's GHG emissions, Steps 1 and 2 can be modeled.

On the second issue, the assumption that billions of pounds of locally emitted GHG emissions have no effect on the health of the local population, Prof. Mark Z. Jacobson's studies of the last few years demonstrate not only that there is a quantifiable effect, but that the effect is significant. Using Jacobson's methodologies, the results from Steps 1 and 2 can give you the results for Steps 3 and 4, of what the predicted increase in death, morbidity, and ER visits will be as a result of the effects of the increase in amount and toxicity of the criteria pollutants, PM and ozone, due to the significant increase in local CO₂ concentrations.

That data can then be used to estimate Step 5. The resultant information would be invaluable data for the Air Districts desire to:

- Estimate the total cost of health impacts and monetary costs associated with the current emissions levels of fossil fuel power plants and refineries and ambient concentrations.
- Backcasting to estimate the health impacts and monetary costs associated with fossil-fuel power plants, refinery emissions and ambient concentrations in years past.
- Estimating the aggregate benefit of the overall emission reductions for the proposed 2009 CAP control strategy as a whole.
- Evaluating the benefits of GHG measures in reducing criteria pollutants.

As an alliance whose core mission is to facilitate the transition to a locally focused and inclusive clean energy system, we see an urgent need to utilize all applicable and available science-based tools to help us understand of the full societal cost of our current carbon intensive systems. This information is vital for policy makers, regulatory agencies and the public so that together we may formulate the appropriate science-based policies and programs needed collectively address the pressing issues of anthropogenic greenhouse gases and global climate disruption.

Response to Comment 4:

Air District staff is reviewing information regarding potential impacts of localized GHG emissions on ozone and PM concentrations. The MPEM may be revised to address any such impact, depending upon the outcome of this review.

Please note that the MPEM was developed to analyze potential control measures for the Clean Air Plan. It is not intended for use in evaluating permits for stationary sources, at least at this point in time.

5. William J. Quinn, California Council for Environmental & Economic Balance (CCEEB)

(letter dated 9/28/09)

- a) CCEEB recognizes and supports the Air District's efforts to be a leader in the field of air quality. We recognize the expertise you have offered other agencies when it comes to issues such as climate change and air toxics. We are troubled, however, that parts of the draft Clean Air Plan (CAP) move the Air District into areas where other agencies have clear authority as lead.

- b) We oppose the Air District's advancements towards establishing regulations to control GHG emissions, such as in Stationary Source Measure 5 (Greenhouse Gases in Permitting-Energy Efficiency). This measure seems to duplicate the Air Resources Board's (ARB) development of energy efficiency and co-benefit audits for industrial sources as well as mandatory GHG emission reduction requirements set forth under AB 32 and the ARB Scoping Plan. We believe AB 32 clearly gives responsibility for controlling GHG from stationary sources to the Air Resources Board. We support the Air District's innovative multi-pollutant approach, in which it seeks to (1) maximize concurrent GHG reductions when controlling for criteria pollutants and toxic air contaminants and (2) minimize tradeoffs between GHG and other pollutants when designing control measures. We do not support separate local greenhouse gas (GHG) requirements. GHG is a global pollutant. We believe a patchwork of Air District-specific rules across the state is the wrong approach. Such rules could clearly interfere in any market program developed by the ARB in that it would make it difficult, if not impossible, to determine what is surplus.

- c) In addition, the Legislature has given the ARB the directive to develop an emissions inventory for GHG pollutants. We are concerned that a second inventory, developed by the Air District for the calculation of a GHG fee, could lead to duplicative efforts and resultant inconsistencies. Furthermore, we are concerned with the accuracy of the Air District's inventory

and its emissions calculations relative to that of the ARB. The ARB has devoted much time and resources to working with stakeholders on the statewide inventory; the Air District should not reinvent the wheel.

d) We are concerned that the CAP is moving forward without full analysis made available to the public, such as cost effectiveness, estimated reductions in emissions and exposure levels, and potential tradeoffs.

e) In terms of cost effectiveness, how is the Air District developing the estimates that the Board must consider with regard to cost?

f) How will staff address these and other comments raised by stakeholders? The process is moving very quickly and comment deadlines have been exceedingly short given the lack of analysis, the expanded scope of Air District activity, and the sheer number of proposed control measures. We would like the opportunity to ensure that our concerns are thoughtful and productive and that they are properly addressed.

g) The Air District has extended much effort in its multi-pollutant evaluation method (MPEM). How is this method being used in the development of the CAP?

h) The goal of the MPEM, to our understanding, is to make a relative comparison among options. However, some of the steps seem to be absolute in their analysis, such as estimates of monetized health and societal benefits. Since each step adds a greater layer of uncertainty, conservative or precautionary thresholds become compounded, thereby calling into question the accuracy of “dollars saved”. Would the Air District consider using a qualitative metric to make these relative comparisons? For example, with GHG, this might be expressed as a percent of 1990-levels or a percent of SB 375 regional targets.

i) How do estimated GHG benefits (\$28 per ton) get weighted vis-à-vis other benefits? GHG is exceptional since the Air District cannot truly determine what level of emissions reductions is directly attributable to its CAP.

j) Moreover, regional GHG benefit estimates confuse the geographic scope of climate change.

k) In calculating health effects, can the Air District include analysis of the economic impacts of its CAP and the associated effects on public health outcomes in order to avoid a perverse negative impact should economic impacts outweigh estimated air quality benefits?

l) Will the Air District test the assumptions embedded in its MPEM by running historic data and checking for accuracy? Will the Air District share the results with public stakeholders?

Response to Comment 5:

a) Comment noted.

b) It is not the Air District's intent to duplicate ARB's efforts in regulating GHG emissions from stationary sources. ARB and Air District staff are working together through the California Air Pollution Control Officer Association (CAPCOA) in developing stationary source GHG regulations and implementation mechanisms. The proposed control measure will be one way to ensure either ARB/CAPCOA developed measures, or the Air District developed measures will be implemented locally through the existing permitting process.

c) 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.

d) Air District staff is currently developing emission reduction and cost estimates for CAP control measures, and evaluating potential tradeoffs among pollutants. The Draft Plan will include information about all these factors and a written comment period for public comment. At the time the Draft Plan is released, the Air District will also release the results of a socio-economic study analyzing the potential economic impacts of the control measures. This study is currently under development by an outside consultant.

e) Preliminary cost estimates are being developed where possible at this time. Any SSMS included in this plan will go through a more detailed cost-effectiveness evaluation during the rule development process in accordance with California law and past practice.

f) Staff will respond to comments raised at workshops or submitted in writing, in a comment summary document such as this one. Staff is making changes to the draft control measures where appropriate from comments received, and will continue to do so until the plan is adopted.

g) The MPEM is being used to help assess the relative benefit of control measures in reducing pollutant levels, population exposure and health impacts, as well as protecting our climate. The MPEM may be used to help prioritize control measures for implementation. On a more general level, the MPEM can help inform which pollutants are most important to address, and how the Air District should focus its resources.

h) The key value of the MPEM is that it provides a metric which can be used to compare the benefit of reducing all the types of pollutants that are addressed in the CAP. We have no other metric or method which does this. Although imperfect, the MPEM provides a tool based on best available technical information. Air District staff has performed an analysis of uncertainty regarding MPEM benefits; this will be made available for public review. We believe that, with appropriate caveats, the MPEM results can help inform the policy-making process.

i) The Air District reviewed various studies where the benefit of reducing GHG emissions was estimated, and chose \$28 per ton of GHG reduced as the appropriate present value, as explained in Chapter 5 of the MPEM Technical Document.

j) Climate change impacts will be experienced both locally and globally. Therefore, reducing GHG emissions in the Bay Area will have both local and global benefits that can and should be recognized in developing this plan.

k) The MPEM provides an estimate of the monetized health and climate protection benefits of reducing air pollution. It should be noted that the MPEM does not quantify all benefits, however. The Air District will provide a comparison of the economic costs versus the benefits of each control measure, wherever possible. In addition, the socio-economic impact analysis will evaluate the overall monetary costs to implement the control measures.

l) The CAP will include an analysis based on the MPEM comparing the health burden related to previous pollutant levels versus current concentrations. The MPEM assumptions and appendix are available for public review, and the Air District will share its analysis of the costs and benefits of control measures in the draft CAP.

6. Karen Pierce, Ditching Dirty Diesel Collaborative (DDDC)

(letter dated 9/11/09)

- a) There is a big question around 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" for the CAP, and keeping stakeholders engaged in throughout the duration of the CAP.
- b) We appreciate the organization of measures into various sources that impact air quality in the Bay Area region. It is vital to us at DDDC that the control measures in whole take in to account individual and cumulative sources of pollution from freight transportation. Many of our communities are inundated by various pollution sources linked to freight transportation (also called "goods movement"). We trust the BAAQMD will be in constant conversation with the CARE Program and stakeholders like DDDC to ensure the communities most impacted by air pollution are also the communities that will receive direct benefit from the CAP's control measures.
- c) Will the scope of the CAP include emissions from planes and ships, which are another source of pollution in many of our communities?
- d) What are the funding mechanisms for implementation of the control measures and what types of incentive funds are available for early implementation?
- e) How will the Air District support small businesses and individuals who are impacted by and may have difficulty meeting draft control measures?
- f) How will the Air District enforce, monitor and oversee the control measures? Will there be public oversight?

g) How will communities be able to share in the development and implementation of the CAP to influence the impacts various measures will have on their communities?

Response to Comment 6:

a) Implementation and enforcement of the control measures will be the responsibility of numerous agencies and stakeholders. For example, the Air District will enforce Stationary Source Measures, and various regional partners, such as MTC and ABAG, and local jurisdictions will work together to implement Transportation, Land Use, and Mobile Source control measures. Staff will review the Collaborative's Public Participation Protocol for possible use in keeping stakeholders engaged during the implementation phase of the 2010 CAP.

b) CARE program staff has participated in development of the 2010 CAP and will participate in its implementation. In addition, Air District staff will continue to work with stakeholders like DDDC to address the disproportionately impacted communities throughout the Bay Area.

c) The Air District has limited regulatory authority over these sources. Therefore, control measures to address these sources of emissions are primarily through enhanced CEQA review, land use planning, the proposed indirect source review rule, incentive funding, collaboration with local governments and stakeholders, and developing best practices guidance. For example, incentive programs described in TCM B-4 (Carl Moyer Program and I-Bond program) are both available for marine vessel projects. In addition, LUM 1 is not limited to on-road sources of pollution, but addresses sources of goods movement emissions as a whole. Finally, the Air District will continue to work with its State and federal partners to address all goods movement emission sources.

d) Available funding varies widely, depending on the type of measure. For example, some state funds (such as Carl Moyer Program and I-Bond, described in TCM B-4) are available for early adoption of mobile source reductions. Additional limited funds are available through USEPA and the Air District's TFCA program. To our knowledge, there are no incentive funds available for early option of stationary source measure. In addition, various sources of funds, primarily through MTC & ABAG, are available to implement transportation control measures and land use measures.

e) During the rule development process, staff will hold stakeholder workshops to identify potential regulatory options to lessen the burden on effected stakeholders. Through the permit process, the Air District does make available special provisions, including lower fees, for qualified smaller businesses that have 10 or fewer employees and a gross income of less than \$600,000 a year.

f) The Air District's existing enforcement program will be responsible for inspection and compliance with any future rules resulting from the 2009 CAP.

g) The proposed stationary source measures will be developed through an open public process with workshops and stakeholder meetings prior to Board consideration. The remaining non-

regulatory control measures that will either add new programs or enhance existing Air District programs will have their own public involvement processes and/or be open to public comment at various Board Committee meetings.

7. Robert Horowitz, California Integrated Waste Management Board (CIWMB)

SSM-2 (email dated 9/21)

Composting appears to fit better with future study measures than with higher-priority SSMs. Per the report, “Measures have been classified as FSMs for a variety of reasons, including lack of emissions data for the targeted source, uncertainty as to the cost-effectiveness of a measure, or because the proposed control technology has not been adequately demonstrated.” All three of these statements are true for composting. Research is underway on a number of fronts, but it is not yet clear whether all questions which were asked of researchers will be answered, and of those which are answered, with what degree of certainty. The cost implications and effectiveness of the various mitigation technologies are unclear and constantly evolving. Basic information about the types of compounds emitted by compost facilities, and their contribution to ozone pollution, is unknown. We have barely scratched the surface in investigating the interplay of composting with greenhouse gas emissions.

Regarding the proposed implementation actions, many of the suggested Tier 1 mitigation measures borrowed from SJVUAPCD Draft Rule 4566 were pulled from a well-known “on-farm handbook,” but are not backed by emissions reduction data. Some may actually increase air pollution by obligating compost facility operators to run more diesel engine hours (scraping to 1”), or by promoting anaerobic conditions (covering active piles with soil). Because many areas of California are “NO_x limited,” any rules which necessitate additional diesel engine use will exacerbate ozone pollution, which could more than offset any pollution benefits gained from what may be marginal improvements in organic emissions of dubious reactivity.

The aeration systems necessary to accomplish the Class 2 mitigation measures require significant amounts of electricity.

The best management practices listed in the report as mitigation measures do not generally have industry support and were not necessarily developed through a collaborative process, as stated in the issues and impediments section. See earlier bullet points. We feel confident that the final suite of BMPs and mitigation measures developed by SJVUAPCD will reflect the extensive collaboration and research which has occurred since those mitigations were originally released in early 2008.

While other air districts are considering measures to control compost emissions, it's important to note that to date no air district has determined that these measures are cost effective for green waste composting. The vast majority of compost facilities in the BAAQMD handle green waste and food waste exclusively.

When assessing the potential effectiveness of any new rule, we request that the Air District consider impacts on competing environmental priorities and programs implemented by other agencies. Regional compost facilities are an integral part of complex, long-range resource management strategies implemented by Bay Area cities and counties to meet statutorily-mandated solid waste disposal reduction goals. Nearly every city in the BAAQMD collects green materials for composting. San Francisco, San Jose and Oakland have all adopted Zero Waste goals. Effective October 21, 2009, San Francisco will require its residents to separate organic wastes for composting, and could fine them up to \$1,000 for failure to do so. Many of these materials wind up traveling beyond the Air District borders to downwind air sheds with more serious quality issues.

Reducing transport and spillover to other air districts is important, but an equally important environmental goal is preventing these materials from reverting back to landfills, where the least stable fraction decomposes anaerobically long before gas capture systems are operational. Anaerobic breakdown gives off odors, VOCs and methane. The aerobic breakdown which is the goal of composting emits fewer odors and little or no methane; it is likely that VOC emissions are reduced, as well. Until proper anaerobic digestion facilities are permitted and built to handle the most volatile fractions of the organics stream, these materials will need to be composted.

Previous laboratory research funded by the CIWMB indicates that leaving organic materials to decompose randomly (e.g., in fields or yards) actually results in higher overall VOC emissions than what is measured from the compost pile. Also, while research has shown that compost piles emit VOCs, the specific types of compounds and their propensity to form ozone are not yet known. It is possible these gases contain significant amounts of ethanol, acetone, and other non- or weakly reactive compounds. The CIWMB recently began vital research to answer that question, and we expect results from that endeavor in 2010.

On the subject of greenhouse gases, our agency is nearing completion of a Life Cycle Analysis of organics diversion options. In the course of preparing and executing this multi-year research project, we have identified the gaps in our ability to quantify the benefits of compost in adapting to climate change. We believe these calculations are fundamental to the total environmental benefit of any proposed rulemaking. For instance:

- All future climate scenarios for California indicate exacerbated water scarcity. Compost can increase the water holding capacity and permeability of the soil types found in the Bay Area and all over California. These benefits would be amplified by commensurate decreases in water use and irrigation-related pumping, not to mention reduced runoff and related water quality benefits.
- Soils are thought to be the largest potential repository for carbon, but carbon content in California agricultural soils is typically very poor, barely 1% in most places. Multi-year compost applications can boost soil carbon content. This obvious benefit, and a related opportunity to offset the use of fossil-fuel based fertilizers and pesticides, offers potentially large greenhouse gas savings. It also makes an

important contribution to sustainable agriculture and efforts to protect California's food security.

To close one significant data gap, the CIWMB intends to initiate major scientific research on nitrous oxide (N₂O) emissions from compost production and use in 2010. This project will complement research on N₂O releases from agricultural soils recently begun by the Air Resources Board, the California Energy Commission, and the Department of Food and Agriculture. As N₂O is one of the most potent greenhouse gases—at least 298 times more potent than CO₂ over 100 years—the results of our study will be relevant to your efforts to reduce greenhouse gas emissions.

The CIWMB's mission includes fostering a vibrant organics recycling industry, which can help California adapt to the impacts of climate change, improve the security of our food supply, conserve precious water and build the soil for a sustainable future. We hope the BAAQMD will agree that any new regulations should be sensitive to these goals, as well as scientific issues and uncertainties noted above. We request BAAQMD to work closely with CIWMB staff, city and county recycling coordinators, and compost operators on any new rules. We would be pleased to collaborate with you to ascertain the results of ongoing emissions studies, to fill remaining information gaps, and to better understand the fragile economics of organics recycling, before you consider new regulatory requirements for compost facilities.

Response to Comment 7:

Because there is still much work to be done re: technical feasibility, cost and other issues related to composting, Air District staff is proposing to move this measure from the SSM category to a Further Study Measure. Staff is aware that composting provides various environmental benefits. Staff intends to work with CIWMB and other stakeholders in the course of investigating potential options to control emissions from composting.

8. Brian Matthews, StopWaste.Org:

a) The CAP should support local jurisdictions' efforts to increase recycling and composting, assist jurisdictions with the permitting of new recycling and composting facilities and support local governments' efforts toward increased recycling goals wherever possible in broad, comprehensive plans, such as this one, to improve air quality in the region.

The Air District proposes to treat composting as an anthropogenic source of emissions. The Air District gives biogenic credit to landfills and POTW's for their emissions. If these sources are treated as biogenic then so should the emissions from composting. The proposed control strategies for compost operations are unworkable and would significantly impact the cost and viability of the composting industry. This would reverse the accomplishments of communities throughout the air basin made over the past 15 years to divert organics from landfill. Statewide initiatives to reduce GHGs and the development of sustainable waste management practices are jeopardized by the 2009 CAP. The control

strategy proposes new activities for Air District staff (inspection of facilities) which have not been accounted for in the analysis.

We recommend the Air District not include composting as a contributing source of emissions to the air basin but rather treat it as a Best Available Control Technology for organics over open burning and landfill disposal. The Air District should quantify the increased emissions which would occur if the organics were left to decompose in-situ or if disposed in landfills and give credit to composting facilities for the emission reductions they provide.

The Air District has classified composting operations as stationary sources for the purpose of regulating them. This is a significant departure from past practice of treating these as area sources, and for the first time, the Air District is proposing to include composting, a controlled natural biological process under its regulator inventory. The composting industry is already highly regulated by the California Integrated Waste Management Board, and it has expended considerable effort in both time and state revenues to develop best management practices which minimize the impacts from this industry.

Multiple errors were made in developing the emission inventory, resulting in a gross over estimation of the inventory. International conventions and guidelines were not followed in the use of data, and the activities of other air districts rulemakings were misrepresented (the Mojave Desert rule has been set aside by the courts, and the SCAQMD rule 1133 only applies to biosolids co-composting).

The emission reduction estimate for ROG and methane are overestimated because the original baseline inventory is overestimated by several orders of magnitude.

The control measures proposed under SSM-2 are impractical, labor intensive, costly and/or would result in either greater emissions reductions or an unusable compost product.

We respectfully request that SSM-2 be removed from consideration until a thorough and complete analysis is conducted which recognized all the benefits of composting to the air basin.

Response to Comment 8:

a) In general, the Air District supports efforts to increase recycling and composting. However, these facilities can have localized impacts that need to be considered during the local jurisdiction's permitting process. As in the past, the Air District will provide assistance to local jurisdictions when requested. Air District staff has moved this measure from the SSM category to a Further Study Measure.

9. Jeff Obert and Jeffrey Belson, Hewlett Packard:

(letter dated 9/10/09)

SSM-3 Digital Printing

Wants emission limits to allow for a combination of measures to meet requirements.

Response to Comment 9:

This suggestion, along with other potential regulatory approaches, will be considered during the rule development process.

10. Karen Pierce, Ditching Dirty Diesel Collaborative (DDDC)

(letter dated 9/11/09)

SSM 17-19 Should also include the impact of public projects.

SSM 17-19 Will the New Source Review (NSR) also take into account the emissions from vehicles moving to and from the new sources?

SSM 17-19 “New and expanded” uses need to include the vehicles moving to and from those sources.

SSM 19 The clustering of diesel polluting vehicles and the air toxic hotspots that these clusters create must be considered.

Response to Comment 10:

Any public or private project subject to Regulation 2, Rule 2 requirements would be required to comply. SSMs 17-19 would apply only to stationary sources of emissions and not mobile sources. The proposed Air District CEQA guidelines and potentially the Indirect Source Review Rule would target localized air toxic hotspots associated with clustering of diesel on-road and off-road vehicles. Please note that measure # LUM 5 has been modified to state that the cumulative health risk tracking system for impacted communities will include mobile and area sources, in addition to stationary sources.

11. Diane Bailey, Natural Resources Defense Council (NRDC)

(letter dated 9/11/09)

a) SSM 4 – General Particulate Matter Emission Limitation Because of the tremendous health impacts associated with PM and the very localized nature of emissions and exposure, we urge the Air District to adopt the more stringent limit of less than 12 pounds per hour, currently in place in the South Coast. Further, the Air District should explore much lower limitations for the fine PM that is responsible for the greatest health impacts (as acknowledged in the draft Plan on page 21).

b) SSM 5 – Greenhouse gases in Permitting, Energy Efficiency The draft CAP describes two different ways in which this measure could be implemented. We encourage the Air District to implement the second method described where energy efficiency-related measures are imposed as a component of the permitting process. This will enable the most rapid adoption of cutting edge technologies that provide multiple pollution reduction benefits. Extensive research by DOE, the CEC, and the LBNL have identified new technologies that increase energy efficiency

resulting in reductions of greenhouse gases, criteria, and toxic pollutants while saving money in fuel costs.

c) SSM 9 – Cement Kilns Cement production is a major source of criteria and toxic pollutants such as NO_x, SO₂, PM, mercury, and other metals. Comprehensive pollution control techniques are required to efficiently reduce the impact of these facilities on neighboring communities. We applaud the Air District for seeking to reduce NO_x and SO_x emissions from the Lehigh Southwest plant and encourage the implementation of a comprehensive suite of pollution controls that effectively achieves the toxic pollutant reductions laid out in the draft National Standard for Hazardous Air Pollutants for Cement Kilns and the NO_x reductions outlined here.

d) SSM 12 – Refinery Boilers and Heaters The Air District should consider the achievable NO_x and GHG reductions possible as a result of installing the most up to date technologies for boilers and heaters which achieve low NO_x emissions through improved energy efficiency. This should be assessed for all boilers and heaters including those currently controlled under Reg 9-10 as well as those currently without NO_x controls.

e) SSM 15- Dryers, Ovens and Kilns In addition to the strategy proposed in the draft CAP, the Air District should assess the availability of technologies that can achieve the NO_x reductions for these sources through improved energy efficiency. This will result in substantial co-benefits through the reduction of other pollutants, including GHGs and toxics.

f) SSM 19 – Revisions to the Air Toxic Hotspots Program SSM 19: NRDC supports transparency in risk reduction rule and protection of sensitive receptors.

Response to Comment 11:

a) Comment noted. It is the Air District's intent to propose the most stringent standards that can be shown to be technically achievable and cost effective.

b) Comment noted. Both means of implementation will be investigated during the rule development stage.

c) Comment noted. The Air District will fully investigate these issues during the rule development stage.

d) Reg. 9-10 is currently in the rule development process to further reduce NO_x emissions from petroleum refinery heaters.

e) Comment noted. It is the Air District's intent to propose the most stringent standards that can be shown to be technically achievable and cost effective.

f) Comment noted. It is the Air District's intent to allow transparency through the rule development process.

12. Randy Castro CAL FIRE

(letter re'd via email 9/22/09)

SSM-11: I supervise our hazard reduction, fuel break projects in the west Santa Clara County watershed areas. Because of the remoteness of some areas we work, chipping is not always an option nor is removal by equipment. I'm concerned that any impending changes to the current open burn policies in the Bay Area might affect our ability to reduce the vegetation fire hazards in our watersheds.

Response to Comment 12:

The intent of SSM-11 is to consider further limiting discretionary agricultural burning. Staff is aware of the necessity of burning to reduce fire hazards in remote locations and will work with CDF and other responsible fire agencies to develop amendments to Reg. 5.

13. Ken Yew & Karen Del Compare-Yew

(Letter received via email 9.28.09)

a) SSM9 Cement kilns: While a decrease in NOx and Sox emissions are necessary, particulate pollution must also be decreased. The area is in non-attainment for PM and the technology exists to decrease this type of pollution from cement plants. In fact, the EPA has recently promulgated rules to decrease mercury and PM pollution from cement plants. The cement industry is vigorously fighting these new proposed rules. However, the BAAQMD has the authority, and in fact the responsibility to decrease PM pollution. I would urge the Air District to adopt the strictest rules possible to decrease PM and mercury emissions as well.

b) SSM 17, SSM 18, LUM 5: Even though Cupertino is the site for a large polluting cement plant and thousands of highly polluting diesel trucks, we were not chosen as a CARE site. These new proposed plans go even further to discriminate against citizens of Cupertino by having different requirements for New Source Review Addressing PM 2.5 (SSM 17), New Source Review for Toxic Air Contaminants (SSM 18), Reduce Risk from Stationary Sources in Impacted Communities (LUM 5). This is wrong for two reasons. There are many citizens who are at particularly high risk in Cupertino and throughout the Bay Area. Is an asthmatic child in San Francisco deserving of more protection from pollutants than an asthmatic child in Cupertino? If not then I would urge the Air District to adopt uniformly strict standards throughout their jurisdiction. Secondly, pollutants from the Bay Area travel further inland to areas with even worse air pollution. As a former resident of Fresno County I can personally attest to the disastrous air quality that exists in the Central Valley. For weeks at a time we would be told that our air is not safe and it is best to stay indoors. In fact one child in six in Fresno is stricken with asthma. What kind of life is that for children growing up? The BAAQMD has a responsibility to decrease pollution for those downwind who have even more severe problems. All the proposed measures, SSM 17, SSM 18, and LUM 5 should apply throughout the Bay Area. This will help reduce emissions within the Bay Area and throughout California.

Response to Comment 13:

a) *Comment noted. It is the Air District's intent to propose the most stringent standards that can be shown to be technically achievable and cost effective.*

b) *The criteria for identifying a CARE communities takes into consideration the amount of toxic emissions emitted within their community, modeled concentrations of toxic air contaminants, poverty levels and number of sensitive populations (youth under 18 and adults over 65 years of age). Cupertino was not identified as a disproportionately impacted (CARE) community based on these factors.*

However, due in part to comments received and new Office of Environmental Health Hazard and Assessment methodologies and guidelines, Air District's staff current approach is to modify these control measures so as to continue to impose consistent permitting thresholds and requirements throughout the Air District. This is reflected in the amendments to the new source review regulation (Reg. 2, Rule 5) adopted by the District Board on January 6, 2010.

14. David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF)

(letters dated 9/15, 9/17, 9/20, 9/22)

Letter dated 9/20

a) TRANSDEF believes the categorization of the mobile source measures to be unhelpful. In effect, the measures are organized by target market (i.e., trucking, farming, gardening...). We believe it would be much more useful to divide the measures into strategies: those oriented towards diesel engines, those oriented towards two-stroke (and old four-stroke) engines and everything else. The reason why categories are important is that they facilitate comparison of measures that do the same basic thing (e.g., MSM B-1 and MSM C-1), which will be helpful in determining how to allocate scarce funds.

b) Costs are handled clumsily for these measures. Descriptions of costs do not clearly indicate which costs are public or social costs, and which are the agency costs. We suggest being explicit as to whose costs are being described.

c) Incentives designed to encourage early implementation of regulations need a careful economic analysis to determine the optimal timing and dollar amount, so as to generate public benefits without gifting public funds for actions by private interests that would otherwise eventually have to bear the compliance costs. In other words, there needs to be a firm cut-off date after which no public subsidies will be available. Monitoring will be needed to ensure that the retrofits are accomplished in a timely manner.

d) We are concerned about rumors we are hearing that current retrofit programs are 'milking' the Air District for the maximum amount available for each category, apparently generating windfall profits for retrofit installers.

- e) There's a need to bring the costs (both social costs and agency costs) and benefits of these measures together in one table, to support a reasoned process for allocating scarce incentive funds.
- f) MSM A-1: This measure's description does not clarify whether this program would crush (or permanently disable the engines of) older vehicles. Without that program element, this measure would not have air quality benefits. It would have the unintended consequence of making used cars cheaper, because of increased supply, possibly resulting in more VMT and emissions.
- g) MSM A-1: CNG is not a renewable fuel, and has no identified path to become one. And yet the emissions calculations assume 50% of program vehicles will use CNG. The measure is not coherent.
- h) MSM A-1: TRANSDEF does not support this measure as written. We see no point in incentivizing CNG or gasoline vehicles. We believe it would make far more sense to concentrate vehicle subsidies in the MSM A-2 program for electrics and plug-in hybrids.
- i) MSM A-1: The identification of limited availability of renewable fuels as an Impediment suggests a program element: an incentive program to produce and distribute biofuels. This is a small enough market that a Air District program could have a significant and beneficial effect, while subsidies for efficient gasoline vehicles are unlikely to affect market conditions, because of the size of the incentive pool relative to the market size.
- j) MSM A-2: TRANSDEF supports the electric/PHEV vehicle component of this measure. We believe the future belongs to electric vehicles, which will over time be sourced with renewable power. We do not believe hydrogen offers benefits commensurate with the costs of a distribution network, and do not support expenditures on that technology.
- k) MSM A-2: We remain dubious about the need for public charging stations. Please be sure the Air District has developed adequate support documentation if it decides to fund charging projects. It is our understanding that typical commuting of under 100 miles round trip will not require a midday charge. So what is the purpose of public charging stations? We believe that a case can possibly be made for charging at recreational sites, but want to see a rigorous analysis.
- l) MSM A-2: The 50% electric operation for PHEVs sounds low to us.
- m) MSM A-4: The notion that the energy to crush a vehicle could be significant should encourage the Air District to consider immobilizing the engine instead.
- n) MSM A-4: The experience of using the web to report a smoking vehicle is unimpressive. There is no anecdotal information recorded--not even the color and make of the vehicle, or a description of what was seen. Clearly, this kind of information can be useful.

o) MSM A-4: It has never been clear whether there is an accurate count of the target vehicles for scrapping. We have long suspected that there is a large body of classic vehicles out there that is driven little. Such vehicles should not be the target of Air District action, if their emissions are low due to low usage.

p) MSM A-4: It might be worthwhile for the Air District to sponsor a bill in the Legislature that would create a separate category for vehicle registration besides Planned Non-Operation. It would be a Classic category. Negotiations with the Bureau of Automotive Repair (BAR), ARB and Department of Motor Vehicles (DMV) may produce some package of benefits for vehicles that are driven less than a specific mileage per year, and give them lower registration fees and possible Smog Check liberalization if they come in for odometer checks every 6 months to a year. Vehicles with this category of registration would then be removed from the list of candidates for the Vehicle Buy Back Program (VBB), allowing a greater focus on the offending vehicles.

q) MSM B-1: Aren't Heavy-duty diesel trucks the overwhelming source of diesel PM? (not merely "a significant source.")

r) MSM B-1: The focus of this measure on incentives to buy new trucks needs to be carefully evaluated against retrofitting a new engine (as in MSM B-2). It seems obvious that the latter strategy would be much more cost-effective.

s) MSM B-1: Explain the climate change benefits of CNG trucks as compared to biodiesel. We have not been impressed that there are significant public benefits to be gained by subsidizing CNG trucks.

t) MSM B-2: It is not clear from the text why this measure was not broadened to include retrofit of PM traps as well. (The last sentence on page 21 explicitly states either NOx or PM retrofits.) It would appear to us that, in general terms, retrofitting both NOx and PM after treatment will be far more cost-effective than subsidizing new trucks as in MSM B-1 (assuming, of course, that there is physical space to mount the filters and traps).

u) MSM B-3: If the category of MSM B measures were changed to be "retrofit diesel engines" this measure could be changed to be an MSM A, which focus on efficiency.

v) MSM B-3: This measure needs to produce an explicit strategy, based on answering the question "What would it take in the way of incentives to prime the pump to make a viable market in efficient drive trains, where the reduction in fuel consumption justifies the purchase cost?"

w) MSM C-1: We suggest this measure should be changed to be part of the MSM B category, because it relates to diesel engines.

- x) MSM C-1: At an Air District workshop on diesel PM, data was presented that construction equipment was a very large source of diesel PM. This is not reflected in the phrase “also a contributor.”
- y) MSM C-2: Would it be helpful for this measure to focus on just two-stroke engines? Getting the worst performers off the street might be better than a less-focused program.
- z) MSM C-2: Is the conversion of 7800 lawnmowers deemed a success? This hardly makes a dent. The goals of this program seem so low as to not be worth doing.
- aa) MSM C-2: Is there an explicit commitment to crushing exchanged machines?
- bb) MSM C-3: Would it be helpful for this measure to focus on just two-stroke engines? Getting the worst performers off the water might be better than a less-focused program.
- cc) MSM C-3: Is there an explicit commitment to crushing exchanged machines?

Response to Comment 14:

- a) The Air District has considered the organization of the control measures carefully. We acknowledge that the control measures can be organized in different ways and see advantages and disadvantages to the various methods. The Air District will consider this suggestion.*
- b) Most of the costs shown are preliminary estimates for funding actual project incentives of replacing/retiring or purchasing equipment. Staff will attempt to better define and clarify cost estimates in the next iteration of the control measure descriptions when the draft CAP is released.*
- c) We agree with the gist of this comment. The intention of the Air District’s grant and incentive programs is to generate surplus emission reductions above and beyond what is required by regulation. Air District incentives programs have Board of Director approved policies that define what constitutes “surplus emission reductions for purposes of the grant programs.*
- d) The Air District has contacted retrofit manufacturers, compared cost quotes from 2008 to current device quotes and has compared retrofit pricing across 16 separate vendors. The Air District has found no evidence of arbitrary cost increases for these devices.*
- e) The 2009 CAP does not allocate funding amongst incentive programs; it merely identifies potential funding amounts that could be used to implement the control measure. The Air District’s Board of Directors ultimately approves the allocation of incentive funds through a well established process, taking into consideration the agency’s strategic goals, potential emission reduction benefits, cost-effectiveness, as well as other criteria.*
- f) Retired vehicles are scrapped and recycled under this measure.*

g) The California Energy Commission (CEC) is currently supporting a bio-methane refinery and infrastructure program with \$20 million annually to make CNG a renewable resource.

h) Air District staff believe that a comprehensive strategy that includes both near-term and long-term measures is needed. CNG and/or high-mileage gasoline vehicles can be an effective means to reduce GHG emissions in the near term while advanced technologies are still being developed and introduced.

i) In implementing MSM A-1, staff will consider the best way to use available Air District resources to help develop renewable fuels and infrastructure. The CEC is expected to make funding available for this infrastructure. The Air District will consider such related efforts in determining how best to allocate its resources.

j) Comment noted.

k) The Air District is proposing Level 3 charging sites which will lead to smart grid technology. These sites will have the ability to fuel all types of vehicles including electric motorcycles and bicycles and low speed vehicles (golf cart type). These projects are proposed for locations with standing fleets such as public entities where they would be used anyway. Opening these sites to the public is a low cost way to address concerns regarding vehicle range, fuel source robustness and availability.

l) Based on available technologies the Air District feels that 50% electric operation accurately reflects the commercial viable vehicle fleets available.

m) The Air District is required to implement its vehicle buy-back program consistent with ARB's Voluntary Accelerated Vehicle Retirement guidelines. The ARB guidelines require destruction of the old vehicle. In any case, retired/scrapped vehicles are eventually recycled for their metal with or without this incentive program.

n) The Air District is currently working on changes to its webpage, however, license plate numbers are the key indicator purposes of identifying vehicles via the DMV database; the color and make of the vehicle are not needed.

o) Air District staff receives DMV information regarding registered vehicles that would be available for the vehicle buy back program based on the age of the vehicle.

p) There is already a provision in the VBB program guidelines to protect so-called classic cars. Please note that Air District staff has added text to the MSM A-4 write-up to state that the Air District will explore ways to target high-use vehicles for the scrappage program in order to maximize the emission reduction benefits.

q) According to the Air District's most current (base year 2005 inventory), construction and farm equipment are the largest source of PM_{2.5} from diesel engines. Diesel trucks are a major source as well, but not necessarily an "overwhelming" source.

r) While the Air District supports retrofits as a cost-effective strategy where applicable, impending state regulations mandate NO_x reductions which cannot be met by existing retrofits devices. Since the Air District is "non-attainment" for PM_{2.5} and NO_x is a significant contributor to secondary particulate formation, the Air District will pursue strategies that achieve the most emission reductions possible for PM and NO_x.

s) Analyses of the GHG emissions of biodiesel and natural gas are available at www.arb.ca.gov/fuels/lcfs/lcfs.htm. The benefits of natural gas and biodiesel vary according to the feedstock, but on the whole they are similar when indirect emissions from land use changes are included in calculating the biodiesel emissions. In both cases, the GHG emissions are lower than for conventional ultra-low sulfur diesel.

t) The intent of MSM B-2 is to bring existing engines (1993-1998) into early compliance with new CARB in-use truck regulations related to NO_x emission limits. The reference to PM filters on page 21 is related to existing conditions of grant incentives. MSM B-1 targets NO_x and PM reductions through the purchase of new trucks that meet CARB's 2010 emission standards.

u) Comment noted.

v) Air District staff believes that using incentive dollars is a way to demonstrate the commercial viability of this technology which will allow it to be adopted more broadly. More research is needed to determine if the technologies are sufficient to create a "viable" market based on cost effective emission reductions.

w) Comment noted. MSMs C-1 through C-3 target off-road emission sources whereas MSM B measures target on-road emission sources.

x) Construction equipment is a large source of the diesel PM in the Bay Area. The statement in MSM C-1 and cited in this comment is in relation to construction equipments contribution to localized exposure of diesel PM. The contribution of construction equipment to localized exposure of diesel PM varies both spatially and temporally.

y) The MSM C-2 description states that the Air District will target two-stroke engines as the initial priority. Program details will be established at a later date, but the program will be designed to maximize emission reductions and cost-effectiveness.

z) Over eight years the Air District estimates that this program removed approximately 33 tons of combined emissions of NO_x, ROG and PM at an estimated cost of \$7,800 per ton of emissions reduced. Approximately 7,800 lawn mowers were retired and replaced with cleaner equipment. This is a very cost effective program when compared to other state and local incentive

programs, such as the Carl Moyer Program and TFCA programs. In addition, this program received press coverage and increased the public's awareness of an easy-to-make clean air choice.

aa) Yes, retired engines will be scrapped and recycled.

bb) Program details re: MSM C-3 will be established at a later date, but the program will be designed to maximize emission reductions and cost-effectiveness.

cc) Yes, retired machines engines will be scrapped and recycled.

15. Andy Katz, Breathe California (BC)

(letter dated 9/16/09)

a) MSM B-1-3: BC encourages cost-effective use of incentive funds, sustainability of funds. Comments at the last workshop raised concern about the need to ensure Carl Moyer and Prop 1B funds are distributed cost-effectively, so that limited funds go to the greatest possible health benefits, and are surplus to what is required under regulations. The Clean Air Plan should also address the long-term sustainability of incentive funds.

b) MSM Proposal: Clean Construction equipment in the priority communities. Breathe California strongly urges adoption of a control measure that would require use of cleaner construction equipment in the priority communities. 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 Air 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. While this proposal did not move forward earlier because it is supposedly "addressed by ARB," (page 71, #60), the state Air Resources Board passed a regulation that very slowly requires changes fleetwide, but makes no efforts to prioritize reductions in the areas most impacted by pollution. The Air District could both accelerate needed public health benefits, and also apply its resources and knowledge regarding ensuring pollution reductions in the most impacted communities.

Response to Comment 15:

a) Both Carl Moyer and Prop 1B funds are state grant programs. State legislation and ARB guidelines strictly prescribe how these funds can be spent. For example, at least 50% of Carl Moyer funds must be spent in impacted communities and all funds must be spent on projects that are surplus to the regulations. Prop 1B funds are also designed to generate surplus emission reductions and must be spent on goods movement projects. In practice, this means

Prop IB funds will be targeted to the most impacted communities, since goods movement contributes greatly to air quality issues in these communities. The 2010 CAP emphasizes the need to focus grant funding so as to protect public health. However, factors beyond the control of the Air District may impact the long-term availability of incentive funds from external sources.

b) Federal law preempts Air District establishment of emission standards for construction equipment. As a result, we cannot adopt a rule to require best available control technology for construction equipment. However, the Air District will encourage local jurisdictions to adopt green construction equipment emission requirements per the Leadership Platform Item 1-7 support for public green fleets. The Air District is updating our CEQA Guidelines (LUM 3) to include significance thresholds for construction emissions and localized PM2.5 concentrations, which should result in cleaner equipment being used throughout the Bay Area.

16. William J. Quinn, California Council for Environmental & Economic Balance (CCEEB)

(letter dated 9/28/09)

a) The Plan introduces a new category of incentive programs aimed at advancing fuel and drive train technologies. Technology programs typically are administered through State and federal programs since technology innovations are beneficial more broadly and can be deployed beyond any one region. We recognize that these types of programs require extensive resources. How does the Air District decide what resources to invest in such programs? Do these programs pull funding that previously went to cover the cost of more traditional stationary source programs?

b) We do not believe the Clean Air Plan should direct the Air District to move into areas where primary authority is given to ARB and EPA.

Response to Comment 16:

a) The Air District envisions that measures to promote advanced fuel and drive train technologies would be funded by some combination of Air District grant programs, grants from other agencies, and private sector funding. Air District grant programs generally target mobile sources only. The Air District efforts to promote advanced fuel and drive train technologies will not have any impact on the level of resources available for traditional stationary source programs.

b) In areas where ARB and EPA have primary authority, Air District efforts will be designed to complement State and federal programs and regulations. The Air District intends to continue its existing efforts to reduce emissions from sources under State or federal control by means of incentive and demonstration programs to promote early compliance with regulations, guidance, best practices, and working to attract green jobs and investment in innovative technologies to the region.

17. Karen Pierce, Ditching Dirty Diesel Collaborative (DDDC)

(letter dated 9/11/09)

a) MSM B1-3: We are supportive of control measures on mobile sources. We believe that you must ensure that emissions reductions are truly “surplus” before continuing to distribute taxpayer- funded incentives. Specifically, all public incentive funds should be used in a manner that assures early emission reductions well before they required by any regulations, requirements or existing programs. We support replacements over retrofits as a longer-term solution to cleaning up diesel PM as well as other emissions from heavy-duty trucks. We are concerned that public incentive funding is not reaching the small businesses and independent truck owners who need it most. The Air District needs to ensure that least able to finance compliance with upcoming regulations receive targeted outreach and assistance in applying for and securing necessary funds. We urge the Air District to be more proactive in engaging independent truckers through efforts such as road-side application assistance kiosks, and that the application process be streamlined.

b) MSM C-1: Much of this funding may be misplaced relative to other diesel clean up opportunities. The Air District needs to be more proactive in getting this funding to the smaller companies, contractors, and farmers, and ensure that the funding is targeted to equipment operated in areas where exposure to pollution is the most significant.

Response to Comment 17:

a) Incentive funding available through the State and Air District grant programs must generally be spent on surplus emission reductions projects. The Air District has spent considerable resources in recent years reaching out to smaller businesses and organizations, and will continue to do so. These activities include partnering with truck dealers to hold events, advertising in trade publications, and staffing an office at the Port of Oakland to answer questions on an appointment and drop-in basis. In addition, the Air District has streamlined applications as allowed under State funding program requirements, and worked with ARB to make additional streamlining possible.

b) The Air District is committed to targeting funding to areas that are most heavily impacted by air pollution. Construction equipment is a major source of diesel PM. Projects to reduce emissions from construction equipment may have a major impact in certain communities.

18. David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF)

(letters dated 9/15, 9/17, 9/20, 9/22)

Comments from letter dated 9/15

a) TCMs A-1, A-2 and A-3: These three measures each contain the same flaws: It is entirely disingenuous to claim that the purpose of these measures is to reduce emissions. In fact, these measures are, for the most part, post hoc rationalizations and attempts to take credit for pre-ordained lists of funded projects. Any emissions reductions are coincidental--a mere side-effect. The selection of the projects occurred prior to the formulation of the TCM. If the purpose of the TCM was actually to reduce emissions, the project lists would be very different. The reason

for the divergence is that many of the selected projects have very low cost-effectiveness. Had cost-effective projects been selected, the emissions reduction results would be substantially greater.

These TCMs need to apply to good economic times and bad. From a policy standpoint, it is completely unacceptable to allow existing transit services to suffer fare increases and service cuts, while continuing to funnel money into expansion projects. From an environmental justice standpoint, from an air quality standpoint and from a business standpoint, allowing this decline greatly hurts transit operators and the transit riding public.

What's needed as a remedy to this problem is a policy establishing that the top priority for funding is to be continuing the operation of existing transit, in good times and bad. The emissions reduction benefits for these measures are shockingly small, especially considering the many billions of dollars it will take to fully implement these measures. The problem is not MTC's oft-repeated lament that 'infrastructure doesn't move the needle.' The problem is the appallingly bad selection of megaprojects.

The failure to acknowledge the emission reduction trade-offs is shameless. These lists of projects demonstrate that trade-offs were made between projects that maximize emissions reductions, and those that maximize political benefits. The latter were consistently selected, rather than the former.

In addition, environmental justice is an ignored part of the trade-offs. Project selection will either burden or benefit low-income and minority communities, while benefitting wealthier, whiter communities.

The assertion that there are 1.2 million seat miles per hour of buses, 2 million seat miles per hour of trains, and 0.12 million seat miles per hour of ferries is incongruous, in light of the fact that the total Bay Area transit ridership is only in the 700,000 per day range. The only possible conclusion one can draw is that huge numbers of seats are unoccupied in the peak hour. These figures must be wrong. Or the label must involve more than one hour during one day.

While TCM A-1 states that the Climate Action Campaign will fund transit priority measures, this fails to take notice of MTC's announced intention to push back the implementation of that Campaign by up to 5 years. Science is reporting that climate change is accelerating, and that reductions of GHGs are needed in the very near future. Five years later is not anywhere near as helpful as now. If these TCMs are not funded, there will be no benefits.

b) TCMs B-1 and B-3: These measures are based on the same flawed analyses. The language of TCM B-3 admits in the Emissions Reduction Trade-offs section that induced demand will occur, but then attempts to paper over that with unsupportable conjecture: "While the express lanes will likely encourage some additional single occupant- vehicle (SOV) travel over the long term in response to reduced travel time and an increase in overall roadway capacity in the express lane corridors, this could be counter balanced by expected reductions in vehicle miles

of travel (VMT) due to an anticipated increase in transit use and carpooling in response to the express lanes.” Note the use of “could be.” This is hardly a reliable basis for the investment of billions of dollars, which could end up exacerbating the region’s GHG emissions. In fact, it is far more likely that, given the affluence of the Bay Area, travelers would choose to stay in their cars. This is California, after all, with its attendant car culture and pervasive media environment of automobile advertising. Allowing SOVs to use the HOV lane eliminates the only competitive advantage that transit and carpools now have over SOVs--their own right of way. Why would people want to use these alternative modes if they can just pay to keep doing what they are accustomed to doing? TRANSDEF believes the entire conceptual foundation of “express lanes” to be fatally flawed.

The kind of reducing VMT over the long-term--not just the short-term-- must be demonstrated through a credible analysis that includes a land use model.

TRANSDEF believes that, because of the centrality of the HOT lane proposal to MTC’s strategic vision, a competent peer review by academically qualified modelers is required before TCM B-3 can be included in a Clean Air Plan. In particular, the issue of highway capacity expansion and its counterpart--induced demand--leading to higher emissions of criteria pollutants and GHGs, must be resolved if the Bay Area is to reliably accomplish its emission reduction goals. The Air District has a vital role to play here as an honest broker and enforcer of quality control in its own planning. The Air District needs to know whether TCM B-3 will reverse the emissions reductions of the rest of the Clean Air Plan. TRANSDEF can provide the Air District with contacts for highly reputed modelers.

TRANSDEF hired an expert in modeling to provide a report on an EIR we are now litigating. It contains very useful references to the academic literature on induced demand, as well as identifying the utter folly of widening freeways to reduce emissions. The report is attached.

TCM B-1 references “limiting traditional expansion of the system to only the most essential locations.” Earlier versions of the Freeway Performance Initiative had included a system expansion component, but the project definition has changed over time. It is unclear from this text whether this TCM is intended to include expansion as well. Please verify the accuracy of the absence of any capacity expansion in the Implementation Actions.

“It is important to acknowledge this simplified first-order analysis may overstate performance to some degree by not accounting fully for changes travelers might make in response to the improved travel speeds associated with the HOT lanes. For example, travelers who would otherwise choose to drive in the shoulder period might shift into the peak, resulting in somewhat slower travel speeds and potentially higher emissions.” (Bay Area HOT Network Study, MTC, Sept. 2007, p. I-14.)

TCM B-3: we believe this alleged TCM does not belong in a category of “Improve System Efficiency.” While it claims to make better use of HOV lanes, the principal better use is to generate revenue to build more lanes. Express lanes are all about capacity expansion, not

system efficiency. We vehemently disagree that “TCM B-3 will seek to correctly price travel demand on Bay Area modeling that was done for these measures was so oversimplified as to be worthless for purposes of allocating billions of dollars. In particular, the modeling did not include feedback from changes in land use over time. Instead, the modeling treated land use as static and identical between the No Project and the Project Alternatives. Adding transportation infrastructure that changes travel times will create changed trip tables that will in turn affect location decisions over time. Yet, MTC’s model is blind to these effects, so it is unable to analyze the serious issue of induced demand, which will potentially undo whatever benefits the proposed projects claim, while greatly increasing VMT and the emissions of criteria pollutants and GHGs. Before ramp metering or express lanes can be considered TCMs and credited with emissions reductions, their efficacy in reducing VMT over the long-term – not just the short term – must be demonstrated through a credible analysis that includes a land use model.

Climate change imposes an urgent need to reduce emissions, which in the Bay Area are overwhelmingly the result of motor vehicle travel. TRANSDEF has been advocating the need for road pricing in the near-term, in which highways would have tolls on all lanes (except possibly the HOV lane). That would be “correctly pricing travel.” The vast majority of travelers in a TCM B-3 implementation would not personally experience a price signal. The primary recipient of revenues generated by HOT lanes will be additional lanes. It is highly disingenuous to claim that “improved regional transit” will be a result.

c) TCM B-4 contains a project, the I-580 truck climbing lanes that is inconsistent with the policy of the Alameda County Transportation Plan, which rejects widening the connection to the San Joaquin Valley. That gateway policy was based on sound thinking about limiting the amount of vehicular traffic entering the county. Had MTC been responsible in planning for the region, it would have recommended the Altamont Pass as the route for High-Speed Rail, because of its ability to remove cars from this very freeway, thus obviating the need for truck climbing lanes. It made a political routing decision, rather than one based on professional transportation analysis.

d) TCM C-1: Employees may choose to drive because of habit and the pervasive advertising of automobiles.

- The City of Richmond recently adopted a transit benefit ordinance. However, it is questionable whether such ordinances belong in a TCM that is titled Voluntary Employer-Based Trip Reduction Programs.
- TRANSDEF proposes the development of a new funding scheme for shuttles: the employer’s cost of the shuttle could be allocated to the users, and be considered part of their transit benefit package, preferably funded by parking cash-out.
- After stating the Air District’s lack of authority to mandate employer-based trip reduction ordinances, should mention the relevant draft leadership platform.

e) TCM C-4: This is an especially important TCM. A major marketing campaign is needed to raise the visibility of transit and make the link between driving and climate change. It is important that this program be funded and commenced immediately. Unfortunately, MTC is

proposing to push this program back 5 years, so as to be able to make freeways work better (in the short-term). This is completely unacceptable.

Comments from letter dated 9/17

f) An addendum to comments on TCMs B-1 and B-3 In recognition of the inadequacies of contemporary modeling, the CTC adopted a 2008 Addendum to the RTP Guidelines that sets out new standards for modeling capabilities. The 4 major MPOs are being asked to upgrade their models to include a land use model. While MTC has apparently expressed its willingness to do so, the Air District should be aware that when that modeling is eventually in place, it is highly likely to indicate that building out the HOT lane network will increase VMT and GHG emissions in the region. That's why we called for the Air District to conduct a peer review, for purposes of quality control of its data.

g) TCM D-3:

- It is unclear how "arterial management" fits into Focused Land Use Strategies.
- The "encourages" in the first line on page 69 is too weak. We suggest "offers incentives for" instead of "encourages."
- We suggest adding the following to the end of the paragraph starting "Senate Bill SB 375": "Implementation of TCM D-3 will, by necessity, be part of these relationships."
- We suggest adding a new bullet to Implementation Actions, Phase I: "Evaluate raising the TOD policy thresholds as a means of ensuring successful implementation of the SCS."
- What's tragically missing from the Supporting Actions by Partner Entities is a program of incentives to encourage these actions. Where is the discussion of Focus incentives and Proposition 1C?
- In Monitoring Mechanisms, add "station area plans" before "TLC projects."

h) Pricing Strategies

First, we suggest that what is now called E-3 be moved to become E-1, as this TCM raises the broad policy questions of pricing, and by necessity, needs to come first. (Note that this will include changing the references on page 83, second paragraph.)

i) Current E-3

- We suggest that an economist be hired to develop an optimal implementation strategy.
- Add to the second bullet on page 82: "One possibility is to pay at the pump."
- In the Feebates bullet, the last sentence is incorrect. In the feebate model, funding for desirable activities comes from a higher charge on undesirable activities.

j) E-2:

- It would be useful to state as part of the Regulatory Context that often, employee commuting is the biggest component of a business's carbon footprint.
- On page 77, add the following Implementation Action: "Grants for updating the parking component of zoning and traffic regulations."

- A major financial incentive that was not mentioned is the authorization to convert surplus parking area into land area for economically remunerative uses.
- The middle paragraph under Impediments explains why the JPC's regional parking program is so important. It is needed to eliminate the competitive disadvantages.

k) Current TCM E-1

- If the SFCTA expects results in Spring 2009, they are late (or I haven't heard about them, and neither have the CAP's authors).
- HOT lanes are not a value pricing strategy, because only one lane is priced. Only a small minority of freeway users experience a pricing signal. Discussion of HOT lanes does not belong in this TCM.
- Financial analysis shows a continuing likelihood that surplus revenues from HOT lanes will be eaten up by highway widening, thus never being available for "public transit funding."
- What does the following mean: "Because of this, the Bay Area bridges must be consistent with Bay Area freeways relative to HOV usage...?" Is it saying that there is a need for HOT/HOV lanes on the bridges?
- The Implementation Actions are so weak as to be embarrassing. Please eliminate all uses of "if applicable and feasible." Instead of "consider" TRANSDEF suggests you use the phrase "attempt to implement." "Consider" is unworthy of being an element of a Plan. Using the proposed alternative walks the fine line of being more aggressive than just "considering," while not committing to actually deliver the product. Similarly, "if feasible" can be changed to "attempt to begin a demonstration" in the first bullet of Phase 2. Also, it would be better to say "...value pricing will be evaluated for application to other bridges..."

Response to Comment 18:

a) The selection of projects for regional transportation funding is determined through the process to develop the Regional Transportation Plan (RTP). Air quality is one factor among many used to select projects in the RTP process. The CAP TCMs highlight a subset of RTP projects that have air quality benefits. However, the CAP is not intended to serve as a separate process for selecting which projects receive regional transportation funding.

MTC provided an analysis of socio-economic impacts of the Transportation 2035 RTP in its February 2009 T2035 Equity Analysis Report.

The data re: peak-period seat-miles per hour for bus, rail and ferry service in TCMs A-1, A-2, and A-3 are taken from Table C-3 in the T2035 Travel Forecast Data Summary (Dec. 2008) available on the MTC website.

b) The Air District agrees that it is important to analyze both the long-term and short-term air quality impacts of the projects described in TCMs B-1 and B-3. The Air District will commission an independent analysis to evaluate the air quality impacts from the Freeway Performance Initiative (TCM B-1) and the HOT lanes program (TCM B-3), including GHG emissions.

The FPI, as described in TCM B-1, includes a +0.1 percent increase in lane mile capacity in the FPI network. This lane mile capacity expansion comes primarily from the closure of gaps in the existing HOV lane system through use of shoulders by buses.

MTC is responsible for evaluating the equity issue; the Air District encourages MTC to design a program that address any inequities identified.

c) According to 12/15/09 conversation with Beth Walukas, Manager of Planning for the Alameda County CMA, eastbound truck climbing lanes over the Altamont Pass are included in the County Transportation Plan. The CMA supports this project as a way to relieve congestion in eastbound mixed-flow lanes.

d) Allowing employers the flexibility to use parking cash-out as a potential source of shuttle funding as part of an employer based trip reduction program or transit benefit package would not be precluded from TCM C-1. Mention of the provision in the CAP Leadership Platform re: authority to require employer trip reduction requirements has been added to TCM C-1.

e) MTC and Air District staff are currently collaborating on development of a climate change public education campaign that will be funded through the recently adopted 2035 RTP beginning in 2010.

f) Comment noted.

g) Arterial management is referenced in the regulatory context and background section describing what has and is occurring to support high density infill types of development. Arterial management is just one of many issues that need to be addressed in siting high density infill development.

The use of the term “encourage” describes current MTC practices in providing funding to CMAs related to the interagency funding agreements. During the development of the SCS, Air District staff anticipates the regional agencies will re-evaluate all of our land use policies and incentive programs to ensure successful implementation of the SCS.

Language about financial incentives and funding available through FOCUS and Proposition 1C has been added to TCM D-3.

The term “station area plans” has been added in the Monitoring Mechanisms section, as suggested.

h) TCM E-3 includes a wider variety of pricing strategies which include value pricing measures included in TCM E-1. The numbering of the measures does not have any bearing on importance or priorities in implementation.

i) There are various potential implementation strategies for pay as you drive insurance measures, all of which will be evaluated, including pay at the pump. The concept behind feebates is that rebates for fuel efficient vehicles would be funded by imposing higher fees on the less efficient vehicles.

j) The implementation actions by the regional agencies, such as providing technical assistance to local jurisdictions and development of parking guidelines can identify the how much of a businesses carbon footprint is attributable to employee commute. Other implementation actions identify the need to work with local jurisdictions to identify ways to provide financial incentives, which could include grants to update the parking component of zoning and traffic regulations. These financial incentives could also be for converting surplus parking into other uses.

k) Results of the SFCTA have not been released as yet. Value pricing is one of many pricing strategies that could be employed to reduce vehicle trips and VMT. Additional analysis will be conducted regarding HOT lanes to identify the amount of funding that could be expected to go towards transit from HOT lanes.

The language in the measure is based on current conditions and what the regional agencies can commit to at this time. It would be disingenuous to include the recommended language at this point in time. These value pricing measures are going to need additional evaluation and studies are needed to determine their feasibility of implementation in the Bay Area.

The statement in TCM E-1 re: consistency between HOV lanes polices on express lanes and bridges has been revised as follows: "Because of this, the HOV (high occupancy vehicle) occupancy requirements on Bay Area bridges must be made consistent with HOV occupancy requirements on adjacent freeways so that the region's bridges and express lane network form a unified system."

19. Karen Pierce, Ditching Dirty Diesel Collaborative (DDDC)

(letter dated 9/11/09)

a) DDDC recommends that the CAP incorporate the state commitment from the Governor's Goods Movement Action Plan that projects should move forward with "no net increase" in air emissions. The Air District must work with project sponsors to ensure that there is no net increase in air pollution and require actual proof of decreased pollution level due to these measures.

b) How will "congestion management" work?

c) What are the methods and criteria for a good project?

d) If a Proposition 1B Trade Corridor Improvement Fund project is found to negatively impact air quality after all potential mitigation measures are explored, what will the Air District do to prevent those impacts?

e) Re: TCM D-3, DDDC supports transit-oriented development and mixed land uses as long as public health impacts are at the forefront and there is not an increase in people exposed to air pollution. The Air District should ensure that housing and sensitive land uses are not placed next to freeways, polluting rail yards, or any other freight or industrial source of pollution.

Response to Comment 19:

a) Projects within TCM B-4 could result in emission trade-offs, such as reducing PM and slightly increasing GHG emissions due to fuel economy reductions from PM retrofit devices. Overall the Air District supports the GMP goal to “Reduce total statewide goods movement emissions to the greatest extent possible and at least back to 2001 levels by 2010”. Projects will be evaluated on a project by project basis to ensure any trade-offs do not impede air quality goals or disproportionately impact CARE communities. In response to this comment, a reference to the State Goods Movement Plan has been added to the “Regulatory Context and Background” section in TCM B-4.

b) Projects addressing congestion management must show reductions to ozone precursor and/or particulate matter emissions, while taking into account any potential to create induced demand.

c) Projects must be shown to reduce emissions of ozone precursor and/or particulate matter in a cost-effective way.

d) The Air District will work closely with project sponsors during the planning and environmental review process to minimize any potential air quality impacts to the extent possible.

e) The Air District has no direct authority over local land use decisions. However, the Air District has developed guidelines and thresholds of significance for projects subject to the California Environmental Quality Act for local jurisdictions to use when planning land uses adjacent to sources of toxic air contaminants. The Air District encourages local jurisdictions to taken into consideration our recommendations regarding siting new receptors adjacent to TACs. The Air District will also encourage local jurisdictions to develop Community Risk Reduction Plans, and will serve as a resource to cities that wish to develop such plans.

20. Andy Katz, Breathe California (BC)

(letter dated 9/16/09)

a) TCM A-1 and A-2: Need for cost-effectiveness in resource allocation. The discussion of TCM measures to improve transit services describes much of what is needed to achieve improved transit service in the Bay Area. The discussion should also discuss the need for limited transit

funds to be prioritized in a cost-effective manner, so that limited funds can achieve the greatest possible reduction in criteria pollutants and greenhouse gas reductions.

b) TCM B-3: Express Lane Network –The Clean Air Plan should not adopt the flawed modeling showing that the network, as proposed, will reduce greenhouse gas emissions, without performing a rigorous third party peer review that considers the induced demand triggered by adding 400 lane miles to the freeway network. This freeway expansion will not only increase greenhouse gas emissions, but will also require funding from the toll revenues, preventing tolls from funding additional transit. The analysis must be more explicit about assumptions, additionally issues, or otherwise should drop any claims expressing numerical greenhouse gas benefits.

c) TCM Proposal: County transportation plans must meet GHG reduction goals. While it is true that county congestion management agencies adopt their own transportation plans, this should not preclude the feasibility of the Air District directing 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 the Air District should play a greater role.

d) TCM B-4: Induced Demand and Goods Movement. 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 mitigate 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.

Response to Comment 20:

a) Language about the Transit Sustainability Project, which aims to improve transit’s core performance and financial stability and identify service productivity improvements that will yield more from the region’s investment in transit service, has been added to TCM A-1.

b) The Air District will perform an independent analysis to evaluate the effects on air quality from the proposed express lane network, including effects on GHG emissions.

c) The Air District encourages CMA’s to set GHG reduction goals that meet or exceed AB32 targets and implementation of policies that achieve those goals. As noted in TCM D-3, the interagency funding agreements between MTC and CMAs for the 2010 -2012 period include language to encourage that county transportation plans support climate protection and reduce VMT.

d) In addition to TCM B-4, the CAP control strategy also includes LUM 1 which focuses on reducing emissions from goods movement by promoting mode shift and efficiencies in goods

movement, among other measures to reduce emissions and population exposure from the goods movement sector.

21. Diane Bailey, Natural Resources Defense Council (NRDC)

(letter dated 9/11/09)

a) TCM A-1, 2 & 3: The success of a TCM such as A-1, A-2, A-3 hinges on the availability of funding at the state, regional and local levels. NRDC recommends that the Air District formally commit in the CAP to engage in the public transit funding process to find sustainable sources of funding for these essential services. In addition to operating existing service, and introducing new services (such as BRT and RapidBus), efforts should also be made to expand the reach of the existing bus system, increase headways for both bus and rail, and lower fares. Each of these factors correlates positively with increased passenger miles, greater per passenger mile efficiencies, and reduced vehicular emissions.

b) B-1 NRDC shares the concern of staff that TCM B-1 strategies “could encourage longer commutes from residential locations in the periphery of the region.” To the extent that CAP policies facilitate and support a larger regional development footprint (see also our comments on TCM B-3: HOT Lanes), care must be taken to avoid inducing new travel or promote residential and commercial development that will lengthen travel distances by car. In the effort to reduce idling and smooth traffic flow to cut air pollution, the Air District must be mindful of induced travel demand and VMT increases through “rebound effects” when altering operations.

c) TCM B-3 NRDC has expressed serious concerns about the Express Lane Network envisioned by MTC and authorized in AB 744 (Torricco). Although we have supported the conversion of existing HOV lanes to HOT lanes, and can even support restriping of existing facilities to fill gaps in the network (even though these are technically increases in capacity), NRDC and other environmental organizations question the VMT reduction potential of the outward expansion of the system along the 101 (southbound), the 80 (east of Vacaville) and the 580 (east of Dublin). This expansion of highway capacity into undeveloped areas is typical of historic infrastructure investments that have supported sprawl and increased VMT. We appreciated staff’s recognition of this trade-off (p 128), and ask the Air District staff to investigate the likely impacts of the system, generally, and the extensions, in particular, before associating significant air quality improvements with the Network. NRDC recommends that the Air District examine the likely air quality impacts of possible increased congestion in the East Bay urban core, particularly East and West Oakland. The Express Lane Network will not include the 880 in Oakland, the Bay Bridge, or its approaches, meaning that drivers with faster commutes along the Network may nonetheless find themselves funneled into congested general purpose lanes once they reach Oakland, concentrating congestion in these already sensitive areas.

NRDC appreciates the Air District’s willingness to sit a representative on the BATA’s BAYPOC, the board that would oversee the implementation of the network, and to assist in analyzing the system’s impacts. This was a request NRDC and other environmental groups made to MTC. We

would encourage the Air District to set baselines now, before the Network is up and running, to aid in gauging likely impacts in the future.

d) TCM C-1 NRDC Consistent with TCM E-2, NRDC recommends that “Free or underpriced parking” be added to the bulleted list of reasons why employees drive to work. Although the Bay Area is a national leader in corporate Transportation Demand Management programs, voluntary employer efforts to reduce employee driving are nevertheless quite inadequate. Not only is technical assistance lacking, but many employers believe TDM programs put them at a disadvantage when compared to competitors who can, for instance, offer freely available parking. SB 375 calls for broad new regional planning efforts that must involve municipalities, regional agencies and area employers. NRDC is currently sponsoring legislation (SB 728 (Lowenthal), supported by the Air District, that will grant authority to cities, counties and air districts to enforce CARB’s Parking Cash Out program. As the Air District has shown a willingness in the CAP to support legislation to expand incentives for employer TDM programs, NRDC would also ask that the Air District sponsor or support legislative efforts to amend or repeal SB 437.

Response to Comment 21:

a) The Air District is committed to continue working with its partners to identify the most sustainable and efficient transit services and this commitment is represented in the TCMs, which were jointly developed by MTC, the Air District and ABAG.

b) To address this issue, the Air District will perform an independent analysis to evaluate the air quality impacts related to TCMs B-1 and B-3, including GHG emissions.

c) See response to comment directly above.

d) The Air District has added language identifying free parking as a reason why employees drive to work to TCM C-1. The Air District has added language in support of mandatory employer-based trip reduction programs to TCM C-1. This is also addressed in the CAP Leadership Platform.

22. Jenny Bard, American Lung Association (ALA)

(letter re’d via email 9/16/09)

a) TCM C-1: Promote and incentivize webcasting among government, business and community organizations to reduce VMT from meetings and unnecessary travel. Meeting related VMT and attendant pollution reductions could be significantly reduced if viable alternatives to in-person attendance are provided.

b) TCM C-1: Work with MTC to develop model transportation demand management policies and programs, and seek necessary legislative authority, to achieve expeditious and ambitious reductions in VMT from employer based trips.

c) TCM D-3: Support policies for county transportation authorities to prepare transportation plans that meet GHG reduction goals. The Air District should call for policy guidance from the MTC and the Joint Policy Committee to the congestion management agencies to produce plans that show a capped level of per capita VMT and would help serve in the development of the region's Sustainable Community Strategy under SB 375.

d) TCM D-3: Work with local governments through Joint Policy Committee to support the most ambitious regional greenhouse gas reduction targets through the SB 375 process to accelerate regional smart growth and transportation planning and to reduce vehicle miles traveled.

Response to Comment 22:

a) The Air District encourages employers to provide facilities for webcasting to reduce travel and associated emissions. Text has been added to TCM C-1 to address this point. The Air District is not aware of any existing funding sources to support the purchase of webcasting equipment or fund webcasting programs.

b) The Air District will continue to work with MTC and other agencies to support rideshare, vanpool and other TDM programs. Within the CAP Leadership Platform the Air District is advocating for legislation that would provide authority to require employee trip reduction programs.

c) The Air District encourages CMA's to set GHG reduction goals that meet or exceed AB32 targets and implementation of policies that achieve those goals. As noted in TCM D-3, the interagency funding agreements between MTC and CMAs for the 2010 -2012 period include language to encourage that county transportation plans support climate protection and reduce VMT.

d) The Air District actively participates with JPC, ABAG, MTC, and BCDC on SB375 implementation and the Focus program. In addition, the Air District's Climate Protection Grants have funded local agency projects and plans that reduce GHG and help meet reduction goals.

23. East Bay Regional Park Air District (EBRPD)

(letter 9/21)

a) TCM D-1 should place higher priority on trail gap closure projects and the construction of Class 1 bicycle facilities to minimize the potential impacts of the plan and improve the effectiveness of TCM D-1 at reducing emissions.

b) Please add, "The BAAQMD will encourage MTC to meet its T2035 commitment to provide 1 billion in funding for the Regional Bicycle Program."

c) Please clarify that Association of Bay Area Governments (ABAG) serves an advocacy role and not a construction role in the Bay Trail implementation.

d) Recognize EBRPD and other special districts that are committed to operating, maintaining and building regional bicycle facilities.

Response to Comment 23:

a) The Air District supports and funds a wide range of bicycle facility types to meet air quality goals, including off-road (Class 1) trail and gap closure projects, on-road (Class 2 and Class 3) facilities, and secure bicycle parking facilities.

b) TCM D-1 has been amended to include the suggested text.

c) The text of TCM D-1 has been revised to clarify ABAG's role in the development of the Bay Trail.

d) Text has been added to the "Supporting Actions" section of TCM D-1 to recognize that park and other special districts play an important role in building, operating, and maintaining bicycle facilities.

24. Karen Pierce, Ditching Dirty Diesel Collaborative (DDDC)

(letter dated 9/11/09)

a) DDDC supports smart growth and community access to resources and adequate public transportation. However, with mixed-use, transit-oriented development may come inadvertent conflicts between sensitive land uses (such as housing and day care) and the industrial land uses (such as freeways, rail lines and railyards) that often co-exist with transportation hubs. Such mixed-used development should take place with close attention to creating buffers between people and transportation sources of pollution.

b) LUM 2: DDDC applauds the Air District's commitment to develop an indirect source review rule to reduce construction and vehicular emissions associated with new or modified land uses in the Bay Area. Given the enormous contribution that mobile sources make to regional air pollution and in particular, that diesel-fueled vehicles contribute, we feel strongly that the Air District cannot do its job of protecting public health from air pollution properly without taking action to address the clustering of diesel sources around certain land uses. We urge the Air District not to limit this rule to new or modified land uses, but to look closely at the many existing land uses that result in a clustering of air pollution sources and take action there as well.

c) LUM 2: DDDC believes that the Air District should discourage inappropriate land uses, such as mixing industrial with residential land uses by increasing the fee in those areas. We do NOT want to simply move pollution magnet sources between two highly impacted areas, one more rural than urban (e.g. Tracy to Richmond, and vice versa.).

d) LUM 2: DDDC Will the fees collected from the draft rule go into a mitigation fund?

e) LUM 2: DDDC Is this measure solely to encourage infill or will it also cover urban land uses such as distribution centers, rail yards, and ports?

f) LUM 2: DDDC Do warehouses stay where they are, even if they are located in a densely populated residential area in a mixed zone?

g) LUM 3: DDDC is pleased to see a measure focused on enhancing the Air District's CEQA program. The Air District is seen as the "go to" group by local municipalities in determining the impact of their local land use decisions on community environmental health, vis-a-vis air pollution, and this critical role that the Air District can play in protecting health cannot be underestimated. We believe that revised CEQA guidelines that convey the importance of preventing exposures to multiple sources of pollution, and the importance of minimizing land uses conflicts and creating buffers will go a long way towards protecting health. We also would like to see the Air District provide public participation suggestions in their CEQA guidelines.

h) LUM 4: DDDC encourages land uses that move trucks (and other mobile polluting sources) from sensitive receptors.

Response to Comment 24:

a) The Air District shares this concern, which is a key rationale for developing the Land Use & Local Impact measures in the CAP control strategy. The revised BAAQMD CEQA Guidelines, in combination with technical support by Air District staff, will provide lead agencies with the tools to evaluate and mitigate potential air quality impacts related to siting new receptors near existing sources or new sources near existing sensitive receptors. The Air District will also encourage and assist local agencies to develop Community Risk Reduction Plans to address this issue.

b) This comment will be taken into consideration when the Air District develops the ISR program.

c) The Air District's revised CEQA Guidelines and the indirect source review rule will both address this issue.

d) If fees are ultimately approved with the ISR, Air District staff would anticipate the fees going into a mitigation fund. However, this will be determined as part of the rule-making process.

e) Staff anticipates that the ISR would potentially cover all new or modified land uses that exceed thresholds defined in the ISR rule.

f) The Air District has no authority to move existing land uses.

g) Lead agencies are responsible for public outreach on CEQA documents. Air District staff does not believe that it is necessary or appropriate to include guidance on public participation in the Air District's CEQA Guidelines.

h) Comment noted.

25. Jenny Bard, American Lung Association (ALA)

(letter re'd via email 9/16/09)

a) LUM-1: ALA supports anti-idling legislation in CARE communities and around sensitive receptors (schools, hospitals, parks.) According to the California Energy Commission, idling longer than 10 seconds uses more gas and emits more pollution than stopping and starting an engine. Idling contributes an estimated 1.6 percent of GHG emissions in the U.S. Combined with a public education campaign, this control measure could reduce significant emissions from idling and increase public awareness of the link between idling, air pollution and greenhouse gases.

Response to Comment 25:

a) ARB has promulgated strict anti-idling rules for heavy-duty diesel engines. As described in LUM-1 and the CAP narrative, the Air District has entered into an MOU to help enforce ARB rules in CARE communities. TCM C-5 (smart driving) can also help to educate the public as a whole on the need to reduce vehicle idling to protect air quality and conserve energy.

26. David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF)

(letters dated 9/15, 9/17, 9/20, 9/22)

Letter dated 9/20

a) It appears to TRANSDEF that measures SSM 17, 18, and 19 would fit better into this category. These methods of preventing local impacts are distinctly different from rules governing specific industrial processes.

b) LUM 1: We recommend that the elements of this measure that refer to “encourage turnover to cleaner engines” be deleted for being duplicative of MSMs.

c) LUM 1: Please verify that there are energy savings when truck shipments are moved by barge.

d) LUM 1: Is the “new switcher engines” initiative a demonstration project or a longer-term commitment to provide an incentive for such engines?

Letter dated 9/22

e) Land Use & Local Impacts Measures: Consistent with its comments about the sub-groupings of Mobile Source Measures, TRANSDEF believes that the Air District has made its grouping of measures in this category unnecessarily complicated by focusing on the target market for emissions reduction instead of the strategy for doing so. Careful analysis of the measures in this

category reveals that a substantial reorganization would benefit the Plan's cohesion. Along these lines, LUM 2, ISR, should be classified as a TCM, because its principal target is on-road emissions, measured as VMT. Similarly, about half of LUM 4, Land Use Guidance, is really very similar to TCM D-3. We suggest that a new TCM D-4, General Plans, be created, built from the general plan-related contents of LUM 4. The rest of LUM 4 clearly pertains to local impacts alone.

If these proposed changes were made, this category could be revised to become Localized Measures. It would also contain measures currently identified as SSM 17, 18, and 19, as these methods of preventing local impacts are distinctly different from rules governing specific industrial processes. By collecting all the strategies that involve localization, the Plan gains a conceptual coherence it doesn't have now, as each of the other control measure categories has a regional focus.

The one LUM measure that doesn't fit into a Localized Measures category is LUM 3, Updated CEQA Guidance. That could be resolved by splitting the measure's contents between Localized Measure (EIRs typically focus on local impacts) and Energy & Climate Measures (EIRs need to focus on the regional and global impacts).

f) LUM 2 ISR should be classified as a TCM, because it's principal target is on-road emissions, measured as VMT. Similarly, about half of LUM 4, Land Use Guidance, is really very similar to TCM D-3. We suggest that a new TCM D-4, General Plans, be created, built from the general plan-related contents of LUM 4. The rest of LUM 4 clearly pertains to local impacts alone. If these proposed changes were made, this category could be revised to become Localized measures. It would also contain measures currently identified as SSM 17, 18, and 19, as these methods of preventing local impacts are distinctly different from rules governing specific industrial processes. By collecting all the strategies that involve localization, the Plan gains a conceptual coherence it doesn't have now, as each of the other control measure categories has a regional focus. The one LUM measure that doesn't fit into a Localized Measures category is LUM 3, Updated CEQA Guidance. That could be resolved by splitting the measure's contents between Localized Measure (EIRs typically focus on local impacts) and Energy & Climate Measures (EIRs need to focus on the regional and global impacts).

g) LUM 2: TRANSDEF is strongly supportive of a vigorous ISR program. We would very much like to see ISR establish an economic level playing field between developers of greenfields and developers of infill projects. This would require significant mitigation fees on greenfield developments that do not mitigate their auto trip. We see a principal mitigation to be connectivity to a transit network, either by accessible location or by the permanent funding of shuttles. We would like to see market rate parking charges as one mitigation that would reduce auto impacts, and thereby reduce mitigation fees. Another possibility is that projects that are consistent with the Sustainable Communities Strategy be exempt from mitigation fees.

h) LUM 3: As stated above, we recommend that this measure be separated into at least two parts. Those parts that relate to local impacts from toxics, etc. should remain as a Localized

Measure. Those parts that relate to GHGs should go to the Energy & Climate Change category. We are very pleased to see the proposal to post a log of CEQA comments on the Air District's website. We have found the Attorney General's CEQA comment log to be most useful. We are very pleased to see a reference to the incorporation of travel demand management in projects. For many years, this has been one of TRANSDEF's chief goals.

i) LUM 4: As stated above, we suggest that most of this measure become TCM D-4, General Plans, as most of the elements of this measure are directed at reductions in motor vehicle travel. Those portions that are directed at reducing population exposure to toxics should remain here as LUM 4, General Plans. It is illogical to list other Plan control measures as implementation actions for this measure. This includes CEQA Guidelines and ISR. These already have their own analyses. CARE belongs in LUM 5. Aren't all the Regional Agency collaborations already covered by TCM references? This shouldn't be a kitchen sink of Air District work. We support the Best Practices Web Portal, but wonder whether it would better fit in a TCM D-4, General Plans.

j) LUM 5 & 6: We are very pleased to see an explicit Air District focus on public health. This is a big step forward. We support these measures. We especially appreciate the mobile monitoring van. This will be invaluable in documenting local emissions.

Response to Comment 26:

a) These measures (which have been re-numbered as SSMs 16, 17, and 18) have been included in the SSM category because they will be adopted as stationary source measures via the Air District's rule-making process.

The land use measures (LUMs) for the most part will be implemented through collaboration with land use agencies to implement strategies which the Air District has no direct regulatory authority. There is, as commenter noted, a linkage between LUM 5 and these measures, which is described in LUM 5.

b) Comment noted.

c) The potential for energy savings from any mode shift will be evaluated when specific information is available on potential projects, as the measure calls for the Air District to "examine opportunities."

d) New switcher engines appears as a possible project type under "Partnerships and Demonstration Projects" in LUM 1. However, at this time it is not possible to say if any of these project types would be limited to demonstration projects or represent a new incentive category. More research and evaluation would be needed to make this determination.

e) The Air District agrees that there are a variety of ways that the control measures could be organized with various advantages and disadvantages to different structures. We also recognize that many of the measures have overlapping and inter-linking purposes,

implementation actions and affects. Although we appreciate the intent of the Transdef suggestions, Air District staff believes that the existing structure, albeit imperfect, is preferable because it 1) calls attention to the importance of land use decisions for air quality, and 2) emphasizes the need to promote infill development in a way that protects public health and minimizes population exposure to air pollutants.

f) See comment in response to e above.

g) Comment noted. These are issues that will be evaluated during rule development

h) Comment noted. Please see response to E above.

i) Comment noted. Please see response to E above.

j) Comment noted.

27. Diane Bailey, Natural Resources Defense Council (NRDC)

(letter dated 9/11/09)

a) LUM 1: NRDC strongly supports the comprehensive approach to goods movement taken through this measure. It is important to learn from past efforts, such as the MAQIP, and adapt strategies so that the Air District has more control over achieving emission reductions from this broad sector. To that end, we are very supportive of the following efforts outlined in this measure:

- Mode Shifts: While this is currently being considered as part of the AB 32 goods movement system efficiencies measure at the state level, local and regional support and participation are critical to development of a cargo mode shift plan that does not simply move adverse impacts from one area to another. Care must be taken to evaluate impacts to the environment far beyond air pollution and GHG emissions. We look forward to the Air District's leadership and participation in this process.
- Efficiencies in Distribution Systems: Similarly, while this measure is being developed at the state level, it is important for the Air District to actively engage on this issue, with its knowledge of local systems. For instance, much can be done at the regional level to reduce empty container truck traffic, design more efficient staging and routing systems for cargo, and ensure that systemic efficiency improvements protect sensitive populations.
- Best Practices for Goods Movement Land Uses: It is critical for the Air District to play an active role in ensuring that local and regional land use decisions do not put residents and vulnerable populations at increased health risk from air pollution, noise or other hazards due to inappropriate siting choices.

- Container Fees: We greatly appreciate the Air District’s support for this important revenue source. Without these much-needed funds, communities impacted by freight pollution throughout the Bay Area simply will not see adequate improvements to their air quality and health.
- Additional elements: We strongly support the inclusion in this initiative of increased enforcement, improved outreach, better signage and truck routes, and consolidated truck services and parking facilities.

b) LUM 2: NRDC supports the creation of Indirect Source Review and appreciates the opportunity to serve on the Air District’s stakeholder advisory group. In the development of ISR, it is vital to balance the need to reduce criteria pollutants, particularly in CARE communities, with the need to increase development intensities in the developed parts of the region to reduce VMT. A major obstacle to smarter growth is that greenfield development is often much cheaper and comparatively lightly regulated, when compared to infill development. An ISR must support superior environmental performance without further disadvantaging development of the character, and in the locations, known to reduce VMT.

Additionally, we strongly support potential regulation of magnet sources (FSM 11), but urge the Air District to incorporate these sources into ISR rather than a separate rulemaking. We look forward to working with the Air District in the development of this important tool.

c) LUM 3: NRDC supports the continued work of the Air District to revise CEQA thresholds and offer guidance to lead agencies on CEQA compliance. As the Resources Agency continues its SB 97-mandated review of the CEQA Guidelines to include GHG emissions, NRDC recommends the following for the Air District to consider in their CEQA guidance:

- The Air District should assist lead agencies in quantifying GHGs whenever possible, using qualitative methods only when quantification is impossible or to add further information to quantified data;
- The Air District itself, and in its guidance to lead agencies, should prioritize mitigation measures, with preference for on-site and local mitigations, as opposed to off-site mitigations, which are harder to monitor and enforce and may not offer local co-benefits. GHG mitigations must also be additional, and not the result of already existing requirements for projects.
- The Air District can assist in the development of “applicable measures of effectiveness,” consistent with the Resources Agency’s proposed changes to transportation impacts in Appendix G of the CEQA Guidelines (the Checklist). Although NRDC does not support the inclusion of “capacity” as the primary indicator of the environmental impacts of transportation, the draft does permit the acceptance of locally-preferred measures. We believe this is an opportunity to move towards a more holistic consideration of transportation, to include the experiences of transit, pedestrians and bicyclists in CEQA analysis.

Response to Comment 27:

a) NRDC's cautionary and advisory comments provided will be taken into consideration when developing implementation strategies for LUM 1 as well as the other land use measures.

b) Development of an ISR will have to take into consideration the obstacles facing high density infill development and not create additional obstacles. The inclusion of magnet sources into the ISR will also be evaluated during rule making.

c) Comments noted. Development of the revised CEQA Guidelines will address the issues raised in these comments.

28. Andy Katz, Breathe California (BC)

(letter dated 9/16/09)

a) At the initial workshop, Breathe California proposed developing regulations or incentives for stationary sources targeted at reducing pollution on Spare the Air days, due to the need to achieve pollution reduction especially on days with the most pollution. While an illustrative example could be to work with the Public Utilities Commission to build into electricity rates either higher prices on particular days or discounted rates for participating firms, it was not suggested to merely advocate for higher electricity rates, nor to specifically advocate for higher electricity rates for industrial facilities on Spare the Air Days. Please correct page 77, B-4, rows 1 and 3 of the Draft Summary of Review and Evaluation of Potential Control Measures, so the proposal is regarded as "Develop incentives and/or regulations, such as use of electricity rate incentives, to reduce stationary source emissions on Spare the Air days." While this measure would require use of PUC authority, it is still appropriate for inclusion as a Further Study Measure since the current Spare the Air program is insufficient to reduce pollution to acceptable levels.

b) ECM-1, ECM-2: At a prior workshop, it was proposed to locate renewable energy in sites that would move the ISO to reduce emissions, by displacing the need for certain power plants. While it is true that this is under the authority of the CEC and PUC, the Air District should take seriously the opportunity to reduce power plant emissions through the use of alternatives such as renewable energy. If the lack of authority on the part of the Air District prevents this measure from being listed as an SSM or ECM, it should be included as a Future Study Measure, or leadership platform plank.

c) There is concern regarding use of a potential carbon trading system to create credits for local government actions. Such local actions should be in addition to emission reductions under the cap-and-trade regulation, not in exchange for offset credits.

Response to Comment 28:

a) The Air District is not pursuing stationary source episodic measures in the 2009 CAP. Previous evaluations of episodic measures have identified them to be infeasible due to substantial implementation issues. The change in the "Draft Summary of Review & Evaluation

of Potential Control Measures” document has been made as requested by BC; the revised version of this document is posted on the 2009 CAP “Resource & Technical Documents” page on the Air District website.

b) The stated purpose of ECM-1 is to decrease the amount of energy consumed in the Bay Area through increased efficiency and conservation. The stated purpose of ECM-2 is to promote the production and use of renewable energy in the Bay Area. Both these measures aim to reduce the need for power generated at existing plants, particularly at “peaker plants” that usually have higher emissions.

c) The 2010 CAP is not proposing or advocating for a local or regional carbon trading system to provide “credits” to local governments for implementing energy efficiency measures or developing renewable energy supplies.

29. Karen Pierce, Ditching Dirty Diesel Collaborative (DDDC)

(letter dated 9/11/09)

Energy and Climate Measures

a) DDDC is happy to see Urban Heat Island Mitigation, Renewable Energy and Energy Efficiency being addressed. We encourage the Air District to provide guidance to local governments on specific climate adaptation strategies that might be included in General Plans such as coordinated systems of cooling stations to reduce need for additional single user demands on energy as well as to respond to potential crisis situations in addition to reduction of development that leads to urban heat island effects and strategies to alleviate those effects. We also urge development of additional weatherization and energy efficiency incentive programs that focus on highly impacted communities as those are the communities predicted to experience the most adverse effects of Climate Change.

b) The projections related to energy demand are driving decisions about where and when to build additional power plants, which are currently, and will continue to be, concentrated in minority communities. DDDC urges the Air District to consult the Independent System Operator (ISO) to determine how accurate their projections actually are and to recommend realistic approaches to determining future demand as a means of reducing additional exposures to power plant emissions. Coupled with the recommendations already included in the Draft, this could lead to substantial public health benefits.

Response to Comment 29:

a) The Air District is committed to working with our partners and stakeholders to seek innovative ways to address climate change through the Energy and Climate Measures, especially in the communities that will be disproportionately impacted from the effects of climate change.

b) Forecasting energy demand is primarily within the purview of the California Energy Commission (CEC). (The Independent System Operator manages the flow of electricity on the

state's power grid, while the CEC is responsible for, among other things, forecasting future energy needs, maintaining historical energy data, and providing this information to the public.) The Air District has no expertise or authority in this area. The estimates for current energy use in ECM-1 are from the Air District's 2008 Source Inventory of Greenhouse Gas Emissions. This data was provided to the Air District by the California Energy Commission. The future demand for energy in ECM-1 is estimated by taking current energy use (data from 2007) and applying a growth rate to estimate energy use out to 2020. The growth rate used is the population growth rate from ABAG's Projections 2009.

30. Stopwaste Letter

(letter received via email 9/16/09)

a) ECM-1: The existing building market should be the critical area of focus for the coming years. As these buildings are retrofit, setting minimum energy efficiency and green building strategies can effectively “lock-in” consumption patterns for the next 20-30+ years of occupancy. Retrofitting these buildings with green building and energy efficiency strategies will cut green house gas emissions, air pollution, and help California meet multiple environmental goals. Comments include specific recommendations re: existing residential and multi-family housing, as well as commercial buildings.

b) ECM-4: StopWaste’s Bay-Friendly Landscape Guidelines and tools incorporate landscape practices with positive air impacts into a broad framework of sustainable landscape practices. ECM-4 should encourage the construction of Bay-Friendly Rated Landscapes and hiring of landscape professionals who have received training and are qualified as Bay-Friendly landscape professionals. The Bay-Friendly Landscape Guidelines include standards to minimize decorative turf and hedges that require shearing. Mowing and shearing often uses equipment that has significant air impacts.

c) Consider developing a green lawn & garden equipment certification component of the Bay Area Green Business Program. StopWaste’s Bay-Friendly Landscaping scorecard would be able to recognize this standard in our landscape scorecard.

d) ECM-4: promote the health of urban forestry by creating a tree inventory, setting goals on increasing urban tree populations, creating better soils & environments for urban trees & supporting funding efforts of urban forestry programs. In addition, encourage the planting of large stature trees where appropriate.

e) ECM-4: Discourage planting invasive plants. Once invasive plants populate open space areas, large-scale efforts may be needed to eradicate them; use of power equipment to remove invasive plants can have negative impacts on air quality.

f) ECM-4: Change title of measure from “Tree Planting” to “Urban Forestry.” Support programs that promote the health of urban forestry by creating a tree inventory, setting goals on increasing urban tree populations, creating better soils and environments for urban trees and

supporting funding efforts of urban forestry programs. In addition, encourage the planting of large stature trees where appropriate as they have exponentially larger positive impacts for clean air, storing carbon and reducing storm water runoff than small stature trees. We currently award points in our Bay-Friendly landscape scorecard for the planting of large stature trees.

g) ECM-4: Do not add another criteria such as low VOC trees since there are many criteria now that end up restricting the selection of urban trees.

h) ECM-4: Encourage use of bio-based fuels in landscaping equipment.

Response to Comment 30:

a) Based on StopWaste comments and further discussion with StopWaste staff, the Air District has made the following changes to ECM-1 in response to comments: added to the second bullet under Implementation Actions; "and green building ordinances"; added in the fifth paragraph in Regulatory Context and Background; "Comprehensive green building programs that include standards for energy efficiency and third-party verification of building performance are critical to this objective".

b) Reference to the Bay-Friendly Landscape Guidelines has been added to ECM-4. These Guidelines provide valuable strategies for communities setting standards for landscaping.

c thru f) The Air District has added text to ECM 4 to emphasize that tree-planting should be seen as a component of a broader urban forestry program. The Air District will bear the StopWaste suggestions in mind as we move forward to implement ECM 4. We agree that good urban forestry and landscape practices can have beneficial air quality impacts, but we also need to be cautious about raising expectations regarding the scope of activities and resources that the Air District will be able to provide to implement this measure.

g) The Air District would be remiss if we did not offer guidance on VOC emissions from trees. Biogenic emissions can be a substantial amount of the emission inventory; an increase in biogenic emissions could mean that the Air District would need to find additional emission reductions from other sources, such as tighter regulations on VOC emissions stationary sources, in order to achieve stringent air quality standards. The Air District will work in partnership with StopWaste when implementing this measure regarding how best to inform public agencies and the general public about the air quality benefit of low-VOC trees.

h) Bio-fuels may result in a trade-off between particulate matter, NO_x, and CO₂. The Air District will continue to monitor the progress and findings of ARB's current Biodiesel/Renewable Diesel Working Group and share information with StopWaste and other stakeholders.

31. David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF)
(letters dated 9/15, 9/17, 9/20, 9/22)

Letter dated 9/22

Energy & Climate Measures

a) TRANSDEF believes that the use of “&” in the name of this measures category unnecessarily complicates the category. We think energy consumption and climate change are two sides of the same coin, and suggest that a better category title would be Energy/Climate measures. That title conveys that these two aspects are locked together.

b) ECM 1: We are pleased to see the Air District want to become involved in energy efficiency, as it will be a key area for the Air District’s climate protection campaign. We think a better use of the Air District’s resources would be to lobby the Legislature and CEC for incentives for energy efficiency in the schools, rather than directly provide incentives.

c) ECM 2: We are pleased to see the Air District seek to foster innovative programs. However, we urge the Air District to not become a distributor of incentives for such programs, as that would duplicate the work of the CEC. We do not believe the air quality benefits to be likely to be cost-effective, as compared to other measures.

d) ECM 2: Please note that on-site renewable energy systems--distributed generation--has greatly reduced distribution energy losses, so total energy savings are much greater than the added renewable power alone. This is a co-benefit.

e) ECMs 3 & 4: We suggest you use the words “carbon sequestration” in describing the benefits of trees.

Response to Comment 31:

a) Comment noted. Although there is clearly a tight linkage between energy and climate, there are elements of ECM3 and ECM 4 that address other aspects of the climate problem beyond the confines of energy, so Air District staff believes that the use of “&” in the title of this control measure category does make sense.

b) Comment noted. Implementation of this measure will include trying to identify various incentive programs offered by CEC and others that the Air District can possibly leverage by making available Air District grants to school districts to use for projects or as a match if required from the other programs.

c) The Air District will weigh the cost-effectiveness of different proposed components of this measure in partnership with other jurisdiction. It is our intention for any Air District incentive programs to work in concert with programs offered by other jurisdictions and not to compete with or duplicate these programs.

d) This point has been added to ECM 2 under the “Co-benefits” section.

e) We have amended the discussion of the benefits of trees in ECM 4 to address this suggestion.

32. William J. Quinn, California Council for Environmental & Economic Balance (CCEEB)

(letter dated 9/28/09)

a) The plan relies heavily on energy efficiency. We continue to support the State's longstanding efforts to improve energy efficiency, increase energy conservation, and advance the development and deployment of renewable energy resources. We recognize that there are two State agencies and innumerable public and private, non-profit and for-profit organizations that provide outreach and technical assistance to energy end users. Furthermore, the California Energy Commission and local municipalities are responsible for setting building standards and codes, such as the successful and aggressive Title 24 building standards. Other groups are national leaders in advancing "green building," such as the federal Energy Star program and the U.S. Green Building Council's LEED Standards. We are unsure what expertise the Air District can add to these efforts beyond supporting the public's understanding of the energy-air quality connection. Education and outreach on demand-side energy use, green building and renewable energy seem outside the Air District's purview. Moreover, it seems impossible to quantify reductions in energy demand attributable to the Air District's efforts, which calls into question the associated emissions reductions estimates. We encourage the Air District to partner with other agencies and organizations, such as the Energy Commission and PG&E, to determine how it might support their programs rather than creating new and duplicative efforts.

Response to Comment 32:

a) The Air District agrees that we should not duplicate existing efforts. We will work in concert with federal, State and other entities and jurisdictions to ensure that any new Air District programs complement existing efforts. Air District staff has expertise in stationary source permitting activity that includes looking at energy efficiency of control devices; preparing guidance documents for local governments to consider strategies during general plan updates; reviewing CEQA documents to ensure energy impacts are analyzed and mitigated; and funding projects through the climate protection grant program for energy efficiency projects.

33. David Schonbrunn, Transportation Solutions Defense and Education Fund (TRANSDEF)

(letters dated 9/15, 9/17, 9/20, 9/22)

Letter dated 9/17

a) FSM 11: To enhance the distinction between ISR and a magnet source rule, we suggest adding to the last paragraph, "The Air District will evaluate the feasibility of developing a magnet source rule for existing facilities."

Response to Comment 33:

a) FSM 11 already states that this measure may apply to both new and existing facilities in the first sentence of the "Further Study Measure Description" section.