Scoping Plan FED Response to Comments

ARB Responses to Public Comments on the Functional Equivalent Document (FED) for the Proposed Climate Change Scoping Plan

#### Introduction

This document summarizes and responds to public comments submitted on the environmental analysis prepared by Air Resources Board (ARB or Board) staff for the *Proposed Climate Change Scoping Plan*, which was released to the public on October 15, 2008. Staff's environmental analysis is set forth in the *California Environmental Quality Act Functional Equivalent Document* (FED), which is Appendix J to the *Proposed Climate Change Scoping Plan*.

ARB received many comments on the *Proposed Climate Change Scoping Plan* (Scoping Plan) and the FED. To avoid confusing comments on the Scoping Plan with comments on the FED, the public notice for the Scoping Plan requested that all comments on the FED be separated from comments on the Scoping Plan and sent to a separate internet address reserved for FED comments. Some commenters followed this direction. Others did not and instead combined their comments on the Scoping Plan with their comments on the FED, and then sent all of their comments to the internet address specified in the public notice for comments on the Scoping Plan. Comments were also sent to ARB by postal mail or facsimile, or were delivered in person at the Board's December 11, 2008 public hearing. For completeness, this document will address all comments on the FED received by ARB during the public comment period. The public comment period for both the Scoping Plan and the FED began with the release of these documents on October 15, 2008, and ended with the close of public testimony at the Board's December 11, 2008 public hearing.

This document has been prepared to comply with ARB regulations set forth in title 17, California Code of Regulations, section 6007, which requires ARB to respond in writing to all comments raising significant environmental issues that are made on a proposed ARB action.

### **Summaries of Public Comments and ARB Responses**

Presented below are summaries and responses to public comments received on the FED that raise significant environmental issues. A list of commenters is set forth below with the date and form of all comments that were timely filed. Links are also provided to ARB's website where the text of each written comment can be found. Many of the commenters submitted comments on both the Scoping Plan and the FED. Only the comments on the FED are summarized and responded to below:

Commenter Name of Commenter and

Abbreviation Dates Comments were Submitted.

Johnson Ken Johnson

Written Testimony: [11-10-2008]

Link to comments on ARB's website:

http://www.arb.ca.gov/lists/ceqa-sp08/2-

ceqa comments kenjohnson.pdf

Schonbrunn David Schonbrunn

Written Testimony: [11-19-2008]

Link to comments on ARB website:

http://www.arb.ca.gov/lispub/comm/bccomdisp.php?listname

=ceqa-sp08&comment\_num=3&virt\_num=2

Sierra Club Jim Stewart, Sierra Club

Written Testimony: [11-30-2008]

Link to comments on ARB's website:

http://www.arb.ca.gov/lispub/comm/bccomdisp.php?listname

=cega-sp08&comment num=5&virt num=4

WELC Dan Galpern, Western Environmental Law Center

Written Testimony: [11-13-2008]

Link to comments on ARB's website: http://www.arb.ca.gov/lists/scopingpln08/194-

welc comments on proposed rulemaking - 20081113.pdf

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CAPCOA Mel Zeldin,

California Air Pollution Control Officer's Association

Written Testimony: [11-18-2008]

Link to comments on ARB's website: http://www.arb.ca.gov/lists/scopingpln08/563-

capcoa\_comments\_on\_scoping\_plan\_11-18-08.pdf

LOC Kyra Ross, California League of Cities

Written Testimony: [12-05-2008]

Link to comments on ARB's website: <a href="http://www.arb.ca.gov/lists/scopingpln08/1242-">http://www.arb.ca.gov/lists/scopingpln08/1242-</a>

ab 32 scoping plan loc comments - supplemental 12-

4.pdf

Kyle Dr. Amy D. Kyle, University of California, Berkeley

Written Testimony: [12-08-2008]

Link to comments on ARB's website: <a href="http://www.arb.ca.gov/lists/scopingpln08/1337-">http://www.arb.ca.gov/lists/scopingpln08/1337-</a>

adk\_ab32scoping\_12.08.08.pdf

EDC Linda Krop, Environmental Defense Council

Written Testimony: [12-08-2008]

Link to comments on ARB's website: <a href="http://www.arb.ca.gov/lists/scopingpln08/1397-">http://www.arb.ca.gov/lists/scopingpln08/1397-</a>

edc comments on ab 32 proposed scoping plan.pdf

Earthjustice William Rostrov, Earthjustice

Written Testimony: [12-09-2008]

Link to comments on ARB's website: http://www.arb.ca.gov/lists/scopingpln08/1462-

ej\_\_comments\_on\_ab\_32\_scoping\_plan\_12\_09\_\_08\_\_final.

zip

NCPA Susie Berlin, Northern California Power Agency

Written Testimony: [12-09-2008]

Link to comments on ARB's website:

http://www.arb.ca.gov/lists/scopingpln08/1491-

comments\_to\_carb\_re\_10-15-

08 proposed scoping plan final .pdf

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CBE Anna Lee, Communities for a Better Environment

Written Testimony: [12-09-2008]

Link to comments on ARB's website: <a href="http://www.arb.ca.gov/lists/scopingpln08/1500-">http://www.arb.ca.gov/lists/scopingpln08/1500-</a>

cbe comments dec 08 ab32 propsd scoping plan.pdf

Morris Brian Morris, Plumas County Flood Control and Water

**Conservation District** 

Written Testimony: [12-10-2008]

Link to comments on ARB's website: <a href="http://www.arb.ca.gov/lists/scopingpln08/1593-plumas\_ab32\_scoping\_plan\_comments.pdf">http://www.arb.ca.gov/lists/scopingpln08/1593-plumas\_ab32\_scoping\_plan\_comments.pdf</a>

Marquez Jesse Marquez, Coalition for a Safe Environment

Written Testimony: [12-10-2008]

Link to comments on ARB's website: <a href="http://www.arb.ca.gov/lists/scopingpln08/1622-">http://www.arb.ca.gov/lists/scopingpln08/1622-</a>

cfase carb ab 32 scoping plan public comments 12-

10-08.doc

CRPE Luke Cole, Center on Race, Poverty, and the Environment

Written Testimony: [12-10-2008]

Link to comments on ARB's website: <a href="http://www.arb.ca.gov/lists/scopingpln08/1657-scoping-plan-comments">http://www.arb.ca.gov/lists/scopingpln08/1657-scoping-plan-comments</a> - crpe final 12-10-08.pdf

Plumas County Robert Meacher, Plumas County

Oral Testimony: [11-25-2008]

Link to comments on ARB's website:

http://www.arb.ca.gov/lists/scopingpln08/814-30.pdf

Valero Darren Stroud, Valero Energy Corporation

Written Testimony: [12-10-2008]

Link to comments on ARB's website:

http://www.arb.ca.gov/lists/scopingpln08/1749-01.pdf

### Comments submitted by Ken Johnson (Johnson):

<u>Comment 1 (Johnson):</u> The commenter disagrees with a statement in Section V.G of the FED that states, "Because a carbon fee and a cap-and-trade program both force covered sources to either reduce emissions or pay for those emissions, the economic incentives under the two programs are similar." He states, "This is untrue. Cap and trade systems are characteristically susceptible to price erosion or collapse, which can greatly diminish economic incentives for emission reduction, whereas a carbon fee would maintain a stable price incentive(s)."

Response: As indicated in the FED, a carbon fee, like a cap-and-trade program is a way to price carbon. The economic incentives are similar, not identical, and ARB would expect to see similar types of emission reduction efforts undertaken under both a carbon fee-based program and a cap-andtrade program. The causes for the price erosion seen in some cap-and-trade programs and solutions to that erosion have been identified. For example, the price erosion experienced at the end of the first phase of the European carbon trading markets (the EUETS) was due in significant part to the fact that the allowances were overallocated, they expired at the end of the first phase, and they could not be banked for use in a future compliance period. ARB has adopted reporting regulations that will provide hard data on emission levels in advance of 2012 and help avoid overallocation of allowances. In addition, ARB is considering allowing the banking of allowances, as recommended by the Market Advisory Committee and several experts. Finally, it is worth pointing out that price erosion should not be viewed as a purely negative result. It may signify that emissions targets have been reached in a lower-cost way that was not anticipated by market participants at the outset of the program.

<u>Comment 2 (Johnson):</u> "Unless a price floor is proposed as a recommended measure, it should be identified as a project alternative in the CEQA Evaluation, and ARB should explain its rationale for not implementing a price floor."

Response: ARB staff is just beginning the process of developing regulations to implement a cap-and-trade program. ARB will design the details of the program as part of this process. A price floor is a potential design element within a cap-and trade program, and is not a separate alternative. No decision has yet been made about whether or not to include a price floor in a cap and trade program. This is one of the many decisions on design elements that will be made in the future as the program is developed.

### Comment Submitted by David Schonbrunn (Schonbrunn)

<u>Comment (Schonbrunn)</u>: "The rationale for discarding Alternative 5, the carbon fee, is entirely based on conjecture. Cap and trade is asserted to provide certainty as to emissions reductions. This is blatantly incorrect, as Europe learned recently. ...A carbon tax, on the other hand will be very simple to implement. The institutions are mostly in place already. While more accountants will need to be hired to assume the larger responsibilities of a carbon tax system, nothing exotic is needed. It will be easy to catch bad actors. ...I request that Paragraph G on page J-87, the analysis for Alternative 5, be withdrawn and be recirculated with a conclusion consistent with the comments above."

Response: As indicated in the FED, the cap-and-trade program provides a firm cap on 85 percent of the state's greenhouse gas emissions. It also increases California's certainty in meeting the 2020 target and provides a robust mechanism to achieve the additional reductions needed by 2050. While a carbon fee might be simpler to administer than a cap-and-trade program, it does not provide the same level of certainty as to the level of emissions reductions that will be achieved. This is because it is very difficult to predict in advance how high the fee must be set in order to discourage emission sources from simply paying the fee instead of reducing their emissions to a level envisioned by the program.

The paragraph mentioned by the commenter states that the "cap-and-trade program ... increases California's certainty in meeting the 2020 target..." This is the case because a cap-and-trade program would issue a fixed number of permits and include substantial penalties for covered sources that do not have sufficient permits to match their emissions. This is one of the reasons why ARB included the cap-and-trade program as a measure in the Proposed Scoping Plan. The full discussion of why this option was chosen can be found on pages J-87 to J-89 of the FED. Additional discussion of carbon fees can be found in the responses to the following comments submitted by the Sierra Club.

### Comments Submitted by Jim Stewart, Sierra Club California (Sierra Club)

<u>General Comment (Sierra Club)</u>: The brief summaries in Appendix J, pages J-85-87, of why ARB staff believes a cap-and-trade approach is superior to carbon fees, disregard real world experience so far with cap-and-trade...Whether it be the problems with RECLAIM in the South Coast AQMD, or Europe's bungled attempt at trading, cap-and-trade is no panacea. It is much less likely to lead to achieving a firm cap, compared to a combination of regulations, with financing of reductions with carbon fee income. In fact a carbon fee is markedly superior to cap-and-trade for the reasons discussed below. CARB has not given this fee option the attention or study it merits.

<u>Response:</u> The commenter makes a number of policy arguments criticizing a cap-and-trade program and identifies various reasons for preferring a carbon fee over a cap-and-trade approach. Each of the specific arguments made by the commenter is addressed below.

<u>Comment 1 (Sierra Club):</u> Such a fee would benefit businesses since a carbon fee would reduce risks and aid business planning, because the price is more predictable than the outcome of a cap and trade/auction.

Response: One of the fundamental trade-offs between a carbon fee and a cap-and-trade program is that the carbon fee provides certainty on the price that emitters would pay by establishing the price administratively, while a capand-trade program provides certainty on the amount of emissions from sources in the program by establishing a fixed number of permits consistent with the emissions cap. The commenter is correct that businesses would face less price uncertainty in a carbon fee program, where they would know the price per ton of emissions once the fee level is established, than in a capand-trade program, where the price would be set by the market. Nevertheless, sources in a cap-and-trade program can also plan effectively because they know the costs they would face to reduce emissions, and can weigh those costs against the expected cost of allowances and offsets and the long-term need to reduce emissions as part of their business planning. ARB staff believes that the greater certainty in meeting the emissions goals in addition to some predictability in cost provides an important policy reason to prefer the cap-and-trade program over a carbon fee approach.

<u>Comment 2 (Sierra Club):</u> A carbon fee would provide a predictable source of income for the state to put into Scoping Plan implementation.

Response: Staff believes that the predictability of revenue streams under a carbon fee is neither guaranteed nor exclusive to this approach. Revenues generated by a carbon fee may be more predictable than from a cap-and-trade program. However, as entities take actions to avoid paying the fee by lowering their greenhouse gas emissions, fewer revenues would be collected. It would be difficult to predict how businesses will respond and how the fee revenues from the program will vary over time.

Revenue can also be raised in a cap-and-trade program to the extent that allowances are auctioned. The amount of auction revenue raised by a cap-and-trade program will send an important price signal that reflects the ease or difficulty of meeting program goals. Low auction prices would reflect low demand for permits, meaning that sources are able to collectively reduce emissions to meet the emissions limits at low cost. While the program would generate relatively lower revenues if auction prices are low, less revenue would be needed to implement AB 32 because the AB 32 targets were being

met. If sources are having difficulty meeting the targets, there would be higher demand for permits and higher prices at auction. Under this circumstance, higher revenues would be generated that could be used to meet the AB 32 emission targets.

In other words, either system has the potential to provide a reliable stream of revenue to help implement the Scoping Plan. A cap-and-trade program is the preferred approach because, among other benefits, it would ensure that technologically feasible reductions occur with the lowest marginal cost of control.

<u>Comment 3 (Sierra Club):</u> Under the precedent of the Sinclair Paint case, expenditures of revenue from carbon fees must be related to the issue of carbon emissions. On the other hand, auction revenues could be appropriated by the legislature for any purpose they want, including deficit reduction, which would have zero impact on GHG emissions.

<u>Response:</u> We disagree that different rules apply. Any expenditures of funds raised during implementation of AB 32, whether from a carbon fee or through auctions as part of a cap-and-trade program, would need to be appropriated by the Legislature and would face essentially the same legal constraints for how the revenues could be used.

Comment 4 (Sierra Club): Fees can be imposed on all carbon sources, rather than only on the sector of large producers. This accomplishes the following goals: a) it allows a much lower carbon rate per ton to raise the same amount of money, b) it distributes the cost burden between all sectors, c) it insures that the cost rate is low enough that it will not be disruptive to industries or consumers, d) it provides equity between sectors. In California a modest fee of \$4 per ton on all the state's emissions (currently about 500 million tons) could collect about \$2 billion in revenue. ARB's planned "cap and trade" market system accounts for 20% of 174 million tons reduction target (34.4 million tons). To raise the same revenue from this 34.4 million ton basis would require a carbon auction price over \$58 per ton, a price that is very doubtful given recent experience with auctions in the US trading at under \$5 per ton. As for consumer impact, a \$4 per ton rate would add about 4 cents per gallon for gasoline, and 0.1 to 0.3 cent per kilowatthour for most California electric utility customers. (Likely, there would not be a strong consumer reaction, compared to a \$58 per ton price.)

Response: We disagree. This comment reflects significant misunderstandings about the workings of the proposed cap-and-trade program. The proposed program would cover 85 percent of emissions in California by 2020, and emission allowances would need to be held for every ton emitted, not merely for 20% of the reduction target. Those sources of emissions not included are generally ones where it is more difficult to quantify the level or origination of emissions adequately; applying a carbon fee to

those emissions would also be difficult. The commenter also makes a number of assumptions about how a carbon fee would work and how much revenue it would raise as compared to a cap-and-trade program. These assumptions are speculative, and it is not clear that a cap-and-trade program would raise less revenue than a carbon fee. What happens depends on the details of how the programs are designed, prevailing market conditions, and a host of other factors that cannot be known with any certainty at this time. Finally, it bears pointing out that the Scoping Plan is designed to reduce GHG emissions, not to raise money. For the purpose of reducing emissions, a cap-and-trade approach provides more certainty than a carbon fee for the reasons identified in the responses to previous comments.

<u>Comment 5 (Sierra Club)</u>: Fees also eliminate the "loopholes" of offsets that create many regulatory and compliance problems, as well as huge potential environmental justice issues.

Response: We disagree. Offsets will require careful crafting of the regulations to ensure that the emission reductions they represent are real, permanent, quantifiable, verifiable, additional, and enforceable, as required by AB 32. Appropriate rules will prevent offsets from becoming a 'loophole' that prevents meeting the goals of AB 32. Further, the commenter presumes that a carbon fee program would not or could not incorporate offsets. Offsets can also be included in a carbon fee program, where they could be applied to reduce the quantity of emissions on which fees are owed.

While it is not clear what specific environmental justice issues the commenter believes that offsets present, staff is aware of several concerns that have been raised concerning the potential effects of offsets on sources' emissions of health-based pollutants in the local community. AB 32 programs, ARB environmental justice policies, State clean air legislation, and State and local air district rules can and should all work together to prevent deterioration of local air quality. As noted by the Market Advisory Committee:

"a well designed cap and trade program in most cases will yield significant reductions in emissions of local pollutants, since local pollutants will tend to be bundled with GHG (especially CO2) emissions, so that changes in the production methods that lead to reduced GHG emissions also lead to lower emissions of local pollutants. These reductions would be consistent with prior experience. A U.S. Environmental Protection Agency staff analysis found that under the SO2 emissions trading program, the largest reductions occurred in areas with the highest emission levels. This finding was true both regionally and at individual plants."

See Market Advisory Committee to the California Air Resources Board, Recommendations for Designing a Greenhouse Gas Cap and Trade System for California (hereafter "MAC Recommendations") at 10 (2007) [citing The Acid Rain Program and Environmental Justice: Staff Analysis" (September 2005) U.S. Environmental Protection Agency, Office of Air and radiation, Clean Air Markets Program].

During the rulemaking process for the cap-and-trade regulation, ARB staff will consider the potential for direct, indirect and cumulative emission impacts from offsets, including localized impacts in communities that are already adversely impacted by air pollution. Commenters have suggested a number of methods for preventing such impacts, including (i) giving preference to offset projects associated with such communities, (ii) supplementing a cap and trade program with traditional regulations, (iii) conditioning the use of offsets, or (iv) using auction revenues to reduce co-pollutant emissions. ( See e.g., MAC Recommendations at 10 (2007); see also Alice Kaswan, Environmental Justice and Domestic Climate Change Policy, 38 ELR 10287, 10304-10307 (May 2008)). Such design options will require careful evaluation during the cap-and-trade rulemaking, and ARB is committed to performing this evaluation. It is important to emphasize that the cap-andtrade program will have its own environmental analysis when the regulations are developed, at which time the program details will be known and a more detailed environmental analysis will be possible.

<u>Comment 6 (Sierra Club):</u> Fees avoid much of the high transaction costs associated with auctions. They can be designed to avoid the fate of the auction in the northeastern US where the bid price for RGGI permits of \$3 per ton barely covered the cost of the auction.

Response: We disagree. While there will be costs associated with administering an auction, as there would be for administering a carbon fee, these costs are unlikely to represent a significant fraction of auction revenue. For example, the State of Massachusetts, a member State within the Regional Greenhouse Gas Initiative (RGGI), participated in their second allowance auction as part of the RGGI trading program in December 2008. RGGI auctioned around 31.5 million allowances which were sold at a clearing price of \$3.38 per allowance. The Massachusetts share of the allowance proceeds came to approximately \$14.8 million, which are to be spent on various programs such as energy efficiency and renewable incentives. Of the \$14.8 million Massachusetts spent \$400,000 for administrative and vendor costs for the RGGI auction which equates to around 2.7 percent of the revenues earned by the State. Very similar results were seen for Massachusetts as part of the first RGGI allowance auction in September 2008.

<u>Comment 7 (Sierra Club):</u> Auctions could raise some initial money to benefit the state, but then market traders who bought the credits have the chance to resell the credits, thus reaping profits for themselves but not benefitting the climate.

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(For example, traders who bought the RGGI permits for \$3 per ton are now reselling them for over \$4 per ton, but none of those millions of dollars of trading profits are benefiting the climate.)

<u>Response:</u> The presumption that a majority of the allowances auctioned by the State would be purchased by "traders" is belied by the recent experience of RGGI. For example, in the second RGGI auction, held in December 2008, compliance entities accounted for seventy-six percent of the quantity of bids submitted. (See Potomac Economics, Post-Settlement Auction Report, RGGI CO2 Allowance Auction 2 (January 6, 2009 [available at www.rggi.org]).

As with any tradable instrument that is auctioned – such as United States Treasury securities – it is possible that the value of the instrument will fall below or rise above the price the government received for it at auction. In a cap-and trade-market, that price fluctuation should reflect the scarcity of allowances and create economic incentives for sources to reduce their emissions. Furthermore, during the rulemaking process, ARB will consult with recognized legal, business, and economic experts in the areas of competitive markets, financial mechanisms, and commerce. The purpose of such consultation will be to examine options among various allocations and auction revenue distribution strategies, and advise staff on the relative costs and benefits of these alternatives within a cap-and-trade program. In short, we believe that a well-designed cap-and-trade program will not suffer from the problems suggested by the commenter.

<u>Comment 8 (Sierra Club):</u> Offsets would be allowed under cap-and-trade, which require expensive verification procedures, as well as controversy over location (in-state, regional, international?).

Response: Cap-and-trade programs can be designed either to allow or to prohibit the use of offsets. We agree that the incorporation of offsets into a cap-and-trade program will require much investigation and verification to ensure that they meet the very stringent tests needed to assure their reliability and value in the market. ARB will need to ensure that any offset protocols allowed under the regulations will meet the tests specified in AB 32. We believe that a well-designed program can meet these tests. It should also be noted that allowing the use of offsets is not a unique feature of a cap-and-trade program. Offsets can also be allowed in a carbon fee program, where they could be applied to reduce the quantity of emissions on which fees are owed, as well as in source-specific direct regulations, where they can be allowed as a compliance option in lieu of meeting source-specific emission standards.

<u>Comment 9 (Sierra Club)</u>: Cap-and-trade creates huge environmental justice equity problems, which can be more fairly dealt with using a targeted combination of regulations and financing mechanisms from a carbon fee.

<u>Response:</u> We disagree that a well-designed cap-and-trade program for GHG emissions will result in harm to environmental justice communities.

The sources covered by the cap-and-trade program (as well as non-capped sources) are also covered by stringent criteria pollutant and air toxics regulations that have already been adopted by ARB and the local air districts. These regulations will continue to result in continued and significant reductions in air pollution emissions, exposure, and health-based risk. Further, assuming that the reference to "financing mechanisms from a carbon fee" is a reference to the use of fee revenues to abate greenhouse gas and related emissions in environmental justice communities, a cap-and-trade program provides a similar ability to raise revenues for this purpose through the auctioning of allowances.

Under a cap-and-trade approach, a new source could be allowed to emit GHGs provided it has enough allowances to cover its emissions. Since the allowances are capped, that would mean the new source would have to displace another source of GHG emissions. However, it is important to note that even with enough carbon allowances, a source (new or modified) would not be allowed to operate without a permit for other pollutants it may also emit. The permit would require the source to comply with all other existing pollution control regulations.

Similarly, a carbon fee would allow any existing sources to maintain or increase their GHG emissions as long as they paid a fee proportional to their emissions. Again, this approach, even in combination with direct regulations on more industrial sources than those included in the Scoping Plan, would not necessarily prohibit greenhouse gas emission increases in specific communities any more than a cap-and-trade program would. This is because there are different ways to design a cap-and-trade program, as well dozens of different ways to design as a carbon fee program, a program that relies solely on source-specific regulations, or a program that uses some combination of these approaches. The environmental impacts and overall effectiveness of any emission reduction program will intimately depend on the details of how each program is designed.

For example, the fee per ton in a carbon fee program can be set at many, many different amounts. What happens in the real world will depend to a great extent on the amount of the fee. An approach relying solely or partly on source-specific regulations would regulate many different categories of GHG emission sources, and the regulations for each source category can vary tremendously depending, among other things, on issues of technological feasibility and cost-effectiveness.

The point is that a command and control rule or a carbon fee is not inherently better for the environment than achieving emission reductions from a particular source through a cap-and-trade system. A poorly designed command and control rule or carbon fee can have unintended adverse impacts on neighbors next to a facility, and a poorly designed cap-and-trade system can also have such unintended impacts. It all depends on the details of how each approach is designed.

At this point in time we do not know exactly how the cap-and-trade system will be designed, or how an alternative approach would be developed using various command and control regulations. There are so many possible variations that it is not valid to assume that greater environmental justice problems would result from the cap-and-trade program versus a program that relied more heavily on direct regulations, or direct regulations combined with a carbon fee. (Additional discussion of this issue can be found in the response to Comment 4 submitted by Dr. Amy Kyle.)

Nevertheless, staff fully recognizes the potential for direct, indirect, and cumulative emission impacts from market-based mechanisms, including localized impacts in communities that are already adversely impacted by air pollution. To address this issue staff will evaluate different mechanisms that can be incorporated into a cap-and-trade program to prevent increases in emissions of toxic air contaminants or criteria air pollutants to the extent feasible—including the potential to use revenues generated by an auction to encourage investment in emission reductions in areas already adversely impacted by air pollution.

<u>Comment 10 (Sierra Club)</u>: The bottom line is that the combination of regulations and financing reduction measures with fee income can be more easily adjusted to achieve the firm cap...

Response: As discussed in the specific responses above, ARB staff believes that the cap-and-trade program combined with the complementary measures provides the best mechanism for achieving the goals of AB 32. This combination makes use of more direct regulatory measures where appropriate, but also includes a firm cap on 85 percent of the emissions in California by 2020. Once the rules of the cap-and-trade program are established, the program can be used to achieve further reductions beyond 2020 by adjusting the level of the cap to further decline to the 2050 goal. Achieving specific emission reduction targets using only source-specific direct measures and a carbon fee would require continued development of new source-specific regulations and adjustment of the fee level to ensure that an appropriate price level is being maintained. While this approach was examined, the Board decided that proceeding with a cap-and-trade approach would be more cost-effective and would more effectively achieve the goals of AB 32.

#### Comment Submitted by the Western Environmental Law Center (WELC)

<u>Comment (WELC):</u> The commenter states: "The Legislature, in AB 32, established two principal requirements for ARB with regard to planning and rulemaking aimed at reducing GHG emissions in California: (1) ARB must determine and set by 2008 a certain limit of GHG emissions, and ensure that annual emissions by 2020 are under that limit, and (2) ARB is required to adopt rules to ensure that, within certain constraints, maximum reduction of GHG emissions are achieved by 2020. However, the Proposed Scoping Plan sets out measures intended to meet the first of these requirements only, while it essentially ignores the second. For that reason, if the proposed plan is adopted without change, the ARB will fall short of meeting a fundamental mandate in AB 32." As a mechanism to ensure meeting the mandate, the commenter requests "that in its Scoping Plan ARB adopt a price floor as a recommended measure. If ARB declines to recommend a price floor, we request that it be included among project alternatives and an explanation be supplied as to why (it) was rejected".

<u>Response</u>: AB 32 contains a number of statutory requirements in addition to those mentioned by the commenter. We believe that the Scoping Plan meets all of these requirements for the reasons discussed in the Scoping Plan and the responses throughout this document.

With respect to setting a "price floor," ARB staff is just beginning the process of developing regulations to implement a cap-and-trade program. ARB will design the details of the program as part of this process. A price floor is a potential design element within a cap-and trade program, and is not a separate alternative. No decision has yet been made about whether or not to include a price floor in the cap-and-trade program. This is one of the many decisions on design elements that will be made in the future as the program is developed.

### Comments Submitted by CAPCOA (CAPCOA)

<u>Comment 1 (CAPCOA):</u> **Low Carbon Fuel Standard:** CAPCOA supports the goal of the Low Carbon Fuel Standard adopted by ARB to reduce the carbon intensity of transportation fuels. However, to ensure that local and regional air quality impacts are not exacerbated in the process and that energy reduction goals are actually realized, extensive analysis will be required prior to development of the implementing regulation, including the following:

• Evaluation of the toxic and criteria pollutant impacts of biofuels to ensure that public health is not compromised in implementing this measure.

- Analysis of the impact of biofuels on broader societal issues and how these might affect implementation effectiveness, such as the potential for the regulation to create "domino" effects on grains and crops that ultimately affect food availability and cost.
- Development of better tools to assess and audit land use implications of the various strategies, such as potential conversion of pastures, rainforests and other existing carbon sinks to fuel production and how that will affect the global carbon balance.
- Analysis of the potential to increase light-duty vehicle dieselization if a marketbased, averaging mechanism for fuel carbon content is used to provide regulatory flexibility.

Response: The FED prepared for the Scoping Plan is programmatic and contains information and analyses available at the time of preparation. The Low Carbon Fuel Standard regulation is currently under development. The Initial Statement of Reasons for this regulation will include a detailed environmental analysis of the potential environmental impacts of the regulation, and will address the issues mentioned by the commenter to the extent feasible.

<u>Comment 2 (CAPCOA):</u> **High Speed Rail:** "CAPCOA strongly supports efforts to improve public transportation in California and reduce our dependence on the automobile for travel. However, the information provided in Scoping Plan on this measure is very general, with little information on its cost-effectiveness, quantification of emission reduction benefits or potential environmental impacts. These issues need to be thoroughly analyzed and discussed in the final plan to identify the potential benefits and impacts of this measure."

<u>Response:</u> The programmatic environmental impact statement/report (SCH# 2001042045) prepared for the High Speed Rail projects is incorporated by reference in the FED (see page J-100). This incorporated document contains the information and analysis requested by the commenter.

<u>Comment 3 (CAPCOA):</u> Recycling and Waste: "This measure is primarily directed at landfill methane control; it does not include any of the other recommendations from ARB's Economic and Technology Advancement Advisory Committee (ETAAC) report. Landfill methane controls are currently in place and regulated by air districts at most of the larger landfills in the state. While CAPCOA agrees these controls are an important means of reducing GHGs, the potential negative impacts on criteria pollutant emissions have not been analyzed in the scoping plan. Many landfill gas destruction techniques generate significant quantities of NOx, which can impede progress toward attainment of state and federal ozone standards. Thus, we have the following recommendations for this measure:

The potential increase in NOx and other criteria pollutant emissions from this control strategy need to be analyzed and identified in the scoping plan, with appropriate mitigations proposed."

Response: We agree that implementation of a Landfill Methane Control Measure could result in potential increases of NOx and CO emissions. The FED identifies this as a potential adverse environmental impact (see page J-112). The extent to which such increases may occur cannot feasibly be analyzed in the Scoping Plan, however, because this will depend on the specific provisions of the regulation that is developed to implement this measure. The Initial Statement of Reasons for this future regulation will include a detailed environmental analysis of the potential increases in NOx and other criteria pollutant emissions, and will propose appropriate mitigation measures.

<u>Comment 4 (CAPCOA):</u> **Agriculture:** "This measure proposes voluntary controls of methane from manure digester systems; it also mentions a few potential future strategies that could reduce  $N_2O$  emissions from nitrogen fertilizers and  $CO_2$  emissions from farm efficiency improvements. Agriculture in California is a large source of GHG emissions and CAPCOA supports measures to reduce their impact. However, no discussion is provided on the potential negative impacts on criteria pollutant emissions from digester controls, which could involve uncontrolled combustion if the emissions are flared. The Scoping Plan should identify these potential impacts and provide preferential treatment to control methods that do not increase NOx and other criteria pollutants. We have the following recommendations:

- The potential increase in NOx and other criteria pollutant emission from this control strategy need to be analyzed and identified in the scoping plan, with appropriate mitigations proposed.
- No-NOx control methods for digesters, such as injection of dairy gas into natural gas pipeline system, should be evaluated and recommended as the preferred implementation method.
- Utilization of agricultural biogas for electricity generation using low-NOX microturbines and fuel cells in the future should also be recommended as preferred.
- The potential for additional carbon sequestration from agricultural growing practices should be evaluated and discussed."

<u>Response:</u> Methane Capture at Large Dairies is a voluntary measure. The FED identifies increased NOx emissions as a potential adverse environmental impact from this measure (see pages J-39 and J-116). The FED also

identifies potential mitigation measures to control NOx, but notes that NOx controls for the types and sizes of engines typically used in dairy digesters may not be available, cost-effective, or able to meet the NOx requirements specified in local air district rules. The commenter suggests that the Scoping Plan should identify several specific technologies as the "preferred implementation method." Staff believes that such a blanket recommendation is inappropriate because insufficient knowledge is currently available to determine if these technologies would be feasible or cost-effective for all or most methane capture projects. Before such projects could be sited, project-specific CEQA compliance would be necessary and local air district rules would need to be complied with.

The commenter also states that: "the potential for additional carbon sequestration from agricultural growing practices should be evaluated and discussed." The Scoping Plan does briefly discuss this issue (see page 67), but indicates that further research on quantification protocols will be necessary to determine the potential role that the agricultural sector can play in California's emission reduction efforts.

#### Comment Submitted by Kyra Ross, California League of Cities (CLOC)

<u>Comment (CLOC):</u> "Neither the Scoping Plan or the Environmental Analysis Supports an increase in the MMT Estimate for Transportation Related Emissions"

"The emissions reduction number included in the Scoping Plan is based upon [a] 2008 U.C. Berkeley study which reviewed over 20 modeling studies in California, other states and Europe. The Scoping Plan has chosen an estimate that is based upon the cited literature while at the same time acknowledges that SB 375 implementation will ultimately determine the targets. Therefore, the 5 MMT estimate should not be increased at this time since 5 MMT is based upon the cited literature, and, in any event, SB 375 will determine ultimate target. In addition, the document that serves as the functional equivalent to the environmental analysis required under the California Environmental Quality Act ("FED") document for the Scoping Plan does not quantify the reduction for transportation related emissions.

The FED states [the] Scoping Plan requires "the establishment of a process whereby regions integrate development patterns, transportation networks, and other transportation measures and policies in a way that achieves greenhouse gas emission reductions" (a reference to SB 375). The FED does not analyze the proposed 5 MMT estimate because the document acknowledges that whatever number is used in Scoping Plan will be superseded by regional targets set through SB 375 process."

<u>Response</u>: The Scoping Plan identifies 5 MMTCO2E as the statewide target for regional transportation-related GHG emission reductions. The commenter is not criticizing the selection of this numerical target, but argues that the target should not be increased because such an increase is not supported by the analysis in either the Scoping Plan or the FED.

The Board did not amend the Scoping Plan to increase the 5 MMTCO2E target; it was adopted with no change to this target. Resolution 08-47, which was adopted by the Board on December 11, 2008, also recognizes that through the SB 375 (Stats. 2008, Chapter 728) planning process, local governments and transportation agencies are key partners in ARB's efforts to reduce greenhouse gas emissions, that improved land use and transportation planning is needed to provide Californians with affordable, high quality options for housing and mobility that will result in reduced greenhouse gas emissions, and that the greenhouse gas reductions associated with more sustainable growth will increase over time.

# Comments Submitted by Dr. Amy Kyle, University of California Berkeley (Kyle)

Comment 1 (Kyle): Public Health Assessment - The public health assessment in Appendix H focuses on estimating reductions in emissions of air pollutants projected to result from the actions identified in the Scoping Plan. The Scoping Plan focuses on reductions that would be anticipated to be in addition to those projected to occur as a result of actions taken pursuant to the 2007 State Implementation Plan (SIP). This may under-estimate the true benefits of actions taken under the Scoping Plan, since implementation of such actions would increase the likelihood that the reductions identified in the SIP would be achieved. History would suggest that all elements of SIPs are not necessarily implemented to the degree projected at the outset. As noted previously, only the health benefits from projected reductions in emissions of PM2.5 are quantified for most parts of the analysis, though reductions for other pollutants are estimated. Public health benefits arise from the replacement of combustion with other energy sources.

<u>Response</u>: ARB staff has conservatively estimated the public health benefits of the plan, and it is possible that these benefits have been underestimated. Staff believes that a conservative estimate is appropriate. The commenter is not suggesting that the FED inaccurately identifies the adverse environmental impacts of the Scoping Plan.

<u>Comment 2 (Kyle):</u> **CEQA Equivalent Document -** The CEQA equivalent analysis considers the wide array of issues pertinent to CEQA and is organized according to major elements of CEQA. The overall purpose of CEQA is to consider alternatives with regard to environmental and health impacts. The

CEQA document also states that the assessment of the statutory criteria from AB 32 related to maximizing benefits to the people of the state, ensuring that cumulative impacts are not worsened, and so on, will be deferred to the development of the regulations for individual measures. This seems odd in two respects. First, it is not clear why the statutory requirements from AB 32 are addressed in the CEQA document. They are not part of CEQA. Second, the capacity to compare different alternative approaches is lost once a set of alternatives is selected to be implemented. Surely, it makes more sense to determine which set of policies is most likely to yield the greatest net benefits to the people of the state and avoid cumulative impacts while all options are still in play. How this can be done for individual options, at the time of rule-making, is not clear. In the discussion of air quality impacts, some assertions seem unlikely. On pages J-25 to J-26, the draft says that the implementation of the cap and trade program is likely to increase reductions in air pollutants in California compared to other options. The logic for this is not apparent. Since the cap and trade program, as explained to date, would allow emitters to purchase allowances to continue their emissions, rather than to reduce them, the "trade" part of cap and trade would be inclined to reduce health benefits compared to other kinds of incentives that do not allow for trading and for offsets that may be to areas out of the state or out of the country. The document does acknowledge the potential releases of both toxic and criteria pollutants in association with the infrastructure for and use of biofuels and notes that these need to be addressed, at page J-30.

Comment 3 (Kyle): Environmental Justice Analysis - The analysis of environmental justice (page J-69 to J-71) discusses the process used to elicit public comments from impacted communities. It then notes that AB 32 requires that the ARB must consider several issues before it selects any market-based mechanism. These issues include the potential for "direct, indirect, and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely affected by air pollution." It also notes that any such program must be designed to "prevent any increase in the emissions of toxic air contaminants or criteria air pollutants" and to "maximize additional environmental and economic benefits for California." However, the document notes that this has not been done and would be done only after the adoption of the Scoping Plan. It is hard to see how this is consistent with the statute. This analysis does not acknowledge that the implementation of the "trade" part of cap and trade and use of offsets can and likely will contribute to continued patterns of disproportionate impacts in certain communities. This is because emitters in such communities will have the opportunity to buy allowances or offsets instead of reducing emissions. The "trade" part of cap and trade imposes no geographic constraints over where reductions occur or where emissions continue. Emission reductions may be made out of the state, if allowances are to be traded to other states, or even out of the country, if broad provisions for "offsets" are allowed. It is also not certain whether such reductions would occur, and it would be outside the legal capacity of the State of California

to ensure that they did. So, cap and trade rules do not address concerns about environmental justice or cumulative impacts. Instead, ARB proposes to initiate a stakeholder process after the cap and trade measure is adopted to address this concern. Since the concern is structural, it would not seem to be amenable to being addressed through a stakeholder process.

Response to Comments 2 and 3: The commenter states that the overall purpose of CEQA is to consider alternatives with regard to environmental and health impacts. We agree that this is one of the purposes of CEQA. Another important purpose of CEQA is to disclose potential adverse environmental impacts associated with a proposed project to the public and public agencies prior to a project's approval. Identifying a range of alternatives, including the "No Project" alternative is a key component of this process.

The commenter questions why the statutory requirements of AB 32 are addressed in the FED since they are not part of CEQA. ARB staff recognizes that AB 32 requirements are not part of CEQA. They are an essential part of the project being evaluated, however, because the characteristics of each alternative considered would be shaped by the AB 32's requirements during regulatory adoption. Thus, statutory criteria from AB 32 are mentioned in a number of places in Appendix J. First, pages J-4 and J-5 provide an explanation of ARB's approach and indicate that the FED is programmatic in nature. Second, on p. J-25, as part of the description of the cap-and-trade measure included in the Plan, the FED references the requirements that Health and Safety Code section 38570 et seg. specifies for the cap-and-trade program. Third, several sections of AB 32 are mentioned in the "Environmental Justice" section starting on page J-69. Again, these references explain the requirements relating to environmental justice that will need to be met when adopting regulations to implement the Scoping Plan. The last citation of AB 32 is on p. J-74, in the "Project Alternatives" section, where it is necessary to state the overall purpose of the project being reviewed. This purpose is set forth in AB 32.

The commenter states that "on pages J-25 to J-26, the draft says that the implementation of the cap-and-trade program is likely to increase reductions in air pollutants in California compared to other options," but that "the logic is not apparent." We disagree; the FED does not make this claim. The FED states:

"While the cap-and-trade program would allow facilities to obtain allowances or offsets rather than making on-site reductions, this requirement would not provide an incentive for facilities to increase emissions beyond the levels expected in absence of implementing AB 32."

Since greenhouse gas emission sources also emit criteria and toxic air pollutants, ARB anticipates that the proposed measure will generally result in

overall air quality improvement as it reduces greenhouse gases. The cap would reduce over time, and allowances would also be reduced since they would be surrendered at intervals.

Regarding releases of both toxic and criteria pollutants from new facilities fuels, emissions would be assessed during the siting and permitting processes and mitigated to the extent feasible. A cap-and-trade program would not prohibit the expansion of an existing facility or the establishment of a new facility which may emit greenhouse gases, toxic contaminants or criteria pollutants. However, the same is true today (i.e., it is part of the existing conditions in California), and is also true for all of the alternatives evaluated in the Scoping Plan. All such projects will continue to be subject to project-specific CEQA compliance, existing local ordinances and rules, and be required to implement appropriate mitigation measures. This is specifically provided for in AB 32; Health and Safety Code section 38595 states:

"Nothing in this division shall preclude, prohibit, or restrict the construction of any new facility or the expansion of an existing facility subject to regulation under this division, if all applicable requirements are met and the facility is in compliance with regulations adopted pursuant to this division."

Health and Safety Code section 38592(b) further states:

"Nothing in division shall relieve any person, entity, or public agency of compliance with other applicable federal, state, or local laws or regulations, including state air and water quality requirements, and other requirements for protecting public health or the environment."

The commenter also states that ARB's "analysis does not acknowledge that the implementation of the 'trade' part of cap and trade and use of offsets can and likely will contribute to continued patterns of disproportionate impacts in certain communities." The commenter believes that these impacts are an inherent, structural characteristic of all cap-and-trade programs. ARB does not agree with this premise for the reasons set forth at length in the responses to Comments 5, 8, and 9 submitted by the Sierra Club and the comments submitted by the Environmental Defense Council and Earthjustice.

<u>Comment 4 (Kyle):</u> **Assessment of Alternatives:** The document has perhaps its greatest limitations in its discussion of alternatives. This discussion of the proposed alternatives is quite short, occupying fewer than ten pages (p. J-84 ff). The document reviews the key elements of a "business as usual" or "no action" alternative to the Scoping Plan. It correctly states that the elements proposed in the Scoping Plan would lead to greater greenhouse reductions than "business as usual." The document then makes the assertion that the mix of strategies that could be implemented would all have approximately the same outcome. It further

asserts that the alternatives could not be assessed until regulations, which are more detailed, are developed. This reinforces the critical limitation of this Scoping Plan, which is that it fails to discuss even the major parameters of different implications of the options before the ARB. In any case, this section of the CEQA document does not address public health impacts in a complete way.

The option of a carbon fee is briefly mentioned but dismissed with the assertion that it does not provide the certainty of reductions that would be gained from the cap and trade program. However, the analysis does not include any cap with the fee. It would seem that the same critique could be offered of a "trade only" option if that were offered. It also would provide greater economic efficiency without any assurance that the overall target could be reached. It would be a more meaningful analysis to compare the use of the economic incentive of a fee with a cap to the use of the economic incentive of trading with a cap. It notes that California needs to achieve greater efficiency in all sectors (at J-85). What it does not do is to analyze which alternatives are most likely to contribute to this result. It notes (at J-86) that prices likely to result from a cap and trade scenario are unpredictable and that allowing out of state offsets would likely decrease the activity toward emission control and cleaner energy in California, which would seem to be an unfavorable result. This analysis compares the implementation of a cap under cap and trade to no action, rather than to other alternative approaches that might provide for emission reductions and also preclude their leakage out of California and its highly impacted communities.

Neither the CEQA document nor the main part of the Scoping Plan analyzes the value of including combustion sources such as the low carbon fuel standard or the use of biofuels, compared to the potential to move beyond the use of combustion sources to the degree possible. This would also be an issue worth analyzing. Also relevant is the proper relationship between the allocation of resources to reduce demand for energy and to build an energy system based on clean and sustainable sources and technologies compared to that to control emissions. This is a critical issue that would benefit from analysis in this element of the program as well as in the discussion of how economic incentives and market mechanisms will play out.

The key issue identified previously, i.e., who gains the resources that result from the higher price place on carbon and the implications of this for investment decisions, is not addressed. Would use of a carbon fee be likely to result in the same decisions at the end as a trading mechanism? Or not? We have no analysis or discussion of this."

<u>Response:</u> The issues raised by commenter on a carbon fee and assessment of alternatives are addressed in the responses to Comments 1 though 10 submitted by the Sierra Club. The commenter claims that the FED notes "(at J-86) that prices likely to result from a cap-and-trade scenario are unpredictable and that allowing out of state offsets would likely decrease the

activity toward emission control and cleaner energy in California". The FED does not say that; rather, it sates that "the relative cost of reductions in California compared to the rest of the region could increase or decrease reductions in California as compared to a California-only program." (p.J-86) Until more information is available on the relative cost of emission reductions in California and elsewhere, it is premature to claim to know whether greater or fewer reductions will occur in California under a regional program than would occur in a California-only program.

The commenter also states that neither the FED nor the Scoping Plan addresses the need to move beyond the use of combustion sources to meet energy demand, as compared to including measures in the Scoping Plan that simply reduce emissions from combustion sources (such as the low carbon fuel standard and the use of biofuels). This is not accurate. The Scoping Plan does discuss the necessity to substantially reduce California's current reliance on combustion sources that generate GHG emissions (see pages 44-46 and 117-120 of the Scoping Plan). A cap-and-trade program can help achieve this goal, which is one of the reasons why a cap-and-trade system was chosen as a measure.

#### Comment Submitted by Linda Krop, Environmental Defense Council (EDC)

<u>Comment (EDC):</u> The CEQA Functional Equivalent Document (FED) for the Scoping Plan must address the issue of the impacts associated with cap and trade. The FED fails to analyze how emission reductions under a cap and trade program would be quantified to ensure additionality, verifiability, and enforceability. The FED must also analyze what impacts would result from cap and trade, including impacts relating to air quality, public health and environmental justice. In doing so, the FED must analyze the full life cycle impacts associated with cap and trade.

The FED gives short shrift to Alternative 4, which would replace cap and trade with source-specific regulatory requirements. The FED states that impacts from this Alternative would be similar to the proposed action, despite the fact that regulation-based emission reductions would result in relatively minimal impacts where as cap-and-trade may result in significant air quality, public health and environmental justice impacts. The FED also states that emission reductions from this Alternative are unknown, when in fact there are additional measures that could be included in the Proposed Scoping Plan."

<u>Response</u>: The commenter asserts that the FED fails to analyze how emission reductions under a cap-and-trade program would be quantified to ensure additionality, verifiability and enforceability. The FED is a programmatic document, as the Plans' measures are in different phases of development. With the Board's adoption of the Scoping Plan, ARB is starting

its cap-and-trade rulemaking. In this rulemaking ARB will design the details of the cap-and-trade program and address the commenter's concerns. The cap-and- trade program will have its own environmental analysis when the regulations are developed.

The commenter indicates that the FED gives short-shrift to "Alternative 4: Adopt a Program Based Primarily on Source-Specific Regulatory Requirements with No Cap and Trade Component." The commenter assumes that a source-specific regulatory approach would result in relatively minimal environmental impacts as compared to the many adverse impacts that the commenter asserts would result from a cap-and-trade program.

We believe that the commenter is fundamentally mistaken in assuming that a source-specific regulatory program is inherently better than a cap-and-trade at minimizing environmental impacts, including environmental justice impacts. As indicated in the FED, implementing the source-specific alternative means that additional greenhouse gas emission reductions would be required through more aggressive implementation of the measures already recommended, or implementation of additional measures. The FED further indicates that the measures adopted by ARB "...in a program based solely on source-specific regulatory requirements would depend on the information that is learned in the future during the regulatory development processes. Thus, ARB cannot predict in which sectors and what geographic locations the measures would occur."

In other words, we believe that the same uncertainty is characteristic of both the cap-and-trade alternative and the source-specific alternative. There are two main reasons why this is so. First, if a cap-and-trade program is not adopted, ARB would instead have to adopt numerous source-specific regulations on many different types of sources. Before ARB adopts a regulation on a source category, staff must spend considerable time investigating the category to determine what level of emissions control is cost-effective and technologically feasible. Some sectors may not be regulated at all because, after investigation, staff determines that emission standards are not cost-effective or technologically feasible, or that the potential emission reductions are so small that regulation is not justified.

In addition, ARB has limited resources and the considerable time it takes to develop each individual regulation means that some sources will be regulated first, others will be regulated later—perhaps much later if the category presents difficult technical issues. Even if regulations are ultimately determined to be feasible and are adopted, the delay in adoption—and the likelihood that long lead times will be necessary for some sources where feasibility is an issue—means that emission reductions at certain sources will likely occur much later than at other sources. It is therefore very difficult to predict at this time (i.e., before staff has done the necessary technical work)

both where emission reductions will occur and when they will occur. Some sources or source categories near environmental justice communities may remain unregulated, or may achieve emission reductions much later than if the source had instead been regulated under a cap-and-trade program.

There is a second reason why uncertainty is a characteristic of regulatory systems relying on source-specific regulations. Each source-specific regulation can be designed in many different ways. Different levels of emission controls can be specified. And source-specific regulations often have exemptions for certain types of sources that cannot comply with a specified standard. Many regulations also have compliance flexibility features that allow such options as the use of averaging or even the use of offsets to meet some compliance obligations. Because of these exemptions or compliance flexibility features, there is no guarantee that uniform reductions at each individual source will occur. Some sources may be exempted entirely and no emissions will occur at that source. Other sources may utilize flexibility options and have fewer emission reductions at an individual facility. Different impacts to neighboring communities could therefore result from the regulation, as compared to a regulation without such flexibility.

One might say: "No problem—just make sure that no exemptions or compliance flexibility is included in any source-specific regulation." Such a solution is superficially appealing but has serious downsides. One reason that exemptions may be included in a source-specific regulation is that not all individual sources can achieve the same level of emission reductions due to various factors such as the source's age or use of particular types of equipment. If a standard is set that all facilities can meet (e.g., in order to satisfy the requirements of technological feasibility and cost-effectiveness set forth in AB 32) the emission standards may have to be set much less stringently in order to meet these requirements. If carefully targeted exemptions or less stringent standards are instead allowed for certain types of facilities, the standards on the remaining sources may be able to be set such more stringently. Such a regulatory structure may be necessary in order to achieve the maximum feasible emission reductions (another requirement of AB 32) from the source category as a whole. The same rationale may also justify the inclusion of flexibility options in a source-specific regulation.

The bottom line is that both a source-specific regulatory program and a capand- trade program can have the same result in the real world: situations where certain individual facilities achieve less emission reductions than other facilities, and situations where emission reductions are unevenly distributed among the various sectors both in both location and timing. It is simply not possible to determine in the abstract whether a source-specific regulatory program will avoid the problems that might occur from a cap and trade program. It all depends on the many details of how the programs are designed. This is why for both alternatives the FED indicates that at this time ARB cannot predict in which sectors and what geographic locations the emission reductions would occur.

### Comment Submitted by William Rostrov, Earthjustice (Earthjustice)

<u>Comment (Earthjustice):</u> "Maximum Technological Feasibility Must Be Assessed Before ARB Employs Any Flexible Compliance Mechanisms. ARB must determine whether reductions from the covered sectors in the cap-and-trade program will achieve reductions that are at least equivalent to those that could be achieved through direct regulation. However, ARB has not presented this analysis. To the contrary, the CEQA evaluation states that "ARB cannot predict in which sectors and in what geographic locations these reductions would occur."

<u>Response:</u> This comment is addressed in the response to the previous comment submitted by the Environmental Defense Council. Further, the capand-trade program requires reductions **beyond** those achievable through the direct regulatory measures identified by ARB as technologically feasible and cost effective. In short, the reductions are more than equivalent to those that could be achieved through direct regulation at this time.

# Comment Submitted by Susie Berlin, Northern California Power Agency (NCPA)

<u>Comment (NPCA)</u>: Renewable Portfolio Standard - "The recommendation to move forward with a statewide renewable energy mix of 33% is consistent with many stakeholder discussions, as well as the Governor's recent Executive Order, S-14-08, dated November 17, 2008. The Proposed Scoping Plan must be revised to acknowledge – not resolve – a number of issues integrally linked with an increased RPS which must be part of any CARB rulemaking on the subject. These issues include: (1) eligible renewable resources; (2) ongoing processes for developing RPS rules; (3) total costs associated with renewable resources; (4) impacts associated with development of additional transmission facilities, firming resources, and electric grid reliability; and (5) the use of renewable energy credits and certificates."

<u>Response:</u> The commenter requests ARB to acknowledge several issues surrounding the RPS. Appendix J, Pages 101 through 105 summarizes potential environmental impacts associated with the Renewable Portfolio Standard, and indicates that there may be a need for additional infrastructure projects that would support the overall measure. Site and project-specific environmental (CEQA and/or NEPA) analysis also would be necessary.

# Comments Submitted by Anna Lee, Communities for a Better Environment *(CBE)*

Comment 1 (CBE): We have concluded the plan fails to meet AB 32's required goals of greenhouse gas reductions by 2020, because, among other things, ARB is relying on highly complex, poorly modeled, unenforceable pollution trading. The plan also fails to meet its requirement to address Environmental Justice impacts, and fails to address toxic co-pollutants of greenhouse gases. The plan will increase criteria and toxic air emissions as well as water pollution in California, and will especially do so in low-income and communities of color. communities that are already grossly overburdened. California's plan will also severely impact the environment outside of California, and its market-based system should not be replicated elsewhere. Furthermore, it squanders the unprecedented opportunity to solve climate change and at the same time solve California's severe public health hazard of smog (since both are caused by fossil fuel use) by planning for emissions reductions out of state rather than in communities in-state. It squanders the opportunity for creating a new economy of green jobs within California. The plan fails to protect severely burdened communities of color from increasing toxic hotspots, or even to minimally evaluate this problem. The Board can correct these severe deficiencies, but there is no shortcut to solving climate change by hoping that businesses outside the state will solve the problem through the market. The Board must give the directive that we do the work right here in California, and set the standard for the rest of the nation to do the same. Please see our summary below, and detailed comments.

Comment 2 (CBE): The Plan depends on poorly modeled Cap & Trade measures that lump together highly complex and toxic Oil Refineries and other Industry with Residential, Commercial, and Electricity Sectors, that have nothing in common as pollution sources or economic entities. This Enron-style market plan is so complex, and spread over such large and international geographic regions, that it has no hope of achieving equivalent and enforceable reductions including greenhouse gases and toxic co-pollutants. It will increase toxic hotspots in the most severely burdened California communities, and undermine California residents' democratic input into local pollution control. It even undermines its own pollution trading scheme by allowing widespread offsets. The full and detailed economic modeling to be carried out for CARB was never completed.

<u>Comment 3 (CBE):</u> The CPUC's detailed modeling of Cap and Trade for the electricity sector, which found that \$100/ton would be needed to achieve reductions, is many times higher than the prices expected and planned for carbon credits, so trading in this sector will fail to achieve greenhouse reductions but still add to electricity costs.

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<u>Comment 4 (CBE):</u> The plan fails to require the worst industrial polluters – California oil refineries – to directly reduce emissions despite available controls, and despite their continuing, unchecked switch to heavy, contaminated crude oil. The same is true for all other industrial polluters.

Response to Comments 1-4 (CBE): These comments are mostly directed at the policy choices made in the Scoping Plan, although some of them touch upon environmental issues analyzed in the FED. All of the comments on the FED have been raised by other commenters. The responses to these comments are set forth in the responses to Comments submitted by the Sierra Club, Amy Kyle, the Environmental Defense Council, and Earthjustice.

<u>Comment 5 (CBE):</u> The best measures in the Scoping Plan are already required by other laws or Early Action Measures, making the plan seem far more comprehensive than it is. (These measures include Pavley, RPS, and many Early Action items).

<u>Response:</u> The Scoping Plan is a compilation of measures to reduce GHG emissions. It recognizes that some of the measures are more fully developed than others. The commenter is not suggesting that these more fully developed measures are inappropriate or should be eliminated.

<u>Comment 6 (CBE):</u> A cornerstone of Transportation emissions controls in the Plan -- the Low Carbon Fuel Standard (LCFS) – will increase greenhouse gases, and will severely increase smog, water pollution, worldwide food shortages, increased food prices, and damage to wildlife. This increase is due to the LCFS's dependence on corn ethanol (now acknowledged in the LCFS to cause increased greenhouse gases), and the failure to prevent switches to heavy crude oil at oil refineries. The switch to heavy crude oil is happening now but will drastically increase unless the Scoping Plan addresses it.

Response: The FED prepared for the Scoping Plan is programmatic and contains information and analyses available at the time of preparation. The Low Carbon Fuel Standard regulation is currently under development. The Initial Statement of Reasons for this regulation will include a detailed environmental analysis of the potential environmental impacts of the regulation, and will address the issues mentioned by the commenter to the extent feasible.

<u>Comment 7 (CBE):</u> The plan still allows almost all of the state's smog regulations to continue exempting the highly-potent greenhouse gas methane (which also causes smog).

<u>Response</u>: The commenter seems to be advocating the removal of all methane exemptions from smog regulations for all sources. The removal of methane exemptions can be an effective strategy to reduce greenhouse

gases. That is why the Scoping Plan includes a measure to remove methane exemptions from existing refinery regulations (Measure I-5, Removal of Methane Exemptions from Existing Refinery Regulations). The removal of all methane exemptions from all smog regulations was not included a measure because it may not be appropriate or feasible for some regulations. Staff believes that decisions on methane exemptions should be made on a case by case basis after evaluating technological feasibility, cost-effectiveness, and other rule-specific issues. It should be noted that other measures identified in the Scoping Plan will reduce methane emissions (see Measures RW-1, RW-2 and A-1).

<u>Comment 8 (CBE):</u> The Mandatory Reporting Regulation – essential to assessing the quantities of greenhouse gas emissions and reductions in the Scoping Plan -- allows oil refineries to keep greenhouse calculations secret from the public, and allows conflict of interests in report verification – this could be easily remedied with almost no administrative cost to the state."

Response: This comment does not pertain to the FED. However, staff responds as follows. The Mandatory Reporting Regulation was approved by the Board in 2007 after a long public process, which included responses to the concerns raised by the commenter. Staff believes that the provisions of this regulation are appropriate and that the regulation will yield accurate GHG emissions information.

## Comment Submitted by Brian Morris, Plumas County Flood Control and Water Conservation District (Morris)

<u>Comment (PCFCWCD):</u> "Appendix J, the functionally equivalent document presented to satisfy CEQA requirements for the Scoping Plan, fails to consider the tradeoffs between environmental impacts and benefits at an appropriate scale. Appendix J should emphasize analysis of localized environmental benefits and a least environmental damaging alternative for California. Instead, the anticipated environmental benefits from AB 32 rely too heavily upon success in the regional, national and even global markets."

<u>Response:</u> The scope of analysis of the FED is programmatic, focuses on potential adverse environmental impacts, and was prepared in accordance with CEQA requirements. ARB believes that the FED's programmatic review has been conducted at the appropriate scale and level of detail, as explained in the responses to Comments 16-19 submitted by the Center for Race, Poverty, and the Environment.

Appendix H contains a discussion on environmental benefits and potential effects on public health, and is incorporated by reference in the FED. Appendix J, the FED, focuses on adverse environmental impacts. The FED

also explains why the mix of measures identified in the Scoping Plan was selected as the preferred alternative (see pages J-88 to J-90 of the FED).

## Comment Submitted by Jesse Marquez, Coalition for a Safe Environment (Marquez)

<u>Comment (Marquez):</u> The commenter's letter contains two similar sections that pertain to the FED and compliance with CEQA.

"The Scoping Plan is in violation of the California Public Resources Code (PRC) Section 21000-21006 the California Environmental Quality Act (CEQA) which states:

- a. The maintenance of a quality environment for the people of this state now and in the future is a matter of statewide concern.
- b. It is necessary to provide a high-quality environment that at all times is healthful and pleasing to the senses and intellect of man.
- c. There is a need to understand the relationship between the maintenance of high-quality ecological systems and the general welfare of the people of the state, including their enjoyment of the natural resources of the state.
- d. The capacity of the environment is limited, and it is the intent of the Legislature that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached."

And

PRC Section 21000-21006. CARB, the Scoping Plan and Appendix J - CEQA Functional Equivalent Document fails to comply with the California Environmental Quality Act (CEQA).

This is exemplified by the numerous public comments and information noted in this letter and presented at previous public meetings and hearings."

Response: The commenter asserts that the Scoping Plan is in violation of Public Resources Code sections 21000 – 21006, but provides no specificity about how these sections have been violated. It is not possible to meaningfully respond to such a general comment, other than to state that we believe the FED complies with all applicable CEQA requirements. The commenter may agree with some of the more specific criticisms of the FED that have been raised by other commenters, since the commenter states that his criticisms are "... exemplified by the numerous public comments and information ... presented at previous public meetings and hearings." If so, ARB's responses to these more specific comments are set forth in this document.

### Comments Submitted by Luke Cole; Center on Race, Poverty and the Environment

<u>Comment 1 (CRPE):</u> The plan should reflect a thorough analysis of other greenhouse gas emissions reduction programs. Although the Plan states that ARB reviewed programs from other localities, it does not reflect a thorough consideration and analysis of the failures of earlier cap and trade programs. It is imperative that ARB's plan "incorporate lessons from the experience of the few programs that have historical records of performance."

A thorough review of other programs would reveal that cap and trade programs have failed to both reduce greenhouse gas emissions and have exacerbated local pollution. They have also failed as a mechanism for imposing a meaningful price on carbon. In Los Angeles, pollution trading caused more pollution in Latino communities near oil refineries. In Europe, the greenhouse gas trading system caused *increased* emissions of greenhouse gases. In the Northeastern Regional Greenhouse Gas Initiative, allowances were over-allocated and during recent market contractions, the price of carbon recently fell so low that a floor price of \$1.86 was imposed. Such nominal costs will be passed on to consumers without providing much incentive for technological innovation or energy diversification.

The plan does not address or consider the merits and pitfalls of existing cap and trade programs and presents no evidence that the system ARB proposes will avoid these pitfalls. Rather, ARB's proposal is predicated on the unfounded belief that the cap and trade program will operate in exactly the same manner as proposed. ARB has not taken this meaningful opportunity to build safeguards into California's system that would ensure that greenhouse gas emissions reductions will actually happen by 2020, and will happen in a manner that is equitable to all Californians. "

Response: We agree that ARB's development of a cap-and-trade program must incorporate lessons from the experience of other market-based approaches that seek to reduce greenhouse gas emissions as well as criteria pollutants and air toxics. The existing programs have had both successes and failures, and ARB can learn from these experiences in designing its cap-and-trade program.

Among other things, ARB has the benefit of the work of the Market Advisory Committee, which includes the very helpful information in Appendix B to the Committee's report, titled "Lessons Learned from Experiences with Other Cap and Trade Systems. See Market Advisory Committee to the California Air Resources Board, Recommendations for Designing a Greenhouse Gas Cap and Trade System for California at 89-99 (2007)". In addition, ARB has had extensive interactions with administrators of RGGI, EU ETS, U.S. Acid Rain

program and RECLAIM and has considered the experience of those programs in adopting the programmatic approach to multiple regulatory procedures in the Scoping Plan. Based on this experience, we disagree with the commenter's assessment that all cap-and trade programs will fail.

There are number of specific ways that ARB can build safeguards into a capand-trade program to avoid the potential local pollution pitfalls identified by the commenter. The sources covered by the cap (as well as non-capped sources) are also covered by stringent criteria pollutant and air toxics regulations that will continue to result in continued and significant reductions in air pollution emissions, exposure and health-based risk.

Commenters have also suggested a number of methods for preventing localized impacts, including (i) giving preference to offset projects associated with such communities, (ii) supplementing a cap and trade program with traditional regulations, (iii) conditioning the use of offsets, or (iv) using auction revenues to reduce co-pollutant emissions. (See e.g., MAC Recommendations at 10 (2007); see also Alice Kaswan, Environmental Justice and Domestic Climate Change Policy, 38 ELR 10287, 10304-10307 (May 2008)). Such design options will require careful evaluation during the cap-and-trade rulemaking, and ARB is committed to performing this evaluation.

Under a cap-and-trade approach, a source would be allowed to emit GHGs provided it has enough allowances to cover its emissions. However, it is important to note that even with enough carbon allowances, a source would not be allowed to operate without a permit for other pollutants it may also emit. The permit would require the source to comply with all other existing pollution control regulations.

A cap-and-trade program would not prohibit the expansion of an existing facility or the establishment of a new facility which may emit greenhouse gases, toxic air contaminants, or criteria pollutants. However, the same is true in California today and would also be true for the alternatives of a carbon fee or a program relying on source-specific regulations (see the responses to Comments 2 and 3 submitted by Dr. Amy Kyle). All facilities will continue to be subject to existing local ordinances and rules. This is specifically provided for in AB 32; Health and Safety Code section 38595 states:

"Nothing in this division shall preclude, prohibit, or restrict the construction of any new facility or the expansion of an existing facility subject to regulation under this division, if all applicable requirements are met and the facility is in compliance with regulations adopted pursuant to this division."

Health and Safety Code section 38592(b) further states:

"Nothing in division shall relieve any person, entity, or public agency of compliance with other applicable federal, state, or local laws or regulations, including state air and water quality requirements, and other requirements for protecting public health or the environment."

Similarly, AB 32 is quite clear that certain safeguards must be incorporated into the design of any market-based mechanism that the ARB adopts. ARB takes this responsibility seriously, and staff will work with all affected stakeholders during the rulemaking process to ensure the appropriate safeguards are met and that the 2020 target is achieved in a manner equitable to all Californians.

Comment 2 (CRPE): The plan fails to meet AB 32 criteria for market based compliance mechanisms. AB 32 requires ARB to "consider all relevant information pertaining to greenhouse gas emissions reduction programs," and to "design emissions reduction measures . . . in a manner that . . . maximizes additional environmental and economic co-benefits for California." Specifically, before including market based compliance mechanisms ARB must: (1) "consider the potential for direct, indirect and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely affected by air pollution; (2) design any market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants; and (3) maximize additional environmental and economic benefits for California, as appropriate." ARB has not yet addressed any of these requirements.

Response: The commenter quotes portions of multiple statutory provisions, some of which express the intent of the Legislature regarding the design of emissions measures, others which relate to the Scoping Plan and still others that apply only to rulemaking activities. ARB has acted consistently with the intent of the legislature as expressed in Heath and Safety Code section 38501(h) and will continue to do so as it designs specific emissions measures through rulemaking. Further, pursuant to Health and Safety Codes section 38561(c), ARB has "consider[ed] all relevant information pertaining to greenhouse gas emissions in other states, localities and nations . . .", as evidenced by ARB's extensive interactions with administrators of RGGI, EU ETS, the U.S. Acid Rain program and RECLAIM. In addition, staff recognizes the potential for direct, indirect, and cumulative emission impacts from market-based mechanisms, including localized impacts in communities that are already adversely impacted by air pollution.

To address the requirement to consider such effects in its rulemaking activities (section 38570(b)(1)), ARB staff will review different alternatives that can be used to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants to the extent feasible. As part of this

work, ARB staff will explore the potential for specific program design elements such as those identified in the response to the previous comment. ARB staff will also consult with recognized legal, business, and economic experts in the areas of competitive markets, state financial mechanisms, and commerce. Among other things, such consultation will be to examine options among various allocations and auction revenue distribution strategies, and advise staff on the relative costs and benefits of these alternatives within a cap-and-trade program.

<u>Comment 3 (CRPE):</u> Unfortunately, ARB has not shown that the cap and trade program will meet the directives of AB 32. Nothing in the Plan demonstrates that the cap and trade program will deliver the "maximum technologically feasible and cost effective" greenhouse gas emission reductions, or maximize environmental co-benefits for all of California, especially environmental justice communities. ARB also cannot show how the cap and trade program will lead to energy diversification and will not create localized air pollution impacts.

"We, and the EJAC, are clear: trading programs do not work. They have not worked in the past, and they will not work in the future. They are a poor choice by the ARB."

Response: We disagree with the commenter's opinion that trading programs have never worked in the past and cannot be made to work in the future. A broad spectrum of scientific, economic, legal and policy analyses of cap and trade programs performed to date finds that well designed and implemented cap and trade programs for certain air pollutants can and do work. See, e.g., MAC Recommendations at 6-17, 80-81, 89-99 (see citations therein); see also The Acid Rain Program and Environmental Justice: Staff Analysis" (September 2005) U.S. Environmental Protection Agency, Office of Air and radiation, Clean Air Markets Program); Dallas Burtraw, A New Standard of Performance: An Analysis of the CAA's Acid Rain Program, 26 Environmental Law Reporter 10411 (1996); David M. Driesen, Trading and Its Limits, 14 Pennsylvania State Environmental Law Review 169 (2006); Tom Tietenberg, Tradable Permits in Principle and Practice, 14 Pennsylvania State Environmental Law Review 251 (2006).

In both this comment and the previous comment, the commenter quotes portions of multiple statutory provisions from AB 32, some of which express the intent of the Legislature regarding the design of emissions measures, others which relate to the Scoping Plan, and still others that apply only to rulemaking activities. The commenter's general remarks about these provisions are addressed in the response to the previous comment.

<u>Comment 4 (CRPE):</u> Cap and Trade Programs do not Deliver Geographic or Procedural Equity or Emissions Reductions. The Scoping Plan is evidence of the favorable political landscape for cap and trade programs. However, cap and

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trade models are not successful prophylactic measures in that they have proven to be ineffective tools for phasing out carbon use. Pollution trading makes for ineffective air quality policy in at least four ways.

First, due to over-allocation of allowances, low carbon prices, fraudulent transactions and banking (which may result in short term reductions followed by a spike in emissions when banked credits are utilized), pollution trading programs do not significantly reduce air pollution. The Plan merely asserts with no evidence that the cap and trade program does not provide facilities with incentives to increase their emissions. However, AB 32 requires ARB to "design" the cap and trade program to "prevent" any increases and to prevent localized impacts. Even if specific facilities do not increase their emissions, and continue to emit business as usual, this does not maximize co-benefits or prevent localized impacts. "

Response: The premise that pollution trading programs do not significantly reduce air pollution is contradicted by experiences in other programs. The RECLAIM program in the South Coast air district has achieved reductions well beyond original expectations and continues to show increased reductions, including in areas adversely impacted by pollution and consistent with the ozone State Implementation Plan for the South Coast Air Basin. The federal Acid Rain program has also gone well beyond original emission reduction estimates and has lowered control costs over what would otherwise have occurred under a command-and-control system. In both cases, as in other market-based regulatory systems, adjustments have been made as problems are identified, and cost-effective emission reductions continue to occur.

The commenter presumes that ARB will design a program that over-allocates allowances, has low carbon prices, suffers from fraudulent transactions and allows spikes in emissions. To the contrary, ARB intends to learn from other cap-and-trade programs which experienced some or all of these problems. As indicated elsewhere, staff recognizes the potential for direct, indirect, and cumulative emission impacts from market-based mechanisms, including localized impacts in communities that are already adversely impacted by air pollution. To address this requirement, staff will review different design features that can be used to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants to the extent feasible, and consistent with the requirements in AB 32. Some of these potential design features are discussed above in the response to Comment 1 (CRPE).

<u>Comment 5 (CRPE):</u> Second, because the cap and trade program offers emitters flexibility in how they reduce greenhouse gases to comply with the program, there is a risk of undesirable side effects. For example, emitters could choose to adopt a measure that reduces GHGs but increases air pollution. Also, pollution trading can actually stifle technological innovation, as regulated sources seek "cheap fixes rather than innovative and enduring solutions."

Response: We agree that a poorly designed cap-and-trade program could potentially result in the undesirable effects suggested by the commenters. We do not agree that a well-designed cap-and-trade program will result in such effects. The sources covered by the cap (as well as non-capped sources) are also covered by existing state and local criteria pollutant and air toxics regulations that will continue to result in continued and significant reductions in air pollution emissions, exposure, and health-based risk. These issues are addressed at length in the responses to Comment 9 submitted by the Sierra Club and Comments 2 and 3 submitted by Dr. Amy Kyle.

We also disagree that trading can stifle technological innovation as regulated sources seek "cheap fixes rather than innovative and enduring solutions." The academic literature that first raised this argument also pointed to solutions that allow a cap and trade program to incentivize technological innovation. See David M. Driesen, Free Lunch or Cheap Fix?: The Emissions Trading Idea and the Climate Change Convention, 16 Boston College Environmental Affairs Law Review 1, 78-86 (1998). ARB's coupling of a capand-trade program with source-specific regulations is one measure that prevents a reliance on "cheap fixes." Furthermore, the duration of the capand trade program, the substantial reductions required, and the commitment to continue the program past 2020 with a steadily contracting cap will quickly exhaust the supply of "cheap fixes." The price attached to carbon emissions and the declining cap is likely to incentivize technological innovation beyond that required by source-specific regulations.

In addition, ARB has solicited advice on how to design a cap-and-trade program to incentivize technological innovation. Specifically, ARB has requested and the Economic and Technology Advancement Advisory Committee (ETAAC) has provided "a consensus view on how various policy mechanisms referenced in the Market Advisory Committee (MAC) report might affect investments in – and the implementation of -- technologies and other solutions designed to help meet AB 32's GHG emission reduction goals. CARB directed ETAAC to provide comments on three specific market design objectives highly relevant to the effective implementation of AB 32: (1) Early Action; (2) Innovation; and (3) Clear Price Signals." See Recommendations of ETAAC, Final Report at 9-1 to 9-9 (2008). The measures and policies identified in the Scoping Plan are premised on the need for continued technological innovation that will fundamentally change how California uses and conserves energy. Other political jurisdictions can also move toward the California model by taking on additional reductions using California's standards.

<u>Comment 6 (CRPE):</u> Third, pollution trading decreases public participation in environmental decision-making. Pollution trading occurs without any public oversight or public understanding of actions taken to reduce GHG emissions. A

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community could fight for years for a stronger permit to limit pollution from a particular factory, and then that factory could simply buy credits allowing it to increase its emissions.

Response: We disagree. Even though a future cap-and-trade program may allow sources of GHG emissions to trade GHG allowances, affected sources will remain subject to separate and distinct requirements for criteria pollutants and air toxic emissions imposed by State and local air pollution regulations. The ability to purchase or trade GHG allowances does not mean that sources will be able to ignore existing permit conditions.

<u>Comment 7 (CRPE):</u> Finally, pollution trading often does not result in emissions reductions because of increased difficulty monitoring and enforcing emission reductions. ARB has provided no information in this Plan on how it will reliably monitor emissions of all capped sources during the cap and trade program to ensure that allowances surrendered are equal to the source's actual emissions.

Response: We disagree. In 2007, ARB approved regulations that require the mandatory reporting of GHG emissions from many GHG emission sources that would be covered under a cap-and-trade program (see title 17, California Code of Regulations, sections 95100-95113). These regulations provide a foundation of experience that can be built upon and expanded to other sources as part of the rule development of a cap-and-trade program. ARB staff has also been developing third party verification protocols to ensure that reporting sources are complying with the enforceable and accurate reporting methods. Finally, ARB legal and enforcement staff have been working with other State agencies (such as the California Energy Commission) and Western Climate Initiative (WCI) jurisdictions to develop the mechanisms necessary to monitor trading and emissions in a cap-and-trade program. The details of such mechanisms will be finalized during the rulemaking for the cap-and-trade program.

<u>Comment 8 (CRPE):</u> While the Acid Rain program is touted as a successful cap and trade program, it only covered one sector, power plants, thus making "data tracking and compliance determination" easier. In programs with greater heterogeneity such as the multi-sector cap proposed in the Plan, tracking noncompliance becomes a greater problem. While the Acid Rain program is mythologized as the one successful trading program, it also resulted in *increased* air pollution at 42% of the covered facilities, meaning there were localized air pollution impacts of the type that AB 32 prohibits.

<u>Response</u>: A multi-sector cap-and-trade program could be more difficult to enforce than the federal acid rain program. However, robust enforcement of a multi-sector cap-and-trade program is feasible and can be accomplished (see the response to the previous comment). California as well as federal monitoring requirements have been in place for several years, and many

sources are able to track their emissions through continuous emissions monitors. While the acid rain program relied on U.S. EPA personnel for enforcement, ARB believes that verification by independent third parties can enhance our ability to track compliance. ARB has begun to establish procedures to certify these verifiers. As indicated elsewhere in these responses, a cap-and-trade program for greenhouse gas emissions will not eliminate existing requirements for sources to meet health-based criteria pollutant or air toxics requirements. As an added precaution, staff will also investigate alternative approaches to ensure that a cap-and-trade program does not lead to the potential for direct, indirect, and cumulative emission impacts from market-based mechanisms, including localized impacts in communities that are already adversely impacted by air pollution.

<u>Comment 9 (CRPE):</u> The German approach of direct regulation had greater percentage reductions in SO2 emissions over a two-year period than the U.S. approach of trading did over a 10-year period.

Response: We believe that this is an inappropriate comparison. The amount of reductions achieved by a cap-and-trade program is critically dependent on the level of the cap. Greater emission reductions can be achieved if the cap is set at a lower level. The U.S. acid rain program set the cap at a particular level and was successful in achieving this cap. The fact that German SO2 regulations achieved a different level of emission reductions does not mean that source-specific regulations are inherently better than a cap-and-trade program at achieving emissions reductions. The reductions that will be achieved from either program are dependent on the specific design features of that program. It should also be noted that the Scoping Plan is proposing a cap-and-trade program for greenhouse gas emissions. Such a program is also in place in Germany as part of the European Union Emissions Trading Scheme. As indicated in responses to previous comments, such a program in California will not be allowed to interfere with requirements to meet other health-based pollutant standards.

<u>Comment 10 (CRPE):</u> "By using a market mechanism that allows trading out of state, ARB is allowing the new jobs that will be created by investment in green technology to be created in places like Arizona, rather than in California. This directly violates AB 32's requirement that ARB "direct public and private investment toward the most disadvantaged communities in California." Linking California's trading program to the Western Climate Initiative could also contravene AB 32's requirement that greenhouse gas emission reductions achieved are enforceable by ARB."

<u>Response</u>: We agree that a California program that links with the Western Climate Initiative (WCI) must be conditioned on the assurance that AB 32 requirements will be met. Both as part of the California rulemaking process, and our involvement in the WCI effort, we will work closely with all

stakeholders to ensure that California sources and the public are not adversely affected -- either economically or environmentally -- through participation in a regional program.

California's public and private investment would not be directed out of state as a result of reciprocal linkage with other jurisdictions' market mechanisms through WCI. The greater the number of states that enact climate change legislation, the more investment is likely to be stimulated. Given that California is already a center for the creation of green jobs, participation of additional states and provinces in a cap-and-trade program is likely to increase the potential for green jobs in California rather than lead to a flight of green jobs to other states. Furthermore, California departments and agencies involved in the development of the cap-and-trade program are working with their counterparts in other WCI jurisdictions to ensure that the program is enforceable no matter where the allowances are traded or used.

<u>Comment 11 (CRPE):</u> "ARB should not allow trading in overburdened communities. Because industrial polluters in California are predominantly located in and also tend to cluster in low income neighborhoods and communities of color, ARB must take measures that will *prevent* these sources from increasing pollution. The unrestricted trading envisioned by the Plan seriously threatens to further overburden such communities."

Response: A cap-and-trade program, if properly designed, will not overburden vulnerable communities. A cap-and-trade program for greenhouse gas emissions will not be allowed to weaken or reduce the requirements for permitted sources, which are currently subject to health-based criteria pollutant or air toxics requirements. As an added precaution, staff will investigate alternative approaches to ensure a cap-and-trade program does not lead to the potential for direct, indirect, and cumulative emission impacts from market-based mechanisms, including localized impacts in communities that are already adversely impacted by air pollution.

<u>Comment 12 (CRPE):</u> ARB should maximize co-benefits through direct emission reduction measures and performance standards. A direct emission reduction is defined as "a greenhouse gas emission reduction action made by a greenhouse gas emission source at that source." Instead of relying on trading, ARB should instead focus on its commitment to "partner with local air districts to develop and effectively enforce . . . source specific requirements on industrial sources.

By requiring emissions reductions at the source, ARB will provide certainty about where emissions reductions will occur and thus ensure that environmental justice communities will get an equitable share of the co-benefits of reducing greenhouse gas emissions.

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Direct regulations and performance standards are effective tools to spur technological innovation and can overcome non-price market barriers preventing cost-effective efficiency improvements and other investments. In addition, direct emission reduction measures can provide targeted co-benefits and ensure an appropriate level of GHG and co-pollutant reductions.

Response: This comment is based on two incorrect assumptions. The first assumption is that a source-specific regulatory program will provide more certainty than a cap-and-trade program about where emission reductions will occur. The second assumption is that a source-specific regulatory program will ensure that environmental justice communities will receive greater co-pollutant emission reduction benefits as compared to a cap-and-trade program. Neither of these assumptions is accurate for the reasons discussed at length in the responses to Comments 5 and 9 submitted by the Sierra Club, Comments 2 and 3 submitted by Dr. Amy Kyle, and the comment submitted by the Environmental Defense Council (EDC).

The commenter also implies that source-specific regulations will spur technological innovation more effectively than a cap-and-trade program. We do not agree for the reasons discussed above in the response to Comment 5 (CRPE) submitted by the commenter.

<u>Comment 13 (CRPE):</u> ARB should impose targeted emissions reduction measures because the location of greenhouse gas emissions sources and the location of emissions reductions matter. Due to its reliance on a cap and trade program, ARB cannot anticipate where emissions reductions will occur. "Table H-12 [sic, referring to Table H-9] does not include the criteria pollutant cobenefits of additional GHG reductions that would be achieved from the recommended cap-and-trade regulation because we cannot predict in which sectors they would be achieved."

Because ARB cannot predict where emissions reductions and criteria pollutant co-benefits will occur, it does not appear that the program is *designed to prevent* localized impacts. The Plan states that ARB will perform an analysis of "any potential localized impacts" at the regulatory phase. However, as the guiding document, the Plan should discuss and analyze the proposed policies to determine their likely impact on low income communities and communities of color. ARB should implement public health safeguards by requiring a higher percentage of direct emissions reductions. ARB's analysis concludes, "[a]ir pollution levels are regional in nature .... Similarly, health impacts estimates reflect local pollution and population patterns. As a result, it is appropriate to analyze the co-benefits on a regional basis." This level of analysis misses the often very localized environmental justice co-benefits of reducing toxic and criteria air pollution. By requiring direct emissions reductions, ARB can target those facilities whose emissions have greater percentages of co-pollutants with serious health impacts. While not considered greenhouse gases, co-pollutants

such as black carbon (soot) and ozone precursors also contribute significantly to global warming. According to NRDC, "addressing soot and smog in conjunction with AB 32 is a win-win strategy." To maximize the environmental co-benefits of global warming regulations, ARB should include strategies to specifically target those facilities with the highest PM and other co-pollutant emissions. ARB should address the health risks posed to environmental justice communities based on disproportionate exposure to nitrogen oxides (NOx) and particulate matter (PM) and target facilities whose emissions contain higher percentages of these and other co-pollutants.

Even if these sources do not increase emissions, it is unacceptable for their emissions to remain static while reductions are made elsewhere through the purchase of allowances or offsets.

ARB should require a higher percentage of direct emissions reductions from such facilities in order the maximize public health benefits of the Plan. In support of a multi-pronged approach, the Plan outlines how "emissions and energy use from most of the sectors covered by a cap-and-trade program would also be governed by other regulatory measures and enforceable policies, including performance standards, efficiency programs, and direct regulations. All measures that otherwise apply to capped sectors would contribute to achieving the cap by reducing their need to obtain allowances." Yet, ARB inexplicably has proposed very few direct emissions reduction requirements on facilities in the industrial sector.

Response: The issues raised by this comment are addressed in the response to the previous comment (Comment 13 (CRPE)). In addition, we disagree with the premise that a cap-and-trade program must specifically target the location of reductions in order to realize maximum co-benefits. As the size of the cap shrinks, we expect the cost of allowances will provide increasing incentives for individual sources to reduce their on-site emissions. To the extent that those sources are located within mixed use or environmental justice areas, greater greenhouse gas reductions should occur in those areas. Should these sources elect to purchase allowances instead of making emission reductions, they would still be subject to criteria pollutant and air toxics requirements imposed by State and local air district rules. The key to reducing public health-related emissions, exposure, and risk will continue to reside in these criteria pollutant and air toxics programs, which should have a far greater positive impact on public health than the nonspecific co-pollutant decreases that are likely to accompany reductions in GHG emissions. In addition, the existing regulatory requirements will likely increase in the future to meet stringent State and federal standards that are already in place.

<u>Comment 14 (CRPE):</u> The Plan states that ARB cannot predict where emissions reductions will occur within the capped sources. Yet, economic models exist that

allow agencies to accurately predict which facilities are likely to purchase pollution credits, thereby increasing or continuing their pollution, by comparing control costs across regulated source categories. ..... ARB must specifically target those industrial facilities whose emissions have significant environmental and health impacts. Upgrading highly polluting power plants holds potential for tremendous co-benefits. For example, in 2005, just five old (pre-1980) power plants in California contributed to more than one quarter of the total NOx emissions from all power plants in the State. An analysis of particulate matter emissions from industrial facilities shows that certain facilities drive the pattern of environmental injustice in California. BP's Carson Refinery alone contributes 3.17% of the PM emissions attributed to people of color in California. The impact of these emissions is felt primarily in the local area around the facility. There are significant public health co-benefits available through targeted emissions reductions requirements for such facilities."

Response: ARB agrees that, in general, aging plants show the greatest promise of realizing greenhouse gas emission reductions as well as copollutant benefits. With a cap-and-trade program, inefficient plants would have a strong incentive to replace older equipment with newer, more efficient units, thereby reducing the cost to the source of purchasing allowances. In developing the program, staff intends to collect information on these sources and examine how the program might work in conjunction with the criteria pollutant and air toxics programs to accelerate early retirement in areas most greatly impacted by associated emissions, exposure, and risk. As indicated in the Scoping Plan, it is not necessary to undertake this targeted approach instead of a cap-and-trade program; the approach can also achieve effective results when combined with a cap-and-trade program.

Comment 15 (CRPE): ARB chooses not to regulate agriculture, and instead allows it to be a source of offsets for the cap and trade program. However, ARB should not allow cross-pollutant trading. Trading credits generated from the installation of methane digesters to power plants and other industrial fuelcombustion facilities could increase pollution and adversely impact public health in the communities around such industrial facilities because the pollutants from a dairy lagoon are different from the more toxic combustion pollution created by power plants and industrial facilities. Currently available technologies and strategies include: (1) anaerobic digesters; (2) bio-gas recovery and barn enclosure: (3) reformulation of ruminant diets to reduce enteric fermentation and some methane emissions; (4) burning animal waste for fuel. Organic farming also has the potential to reduce GHG emissions and sequester carbon. Raising cattle for beef organically on grass, in contrast to fattening confined cattle on concentrated feed, may emit 40 percent less GHGs and consume 85 percent less energy than conventionally produced beef. To maximize reductions in the Proposed Scoping Plan, these and other agricultural emissions control measures should be made mandatory (thereby making them unavailable for use as offsets). Response: ARB staff agrees that before adopting any trading rules as part of a cap-and-trade program, it must perform an analysis to understand the potential for direct, indirect, or cumulative emissions impacts on downwind communities. ARB is also committed to look for opportunities for cost-effective and technologically feasible measures that can reduce greenhouse gas emissions from agricultural activities. The response to Comment 56 (CPRE) discusses future regulation of the agricultural sector by ARB.

<u>Comment 16 (CRPE):</u> ARB describes its environmental analysis as a programmatic Functional Equivalent Document (FED). However, the FED violated CEQA in three main ways: (1) by failing to comply with the requirements for a programmatic review; (2) by failing to analyze the direct, indirect and cumulative impacts of the proposed Scoping Plan; and (3) by failing to adequately analyze alternatives to the proposed Scoping Plan.

The ARB failed to comply with the requirements for programmatic review. ARB discussed possible impacts from the proposed Scoping Plan in the form of a FED in lieu of an Environmental Impact Report, pursuant to Public Resources Code § 21080.5. This section exempts regulatory programs certified by the California Resources Secretary from specific CEQA substantive and procedural requirements associated with environmental impact reports. The California Secretary of Resources has certified ARB's regulatory program which involves the adoption of plans for the protection and enhancement of ambient air quality in California. CEQA requires that a certified regulatory program preparing a functional equivalent document include "a description of the proposed activity with alternatives to the activity, mitigation measures to minimize any significant adverse effect on the environment of the activity." Moreover, "an agency operation pursuant to a certified regulatory program must comply with all of CEQA's other requirements."

In order to comply with CEQA, ARB prepared what it describes as a programmatic FED and ARB plans to tier subsequent rule-specific analysis from this plan level programmatic FED. There could be several advantages to conducting a program level review of the proposed Scoping Plan. A tiered programmatic environmental review could provide for a more exhaustive analysis of impacts and alternatives than would be possible in an individual environmental analysis. In addition, a programmatic analysis could ensure a more thorough cumulative impact analysis that might otherwise be "slighted in a case-by-case analysis." Moreover, a general program level analysis could allow the ARB "to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts." In terms of mitigation measures, CEQA requires that ARB describe mitigation measures which would minimize significant impacts from the project including there efficacy and basis of inclusion. Mitigation measures must also be legally enforceable.

ARB's FED analysis provides none of this information. Instead, the FED provides a circular analysis of impacts, contains no mitigation measures but for compliance with already existing rules, and defers virtually all analysis to individual rule making. While CEQA recognizes that the level of detail in a first tier EIR need not be greater than that of the underlying plan being analyzed, tiering does not excuse a lead agency from "adequately analyzing reasonable foreseeable significant environmental effects of the project and does not justify deferring such analysis and future mitigation to a later tier EIR or negative declaration." The ARB's FED analysis fails to inform decision-makers and the public about the significant impacts from the proposed Scoping Plan; it fails to provide an adequate discussion of the direct, indirect and cumulative impacts from plan, and it does not provide an informative analysis of possible alternatives to the proposed Scoping Plan.

<u>Comment 17 (CRPE):</u> ARB failed to analyze the direct, indirect and cumulative impacts of the Scoping Plan. ARB defers the analysis of specific policy choices and regulatory decisions until each individual rulemaking process. This subverts the purpose of a *program* level analysis. Several of the policy choices ARB is making at this stage have not been analyzed.

Response to Comments 16 and 17 (CRPE): The commenter asserts that ARB failed to comply with the requirements for programmatic review. The commenter is correct that ARB discussed possible impacts from the proposed Scoping Plan in the form of a FED in lieu of an Environmental Impact Report, pursuant to Public Resources Code § 21080.5, which allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. As indicated in the FED (p. J-4 – J-6) The California Secretary for Resources has determined that ARB meets the criteria for a Certified Regulatory Program (see title 14, California Code of Regulations, section 15251(d)). This certification allows ARB to adopt rules, regulations, standards and plans, and exempts ARB from the requirement to prepare Initial Studies, Notices of Preparation, Negative Declarations or Environmental Impact Reports (EIRs). ARB is required to prepare a substitute document subject to other provisions of CEQA, such as avoiding significant adverse effects on the environment where feasible.

The FED considers cumulative impacts and addresses adverse impacts associated with the proposed measures. As required by CEQA, the FED includes a description of the proposed project, an impacts analysis, potential mitigation measures, and a discussion of alternatives. ARB has disclosed as much information as was available at the time of the preparation of the FED. Because the Scoping Plan identifies proposed future actions to adopt and implement greenhouse gas reduction regulations for which specific regulatory language has not yet been developed, the analysis is necessarily general and qualitative. The actual environmental impacts of each proposed measure is

intimately dependent on the details of how each measure is drafted. These details can be finalized only after ARB staff has done the necessary technical work as part of the public process of developing each measure.

Regarding mitigation measures, CEQA requires that ARB describe mitigation measures that would minimize potentially significant environmental impacts from the project. The FED does this. It includes a table identifying the potential adverse impacts and potential mitigation measures for each measure (see pages J-93 to J-116). For some of these mitigation measures, the commenter is correct that ARB identifies regulatory requirements imposed by other agencies (federal, State and local) as potential mitigation measures. Such regulatory requirements already exist and have been proven to be effective. As CEQA discourages speculation (CEQA Guidelines sections 15144 and 15145), it is important to note that drafting an environmental document necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, ARB has used its best efforts to find out and disclose all that it could at the time the FED was prepared.

<u>Comment 18 (CRPE):</u> The ARB defers much of its analysis and mitigation of localized impacts to local land use agencies at the time of project siting. Under CEQA, ARB is responsible for its own compliance with CEQA and cannot rely on other agencies to cure its failures to analyze and mitigate.

Response: In California, local agencies have the legal authority and responsibility to make local land use decisions, such as where individual facilities will be sited. Local agencies have their own regulations and ordinances that project proponents must comply with in order to obtain the necessary permits. Local agencies are usually the lead agencies for project siting decisions and are required by CEQA to perform environmental analyses and implement all feasible mitigation measures for adverse impacts that have been identified. It is entirely appropriate for ARB to rely on local agencies to carry out their legal responsibilities for decisions where they are the lead agencies, especially in a programmatic document like the FED where the locations and specific characteristics of future projects are unknown at the this time. The response to Comment 38 (CPRE) gives an example in the areas of agricultural resources which illustrates why it is necessary and appropriate to rely on local agencies to perform site-specific environmental analyses.

<u>Comment 19 (CRPE):</u> Moreover, agencies are required to use their best efforts to find out and disclose all it reasonably can. 14 CCR § 15144. While the CEQA Guidelines do not directly apply to certified regulatory programs, such programs are still subject to the information disclosure provisions and broad policy goals of CEQA. California Sportfishing ProtectionAlliance v. State Water Resources Control Board (2008) 160 Cal. App. 4th 1643-45. Broadly, CEQA requires ARB to provide sufficient detail to enable those who did not participate in the

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preparation of the FED to understand and meaningfully consider the environmental impacts associated with the Scoping Plan. Based on information ARB provided in its FED, it is possible for ARB to engage in a program level analysis of the Scoping Plan's impacts.

<u>Response</u>: This comment is addressed in the responses to the previous three comments (Comments 16, 17, and 18 (CRPE)).

<u>Comment 20 (CRPE):</u> Appendix J, pgs 31-32. ARB could examine the environmental impacts and environmental justice impacts of those siting decisions and examine the impacts of the low carbon fuel standard in light of that information. A similar analysis could be conducted for refineries and power plants where locations are easily ascertained. This analysis would also contribute to a better understanding of impacts from ARB's decision to recommend a cap and trade program as opposed to a carbon fee or direct regulatory measures. The failure to provide this basic information about the plan level choices ARB is recommending minimizes the Scoping Plan's impacts and subverts the purposes [of] a programmatic analysis under CEQA.

Response. As explained in the responses to many of the previous comments, it is not possible to provide the detailed information requested by the commenter at this time. The information provided in the Scoping Plan and its Appendices will provide a baseline that will be useful for future project-specific environmental analyses. With respect to the Low Carbon Fuel Standard (LCFS), the FED includes a programmatic analysis of the potential adverse environmental impacts of the LCFS. This analysis is contained on page J-27 and in Section VII of the FED. The LCFS regulation is currently under development, and the Initial Statement of Reasons for this regulation will include a detailed environmental analysis of its potential environmental impacts.

<u>Comment 21 (CRPE):</u> ARB failed to adequately analyze alternatives to the Scoping Plan. CEQA requires that a certified regulatory program preparing a functional equivalent document include "a description of the proposed activity with alternatives to the activity, mitigation measures to minimize any significant adverse effect on the environment of the activity." Cal. Pub. Res. Code § 21080.5(d)(3)(A). "

<u>Response:</u> This comment is addressed in the responses to the following two comments (Comments 22 and 23 (CRPE)).

<u>Comment 22 (CRPE):</u> Under CEQA, ARB must examine a reasonable range of alternatives that feasibly meet most the project's basic objectives while avoiding or substantially reducing the significant effects of the project. The selection of alternatives should foster informed decision making and public participation. 14 CCR § 15126.6(a). CEQA also makes clear that the purpose of the alternatives

analysis is to focus on alternatives that are capable of "avoiding or significantly lessening any significant effects of the project, even if those alternatives would impede to some degree the attainment of the project objectives, or would be more costly." 14 CCR § 15126.6(b). In evaluating alternatives, the ARB must include "sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project." 14 CCR § 15126.6(d). Here, ARB identifies the Scoping Plan's objective as "achieving the maximum technologically feasible and cost-effective greenhouse gas emission reductions," citing Health and Safety Code §38561(a)." J-74. The fundamental objective of the Scoping Plan is to map out how California is going to meet AB 32's goals of reducing California's greenhouse gas emissions to 1990 levels by 2020. Health and Safety Code § 38550. The means by which ARB will do this are through achieving maximum technologically feasible and cost-effective regulations. By narrowly defining the objective, ARB has artificially limited the analysis of alternatives.

Response: ARB has appropriately defined the objective of the project (i.e., the Scoping Plan). Moreover, ARB has selected and analyzed a reasonable range of alternatives to satisfy the goal of CEQA of informal decision-making. The commenter's interpretation of the legislative intent of AB 32 would not require a different analysis of alternatives than ARB's description of the project objective. The commenter's criticisms of ARB's alternatives analysis are set forth in the following comment, and these criticisms would appear to be the same under either project description.

Comment 23 (CRPE): Regardless of whether ARB appropriately defined the objective of the Scoping Plan, ARB's alternatives analysis fails to comply with CEQA. ARB presents a cursory, circular and results-oriented description of five alternatives to the proposed plan. The five project alternatives ARB identified are: (1) no project, (2) adopting a variation of proposed strategies or measures: (3) adopting primarily a cap and trade program; (4) adopting primarily sourcespecific regulatory requirements; and (5) adopting primarily a carbon fee. The introductory paragraph to the examination of alternatives 2 to 5 summarizes the major flaws with the alternatives analysis and the FED as a whole. "For these reasons, we expect that environmental impacts (both positive and adverse) of all the alternatives would be similar to the impacts expected from [the] mix of measures identified the draft Scoping Plan. While the magnitude of impacts might increase or decrease, it would be speculative to try to estimate the effects at this time, before the details of specific measures are developed." J-85. This introduction makes clear that the ARB is not providing an informative analysis of alternatives to the Scoping Plan as a whole, which is the main function and advantage of a top tier FED analysis. In conclusion, ARB's environmental analysis pursuant to CEQA is inadequate. It is a self-serving document that provides very little information to the public or decisionmakers with which to evaluate the environmental impacts of ARB's policy choices for reducing greenhouse gas emissions. It provides no information about how ARB's plan will avoid increasing local pollution and toxic air contaminants as required by AB 32. The ARB missed an opportunity to analyze the impacts of the proposed Scoping Plan itself. Instead ARB provided a circular analysis of the plan's impacts and deferred all other analysis to subsequent individual rulemaking processes. This piecemealed approach artificially minimizes the plan's impacts and violates CEQA."

Response: We believe that ARB's analysis of alternatives meets the requirements of CEQA. Of the five project alternatives identified in the FED, the commenter is not suggesting that any of these alternatives were inappropriately chosen. The commenter's main criticism is that additional, very specific information should have been provided on the environmental impacts of each alternative, including how each alternative would differ in its environmental impacts on local communities in terms of increasing local pollution and toxic air contaminants.

ARB's fundamental position is that it is simply not possible to provide the level of detail requested by the commenter in a programmatic document such as the FED. There are dozens of possible variations of each alternative, and what happens in the real world depends on the specific details of how each alternative is designed and implemented. The reason why this is so is described at length in the responses to Comments 5, 9, and 10 submitted by the Sierra Club and the comment submitted by the Environmental Defense Council (EDC). Project-specific impacts are appropriately studied as part of the CEQA analysis for each individual project. The public and ARB will have the opportunity at that time to provide information and analysis of project-specific impacts in order to satisfy CEQA's goal of informal decision-making.

As explained in these responses and the FED, each of the alternatives can be designed in such a way that environmental impacts are minimized. However, the types of emission reduction activities undertaken under any of these alternatives (except for the "No Project" alternative) would be broadly similar. Each alternative essentially identifies different mechanisms that can be used to accomplish the same basic types of changes. For these reasons, the FED concludes that the environmental impacts (both positive and adverse) of all the alternatives would be similar to the impacts expected from the mix of measures identified the draft Scoping Plan. Which alternative to choose therefore comes down to a policy choice. ARB's rationale for making this choice is set forth on pages J-88 to J-90 of the FED.

<u>Comment 24 (CRPE)</u>: The ARB failed to respond to comments on the significant environmental points raised during the environmental review process. "If the Board acts to approve the Scoping Plan and the FED on December 11, it will be violating either Pub. Res. Code §21080.5 or its own environmental review rules and regulations. Section 21080.5 only allows certification of functional equivalent programs if the rules and regulations adopted by the administering

agency for the regulatory program "require that final action on the proposed activity include the written responses of the issuing authority to significant environmental points raised during the evaluation process." Obviously, by having the close of the public comment period on the Scoping Plan and FED the day before the decision is to be made, the ARB has not given its staff or itself sufficient time to digest the comments made, much less provide written responses."

<u>Response:</u> ARB has complied with all applicable CEQA requirements. The commenter is correct that Public Resources Code section 21080.5(d)(2)(D) requires that the regulations adopted under a certified regulatory program must:

"(D) Require that final action on the proposed activity include the written responses of the issuing authority to significant environmental points raised during the evaluation process."

The regulations governing ARB's certified regulatory program are found at title 17, California Code of Regulations, sections 60005-60007. The requirement mentioned by the commenter is met by ARB regulations contained in Cal. Code Regs., tit. 17, section 60007, which states:

"(a) If comments are received during the evaluation process which raise significant environmental issues associated with the proposed action, the staff shall summarize and respond to the comments either orally or in a supplemental written report. Prior to taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue."

ARB followed these regulations in its actions on the Scoping Plan. At its December 11, 2008 public hearing, the Board did not take final action to approve the Scoping Plan. What the Board did was approve Resolution 08-47, which designated the ARB Executive Officer as the "decision maker" under Cal. Code Regs., tit. 17, section 60007(a) for the purposes of responding to environmental issues raised on the Proposed Climate Change Scoping Plan. The Board also directed the Executive Officer to:

"... prepare and approve written responses to all significant environmental issues that have been raised, and then to either: (1) return the Proposed Climate Change Scoping Plan to the Board for further consideration if he determines that this is warranted, or (2) take final action to approve the Proposed Climate Change Scoping Plan with the modifications identified at the December 11, 2008 public hearing, any conforming modifications that may be appropriate, and any modifications that are necessary to insure that all feasible measures or feasible alternatives that would substantially reduce any significant adverse environmental impacts have been incorporated into the final action."

(see Resolution 08-47, page 7)

This document contains the written responses to all significant environmental issues that have been raised. After approving these responses, the Executive Officer will then comply with the Board's direction set forth above in Resolution 08-47. If the Executive Officer determines that returning to the Board for further direction is not warranted, he will issue an Executive Order that approves these written responses and takes final action to approve the Scoping Plan. By following this process, ARB will comply with all applicable provisions of CEQA and ARB regulations. Finally, CEQA and ARB's certified regulatory program – contrary to the commenter's assertion – do not require the comment period to remain open until the decision maker acts. Doing so could potentially force the regulatory process to go on ad infinitum. It is within ARB's discretion, and consistent with CEQA, to require a closing date for the submittal of comments prior to the final decision.

<u>Comment 25 (CRPE):</u> **Project Description**. The project description discusses in very vague terms the potential regulatory measures ARB is considering for reducing greenhouse gas emission by 169 MMTCO2E. However, the Project Description does not discuss specific reductions from each sector it briefly describes nor does ARB discuss the policy choices it made to exclude some sectors from regulation."

Response: Pages 11 and 12 of the Scoping Plan divides California's GHG emissions into various sectors and quantifies the GHG emissions from each sector. The anticipated emission reductions from each sector and measure are included in Chapter II of the Scoping Plan (Recommended Actions), and are set forth in detail in the "Sector Overview and Emission Reduction Strategies" in Appendix C to the Scoping Plan. The commenter asserts that ARB did not discuss the policy choices it made to "exclude" some sectors from regulation. The commenter does not specifically identify which sectors have been "excluded." Based on other comments submitted by CRPE, however, the commenter may be referring to the agricultural sector. Comments on this sector are responded to in the responses to Comments 37 and 56 (CRPE).

<u>Comment 26 (CRPE):</u> Low Carbon Fuel Standard: This measure relies on future rule development and subsequent local land use decisionmaking processes to assess mitigation measures. Energy and Natural Gas: Renewable Portfolio Standard and Million Solar Roofs: Again relies on local siting decisions to address impacts.

<u>Response:</u> This comment is addressed in the response to Comment 18 (CRPE).

<u>Comment 27 (CRPE):</u> Air Quality- Cumulative Impacts: ARB states that the Scoping Plan's cumulative impact will be to substantially improve air quality.

Appendix J p. 24. However, the ARB provides no facts or analysis to support this conclusory statement. ARB recognizes that there could be an increase in local air pollution. Appendix J p. 24. Again, ARB relies on local siting agencies to mitigate these impacts. Without ARB setting minimum statewide standards and guidance, this is speculative.

Response: Appendix H of the Scoping Plan, which is incorporated by reference in the FED, contains a detailed analysis supporting ARB's conclusion that the cumulative impact of the Scoping Plan will be to substantially improve air quality. In general, implementation of Scoping Plan measures would improve air quality overall because local pollutants tend to be "bundled" with GHG (especially CO2) emissions, so that changes in the production methods that lead to reduced GHG emissions also lead to lower emissions of local pollutants. This was one of the conclusions of the Market Advisory Committee regarding a well-designed cap-and-trade program. (See Market Advisory Committee to the California Air Resources Board, Recommendations for Designing a Greenhouse Gas Cap and Trade System for California" (2007) at page 10.) The same effect will occur for direct regulatory measures included in the Scoping Plan. By reducing co-pollutants associated with GHG emissions, the overall effect on air quality will be cumulatively positive.

The FED also indicates that there may be construction—related air quality impacts which should be evaluated on a project-specific basis. The response to Comment 18 (CRPE) addresses the issue raised by the commenter on decisions of local siting agencies.

<u>Comment 28 (CRPE):</u> **Criteria Pollutants**: ARB describes criteria pollutants in the Air Quality Analysis. However, it does not provide any information on the health effects of each pollutant.

<u>Response:</u> The FED incorporates by Reference Appendix H of the Scoping Plan. Appendix H includes information and discussion regarding the health effects of criteria pollutants and toxic air contaminants.

<u>Comment 29 (CRPE):</u> California Cap and Trade Program: ARB states that this program is not expected to result in adverse air quality impacts. Appendix J p. 25. However, ARB has no facts or analysis to support this conclusory statement. The FED makes reference to "some individuals" raising concerns that the cap and trade program could result in localize environmental impacts. Appendix, J p. 25. Specifically, the Environmental Justice Advisory Committee which was charged specifically with advising ARB on the Scoping Plan has consistently and repeatedly raised these concerns which ARB has consistently and repeatedly ignored, including in its CEQA analysis. Appendix J pp. 25-26. The ARB's analysis of this issues violates CEQA as well as the laws of reason.

First, ARB justifies the cap and trade program based on the fact that the cap will redress any localized impacts from trading without any support for that assumption. ARB then makes the statement that "[w]hile some localized impacts could result from overall implementation of AB 32...these would not be a direct result of the cap-and-trade program." Appendix J p. 26. This simply makes no sense. The cap and trade program would allow some facilities to emit more pollution than they would otherwise by trading allowances with other facilities that have reduced their pollution. Furthermore, even if this statement is true, it does not justify failing [to] analyze the potential local impacts from the cap-and-trade program. ARB is required to analyze both the direct and indirect impacts from a proposed project. CEQA Guidelines §§ 15126, 15126.2. Also, as part of the effort to prevent local air pollution impacts, ARB notes that local air districts could impose more stringent requirements for sources of criteria pollutants and air toxics. However, absent ARB requirements and guidance, this is mere speculation. There is no assurance that local air impacts will be avoided or reduced in direct contradiction to Health and Safety Code § 38501(h) (design greenhouse gas reduction measures to maximize co-benefits for California).

Response: The commenter raises a number of issues regarding the potential adverse environmental impacts that may result from a cap-and-trade program. These issues are addressed in the responses to Comments 5 and 9 submitted by the Sierra Club, Comments 2 and 3 submitted by Dr. Amy Kyle (Kyle), and the comment submitted by the Environmental Defense Council (EDC). In addition, ARB will work with the local air districts and provide appropriate guidance on the role that the districts can play to help insure that adverse localized health impacts do not occur from implementing a cap-and-trade program.

Comment 30 (CRPE): Transportation: (T-2) Low Carbon Fuel Standard: ARB states that a reduction in the carbon intensity of fuels does not relate to a specific change in criteria or toxic pollutants or in fuel combustion. Appendix J p. 27. ARB defers any analysis of potential local criteria or toxic pollutants to subsequent rulemaking. ARB is required to at least examine the impacts of the Low Carbon Fuel Standard at a program level. ARB includes a map of biofuel production facilities in the state (both currently operational and proposed). Appendix J pp. 31-32. It also provides a general description of where biofuels will likely be produced and estimates that 10-30 new biofuel production facilities will be built in California. ARB can – and should – then analyze what emission[s] are likely based on current biofuel production in the state and demographic information from the surrounding areas to complete the environmental and environmental justice impact analysis. This same analysis could and should be done for refineries and power plants which would also help ARB analyze the potential environmental impacts from the cap and trade program.

<u>Response:</u> The FED includes a programmatic analysis of the potential adverse environmental impacts of the Low Carbon Fuel Standard (LCFS).

This analysis is contained on page J-27 and in Section VII of the FED. It states that one goal of the LCFS is to maintain or reduce criteria and toxic pollutant emissions. The extent to which this goal will be successfully achieved depends on the details of the LCFS regulation, which are still being developed. A more detailed environmental analysis of the LCFS regulation will be conducted when this development is completed.

The commenter also suggests that the programmatic analysis in the FED should include an analysis of the emissions from new biofuel production facilities, power plants, and refineries, and a determiner of the environmental and environmental justice impact of these emissions based on statewide and demographic information from the surrounding areas. For the reasons discussed in the responses to Comments 16-18, this level of detail is not feasible in a programmatic analysis such as the FED. The project-specific impacts of the LCFS regulation will be addressed in the LCFS rulemaking.

<u>Comment 31 (CRPE):</u> Electricity and Natural Gas: (E-2) Increased Heat and Power: ARB discloses that this measure may have significant local impacts if units are not installed properly. However, ARB can make this measure enforceable with significant penalties for non-compliance to ensure proper installation. Appendix J p. 35.

Response: Combined heat and power (CHP) systems are currently regulated by the local air districts. Proposed CHP facilities must obtain permits from the local districts before they can be constructed and begin operation. This permitting process should insure that CHP systems are installed properly. Regarding penalties, the Legislature has specified the maximum potential penalties for non-compliance with AB 32 regulations (see Health and Safety Code sections 38560 and 42400 et seq.) ARB does not have the legal authority to change this statutory penalty structure.

<u>Comment 32 (CRPE):</u> Electricity and Natural Gas (E-3) Renewable Portfolio Standard: ARB reviews each of the renewable resources relative to natural gas and does not individually quantify them for the air emissions analysis. ARB identifies that there are potential construction related impacts with each of the resources analyzed. Appendix J pp. 35-36. ARB gives no information on where these facilities are currently located, what the actual impacts are from these types of facilities or what constitutes adequate mitigation. See Part II.A. 1 & 2. This is a violation of CEQA's requirements that a FED actually examine the impacts of a proposed action.

<u>Response:</u> For the reasons discussed in the responses to Comments 16-18, the level of detail requested by the commenter is not feasible in a programmatic analysis such as the FED.

<u>Comment 33 (CRPE)</u>: **Biomass**: ARB describes a likely source of biomass to be redirected open burning of agricultural waste. Appendix J. p. 36. These new biomass facilities will likely be sited in agricultural regions. Several are operating throughout California now. ARB could provide the location of these facilities, known operating emissions, potential mitigation measures and unmitigated impacts. Instead ARB relies on the uninformative and conclusory statement that modern control technologies and good plant design will reduce NOx and PM emissions. However, ARB provides no information on what constitutes modern control technologies or good plant design.

Response: Before any facility or plant can be sited or an existing facility expanded, project-specific compliance with CEQA would be required. What constitutes "modern control technologies or good plant design" depends on the specific characteristics of individual facilities. ARB cannot identify the possible future locations of these facilities, or project-specific impacts and mitigation measures, without engaging in speculation. For the reasons discussed in the responses to Comments 16-18, the level of detail requested by the commenter is not feasible in a programmatic analysis such as the FED.

Comment 34 (CRPE): **Geothermal:** Again, ARB relies on unspecified modern control technology and good plant design to reduce emissions from geothermal plants without specifying what that would be. Appendix J p. 37. ARB also does not provide any analysis of how much such practices reduce hydrogen sulfide, arsenic, mercury, radon 22, and ammonia. Appendix J p. 37. See Part II.A.2. Furthermore, geothermal production produces overburden containing naturally occurring radioactive materials which must be disposed of in landfills – often hazardous waste landfills in environmental justice communities such as the Latino farmworker communities of Buttonwillow, Kettleman City and particularly Westmorland (which is near the site of geothermal energy production). ARB must discuss the impact of this in its land use and hazardous materials analysis. **Hydro-electric:** ARB again does not specify what constitutes good plant design and modern control technology to reduce short-term construction impacts related to hydro-electric facilities. Appendix J p. 37. Moreover, ARB does not disclose the efficacy of such measures.

Response: Before any new facility or plant can be sited or an existing facility expanded, project-specific compliance with CEQA would be required. What constitutes "modern control technologies or good plant design" depends on the specific characteristics of individual facilities, and the geological and other characteristics of each site. For this reason it is also not possible to accurately quantify the amount that such practices would reduce hydrogen sulfide, arsenic, mercury, radon 22, and ammonia. The concentrations of such compounds at geothermal facilities can vary tremendously based on geological characteristics and other site-specific factors. The design and impacts from hydro-electric facilities is also highly dependent on-site specific

factors. For the reasons discussed in the responses to Comments 16-18, the level of detail requested by the commenter is not feasible in a programmatic analysis such as the FED.

Hazardous waste that requires disposal would be subject to the Resource Conservation and Recovery Act (RCRA) regulation and the Hazardous Waste Control Law (HSC, Division 20, Chapter 6.5.). The characteristics and amount of hazardous waste generated by geothermal facilities, and where such waste would be disposed of, are also highly dependent on site-specific characteristics and would need to be addressed in a project-specific CEQA analysis for each facility.

<u>Comment 35 (CRPE):</u> Water: (W-2) Water Recycling and (W-4) Reuse Urban Runoff: ARB defers mitigation to local jurisdictions and air districts. ARB states that additional mitigation is necessary to reduce construction impacts but it does not specify the extent of the impacts or what types of measures are needed. Water: (W-5) Increase Renewable Energy Production: ARB impermissible[y] defers any examination of impacts to the California Energy Commission. Industry: ARB identifies three types of measures specific to industry- audits, systems efficiency improvements and regulatory changes. It then defers all discuss of environmental impacts to subsequent rulemaking. Appendix J p. 38. This conclusory analysis violates CEQA.

Response: The FED appropriately summarizes potential impacts from these facilities and identifies mitigation measures on a programmatic level (see pages J-108-109). ARB cannot determine the possible future locations of these facilities, or project-specific impacts and mitigation measures, without engaging in speculation. For the reasons discussed in the responses to Comments 16-18, the level of detail requested by the commenter is not feasible in a programmatic analysis such as the FED.

<u>Comment 36 (CRPE):</u> Recycling and Waste Management: (RW-1) Landfill Methane Control: ARB identifies potential increases in NOx and Carbon Monoxide (CO) as well as toxic pollutants. ARB also states that offsets may be need to mitigate the impacts from criteria pollutants. There is no discussion of the extent of the impact from toxic pollutants nor is there any mention of potential mitigation for toxic pollution. Appendix J-39.

Recycling and Waste Management: RW-3 High Recycling/Zero Waste: This measure includes composting. Appendix J p. 39. ARB recognizes that composting is subject to region specific air district requirements. ARB also states that BACT reduces air emissions. However, BACT varies widely between air districts. The South Coast Air Quality Management Board and the San Joaquin Valley Air Pollution Control District both require enclosure to reduce NOx and VOCs. The Mojave Air Quality Management Board does not. ARB needs to specify what constitutes BACT for large-scale composting facilities. ARB's

reference to the Modesto study is misplaced. Again, ARB defers the use of anaerobic digesters to local land use agencies and subsequent CEQA review. Recycling and Waste Management: High GWP: (H-6) High GWP Reduction from Stationary Sources: ARB describes a foam discovery and destruction program whereby foam is recovered and combusted prior to landfilling. Appendix J p. 39. ARB discloses that such treatment may emit toxic air contaminants and criteria pollutants. However, ARB defers any analysis or mitigation. ARB does not disclose if such practices are occurring now. Where they might be located, what those emissions are, and any possible mitigation measures used and the efficacy of those mitigation measures.

<u>Response:</u> Landfill gases (mostly methane) are captured by collection systems that are currently in use at many landfills. The collection systems capture both methane and other toxic pollutants, thereby limiting their emissions into the atmosphere. These systems are an effective way to control toxic pollutant emissions from landfills and are an appropriate mitigation measure for these emissions.

Regarding BACT for composting facilities, ARB will consider BACT guidance for local air districts as warranted. The FED identifies potential environmental impacts and mitigation measures, and indicates that further study on potential control technologies is needed.

Regarding foam destruction and recovery programs, ARB is undertaking a research study to determine the lifecycle analysis cost of recovery and destruction of high-GWP GHGs (see page I-61 of Appendix I). The expected completion data of the study is July 2010. Until then, insufficient information is available to determine the efficacy and feasibility of potential mitigation measures.

<u>Comment 37 (CRPE):</u> Agriculture: (A-1) Methane Capture at Large Dairies: ARB states that this is a voluntary measure. As justification for not requiring methane capture at large dairies, ARB claims that such that digesters may emit NOx, the control technology may not be available, it may not be cost effective, or able to meet local air district requirements. However, ARB has not established a cost-effectiveness threshold yet for AB 32 implementation. Yet, it has already taken digesters off the table without trying to determine if any of these potential limitations are actually prohibitive. Furthermore, ARB provides no information or analysis as to the environmental impact of not choosing to regulate methane capture at large dairies. See Part II.A.2.

Response: ARB Measure A-1, Methane Capture at Large Dairies is a voluntary measure at this time. However, this measure has not been taken "off the table." As discussed on page 66 and 67 of the Scoping Plan and page J-39 of the FED, ARB will gather additional information regarding the cost and feasibility and determine at the five-year Scoping Plan update if the

program should be made mandatory by 2020. Sufficient information is not currently available to make this decision. The commenter also criticizes the FED because it "... provides no information or analysis as to the environmental impact of <u>not</u> choosing to regulate methane capture at large dairies." (emphasis added). Such an analysis is not required by CEQA because the current environmental impact from large dairies is part of the existing conditions. The impacts of GHG emissions from the agricultural sector as a whole are discussed on page J-84 of the FED as part of the discussion of the "No Project" alternative.

<u>Comment 38 (CRPE):</u> Agricultural Resources Impacts: (T-2) Low Carbon Fuel Standard: ARB states that the siting of new fuel production facilities may have a significant impact on state classified agricultural land. Appendix J p. 41. However, ARB defers any analysis or mitigation until subsequent local CEQA processes. ARB identifies a possible mitigation measure, a financial mechanism that supports the California Department of Conservation's California Farmland Conservancy Program, but there is no requirement that such mitigation be employed.

**Energy: (E-3) Renewable Portfolio Standard:** Again, ARB discusses possible impacts from the siting of renewable projects, but fails to provide any analysis or required mitigation measures. Instead, ARB defers and delegates all environmental analysis to local land use agencies. Appendix J p. 41. See Part II.A.1&2.

Water: (W-3) Water System Energy Efficiency and (W-5) Increase Renewable Energy Induction: ARB provides no information about possible environmental impacts associated with these measures or there potential impacts to agricultural. ARB simply defers all project specific analysis to local land use agencies. Appendix J p. 42. See Part II.A.2.

Agriculture: (A-1) Methane Capture at Large Dairies: ARB raises the possibility that manure digesters may be incompatible with Williamson Act Contracts. Appendix J p. 42. However, ARB does not provide any basis for that statement and urges dairymen to investigate local land use requirements. By raising a potential hurdle and forcing dairymen to figure how to overcome it, ARB's conclusory statement will have the effect of chilling voluntary implementation of this measure.

<u>Response:</u> The commenter repeatedly criticizes the FED for deferring more detailed project-level environmental analyses to local land use agencies. These comments are addressed in the responses to Comments 16-18, which discuss why the level of detail requested by the commenter is not feasible in a programmatic analysis such as the FED.

Regarding potential mitigation measures for impacts to Agricultural Resources, support of the Department of Conservation's Farmland Conservancy Program is an example of an appropriate mitigation for conversion of agricultural lands to other uses. Avoidance and careful siting would also mitigate potential impacts associated with such conversion.

With regard to manure digesters, ARB does not raise a potential hurdle in mentioning that there may be an incompatibility with a Williamson Act contract. A Williamson Act contract is an enforceable contract that runs with the land and is initiated by the landowner. The landowner would have a copy of the contract. Any person seeking to site a project on agricultural lands can easily check with the county to determine land status and compatibility. Under the Williamson Act, local governments have the authority to determine whether siting a methane digester on contracted lands would be in conflict with an existing contract.

It is the responsibility of the county to evaluate whether construction or expansion of a structure is related to the production of agricultural commodities for commercial purposes. Deference is rightly afforded to the county, who is a party to the contract, because the county has primary responsibility to implement the Williamson Act. Although State law limits the scope of the county's actions, Government Code section 51240 also authorizes the county to adopt its own rules governing its Williamson Act contracts, provided that those rules are more protective of the agricultural character of the land than the statutory limitations. Local discretion is further provided by Government Code sections 51201(e), 51220.5, and 51238(a)(1). Therefore, whether a particular use or building constitutes an agricultural or compatible use is a function both of State law and the county's own rules and ordinances.

The discussion above is an example of why ARB must defer to local agencies for project and site specific impact analyses and mitigation implementation. It also serves as an example of why it is not feasible for ARB to speculate on where future projects would be sited. Further, local agencies have their own sets of standards, rules or conditions with which project proponents must comply with in order for an approval or a permit to be issued.

Comment 39 (CRPE): Impact to Biological Resources: Transportation: (T-2) Low Carbon Fuel Standard: ARB defers environmental review to subsequent rulemaking and local site specific permitting. However, ARB knows where such fuel production facilities are located or proposed, as well as where they are likely to be located. Appendix J p 31-32. This would be enough to know generally what type of species are likely to be effected by the low carbon fuel standard. ARB has the opportunity at this early stage to evaluate the overall impacts at a state level which is often not possible in individual project environmental review. See Part II.A.1&2. Electricity and Natural Gas: (E-3) Renewable Portfolio Standard: Again ARB defers analysis to local siting and rulemaking processes. See Part II.A.1&2. Water: (W-2) Water Recycling, (W-3) Water System Energy Efficiency, (W-4) Reuse Urban Runoff, and (W-5) Increase Renewable

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**Energy Production:** ARB describes any attempt to identify potential impacts from these measures as speculative and defers any analysis to local implementing agencies. Appendix J-44-45. See Part II.A.2.

**Agriculture: (A-1) Methane Capture at Large Dairies**: ARB again defers any analysis to potential impacts until individual projects obtain Authority to Construct permits from local air districts.

ARB avoids doing any environmental review and overlooks an opportunity to evaluate impacts from a state level that are often minimized during local individual project environmental review. Appendix J p. 45.

<u>Response</u>: The issues raised by this comment are addressed in the response to the previous comment (Comment 38 (CPRE)) and the responses to Comments 16-18 (CPRE).

Comment 40 (CRPE): Cultural Resources: ARB concludes that the Scoping Plan will not have an impact on cultural resources because Scoping Plan measures "would not require the destruction or alteration" of significant sites. Appendix J p. 46. However, intent is not required under CEQA to have an impact or to necessitate mitigation. ARB identifies several measures that may have a significant impact, such as (T-2) Low Carbon Fuel Standard, (E-3) Renewable Portfolio Standard, (W-2) Water Recycling, (W-3) Water System Energy Efficiency, (W-4) Reuse Urban Runoff, and (W-5) Increase Renewable Energy Production. However, ARB defers any analysis of those potential impact to subsequent local land use decisions. Appendix J-46.

<u>Response:</u> Section VII of the FED includes a table that lists each of the measures and identifies potentially significant environmental impacts and possible mitigation measures. Regarding the criticism that the FED defers more detailed project-level environmental analyses to local land use agencies, this issue is addressed in the responses to Comment 38 (CPRE)) and Comments 16-18 (CPRE).

<u>Comment 41 (CRPE):</u> Impacts to Energy Demand: California Cap and Trade Program Linked to Western Climate Initiative Partner Jurisdictions: ARB acknowledges that there may be a shift from internal combustion engines to electric which would increase energy demand. Appendix J p. 47. However, ARB admits that it is not possible to determine the level of significance at this time. Appendix J p. 47. ARB provides no information about the potential impacts from this measure yet expects the Board to endorse this approach without any information to support its decision.

<u>Response:</u> The Scoping Plan and the FED provide the best information on energy demand that was available at the time of preparation. It is not possible to provide more specific information at this time.

<u>Comment 42 (CRPE):</u> **Impacts to Geology and Soils:** ARB claims that it is too speculative to identify potential geological or soil impacts from the proposed Plan because it does not know where proposed facilities will be located. Instead it relies on local and state regulations to mitigate any potential impacts for measures such as (T-2) Low Carbon Fuel Standard, (E-3) Renewable Portfolio Standard, (W-2) Water Recycling, (W-3) Water Systems Energy Efficiency, and (W-5) Increase Renewable Energy Production. Appendix J p.49. However, for some of these measures such as the Low Carbon Fuel Standard and the Renewable Portfolio Standard, ARB has some information about where such facilities are located or are likely to be located and could provide some general information about potential impacts and possible mitigation measures or regulations that could reduce those impacts. ARB's failure to provide this information is a violation of CEQA.

<u>Response:</u> Section VII of the FED includes a table that lists each of the measures and identifies potentially significant environmental impacts and possible mitigation measures. Regarding the criticism that the FED defers more detailed project-level environmental analyses to local land use agencies, this issue is addressed in the responses to Comment 38 (CPRE)) and Comments 16-18 (CPRE).

Comment 43 (CRPE): Impacts Associated With Hazardous Materials:

ARB begins this section discussing the regulatory requirements for Class I
Hazardous Waste Facilities. Appendix J pp. 50-51. It should be noted that all of
California's three hazardous waste dumps are in low income communities and
communities of color: Kettleman City, Buttonwillow, and Westmorland.

Transportation (T-6) Goods Movement: As part of the commercial harbor craft
measure, use of a non-toxic antifouling product on hulls would be a way of
reducing hazardous materials impacts. To implement this measure, ARB plans
to rely on encouragement and education of owner/operators. Appendix J p. 5152. However, this is unenforceable. This measure should be mandatory and
fully enforceable.

<u>Response:</u> Before mandatory measures are imposed, additional investigation is needed to determine the technological feasibility of non-toxic antifouling products in these applications.

<u>Comment 44 (CRPE):</u> Electricity and Natural Gas (E-3) Renewable Portfolio Standard: ARB should discuss as part of this impact analysis the disposal of naturally occurring radioactive material as part of the production of geothermal energy.

<u>Response:</u> The FED mentions generation of hazardous waste as a potential adverse impact from Measure E-3, although geothermal facilities are not specifically mentioned. Hazardous waste that requires disposal would be subject to the Resource Conservation and Recovery Act (RCRA) regulation

and the Hazardous Waste Control Law (HSC, Division 20, Chapter 6.5.). As discussed in the response to Comment 34 (CRPE), the characteristics and amount of hazardous waste generated by geothermal facilities, and where such waste would be disposed of, are also highly dependent on site-specific characteristics and would need to be addressed in a project-specific CEQA analysis for each facility.

Comment 45 (CRPE): Impacts To Land Use And Planning Cumulative Impacts: Under this section heading ARB discusses implementation of SB 375. ARB will work through Metropolitan Planning Organizations as part of their regional planning process to set transportation goals and create sustainable community plans. Appendix J p. 54. There are numerous gaps within SB 375 which ARB could fill in the Scoping Plan and subsequent rulemaking. First, ARB should provide for alternative processes for rural areas which do not have metropolitan planning organizations. Second, SB 375 specifically states that local land use agencies need not implement the sustainable community plans once developed. ARB also speculates that Counties will likely adopt Greenhouse Gas Elements as part of their General Plans. However, absent state mandates, guidelines, and protocols this is unenforceable. ARB should designate mandatory local reduction targets of 15% by 2020 as recommended in the Scoping Plan for each large metropolitan area in the state. Appendix J p. 54.

Response: ARB is just beginning the process of implementing SB 375 (Stats. 2008, Chapter 728), which sets forth a detailed implementation process and specifies deadlines for the completion of various actions. Appropriate greenhouse gas emission reduction targets will be set as part of the SB 375 implementation process.

<u>Comment 46 (CRPE):</u> **Transportation (T-2) Low Carbon Fuel Standard**: ARB defers to local jurisdictions and subsequent rulemaking processes to mitigate land use impacts. Appendix J p. 55-56.

Transportation (T-3) Regional Transportation Related Greenhouse Gas Targets: Again this tracks SB 375. There are numerous gaps within SB 375 which ARB could fill in the Scoping Plan and subsequent rule making. First, ARB should provide for alternative processes for rural areas which do not have metropolitan planning organizations. Second, SB 375 specifically states that local land use agencies need not implement the sustainable community plans once developed. ARB also speculates that Counties will likely adopt Greenhouse Gas Elements as part of their General Plans. However, absent state mandates, guidelines, and protocols this is not likely. ARB should designate mandatory local reduction targets of 15% by 2020 as recommended in the Scoping Plan for each large metropolitan area in the state. Also as part of this discussion, ARB mentions formulating Indirect Source Rules for each region of the state. However, it defers any analysis of this measure. The Indirect Source Rule has been operational in the San Joaquin Valley and ARB could analyze the regional and localized impacts for informational purposes at this Plan

level review. **Electricity and Natural Gas (E-3) Renewable Portfolio Standard**: Again ARB defers any analysis to subsequent permitting and rulemaking. Appendix J p. 56. ARB does not provide guidance where such projects could or should be sited in the state.

**Water (W-2) Water Recycling:** ARB again defers to project specific analysis without providing any information at the plan level stage. Appendix J p. 56. See Part II.A.2.

<u>Response:</u> The comments on SB 375 are addressed in the response to the previous comment (Comment 45 (CRPE)). Regarding the commenter's criticism that the FED inappropriately defers more detailed project-level environmental analyses to local land use agencies, this issue is discussed in the responses to Comment 38 (CPRE)) and Comments 16-18 (CPRE).

Comment 47 (CRPE): Impacts To Water Resources: Transportation (T-2) Low Carbon Fuel Standard: ARB identifies a potentially significant impact to water from biofuel spills. To reduce this impact, ARB relies on regulatory compliance and employment of appropriate spill prevention and spill abatement protocols. Appendix J p. 66-67. However, ARB provides no information on what this entails and what expected reductions. See Part II.A.2. Also ARB identified potential impacts from water use but provided no information on possible mitigation measures identified or discussed. Appendix J p. 66. See Part II.A.1. In addition, ARB discussed potential impacts from pesticide use and fertilizers in the production of biofuels crops and hydrogen. ARB suggests minimizing use of pesticides and fertilizers. Appendix J p. 67. However, ARB does not disclose how this is enforceable especially in jurisdictions outside of California. See Part II.A.1.

**Water (W-2) Water Recycling:** ARB identifies reduction of water quality downstream as a potential impact from this measure. However, ARB relies on regulatory compliance and subsequent CEQA compliance to mitigate any impacts. Appendix J p. 67. However, ARB provides no information on what this entail or the efficacy of such measures.

<u>Comment 48 (CRPE):</u> **Recycling And Waste Management:** (RW-3) Composting. Here ARB relies on compliance with waste discharge requirements to mitigate any impacts. However, ARB does not disclose what this means or how effective such compliance is in reducing impacts. Appendix J p. 68.

Response to Comments 47 and 48 (CRPE): As in many previous comments, the commenter believes that the FED should have provided a more detailed analysis and should not defer project-level environmental analyses to local agencies. These issues are addressed in the responses to Comment 38 (CPRE)) and Comments 16-18 (CPRE).

Comment 49 (CRPE): Environmental Justice: ARB identifies two types of environmental justice impacts: procedural and geographic. In terms of process, ARB outlines the number of meetings held in environmental justice communities throughout the state and the number of Environmental Justice Advisory Committee meetings held. ARB has made important efforts in outreaching around the Scoping Plan. However, substantively, it is unclear how such outreach has had a demonstrable effect on the recommended measures in the Scoping Plan. When asked at the November 2008 Environmental Justice Advisory Committee meeting to identify specific reductions for which the committee was responsible, staff was hard-pressed to do so. Several environmental justice organizations throughout the state signed on to a Declaration against Cap and Trade which ARB recommends as a central component to the Scoping Plan. Instead of addressing this opposition, the Scoping Plan skirts over it and mischaracterizes the extent of such opposition in the Scoping Plan (p. 19) and in the FED (Appendix J p. 25). Environmental Justice is not merely about having the opportunity to comment. It is truly about having those comments make a substantive impact on the final decision. In terms of geographical environmental justice impacts, ARB claims that the Scoping Plan itself does not reveal geographic inequities. This is largely because ARB defers all analysis of possible impacts to subsequent rulemaking and permitting processes. ARB could undertake such an analysis even at a program level based on currently existing information. In the FED, ARB provided a map with all the existing biofuel production facilities in the state. Appendix J pp. 31-32. Based on that information, ARB could obtain demographic information about the areas surrounding those production facilities.

ARB could also collect data about the impacts from those facilities from their site specific environmental review processes to create a general analysis on potential environmental justice impacts of the Low Carbon Fuel Standard based on the siting criteria ARB discussed in the FED. A similar analysis could be performed for other sectors such as power plants, refineries, distribution centers and ports. Instead ARB merely states that the Scoping Plans measures such as Energy Efficiency, Low Carbon Fuel Standard, Goods Movement, Industrial Measures and Cap and Trade may have a positive or negative on environmental justice. Appendix J p. 70. This is insultingly uninformative. A proper analysis is particularly important in understanding potential impacts from the Cap and Trade program. ARB is embarking on several important overarching policy choices yet is deferring all analysis of those choices to subsequent rulemaking and permitting process where it will be impossible to review the overall impact of the states approach to global warming. This failure to provide adequate information about the impacts of the Scoping Plan's policy choices is a violation of CEQA.

<u>Response</u>: As in many previous comments, the commenter believes that the FED should have provided a more detailed analysis and should not defer project-level environmental analyses to local agencies. These issues are addressed in the responses to Comment 38 (CPRE)) and Comments 16-18

(CPRE). Regarding the potential for environmental justice impacts, we agree that additional and improved data needs to and will be collected as part of the rulemaking process. ARB will be examining methodologies for evaluating the potential for direct, indirect, and cumulative impacts associated with the capand-trade program and other measures identified in the Scoping Plan.

Comment 50 (CRPE): **Public Health:** The FED cites the public health analysis in Appendix H of the Scoping Plan. As discussed at the California Air Resources Board's hearing on November 20, 2008 the public health analysis is uninformative. ARB assumes that the plan will have an overall cumulatively beneficial impact on public health. Appendix J p. 72. However, ARB provides no support for this statement at a statewide, regional or local level apart from an incomplete analysis of the South Coast Air Basin and Wilmington. ARB's analysis fails to provide the public or decision makers with information necessary to understand the public health consequences of the regulatory framework ARB is recommending. **GB-1 Green Building:** ARB encourages design elements for green buildings to improve indoor air quality. ARB should require such design elements be implemented. Appendix J p. 72. See Part II.A.1.

<u>Response:</u> As mentioned by the commenter, Appendix H contains an analysis of the public health benefits expected from implementation of the Scoping Plan. Appendix H is incorporated by reference in the FED. It correctly concludes that implementation of the Scoping Plan will result in an overall benefit to public health, for the reasons discussed in the response to Comments 2 and 3 submitted by Dr. Amy Kyle (Kyle).

<u>Comment 51 (CRPE):</u> **Alternatives:** ARB discussed five general Alternatives to the Proposed Scoping Plan. **No Project:** This Alternative comprises the bulk of the Alternatives analysis. This section generally describes sector by sector the business as usual impacts compared to the proposed scoping plan. This is the only alternative for which ARB provides such a detailed discussion. Appendix J p. 75-84.

Alternative 2, Adopting a Variation of the Proposed Strategies or Mitigation Measures: ARB states that there are endless variations of measures or subsets of measures that could be adopted as part of Alternative 2. So many so that it would be speculative to analyze because information learned through future rule development could lead to further changes. Appendix J p.85. This discussion is meaningless. It defers any analysis to subsequent rulemaking when it is too late to examine the program level decisions the Board is being asked to make regarding the Scoping Plan. It also subverts the entire purpose of preparing a tiered program level FED.

<u>Response</u>: The response to Comment 23 (CRPE) explains why ARB believes the FED's analysis of alternatives meets the requirements of CEQA.

Regarding Alternative 2, it is incorrect to assume that ARB has reached a final decision on what measures will ultimately be adopted to implement AB

32, and that it is "too late" to examine the choice of measures identified in the Scoping Plan. To the contrary, the discussion of Alternative 2 states that the exact mix of measures is likely to change and, based on information learned in the future during the process of implementing AB 32: "What is actually implemented will be a variation of the specific list of recommended measures." The measures recommended in the Scoping Plan represent ARB's best choice based on the information known at the time the Plan was developed. This is appropriate in a programmatic analysis. It is not too late to change course in the future if warranted by new information.

<u>Comment 52 (CRPE)</u>: Alternative 3, Adopt a Program Based Primarily on Cap and Trade for Sectors Included in the Cap: This alternative seems to be a California only cap and trade program where emission reductions are left to the marketplace. Appendix J p. 86. ARB states that under such a program it would be impossible to know in what sectors or where reductions would occur so ARB dispenses with any analysis of what the possible impacts could be under this alternative.

Response: Regarding Alternative 3, the FED accurately states that ARB cannot predict in which sectors or geographic locations GHG emissions reductions will occur. This is also true of all the other identified alternatives for the reasons stated in the response to Comment 9 submitted by the Sierra Club, Comments 2 and 3 submitted by Dr. Amy Kyle (Kyle), and the comment submitted by the Environmental Defense Council (EDC).

Comment 53 (CRPE): Alternative 4, Adopt a Program Based Primarily on Source-Specific Regulatory Requirements with no Cap and Trade Component. Here, ARB states that it cannot predict what future regulatory process will reveal. Appendix J p. 86. However, this is disingenuous. There were numerous measures considered and then discarded by the Draft Scoping Plan and Proposed Scoping Plan such as regulating methane capture at large dairies. Appendix J p. 45. ARB could analyze the impact of including these known measures in this Alternative without speculation. See Part II.A.1&3.

<u>Response:</u> This comment is addressed in the response to the previous comment (Comment 52 (CRPE). The issues regarding methane capture at large dairies are addressed in the response to Comment 37 (CRPE).

<u>Comment 54 (CRPE):</u> Alternative 5, Adopt a Program Based Primarily on a Carbon Fee. ARB expects similar reductions from this alternative compared to the Proposed Scoping Plan. According to the ARB, it would be similarly difficult to predict where reductions will occur both in terms of sector and geography. Appendix J p. 87. Further, ARB reasons that with a carbon fee there is no certainty that emissions will be reduced unlike a cap and trade program where the cap provides certainty. Appendix J p. 87. This analysis is disingenuous and

misrepresents both the effectiveness of a carbon fee and the historical inefficacy of cap and trade programs in controlling or reducing greenhouse gas emissions. First, ARB ignores the fact that a carbon fee assures in state reductions as oppose to a regional cap and trade program that ARB admits has an uncertain effect on greenhouse gas emission in state. Appendix J p. 26. Second, in Europe cap and trade has resulted in an increase in greenhouse gas emissions despite inclusion of a cap. This is largely due to the problems with enforcement and verification of actual reductions. Third, there is nothing that would prevent ARB from including a cap as part of carbon fee program. Fourth, ARB ignores the fact that carbon fees are easy to administer, collect, verify and enforce which experience has shown has a greater assurance of certainty of reduction then a nebulous cap and trade program over multiple jurisdictions.

<u>Response:</u> The issues raised in this comment are addressed in the responses to Comments 1-10 submitted by the Sierra Club and Comments 2 and 3 submitted by Dr. Amy Kyle (Kyle).

Comment 55 (CRPE): Preferred Alternative: ARB states that the Proposed Scoping Plan which consists of a cap and trade program and complementary measures is the preferred alternative. Appendix J p. 89. ARB recommends the proposed Scoping Plan because the reduction measures were developed to reduce greenhouse gas emissions from key sources while "improving public health, promoting a cleaner environment, preserving our natural resources and ensuring impacts of the reductions are equitable and do not is proportionately impact low income communities and minority communities." Appendix J p. 89. However, ARB's analysis does not support this conclusory statement. ARB defers its analysis to subsequent rulemaking and permitting processes. ARB has no support for this self-aggrandizing statement. See Part II.A.1&2. Further, ARB's numerous assumptions about the success of its proposed cap and trade program linked to the Western Climate Initiative have not been bourne out by historical experience. Europe's cap and trade program has been a failure at reducing greenhouse gas emissions and has had the opposite. ARB's belief that it will design a better program in the future is not in evidence at this time and is sheer speculation. ARB's alternatives analysis does not comply with CEQA.

Response: ARB's Preferred Alternative—achieving GHG emission reductions through a cap-and-trade program in conjunction with complementary measures-is both realistic and achievable. The complementary measures described in the Scoping Plan are based on actions that are well within the ability of State and local agencies to implement and enforce. ARB's best professional judgment, borne out by decades of air pollution control accomplishments, is that the reductions identified in the Preferred Alternative are achievable if the market is carefully designed. The specific concerns raised by the commenter have previously been addressed in the responses to Comments 1-10 submitted by the Sierra Club, Comments 2 and 3 submitted

by Dr. Amy Kyle (Kyle), and the comment submitted by the Environmental Defense Council (EDC).

We take seriously and share the commenter's concern about what are serious health problems in many areas of California. It is with that equal concern about the environment and public health that ARB has proposed a cap-and-trade approach with complementary measures. We believe this approach is the best solution for meeting our carbon reduction goals, advancing our economy using 21<sup>st</sup> century technologies, and reducing emissions, exposure, and risk as expeditiously as possible.

<u>Comment 56 (CRPE):</u> Agriculture represents a significant fraction of the state's GHG inventory. I want to comment specifically on the CEQA document's failure to analyze this exemption. What consequences does exempting agriculture have on public health and the environment, specifically to San Joaquin Valley communities? Likewise, there's no alternative analysis of including agriculture as part of the plan and what those benefits would be to public health and the environment and what impacts would have from including agriculture.

Response: The agricultural sector has not been "exempted." The commenter seems to be referring to the fact that all agricultural measures identified in the Scoping Plan are currently voluntary measures. As discussed on page 66 and 67 of the Scoping Plan, ARB is undertaking research to determine the opportunities for emission reductions that exist in the agricultural sector. Among other topics, this research will seek to ascertain the potential GHG reductions from nitrogen fertilizer use efficiency and other efficiency improvements, such as water use efficiency and conservation, pump efficiency improvements, and maintenance of tire pressure to reduce fuel use by farm equipment.

The bottom line is that sufficient information is not currently available to propose mandatory measures in this sector. Mandatory measures for the agricultural sector may be imposed in the future based on the results of further research. The commenter also criticizes the FED because it does not examine the consequences of "exempting agriculture ... on public health and the environment, specifically to San Joaquin Valley communities." As mentioned above, ARB is not "exempting agriculture." In addition, the analysis requested by the commenter is not necessary or required by CEQA because the current environmental impacts from agriculture are part of the existing conditions. However, the impact of GHG emissions from the agricultural sector is discussed on page J-84 of the FED as part of the discussion of the "No Project" alternative.

Finally, the commenter criticizes the FED because "... there's no alternative analysis of including agriculture as part of the plan and what those benefits would be to public health and the environment and what impacts would have

from including agriculture." As mentioned previously, the agricultural sector has been included as part of the Scoping Plan, although all measures are voluntary at this time. Discussing mandatory agricultural measures as a separate alternative is not appropriate because it would be speculative; ARB must conduct additional research before it can determine what mandatory agricultural measures are feasible and cost-effective.

## Comment Submitted by Robert Meacher, Plumas County (Plumas County)

<u>Comment (Plumas County):</u> The commenter is concerned how the preferred alternative addresses environmental and environmental justice issues in rural California. Early investments into sustainable forest and farmlands for their carbon sequestration and clean water co-benefits are essential for local governments and rural California to actually share in the benefits of a low carbon economy and sustainable communities.

The preferred alternative "still needs to comply with CEQA and with specific language in the authorizing legislation for AB 32 regarding distributional aspects to localities.

Plumas proposes that one functional link between localized impacts and the statewide and regional GHG reduction program is local and regional climate adaptation. Localized climate adaptation is one way to mitigate for distributional impacts associated with the larger scale AB 32 program. The preferred alternative and the CEQA FED for the final Scoping Plan should include recommendations for the implementation of early climate adaptation strategies that mitigate for disproportionate localized effects of the regional AB 32 program – especially for disadvantaged communities.

The preferred alternative as it is currently proposed has the effect of promoting regional GHG reduction technology development and regional offset technology trading between capped sectors at the expense of California's environment and disadvantaged rural communities. Including climate adaptation strategies for addressing localized impacts is therefore an essential program element for mitigating a kind of leakage that has thus far received little attention in the Plan. Now that the preferred alternative includes a market-based cap and trade and offsets program, the preferred alternative must now address the reality that the market investments into the environment or into farm and forests landscapes will always be less certain and therefore less attractive than investments in technology based GHG reduction solutions. Without a Climate Adaptation Strategy for addressing localized impacts as part of the final preferred alternative, the AB 32 program will have failed to even attempt to achieve its distributional equity goal."

<u>Response:</u> The commenter advocates the inclusion of climate adaptation strategies in the Scoping Plan. The Scoping Plan's objective is to reduce

greenhouse gas emissions. Adaptation strategies are not part of the project, and were not considered as an alternative because they would not reduce GHG emissions. The FED indicates that if the No Project Alternative were selected, implementation of costly adaptation measures would be necessary.

The commenter also expresses concern that ARB's Preferred Alternative does not adequately address environmental justice impacts. The issues raised by the commenter are discussed in the responses to Comment 55 submitted by the Center on Race, Poverty, and the Environment (CRPE), Comments 1-10 submitted by the Sierra Club, Comments 2 and 3 submitted by Dr. Amy Kyle (Kyle), and the comment submitted by the Environmental Defense Council (EDC).

## **Comment Submitted by Darren Stroud, Valero Energy Corporation (Valero)**

<u>Comment (Valero)</u>: As the AB 32 Scoping Plan rulemaking process moves forward, Valero believes that CARB must undertake a multimedia evaluation as part of its rulemaking and CEQA obligations for the entire Final Scoping Plan in order to access the totality of the potential environmental ramifications both positive and negative associated with the AB 32 scoping Plan. Valero believes that it is legally impermissible for CARB to defer the multimedia and appropriate CEQA analyses and view impacts in isolation as it undertakes specific elements of the Final AB 32 Scoping Plan.

Response: This comment contains several misconceptions. First, the Scoping Plan is not a "rulemaking" because it does not meet the definition of a "regulation" under the California Administrative Procedure Act. Second, the FED does contain a "multimedia evaluation" in the sense that it examines the potential environmental impacts of the Scoping Plan on air, water, and other media. The commenter may be referring to section 43830.8 of the Health and Safety Code, which requires a "multimedia evaluation" before ARB may adopt any regulation that establishes a specification for motor vehicle fuel. This section does not apply to the Scoping Plan because it is not a regulation. Third, the commenter may be contending that a multimedia evaluation must be conducted under section 43830.8 before the Low Carbon Fuel Standard is adopted as a regulation by ARB. We believe the Low Carbon Fuel Standard is not subject to section 43830.8 because, as envisioned in the Scoping Plan, it would not establish a "specification for motor vehicle fuel" within the meaning of this section.