Response to Comments on the Functional Equivalent Document Prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms

October 10, 2011

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I. INTRODUCTION

To meet the requirements of the California Environmental Quality Act (CEQA) under ARB's Certified Regulatory Program, the California Air Resources Board (ARB) staff prepared and circulated for public review a Functional Equivalent Document (FED or environmental analysis) for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Regulation or Regulation). The FED was included as Appendix O to the Initial Statement of Reasons (Staff Report) prepared for the Regulation, and was circulated for public review and comment from October 28, 2010 to December 16, 2010. Two Notices of Public Availability of Modified Text and Availability of Additional Documents (15-Day Changes) were subsequently issued. The two sets of 15-Day Changes modified regulatory text to provide clarity and were largely administrative. Some of the regulatory modifications would result in the Regulation being more environmentally protective (offset provision and forest protocol). The modifications do not cause new or additional compliance responses by covered entities and do not affect the environmental impact analysis in the FED. Therefore, no revision to the FED analysis or recirculation of the FED is required. The ISOR entitled *Initial Statement of Reasons: Proposed Regulation to Implement the California Cap-and-Trade Program* and other rulemaking documents are available at ARB's rulemaking webpage at http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm.

This document presents ARB's written responses to comments on the FED that raise significant environmental issues and were received during the initial 45-day comment period, at the December 16, 2010 Board hearing, and during the comment periods for the two 15-Day Change Notices. In accordance with ARB's Certified Regulatory Program, the Board will consider the Response to FED Comments for approval prior to taking final action on the proposed Regulation.

Staff will also prepare written responses to *all* public comments received, not just FED comments, for purposes of the Administrative Procedures Act. The complete written responses to all comments will be included in the Final Statement of Reasons (FSOR) prepared for the rulemaking. Upon its completion, the FSOR will be made available in electronic form on the ARB rulemaking webpage at http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm.

Requirements for Responses to Comments

Responses to public comments are prepared in compliance with ARB's certified regulatory program, which states:

> *Public Resources Code (PRC) section 60007. Response to Environmental Assessment*
>
> *(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.

In CEQA, PRC section 21091 also provides direction regarding the consideration and response to public comments. While the provisions refer to environmental impact reports, proposed negative declarations, and mitigated negative declarations, rather than a FED, this section of CEQA contains useful information for preparation of a thorough and meaningful response to comments. PRC section 21091(d) states:

(1) The lead agency shall consider comments it receives … if those comments are received within the public review period.

(2) (A) With respect to the consideration of comments received …, the lead agency shall evaluate comments on environmental issues that are received from persons who have reviewed the draft and shall prepare a written response pursuant to subparagraph (B). The lead agency may also respond to comments that are received after the close of the public review period.

(B) The written response shall describe the disposition of each significant environmental issue that is raised by commenters. The responses shall be prepared consistent with section 15088 of Title 14 of the California Code of Regulations, as those regulations existed on June 1, 1993.

Title 14 CCR section 15088 of the State CEQA Guidelines contains useful information and guidance for preparation of a thorough and meaningful response to comments. It states, in relevant part, that specific comments and suggestions about the environmental analysis that are at variance from the lead agency's position must be addressed in detail with reasons why specific comments and suggestions were not accepted. Responses must reflect a good faith, reasoned analysis of the comments. Title 14 CCR section 15088 (a – c) states:

(a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.

(b) The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.

(c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in

response. Conclusory statements unsupported by factual information will not suffice.

Comments Requiring Substantive Responses

Substantive responses are limited to comments that "raise significant environmental issues associated with the proposed action," as required by PRC section 60007(a). Therefore, responses specific to comments made on the Cap-and-Trade Regulation's environmental analysis are provided, consistent with the provisions of PRC section 60007. As explained above, other substantive comments are responded to in writing in the FSOR. Where a comment raises both an issue related to and issues not related to the FED, the FED-related comments are responded to in this document and the reader is referred to the non-FED responses in the FSOR.

Commenters

ARB received 19 comment letters that included comments on the FED, including comments from three public agencies. The list below identifies the commenters that submitted FED-related comments, and includes commenter information. The commenters are depicted identically to "Section III. A. List of Commenters" in the FSOR and the comment number corresponds with the comment number in the FSOR.

Commenter ID	Commenter Information
BLUESOURCE	Roger Williams Affiliation: Blue Source Written Testimony: 12/13/2010 45-Day Comment #: 660
CBD1	Brian Nowicki and Kevin Bundy Affiliation: Center for Biological Diversity Written Testimony: 12/15/2010 45-Day Comment # 746
CBD4	Nick Lapis, Californians Against Waste; Paul Mason, Pacific Forest Trust; Peter Miller, Natural Resources Defense Council; Brian Nowicki, Center for Biological Diversity; Timothy O'Connor, Environmental Defense Fund; Michelle Passero, The Nature Conservancy Written Testimony: 8/11/2011 First 15-Day Changes Comment #: 1120
CBD5	Brian Nowicki and Kevin Bundy Affiliation: Center for Biological Diversity Written Testimony: 9/27/2011 Second 15-Day Comment # 2093

Commenter ID	Commenter Information
CBE1	Adrienne Bloch Affiliation: Communities for a Better Environment Written Testimony: 12/14/2010 45-Day Comment #: 762
CIPA	Norman Plotkin Affiliation: California Independent Petroleum Association Written Testimony: 8/11/2011 First 15-Day Changes Comment #: 1134
CRPE1	Sofia Parino, Center on Race, Poverty and the Environment; Tom Frantz, Association of Irritated Residents; Penny Newman, The Center for Community Action and Environmental Justice; Teresa DeAnda, El Comite para el Bienestar de Earlimart; Martha Guzman Aceves, California Rural Legal Assistance Foundation; Anna Yun Lee, Communities for a Better Environment; Jane Williams, California Communities Against Toxics; Nicole Capretz, Environmental Health Coalition Written Testimony: 12/14/2010 45-Day Comment #: 693
CRPE4	Sofia Parino, Center on Race, Poverty & the Environment; Maria Covarrubias, Comité ROSAS; Domitila Lemus, Comité Unido de Plainview; Maria Buenrostro, Comité Luchando por Frutas y Aire Limpio; Penny Newman, the Center for Community Action and Environmental Justice; Linda Mackay, TriCounty Watchdogs; Jesse Marquez, Coalition for a Safe Environment; Angela Meszros; Strela Cervas, California Environmental Justice Alliance; Tom Frantz, Association of Irritated Residents; Salvador Partida, Committee for a Better Arvin; Ruth Martinez, Comité Si Se Puede; Ana Ceballor, La Voz de Toniville; Teresa DeAnda, El Comité Para El Bienestar de Earlimart; Gary Lasky, Sierra Club Tehipite Chapter; Shabaka Heru, Society for Positive Action; Caroline Farrell Written Testimony: 8/11/2011 First 15-Day Comment #: 1110
DWR	Veronica Hicks Affiliation: California Department of Water Resources Written Testimony: 12/15/2010 45-Day Comment #: 728

Commenter ID	Commenter Information
DWR2	Veronica Hicks Affiliation: Department of Water Resources Written Testimony: 8/11/2011 First 15-Day Changes Comment #: 1107
DWR3	Veronica Hicks Affiliation: Department of Water Resources Written Testimony: 9/27/2011 Second 15-Day Changes Comment #: 2064
FRIENDSOFEARTH2	Kate Horner, Friends of the Earth US; Rolf Skar, Greenpeace; Victor Menotti, International Forum on Globalization; Bill Barclay, Rainforest Action Network Written Testimony: 8/11/2011 First 15-Day Changes Comment #: 1175
HDDP2	Bradley K. Heisey Affiliation: High Desert Power Project Written Testimony: 12/14/2010 45-Day Comment #: 617
NCPA3	Susie Berlin Affiliation: McCarthy & Berlin, P.C. for Northern California Power Agency Written Testimony: 8/11/2011 First 15-Day Changes Comment #: 1176
NRDC4	Alex Jackson Affiliation: Natural Resources Defense Council Written Testimony: 12/16/2010 45-Day Comment #: 958
SACREB	Karen Klinger Affiliation: Sacramento Real Estate Broker Written Testimony: 12/16/10 First 15-Day Changes Comment #: 983
PCAPCD2	Name: Thomas Christofk Affiliation: Placer County Air Pollution Control District Written Testimony: 8/11/2011 First 15-Day Changes Comment #: 1051

Commenter ID	Commenter Information
USFLAW	Alice Kaswan Affiliation: University of San Francisco School of Law Written Testimony: 12/10/2010 45-Day Comment #: 486
VALERO2	Matthew H. Hodges for Patrick Covert Affiliation: Valero Companies Written Testimony: 8/11/2011 First 15-Day Changes Comment #: 1062

Location of Comment Letters on the ARB Website

All comment letters and attachments received on the proposed Cap-and-Trade Regulation are posted on the ARB website at the following link: http://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=capandtrade10

To manually locate the comments on the ARB website:

- Go to www.arb.ca.gov
- Select “Climate Change Program” in the left column
- Under “Assembly Bill 32 Implementation and Other Activities”, Select “Cap-and-Trade Program” on the activities tab
- Select “View All Public Comments” in the right column.

On the website, the comments are ordered by date received grouped by review period, i.e. 45-Day, first 15-Day changes (15-1), or second 15-Day changes (15-2).

II. COMMENTS AND RESPONSES

This section summarizes comments on the Draft FED and presents ARB's responses to those comments. The comments identified in this CEQA document are a subset of all comments received on the proposed Cap-and-Trade Regulation. Comments that do not pertain to the adequacy of the environmental analysis are addressed in the Final Statement of Reasons (FSOR) prepared as part of the rulemaking process.

In this Response to Comments document, individual comments are presented under the correspondence within which they were received, ordered alphabetically by COMMENT ID and identified as follows:

COMMENT ID: *This is the abbreviation used to identify the comment correspondence in which the individual comments are contained.*

Name:	*Person(s) submitting the comment*
Affiliation:	*Affiliation of the commenter(s)*
Written Testimony: M/D/Y	*Type of comment and date received*
45-Day Comment #: 123	C*omment period and unique comment number. The unique ID number corresponds to numbering in the FSOR.*

Comment: *Comments received under the COMMENT ID are presented individually as shown in this example, beginning with* ***Comment*** *on the first line.*

> **Response:** *Responses are presented following each comment. Responses are indented from the left margin.*

Comment: *All of the individual comments received under the COMMENT ID are presented as demonstrated in this example. This comment would be followed by subsequent comments from this commenter.*

> **Response:** *Responses are presented following each comment. Responses are indented from the left margin.*

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BLUESOURCE

Name: Roger Williams
Affiliation: Blue Source
Written Testimony: 12/13/2010
45-Day Comment #: 660

Comment: The Forest Carbon Developers support ARB's draft market rules and the forest project protocol in general. However, we view the proposed rules as improperly restrictive in ways that make them arbitrary or unnecessarily burdensome and expensive. In these instances, the proposed Regulation does not constitute a reasonable and rational choice, and therefore should be revised consistent with the comments below in order to be legally valid and consistent with the mandate of AB 32 under the California Administrative Procedure Act (APA) and/or the California Environmental Quality Act (CEQA). (BLUESOURCE)

> **Response:** This comment summarizes the commenter's more detailed comments provided later in the letter. See responses prepared to the applicable BLUESOURCE comments.

Comment: As a matter of environmental policy and review, ARB has failed to consider that disqualifying early-mover projects will likely result in the abandonment of those projects, thus not only increasing greenhouse gas emissions but also losing the other societal benefits provided by forest conservation projects, such as habitat and watershed protection. Although ARB recognizes its duty under AB 32 to consider overall societal benefits, including reductions in other air pollutants and other benefits to the economy, environment and public health, the Agency has failed to justify why its arbitrary date restriction is defensible in light of AB 32's mandate or why an earlier start date is not an acceptable alternative.

APA requires ARB to prepare a description of reasonable alternatives to the proposed Regulation and the agency's reasons for rejecting those alternatives, and to determine in its final statement of reasons that no alternative considered by the agency would be more effective in carrying out the purpose for which the Regulation is proposed or would be as effective and less burdensome to affected private persons than the adopted regulation. Similarly, Health & Safety Code section 57005 requires ARB to evaluate the alternatives and consider whether there is a less costly alternative or combination of alternatives which would be equally as effective in achieving increments of environmental protection in a manner that ensures full compliance with statutory mandates within the same amount of time as the proposed regulatory requirements. APA also requires consideration of alternatives for reducing impact on small businesses, such as the Forest Carbon Developers. Although quantification protocols are exempt from APA pursuant to AB 32, HSC section 38571, the issues raised herein are related to non-quantification eligibility criteria, which are subject to APA strictures. ARB also failed to consider these alternatives in its CEQA functional equivalent document. (BLUESOURCE)

Response: The commenter suggests that disqualifying early-mover projects will likely result in the abandonment of those projects, thus not only increasing GHG emissions but also losing the other societal benefits provided by forest conservation projects, such as habitat and watershed protection.

We disagree that the proposed Regulation would result in the abandonment of early-mover projects. The Regulation includes a process for accepting offset credits from qualified existing offset projects into the ARB compliance offsets program. This not only recognizes and rewards these actions, it also helps create an initial supply of offset credits for the cap-and-trade program. We do not agree with accepting offsets from projects before 2005 because beginning in 2005, the Climate Action Reserve (CAR) and its predecessor, the California Climate Action Registry, began adopting voluntary GHG accounting protocols to encourage voluntary early action to reduce GHG emissions. To ensure the GHG reductions and GHG removal enhancements being used in the compliance program are real and additional, we chose to implement the January 1, 2005, date to correspond with the adoption of voluntary offset protocols as the eligible date for transition of early action offset credits to ARB offset credits.

That said, early action offset projects that began prior to January 1, 2005 are still allowed to come into the compliance program and receive early action offset credits for reductions that they achieve between January 1, 2005 and December 31, 2014. To clarify this point we added a new section, 95973(c), that allows a commencement date prior to December 31, 2006 for early action offset projects that transition to Compliance Offset Protocols pursuant to section 95990(k). Any reductions achieved before 2005 may still be traded and sold in the voluntary market but will not be recognized by ARB or allowed to be used for compliance.

In response to the commenter's second point, for projects developed under CAR protocols, we believe that January 1, 2005, is the appropriate date to credit the early voluntary GHG reductions and GHG removal enhancements because it reflects the timeframe in which the voluntary protocols were approved by CAR. If ARB decides to accept early action offset credits achieved under other protocols not developed by CAR, ARB will evaluate whether another date is appropriate for those credits and amend the Regulation if necessary.

In response to the commenter's third point, we added new section 95990(k) to clarify how early action offset projects transition to Compliance Offset Protocols. New section 95990(k)(2) clarifies that once an early action offset project transitions to a Compliance Offset Protocol it will begin an initial crediting period. The crediting period under the early action offset program does not count under the compliance offset program, so the early action offset project may transition any time before February 28, 2015, but must list or register with an Early Action Offset Program by January 1, 2014, (section 95990(c)(3)) to get early action offset credits. This provides a seamless transition process for early action offset

projects and guarantees them a new crediting period. It is necessary for offset projects beginning February 28, 2015, to transition to Compliance Offset Protocols to ensure consistency in the program. It is also necessary that all offset projects are following the rules of the Regulation, including the rules in the Compliance Offset Protocols. We believe that this process will incentivize early action offset projects to transition to Compliance Offset Protocols, and that it will not penalize them.

Based on the preceding explanation, the Regulation would not result in the abandonment of early-mover projects, and as such would not increase GHG emissions that could occur as a result of such abandonment.

The commenter asserts that ARB failed to consider the alternatives required by the APA and HSC in its CEQA functional equivalent document. ARB examined a reasonable range of alternatives, as required under CEQA. The commenter is referred to the description of CEQA alternatives provided as a response to CRPE1. Non-CEQA aspects of this comment are addressed in the FSOR prepared in accordance with APA requirements.

Comment: ARB's requirement that forest owners commit to restricting land-use for 100 years following the issuance of the last offset credit has not been justified by ARB either as a matter of policy or science. In our experience, this arbitrary requirement has become in practice a major obstacle to implementing forest projects, since few landowners are willing to commit land to a certain use for such an extended period for uncertain economic returns. Thus, ARB's policy is deterring beneficial projects and reducing potential environmental and social benefits. Other forest protocols, such as those developed by ACR and VCS do not impose such an unjustified temporal restriction. ARB fails to adequately examine the scientific, policy and environmental bases for this extended requirement, and thus this requirement is contrary to the APA and CEQA. Rather than demanding that land use be restricted for 100 years, the landowner commitment should be commensurate with the length of the regulatory program, and any adjustment for early withdrawal from a commitment should be proportional to the remaining atmospheric benefit of sequestered carbon. We look forward to working with ARB to refine the rules in this respect. (BLUESOURCE)

Response: Ensuring permanence is essential to the environmental integrity of the entire cap-and-trade program. Because offsets allow for an equivalent quantity of GHG emissions within the capped sectors, the CO_2 stored in biological sinks resting from offset project activities must stay out of the atmosphere for a time period comparable to the emissions they are offsetting. If they do not, the net effect would be an increase in GHG emissions to the atmosphere. Scientific estimates of the atmospheric lifetime of anthropogenic CO_2 emissions are uncertain, as CO_2 is removed from the atmosphere by a number of processes that operate at different timescales. However, 100 years should be viewed as a minimum time period for maintaining permanence because a fraction of anthropogenic CO_2 is expected to remain in the

atmosphere well beyond 100 years as it is gradually removed through processes such as silicate weathering. The period of 100 years is frequently used in international climate change policy as a standard frame of reference for determining global warming potentials and setting GHG emission reduction targets, and consequently the use of 100 years to define the permanence of reductions is consistent with other programs.

This requirement was evaluated in the FED. No adverse environmental effects were identified as resulting from this requirement and none are offered by the commenter. Therefore, ARB believes the impact analysis appropriately considers this issue and no changes to the FED are warranted. Non-CEQA aspects of this comment are addressed in the FSOR prepared for the Regulation in accordance with APA requirements.

CBD1

Name: Brian Nowicki and Kevin Bundy
Affiliation: Center for Biological Diversity
Written Testimony: 12/15/2010
45-Day Comment # 746

Comment: The Functional Equivalent Document ("FED") containing ARB's analysis of the environmental impacts of the proposed Regulation also fails to disclose, analyze, and propose mitigation for significant environmental impacts, and fails to adequately discuss a range of reasonable alternatives that could avoid these impacts. (CBD1)

> **Response:** The commenter is referred to the discussion of alternatives provided as a response to CRPE1. ARB examined a reasonable range of alternatives, as required under CEQA. At the programmatic level, the fundamental purpose of the alternatives analysis is to determine if other broad program approaches, such as direct regulation or adoption of a carbon fee, might achieve the project objectives and lessen or avoid the potential adverse environmental impacts attributed to the proposed project.
>
> The Forest Offset Protocol is a part of the proposed Cap-and-Trade Regulation. The alternatives do not focus on a single sector (such as food processing) or a single action (such as facility relocation), because this would be too narrowly defined to achieve the AB 32 GHG reduction goal. Development of the proposed Regulation is an ongoing process which reflects changes and suggestions received through public and stakeholder participation. In response to this specific concern, the commenter is directed to the revised regulation which reflects substantial changes to the general offset sections of the Regulation and the Forest Offset Protocol, increasing the stringency of the offset requirements, which should reduce concerns about potential adverse environmental impacts. Nonetheless, the FED takes the conservative approach in its post-mitigation significance conclusion and discloses, for CEQA compliance purposes, that some of the impacts associated with forestry operations are considered potentially significant and may be unavoidable. The commenter is referred to the discussion of adaptive management provided as a response to CBE1.

Comment: The proposed regulation fails to maximize environmental co-benefits to the extent feasible. Prior to adopting a Cap and Trade system under AB 32, ARB must, "to the extent feasible," maximize additional environmental benefits to California where it is appropriate to do so. Health and Safety Code section 38570(b)(3). By using the term "feasible," the Legislature signaled its intent to require ARB to demonstrate that all appropriate measures must be taken to maximize environmental benefits, unless those measures are shown to be impracticable.

AB 32 does not define the term "feasible." However, that term has a specific meaning under other statutes, including the California Environmental Quality Act—a meaning of which the Legislature was presumptively aware when it enacted AB 32. "Feasible"

means “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.” Pub. Res. Code section 21061.1. In the CEQA context, when a lead agency rejects an alternative as economically infeasible, it must support that determination with quantitative, comparative evidence that the alternative would be economically impracticable (not just more expensive). See, e.g., Save Round Valley Alliance v. County of Inyo, 157 Cal. App. 4th 1437, 1461-62 (2007) (holding that applicant’s inability to achieve “the same economic objectives” under a proposed alternative does not render the alternative economically infeasible); Uphold Our Heritage v. Town of Woodside, 147 Cal. App. 4th 587, 600 (2007) (requiring evidence that comparative marginal costs would be so great that a reasonably prudent property owner would not proceed with the project); Preservation Action Council v. City of San Jose, 141 Cal. App. 4th 1336, 1356-57 (2006) (holding that evidence of economic infeasibility must consist of facts, independent analysis, and meaningful detail, not just the assertions of an interested party). Nor may a lead agency conclude that mitigation measures are legally infeasible without an adequate basis. As the Supreme Court put it, “[a]n EIR that incorrectly disclaims the power and duty to mitigate identified environmental effects based on erroneous legal assumptions is not sufficient as an informative document.” City of Marina v. Bd. of Trustees, 39 Cal. 4th 341, 356 (2006).

The Legislature’s use of the term “feasible” in connection with environmental co-benefits thus imposes a specific burden on ARB—a burden that the ISOR and FED fail to meet. For many months, the Center and other organizations have identified specific, appropriate measures to ARB staff (such as, for example, measures to ensure that forest offset projects improve forest management rather than perpetuate environmentally destructive practices) that could enhance, and thus help maximize, environmental co-benefits. Many of those measures are discussed again throughout this letter. At no point, however, has ARB demonstrated the infeasibility, or even the inappropriateness, of any of these measures. The Cap and Trade regulation as proposed thus fails to comply with AB 32. (CBD1)

> **Response:** The commenter states that ARB has not demonstrated that specific measures suggested by the commenter and other groups that could help maximize environmental co-benefits (such as measures to ensure that forest offset projects improve forest management) are infeasible as required by Health and Safety Code (HSC) section 38570(b)(3). The provision cited directs ARB to: “to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit…maximize additional environmental benefits.” (HSC 38570(b)(3).). AB 32 does not include a specific definition of “feasible” or criteria that should be used to determine what constitutes “to the extent feasible.” AB 32 leaves the specifics of how to do so, including balancing a variety of competing concerns, up to ARB. During development of the Cap-and-Trade Regulation, ARB considered all of its statutory mandates under AB 32, including the requirement to consider measures to maximize additional environmental benefits based on evidence, including economic analysis, where appropriate “to the extent feasible and in furtherance of achieving the statewide greenhouse gas

emissions limit." The appropriate analyses are included within the ISOR for the Regulation. ARB does not interpret AB 32 to require ARB to make a formal infeasibility determination regarding specific measures suggested by the commenter and other groups.

Development of the proposed Cap-and-Trade Regulation included extensive economic analysis and the involvement of an Economic and Allocation Advisory Committee. The updated economic analysis supporting the development of the Regulation was prepared by ARB and released on March 24, 2010 (ARB 2010). Economic reasons were not cited for potential infeasibility of avoiding impacts from implementing the proposed Forest Offset Protocol. On pages 311 to 314 of the FED, ARB explains that significant adverse biological impacts are not expected from implementing the Forest Offset Protocol, because sustainable, long-term harvesting practices and natural forest management would be required and project sites would be subject to some silvicultural activities with or without a Forest Offset Protocol project. Nonetheless, the FED discloses the risk that some adverse impacts cannot be entirely eliminated and unanticipated adverse biological impacts could occur. ARB cannot speculate as to the location of such impacts, but has committed to implementing an adaptive management approach as a program design feature that affords adjustment to the Regulation if any unanticipated significant biological impacts occur. These limits are well defined in authorizing legislation for ARB's responsibilities, which do not include regulation of biological or other non-air related natural resources. This conservative assessment of the situation (i.e., tending to overstate impacts) is intended to fulfill ARB's disclosure duties under CEQA.

Non-CEQA aspects of this comment, such as APA or AB 32 requirements, are addressed in the FSOR prepared for the Regulation in accordance with APA requirements.

Comment: The FED fails to comply with the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., and the CEQA Guidelines, title 14, California Administrative Code, section 15000 et seq. ARB's program for adopting air quality regulations is a "certified regulatory program" for CEQA purposes. (CEQA Guidelines section 15251(d)). Accordingly, the FED must include a description of the proposed Regulation, along with alternatives and mitigation measures to minimize any significant adverse effect. Pub. Res. Code section 21080.5(d)(3); Schoen v. Dept. of Forestry, 58 Cal. App. 4th 556, 566-67 (1997). Although ARB's regulatory program is exempt from certain requirements generally applicable to environmental impact reports under CEQA, see Sierra Club v. Bd. of Forestry, 7 Cal. 4th 1215, 1229-30 (1994), the core procedural and substantive provisions of CEQA still apply. In particular, ARB may not approve a regulation if there are feasible mitigation measures or alternatives available that would lessen or avoid its significant environmental effects. See Pub. Res. Code sections 21002, 21002.1(b), 21081.

As a general matter, the FED is quick to disclaim any responsibility for implementation of measures to mitigate the potentially significant economic impacts of the cap-and-trade program. The FED repeatedly states that other agencies will be responsible for implementing those measures at the project level, see, e.g., FED at 130, but fails to demonstrate in each instance that ARB lacks any legal authority to implement mitigation at the program level. If ARB can feasibly take steps to mitigate any specific effects of this action, it must do so; it may not shift this responsibility to other agencies as a general rule. Cf. City of Marina, 39 Cal. 4th at 366-67.

The FED also relies as a general matter on impermissibly deferred mitigation in the form of "adaptive management." The FED acknowledges that the cap-and-trade program may create perverse incentives and lead to potentially significant environmental impacts. Rather than proposing measures to ameliorate those impacts as CEQA requires, however, the FED states that ARB will monitor a few limited sources of information and develop "appropriate" responses if some unidentified level of impact materializes at some point in the future. See FED at 43-51, 311-14. "Formulation of mitigation measures should not be deferred until some future time." CEQA Guidelines section 15126.4(a)(1)(B). If mitigation is deferred, CEQA requires a lead agency both to develop specific performance standards and to commit to specific mitigation actions that will be taken if those standards are not met. Id.; see also, e.g., Gray v. County of Madera, 167 Cal. App. 4th 1099, 1118-19 (2008); Endangered Habitats League v. County of Orange, 131 Cal. App. 4th 777, 793-94 (2005) (agency "goes too far" when it requires only that project proponent obtain a "report" and then comply with recommendations in the report). The FED's promises of "adaptive management" fail to meet these standards. Under the FED's "adaptive management" strategy, moreover, ARB would take unspecified "appropriate" actions only if future, unanticipated environmental consequences "interfere with or undermine" the objectives of the cap-and-trade program. See FED at 46, 47, 313. Notably, the "adaptive management" strategy does not commit ARB to taking "appropriate" action in the event that significant, unanticipated environmental impacts occur. The purpose of mitigation under CEQA is to reduce or avoid significant environmental impacts, not to advance the objectives of other legislative programs. Accordingly, the "adaptive management" strategy cannot be considered mitigation under CEQA because it does not respond to the impacts that CEQA was designed to avoid.

Finally, the adaptive management strategy is not designed to gather the information that would enable ARB to detect, much less respond to, unanticipated environmental impacts. In the air quality context, for example, ARB proposes to monitor greenhouse gas emissions from covered sources. FED at 46-47. A major concern with the cap-and-trade program, however, is that emissions trading will result in increased local concentrations of conventional and toxic pollutants; information on greenhouse gas emissions alone may not reveal whether such increases are occurring. The FED also proposes to "solicit information" from local air districts concerning new and modified permits, and to evaluate this information at least once per compliance period (i.e., once every three years). FED at 47, 51. This information, however, will not contain data on pollution increases that fall below permitting thresholds. Nor will this information

capture pollution increases associated with increasing production to limits in existing permits. Nor will a triennial review disclose pollution increases in time to develop an "appropriate" response.

In sum, the FED's "adaptive management" strategy will not prevent significant environmental effects, and will not permit ARB to respond to unanticipated effects in a timely or effective manner. Absent specific performance standards, timely and rigorous monitoring of all relevant information, and particularized responses to triggering events, "adaptive management" remains little more than a smokescreen for inadequate analysis of environmental impacts. (CBD1)

Response: The commenter argues that ARB has the responsibility to require project-specific mitigation, and that the FED relies on deferred mitigation in the form of an adaptive management approach. Specifically, the commenter states that the adaptive management approach identified in the FED does not commit ARB to take appropriate action in the event significant impacts occur in the future.

The proposed cap-and-trade regulation would require GHG reductions on a statewide level, but would not stipulate specific improvements or compliance actions by individual regulated entities. As such, it is not possible to ascertain how individual entities may choose to comply. The environmental impact analysis prepared for the proposed Cap-and-Trade Regulation evaluates reasonably foreseeable compliance responses at the programmatic level, and does not speculate as to what actions may be undertaken by individual entities. The FED recognizes that most reasonably foreseeable compliance responses entail some level of onsite construction or installation activities that are traditionally subject to local regulations. ARB does not have the regulatory authority to require and/or permit facility-specific improvements. Local air pollution control districts and/or air quality management districts (air districts) have primary responsibility for adoption and implementation of stationary and area-wide source emission control measures. The FED accurately reflects that local governments, notably cities and counties, have land use and permitting authorities (CEQA lead agency authority, zoning ordinances and regulations, building codes, construction permits, etc.) that are applicable to facility-specific projects. Such projects may be undertaken as compliance responses and would be local improvements subject to project-level CEQA analysis and local permitting.

The FED identified ARB's commitment to an adaptive management approach to assess the effectiveness of the Regulation, and identify data trends that could indicate unanticipated or undesirable results, or a need for changes to ensure the Regulation is meeting its objectives. This monitoring and feedback approach is a fluid process that evolves in response to results observed over time. ARB staff is proposing that the Board adopt an adaptive management plan that lays out a framework for an adaptive management approach to monitor the potential for

adverse impacts that could result from action taken to comply with the proposed Regulation. The plan will focus on the potential for localized air quality impacts and the potential for adverse forestry impacts resulting from the Forest Protocol.

The proposed adaptive management approach has certain attributes of mitigation, in that it can result in the reduction or elimination of potential adverse impacts for the proposed Cap-and-Trade Regulation. However, adaptive management is being proposed to be incorporated as an integral design feature of implementation of the proposed program. As such, the adaptive management approach is not "deferred mitigation." Furthermore, in the context of mitigation in CEQA, the courts have upheld project approvals where the formulation of precise mitigation is infeasible because the exact nature of potential impacts is not known at the time of project approval. Mitigation strategies have been upheld when the agency commits itself to eventually devising measures in accordance with specific performance criteria articulated at the time of project approval. (See *Sacramento Old City Assn. v. City Council* (1991) 229 Cal. App. 3d 1011, 1028-29.) By analogy, staff's proposed adaptive management plan describes ARB's commitment to a specific process, including an analysis of available data, triggers for further analyses to determine whether there are localized air quality impacts or adverse forestry impacts, and if impacts are identified, the process for devising specific mitigation measures. By analogy to mitigation strategies in CEQA, the adaptive management plan lays out ARB's performance standard for identifying and addressing these potential adverse impacts identified in the FED. If the proposed Cap-and-Trade Regulation is approved, this plan would be implemented based on direction from the Board.

Comment: The Forest Offset Protocol proposed in the Cap-and-Trade Regulation is nearly identical to the Forest Project Protocol prepared by the Climate Action Reserve. For example, as previously discussed, the Forest Offset Protocol continues to allow and incentivize even-aged management practices such as clear-cutting that imperil forest health, water quality, and biodiversity; continues to provide incentives for conversion of native forests to plantations; continues to contain loopholes that incentivize increased short-term logging (and associated GHG emissions); and continues to offer credits for non-additional forest management activities in a manner that could increase overall GHG emissions. The impacts associated with these incentives and loopholes have been detailed in a series of letters from the Center to both the Climate Action Reserve and ARB over the past year. The FED largely fails to address the specific impacts identified in this series of letters. Accordingly, the arguments raised in those letters apply with equal force to the Forest Offset Protocol proposed in connection with the cap-and-trade program. These letters are therefore attached and incorporated by reference.

The FED attempts to dismiss concerns that the Forest Offset Protocol will incentivize clear-cutting and conversion of native forests on the theory that such practices will not significantly increase carbon storage. FED at 304-05. The conclusion is dubious, and contradicted by the record of protocol development; throughout the Climate Action

Reserve's protocol development process, timberland owners and other prospective forest project proponents repeatedly insisted that clearcutting and conversion of mature, uneven-aged forests were necessary to maximize carbon sequestration. This conclusion also is purportedly based on a study of "several California forest types." Id. at 304. However, the Forest Offset Protocol applies not just in California, but throughout the continental United States. Thus the FED is devoid of any analysis as to whether the Forest Offset Protocol will incentivize clearcutting and conversion of native forests outside California. Indeed, the FED acknowledges that out-of-state projects may not be subject to the level of environmental analysis that would accompany California or federal projects. Id. at 306. The FED's conclusions that the Forest Offset Protocol will not incentivize clearcutting and conversion lack support.

Despite these conclusions, the FED acknowledges that the Forest Offset Protocol may significantly affect biological resources. FED at 313-14. The FED proposes that ARB mitigate these effects by implementing "adaptive management." As previously discussed, "adaptive management," as proposed in the FED, does not constitute effective or legally permissible mitigation for these foreseeable impacts.

In any event, it is unlikely that the adaptive management program proposed in the FED would allow ARB even to detect, much less ameliorate, the adverse consequences of the Forest Offset Protocol. The FED proposes to collect information only from annual project verification reports and from "periodic" solicitation of public and stakeholder comments. FED at 313. This information, however, will not reveal whether project proponents changed management strategies, in response to the availability of offset credits, in a manner destructive of biological or forest resources. At the very least, a more credible adaptive management program would need to collect a great deal of additional information concerning historical harvest practices at the ownership and landscape scale, changed management practices following enrollment of projects under the Forest Offset Protocol, and continuous monitoring of ecological indicators (including species population trends and water quality) on project lands. The program also would have to establish specific benchmarks or performance standards for example, a certain amount of natural forest converted to plantations, or a certain amount of uneven-aged forest converted to clearcut rotations that would trigger specific ameliorative responses. Absent adequate information, specific performance thresholds, and particularized responses, the FED's "adaptive management" program cannot function as a mitigation measure for the Forest Offset Protocol. (CBD1)

> **Response:** The FED fully analyzed the potential for adverse impacts resulting from the Forest Protocol. The Forest Offset Protocol would not allow any forest management activity that is not allowed by state, federal, or local laws and regulations. The Forest Offset Protocol includes environmental safeguards to help assure the environmental integrity of forest projects. These include requirements for projects to demonstrate sustainable long-term harvesting practices, limits on the size and location of even-aged management practices, and requirements for natural forest management that require all projects to utilize

management practices that promote and maintain native forests comprised of multiple ages and mixed native species at multiple landscape scales.

In accordance with these requirements, the Forest Offset Protocol is not expected to increase the size of even-aged harvested areas or to result in plantation forests. Furthermore, modeling forest growth, mortality, and harvesting over time indicate that it would be unlikely for a forest project to remain eligible (i.e., demonstrate a continued net reduction in carbon sequestration), if conversion to a single-species, single-aged plantation occurred (FED, page 304).

The cap-and-trade program is made up of many elements, must serve a large number of important objectives, and relies on the actions of a large number of participants operating in a complex market system. Therefore, unanticipated effects could occur over the life of the program. The Forest Offset Protocol in particular has been identified as potentially resulting in unexpected environmental effects on forest ecosystems and biological resources (e.g., creating incentives for less environmentally conservative management practices). Based on the available data and current law and policies that regulate forest activities, ARB concludes that substantial impacts from forest project-related impacts attributable to the proposed cap-and-trade program are unlikely. However, there is at least a possibility that some unintended impacts could occur. Accordingly, the FED takes the conservative approach in its post-mitigation significance conclusion and discloses, for CEQA compliance purposes, that some of the impacts associated with compliance responses and forestry operations are considered potentially significant and may be unavoidable.

See response to CBD1 regarding staff's proposed adaptive management plan to assess the effectiveness of the Protocol and ARB's commitment to a specific process for identifying data trends that could indicate unanticipated adverse results, triggers for further analyses to determine if impacts are result of the Protocol design, and if impacts are identified, the process for devising specific mitigation measures, such as changes to the Protocol.

Comment: The FED fails to disclose, analyze, and propose mitigation for impacts related to the biomass and biofuels exemption. Adoption of a regulation is a "project" for CEQA purposes, and the courts have recognized that CEQA requires analysis of environmental impacts associated with a regulation that creates incentives for particular actions. See Cal. Unions for Reliable Energy v. Mojave Desert Air Qual. Mgmt. Dist., 178 Cal. App. 4th 1225, 1244-45 (2009). The FED here completely fails to disclose, analyze, or propose mitigation for the reasonably foreseeable and likely significant effects of exempting all biomass and biofuels emissions from compliance obligations.

This exemption creates a strong incentive to burn biomass fuels in at least two ways. First, emissions from biomass and biofuels combustion do not give rise to any

compliance obligation, and thus will not require purchase or retirement of allowances or offsets. This will encourage use of biogenic fuels wherever fuel-switching is cheaper than the purchase of allowances or offsets.

Second, the biomass and biofuels exemption leaves a number of facilities that already use these fuels outside the cap. Those facilities, however, could choose to "opt in" to the program for the purpose of obtaining allowances. See Proposed Reg. § 95813. Emissions from those facilities would be evaluated against an "efficiency benchmark" based on natural gas combustion. ISOR at II-31. According to the ISOR, "if a facility used a cleaner fuel source, like biomass, or combusts the fuel more efficiently, it would be rewarded with more allowances relative to its actual emissions." Id. (emphasis added). This not only assumes without any support that biomass combustion is "cleaner" than natural gas, but also creates a strong incentive for biomass-fueled facilities to "opt in" to the cap-and-trade program for the purpose of obtaining valuable allowances while at the same time escaping any compliance obligation. See Proposed Reg. §§ 95812(a), 95852.2. The proposed rules thus potentially create a double "freebie" for biomass combustion: an exemption from compliance obligations, coupled with a program for distributing free allowances for that same combustion that may be sold into the market and used to justify emissions at other facilities. This double "freebie" not only incentivizes biomass and biofuels use but also risks a form of allowance double-counting that could ultimately increase GHG emissions overall.

The FED fails to disclose, analyze, and propose mitigation for the foreseeable effects of these incentives. Indeed, the FED completely fails to discuss many of the foreseeable impacts of incentivizing "decarbonization" compliance pathways involving biomass and biofuels. The only oblique mention of such impacts is in the context of cement plants using old tires to fire kilns (a process by which the natural rubber portion of the tires could be "credited as biomass"). FED at 153. Other foreseeable compliance pathways involving biomass and biofuels combustion are simply not discussed. The FED similarly contains no analysis of the impacts of incentivizing these pathways on forest resources, biological resources, geology and soils, or water quality— even though creating an incentive for biomass usage will foreseeably increase biomass harvests. This is a glaring and unlawful omission.

Burning trash, tires, and wood in place of other fuels may increase local emissions of criteria and toxic pollutants. Large-scale replacement of other energy sources with biomass will also put increased pressure on forest ecosystems, with resultant impacts on biodiversity, water quality, and forest health. The potential for these impacts is well-documented; indeed, one recent study concludes that a wide-scale shift to woody biomass energy generation could eventually result in conversion of nearly all of the world's unmanaged forests and much of its pastureland to energy plantations. Significant impacts associated with increased biomass usage may already be anticipated to result from renewable energy standards and a plethora of state and federal subsidies for biomass development. In this context, an exemption from compliance obligations for biomass emissions under the cap-and-trade program at the

very least constitutes a considerable contribution to a cumulatively significant effect. The FED fails to consider this.

Finally, the FED fails to adequately address the effects of the biomass exemption on overall greenhouse gas emissions. The document concludes that switching to "less carbon- intensive" fuels will produce a "beneficial effect" in terms of greenhouse gas emissions. FED at 184. Yet the core assumption underlying this conclusion that biomass emissions are "carbon neutral" is both unstated and unsupportable. Accordingly, biomass and biofuels may not be "less carbon-intensive" than the fuels or energy sources they replace, especially over the time frame relevant to AB 32, and especially if the replaced sources come from other potentially more costly renewables like wind and solar. Absent a protocol for tracking the sources of biomass fuels, evaluating the carbon debts associated with particular fuel sources, and reaching a defensible conclusion as to the real carbon footprint of biomass, the FED cannot rationally conclude that the biomass exemption confers an environmental benefit. (CBD1)

> **Response:** The commenter states that the FED failed to analyze the impacts of and propose mitigation for the exemption of biomass and biofuels emissions from compliance obligations. ARB disagrees with the commenter. The Updated Economic Evaluation of California's Climate Change Scoping Plan, which includes a cap-and-trade program, used the ENERGY 2020 model to assess the potential changes in energy use, both type and volume, brought on by the proposed Cap-and-Trade Regulation. The model did not indicate that the use of biomass would increase in response to the proposed Cap-and-Trade Regulation, and accordingly such an increase was not identified as an impact in the FED. The explanation for why the proposed Regulation would not have an effect is that increased use of biomass is already incentivized by existing regulations such as the Renewables Portfolio Standards and the Low Carbon Fuel Standard. The Renewables Portfolio Standard (RPS) requires publicly owned utilities to obtain 33% of their energy from renewable resources, including biomass. Most utilities are challenged to achieve the renewable target despite the availability of biomass as a renewable fuel. Increased use of biomass for energy generation created by other state policies and initiatives, such as the Renewable Portfolio Standard, is discussed in the FED (see pages 351-352).

Comment: Under CEQA, the FED must consider a range of reasonable alternatives that would feasibly attain most of the objectives of the Cap-and-Trade Regulation while avoiding or substantially lessening its significant impacts, and must compare the relative merits of these alternatives. CEQA Guidelines § 15126.6(a). The FED fails to consider any alternative formulations of the Forest Offset Protocol that could meet these standards.

The Center and numerous other organizations have proposed alternative formulations to ARB throughout the past year. For example, ARB could have considered a version of the Forest Offset Protocol that eliminated clearcutting and other forms of even-aged

management. ARB also could have considered restricting the conversion of uneven-aged, native forests to fast-growing plantations, and could have considered the inclusion of additional carbon pools. Finally, ARB could have considered a version of the protocol that corrected additionality problems caused by the protocol's failure to incorporate long-term sustained yield plans into the project baseline. These alternatives, alone or in combination, would have advanced many of the core objectives of the cap-and-trade program. Had ARB considered these alternatives, it could have compared them, alone or in combination, to the proposed Forest Offset Protocol, and evaluated their feasibility.

The FED failed to do so. Instead, the FED purports to have rejected "Environmental Performance Standards" for all compliance protocols. FED at 370. According to the FED, such standards are infeasible because: (a) they are unnecessary, given the existence of strong environmental laws in California; (b) they would be difficult to apply outside of California due to differences in local law; (c) it would be impossible to create performance standards that work across a wide range of project locations and conditions; and (d) implementing standards would create an administrative burden affecting the functioning of the offset market.

The FED's rejection of Environmental Performance Standards is puzzling at best and disingenuous at worst given that similar environmental standards already have been incorporated into every protocol ARB has proposed for adoption. These standards, such as the natural forest management requirement for forest projects and the limitation on clearcut size, have been applied regardless of California or local law, regardless of differences in project locations and conditions, and regardless of administrative burden. ARB cannot rationally reject alternative formulations of these standards as "infeasible" when the factors supposedly rendering them infeasible are common to the proposed project as well.

In order to reject an alternative as infeasible, the FED must set forth adequate quantitative, comparative data to enable the public and decision-makers to reach a rational conclusion. See, e.g., Save Round Valley Alliance, 157 Cal. App. 4th at 1461-62; Uphold Our Heritage, 147 Cal. App. 4th at 600. The FED does not even identify the particular "Environmental Performance Standards" that it supposedly finds infeasible, much less present adequate data and analysis in support of its conclusions. Accordingly, the FED's approach is unlawful, and the document must be revised to include discussion of a range of reasonable alternatives to Forest Offset Protocol design—including the alternatives identified above and in prior communications with ARB—that could ameliorate environmental effects while furthering AB 32's objectives. (CBD1)

> **Response:** The commenter suggests that the FED did not include a reasonable range of alternatives and states that ARB did not evaluate any alternatives to the Forest Offset Protocol. ARB disagrees. ARB examined a reasonable range of alternatives as required by CEQA and ARB's Certified Regulatory Program (CRP). Refer to the response presented under CRPE1 regarding the reasonable

range of alternatives considered in the FED. As described on page 368-370 of the FED, ARB evaluated five (5) alternatives to the cap-and-trade program. At the programmatic level, the fundamental purpose of the alternatives analysis is to determine if other broad program approaches, such as direct regulation or adoption of a carbon fee, might achieve the project objectives and lessen or avoid the potential adverse environmental impacts attributed to the proposed project. The Forest Offset Protocol is a part of the proposed Cap-and-Trade Regulation. The alternatives do not focus on a single sector (such as food processing) or a single action (such as facility relocation), because this would be too narrowly defined to achieve the AB 32 GHG reduction goal. Development of the proposed Regulation is an ongoing process that reflects changes and suggestions received through public and stakeholder participation.

The commenter is referred to the 15-Day revisions to the Regulation that increase the stringency of the offset provisions and Forest Offset Protocol requirements. Examples of proposed revisions include:

- Offset Project Operators or Authorized Project Designees must submit to California's jurisdiction to resolve disputes regardless of the physical location of the offset project.
- Additional attestations are required when an offset project is listed.
- The Offset Project Operator or Authorized Project Designee must disclose any offset credits issued for the same project for any other purposes in any other program.
- An offset verification team must review listing information submitted by the Offset Project Operator or Authorized Project Designee.
- A verification body must submit verification reports to Offset Project Registries with the Offset Verification Statement.
- Revision to the Compliance Offset Protocol U.S. Forest Projects disallows the use of Qualified Positive Offset Verification Statements because, for forest projects, ARB must ensure all protocol requirements are met, including sustainable harvesting requirements.
- Provisions have been added to deter forest project owners from terminating their offset projects early given permanence requirements that require the sequestration of carbon for 100 years. The Offset Project Operator or Authorized Project Designee must replace any reversed tons calculated pursuant to Compliance Offset Protocol, U.S. Forest Projects to ARB within 90 calendar days. If the Offset Project Operator or Authorized Project Designee does not replace the ARB offsets within the 90 days and ARB offset credits are retired from the Forest Buffer Account, ARB will assess penalties.

With regard to consideration of Environmental Performance Standards, the commenter recommends their use for the Forest Offset Protocol and expresses concern regarding ARB's conclusion that they would be infeasible as applied to the Cap-and-Trade Regulation. The FED explains on page 370 why the use of

Environmental Performance Standards is not feasible. The reasons are both practical (i.e., inability to cover the spectrum of potential sites and circumstances for Forest Offset projects) and legal (i.e., the potential for California-defined environmental standards to be inconsistent with the laws and regulations of other jurisdictions). Further, in California, defining Environmental Performance Standards is not necessary because criteria are established by existing environmental protection laws and regulations.

It is reasonable to expect adequate protection of environmental resources that are outside of the regular purview of ARB by relying on other applicable environmental laws and regulations within California and in other jurisdictions. Protection of other types of natural resources is best pursued by the agencies with jurisdiction over those resources, such as the Department of Fish and Game for California's wildlife. To attempt to create a separate set of standards specially applied to one type of forest activity (i.e., a forest offset project) could involve conflicts and inconsistencies with established regulatory programs, unnecessarily complicating forest management and resource protection.

ARB recognizes the importance of avoiding significant effects when implementing regulatory actions. To this end, see response to CBD1 regarding adaptive management.

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CBD4

Name, Affiliation: Nick Lapis, Californians Against Waste; Paul Mason, Pacific Forest Trust; Peter Miller, Natural Resources Defense Council; Brian Nowicki, Center for Biological Diversity; Timothy O'Connor, Environmental Defense Fund; Michelle Passero, The Nature Conservancy
Written Testimony: 8/11/2011
First 15-Day Changes Comment #: 1120

Comment: We understand that ARB expects the mitigation of environmental impacts resulting from the Cap and Trade Regulation to consist primarily of an adaptive management program, which in turn will largely rely on the information collected pursuant to the Mandatory Reporting Rule. As we stated in our comments to the Cap and Trade Regulation and associated FED, such an approach constitutes impermissibly deferred mitigation under CEQA. If mitigation is deferred, CEQA requires a lead agency both to develop specific performance standards and to commit to specific mitigation actions that will be taken if those standards are not met. As proposed in the proposed modifications, the Cap and Trade Regulation still lacks legally required performance standards and commitments to specific mitigation actions. Indeed, without these benchmarks and performance standards, it is impossible to determine even what information must be collected. Neither the Cap and Trade Regulation nor the Mandatory Reporting Rule identifies benchmarks that would trigger actions to mitigate environmental impacts, nor do they commit ARB to taking action in the event that significant, unanticipated environmental impacts occur.

In sum, absent specific performance standards, timely and rigorous monitoring of all relevant information, and particularized commitments to respond in specified ways to triggering events, the "adaptive management" approach described by ARB will not prevent significant environmental effects, and will not permit ARB to respond to unanticipated effects in a timely or effective manner. As a result, ARB's proposed adaptive management approach to mitigation violates CEQA. The rule, as proposed in the proposed modifications, also represents a failure to comply with Board direction. In their resolution accompanying the approval of the Cap and Trade Regulation in December 2010, the Board directed the Executive Officer to: "Determine whether there are feasible alternatives or mitigation measures that could be implemented to reduce or eliminate any potential adverse environmental impacts…" and to adopt "any modifications that are necessary to ensure that all feasible mitigation measures or feasible alternatives that would substantially reduce any significant adverse environmental impacts have been incorporated into the final action…" The additional reporting requirements in the 15-Day changes for the Mandatory Reporting Rule require the collection of basic information about the mass of forest biomass material and the harvest permit under which it was collected. However, with respect to environmental impacts to forests, this falls far short of satisfying the above directives by the Board or establishing specific performance standards. (CBD4)

> **Response:** See response to CBD1 regarding the proposed adaptive management approach and why it does not constitute "deferred mitigation."

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CBD5

Name: Brian Nowicki and Kevin Bundy
Affiliation: Center for Biological Diversity
Written Testimony: 9/27/2011
Second 15-Day Comment #: 2093

Comment: The proposed modifications eliminate section 95852.2(a)(4)(c), which had required that wood and wood waste materials to be combusted as biomass fuel "not transport or cause the transport of species known to harbor insect or disease nests outside zones of infestation…" (Page A-103.) The notice offers this explanation: "Section 95852.2(a)(4)(C) was removed in response to comments received from stakeholders who claimed that tracking and enforcement of sources of wood and wood wastes is extremely difficult for energy generators." However, there is a high probability that commercial timber land owners - who may not be able to harvest trees killed by bark beetles and disease for lumber or other durable wood products - would welcome the opportunity to sell those trees to biomass energy generators. To the extent that it makes harvest and transportation of these trees economical, the biomass fuel market is likely to become a significant driver of the harvest of trees killed by insects and disease. The elimination of this requirement openly invites the transport of infected and infested materials. This creates a substantial threat to California's forest resources and represents bad public policy. Purchasers of biomass fuels in large quantities - such as owners and operators of biomass power plants can be expected for sound business reasons to enter into contracts with fuel suppliers such as large timber corporations and the United States Forest Service. Those contracts easily could specify that the operators will not accept fuels if doing so would require the transport of infested and diseased materials. Relieving a few "stakeholders" of this purported burden cannot outweigh ARB's responsibility, as an agency required to uphold the public trust, to ensure that its actions do not threaten California's forests as a whole by exposing them to transportation of insects and disease. (CBD5)

> **Response:** The commenter indicates that the removal of Section 95852.2(a)(4)(C) would invite transport of infected and infested materials, thereby possibly resulting in a new environmental impact. ARB disagrees. The California Department of Forestry has oversight of the harvesting of wood and wood wastes, and is required to identify species known to harbor insect or disease nests and approve transportation.
>
> PRC, Ch.10, Article 5, is dedicated to Forest Insect and Plant Disease Control. State laws authorizing the control of forest pests, including Sections 4712-4718, 4799.08-4799.12, and the Federal Forest Pest Control Act (Public Law 110), allows broad administrative discretion in the use of public funds to detect and control forest pests on lands of all ownerships.

PRC Section 4715 allows the Department of Forestry and Fire Protection, in accordance with policy established by the Board of Forestry, to enter into agreements with any owner and with any agency of government, including the federal government, for the purpose of controlling or eradicating forest insects or plant diseases damaging or threatening destruction to timber or forest growth, and it may make expenditures for that purpose.

PRC Section 4716 grants the following authority to the Director of the Department of Forestry and Fire Protection.

> (a) Whenever the director determines that there exists an area that is infested or infected with insect pests or plant diseases injurious to timber or forest growth and that the infestation or infection is of such a character as to be a menace to the timber or timberlands of adjacent owners, the director, with the approval of the board [Board of Forestry], may declare the existence of a zone of infestation or infection, and describe and fix its boundaries.
>
> (b) If the director declares the existence of a zone of infestation or infection pursuant to subdivision (a), the department or its agents may go upon state and private lands within the zone of infestation or infection and shall cause the infestation or infection to be eradicated or controlled in a manner that is approved by the board.

Further, Forest Practice Rules 917.9, 937.9, 957.9, 957.10, 957.11. "Prevention Practices" contain guidelines that address the buildup of destructive insect populations or the spread of disease, hazard reduction and treatment alternatives.

Notwithstanding the protection of regulatory restrictions on the potential transport of invested plant or woody materials, the economics of biomass power plants would preclude transport of materials far from the plant or woody fuel source. Fuel costs are critical to the economic viability of biomass power plants and transportation costs can be the largest component of the cost of fuel. As a result, the "fuel shed" of a biomass power plant must be a limited distance from the plant. Prior environmental investigations have found that within 50 miles, the transport of biomass fuel can still be viable and beyond that distance, the transport begins to be economically infeasible. Therefore, if any material were to carry an infestation, the environmental effect would be minimized by the economic limitations of the cost of fuel transport. Once at the plant, the fuel would be combusted and the risk of spreading an infestation would be eliminated. Recognizing the regulatory protections and the limited distance of fuel transport, any potential for environmental effects from infested plant or woody materials would be less than significant (Amador County 2010a, pages 3-14 to 3-15 and 5-25 to 5-26; Amador County 2010b, pages 2.5-15 and 2.5-24).

CBE1

Name: Adrienne Bloch
Affiliation: Communities for a Better Environment
Written Testimony: 12/14/2010
45-Day Comment #: 762

Comment: Large California NOx, CO, and other co-pollutant reductions can be achieved if an alternative is adopted requiring direct control measures using methods known by CARB (e.g. for boilers and heaters). These co-pollutants otherwise cause large cumulative impacts in impacted communities. Similarly, CARB should evaluate other co-pollutants including PM2.5 and toxics which feasible direct controls would achieve. AB 32 requires addressing the co-pollutants issues, but the proposed cap-and-trade regulation and Scoping Plan do not. (CBE1)

Response: In developing the Scoping Plan in 2008, the Staff Report for the Cap-and-Trade Regulation, and again in the *Supplement to the AB 32 Scoping Plan Functional Equivalent Document* (Supplement), which was presented at the August 2011 Board meeting, we evaluated the air quality impacts of a direct regulation compared to a cap-and-trade program. The proposed Cap-and-Trade Regulation is designed to reduce GHG emissions and is not directly applicable to other pollutants. However, criteria pollutants and toxic air contaminants are generally expected to decline as a result of GHG reduction measures. Consequently, the proposed Cap-and-Trade Regulation would not contribute to a cumulative increase in co-pollutants. FED page 343.

The proposed Cap-and-Trade Regulation has the distinct advantage of imposing an enforceable cap on emissions - making it the most likely method to successfully meet the AB 32 goal of capping emissions at 1990 levels by 2020. As described on page IV-3 of the proposed Cap-and-Trade Regulation Staff Report, direct regulations for emission sources do not provide the same assurance of reductions as those offered by a cap-and-trade program.

The proposed Cap-and-Trade Regulation and the source specific alternative share challenges. 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, it takes considerable time to develop each individual regulation. This 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 potentially long lead times necessary for some sources where feasibility is an issue would mean 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 the cap-and-trade program.

Another reason why uncertainty is a characteristic of regulatory systems relying on source-specific regulations is that each source-specific regulation can be designed in 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. Different impacts to neighboring communities could, therefore, result from the Regulation, as compared to a regulation without such flexibility.

Exemptions or compliance flexibility that may be included in any source-specific regulation may be superficially appealing but present 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 much 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.

Comment: A highly preferable alternative proposal would have been a thorough evaluation of Reasonably Available Control Measures necessary to meet CARB's requirements under AB 32 for maximum reductions, to reduce smog in non-attainment zones, and toxics in overburdened heavily industrial areas. The following sections identify specific sources that should have been considered. For example, additional reductions could be achieved from:

(1) Requiring In-State reductions from industrial boilers and heaters, which CARB has already identified.

(2) Removing industrial exemptions for methane from smog regulations.

(3) Requiring implementation of specific refinery by refinery measures identified in the industrial energy efficiency audits.

(4) Limiting emissions and conversion to processing Heavier Crude at oil refineries (which is not cancelled out by adding polluting ethanol to gasoline).

(5) Requiring oil refineries to switch fossil fuel electricity use to clean alternative energy sources (since oil refineries use significant electricity). (CBE1)

Response: See the response to CRPE1 regarding the reasonable range of alternatives considered in the FED. See response to comment CBE1 regarding consideration of source-specific reduction alternative, above. The commenter offers a range of source-specific GHG reduction measures that could be implemented by ARB. These measures have been considered in the context of evaluating the Additional Source-Specific Command-and-Control Regulations Alternative (see page 387-390 of the FED).

ARB examined a reasonable range of alternatives as required under CEQA. The array of source-specific measures recommended in the comment presents a scenario of additional regulatory actions. ARB staff believes that most of the measures suggested by the commenter are not feasible and the remaining measures, while they have some reduction potential, may be substantially inflated relative to what a regulatory approach might actually cost-effectively achieve.

ARB has adopted an energy efficiency and co-benefits audit regulation. The audit results from this regulation are due at the end of 2011. ARB staff has committed to evaluate opportunities to achieve facility-specific cost-effective emission reduction opportunities that will result in GHG and co-pollutant benefits and require these reductions under a regulatory program. Staff does not believe that mandated improvements of this type are administratively feasible under a regulation at this time due to the lack of data on specific reductions that can be achieved.

Comment: Boiler and Heater NOx and CO Co-pollutant emissions are large and if directly controlled would yield large local health benefits. AB 32 requires ARB to design the program to prevent any increase in emissions of toxic air contaminants or criteria pollutants. It also requires it to consider the overall societal benefits of reducing other

air pollutants and benefits to the environment and public health. Yet the draft regulation demonstrates that reductions could have been achieved to substantially reduce co-pollutant emissions but was rejected.

CARB provided two spreadsheets calculating available measures for reducing CO_2 emissions from industrial boilers and heaters, which are major pollution sources. Measures include replacing old boilers of low or medium efficiency, optimizing combustion, improving insulation maintenance, etc. (listed below and in the attached spreadsheets). CARB identified how much energy would be saved for each of these measures in MMBTU (million British Thermal Units). CARB provided these reduction opportunity calculations not because these are being directly mandated, but to show possible ways that industrial sources could reduce, but are nevertheless allowed to buy their way out of under Cap and Trade. There was no showing that these reductions would not have been cost-effective. Regardless, the CARB list underscores the availability of measures for direct control. If these controls were implemented locally instead of traded, they would not only result in the CO_2 emissions reductions identified by CARB, but would also result in very substantial co-pollutant reductions. CARB should have considered such an alternative project to address co-pollutant impacts.

It is a simple matter to calculate the co-pollutants associated with the energy savings identified in the boiler and heater spreadsheets. For example, standard AP42 emission factors for NOx and CO are available, based on natural gas combustion. This will generally underestimate emissions because more polluting fuels are often used by these boilers and heaters, but applying the natural gas factors provides a conservative estimation, and still comes out to large emissions. The result, in tons per day, is provided below. The detailed tables are attached as an appendix. The full spreadsheets are separately attached. (CBE1)

> **Response:** See response to CRPE1 regarding the reasonable range of alternatives considered in the FED. See response to CBE1 regarding consideration of source-specific reduction alternative.
>
> The commenter suggests that a greater reduction of co-pollutant emissions could be achieved through the direct regulatory control of boiler and heater emissions. ARB examined a reasonable range of alternatives as required under CEQA, including the adoption of direct regulatory controls. While direct regulation offers some reduction potential, the estimated reductions presented by the commenter may be substantially inflated relative to what a rule approach might achieve. The commenter draws on material prepared by ARB staff for the proposed cap-and-trade rulemaking (Appendix F) and contends that the conceptual emission reductions that might be obtained with these measures could be required as a direct regulation. Staff is currently evaluating how facility-specific cost-effective emission reduction opportunities identified by energy efficiency and co-benefits audits due by the end of 2011 could be required under a regulatory program. The commenter is assuming the results of a broad analysis or audits are applicable over a diverse set of sources requiring widespread efficiency

improvements. Staff does not believe that mandated improvements of this type are administratively feasible under a regulation at this time. The commenter also rightfully notes the uncertainty in estimates of emission reductions possible from these types of measures due to potential overlapping of estimated reduction opportunities (such as replacing or improving boilers).

Further, although boiler and heater source-specific reduction measures could achieve substantial GHG reductions, for the reasons described in response CBE1 above, both a source-specific regulatory program and a cap-and-trade program can have a similar result in the real world, but it depends on the many details of how the regulations are designed. The FED indicates that at this time ARB cannot predict in which sectors and what geographic locations the emission reductions would occur under the source-specific alternative. However, it does indicate that emission limits applied to specific regulated entities and facilities could provide more certainty regarding the location of GHG emission reductions, which could be an environmental advantage of this alternative. In comparing the Additional Source-Specific Command-and-Control Regulations Alternative with the Cap-and Trade program, ARB determined that the source-specific alternative (see page 395 of the FED) would result in the low likelihood or no likelihood of achieving the project objectives for five objectives (i.e., equitable distribution, cost-effectiveness, minimize leakage, establish a declining cap, and linkage with partners), whereas the proposed Cap-and-Trade Regulation would have a high likelihood for achieving all objectives. For these reasons, and for other supporting economic and feasibility reasons included in the Initial Statement of Reasons, ARB has rejected this alternative as not being environmentally superior to the proposed action.

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CBE4

Name: Greg Karras
Affiliation: Communities for a Better Environment
Written Testimony: 8/11/2011
First 15-Day Changes Comment #: 1166

Comment: Some of the amendments to the proposed Regulation would cause more severe and significant environmental effects than those disclosed by the draft FED, and warrant revision of the FED. ARB failed to revise and recirculate the environmental document to disclose the impacts of the amendments. Given the likely significant environmental impacts from the substantial changes to the proposed Regulation, ARB should revise and recirculate the FED before adopting any amendments to the proposed Cap and Trade Regulation.

CEQA requires that the agency prepare a response to comments before adopting a final EIR or FED. This final action is due in October 2011. Yet, at the same time, the Board has directed the Executive Officer to report back to the Board in July 2011 on the "finalization of the allowance allocation system", "implementation of a market tracking system", "implementation of an auction system", and "implementation of an offset tracking system." At the same time comments are being taken, and before the final FED is prepared, ARB will be actively preparing markets for Cap and Trade. As such, the Board has adopted a Cap and Trade Regulation before completing CEQA.

The process is further aggravated because the Board in its December resolution also directed the Executive Officer to "modify" several aspects of the Regulation, and never mentioned considering the environmental consequences of the changes. The Board has not considered CEQA or environmental consequences at all in deciding whether or not to approve this project. The Executive Officer alone will review the FED comments, which are based on the pre-amendment regulations. The Executive Officer should at least have the benefit of comments on the completed draft EIR, one that reflects the true project and its impacts.

During the comment period for the Scoping Plan alternatives, ARB also released amendments to the Cap and Trade Regulation for public comment. ARB's decision to create an overlapping comment process also undermines public participation and ARB's ability to genuinely consider the project's significant impacts. It is not possible to fully comment on both documents at once. ARB's insistence on thrusting this Regulation forward without ensuring that it will avoid significant impacts casts serious doubt on the process as a whole and CARB's willingness to hear from all but a select few "stakeholders" whose opinions are solicited. (CBE4)

> **Response:** The commenter expresses an opinion that the Board has adopted the Cap-and-Trade Regulation before completing CEQA, that the Board has not considered CEQA or the environmental consequences of the proposed 15-Day changes, and that ARB's decision to create an overlapping comment process undermines public participation. The commenter suggests that the FED should

be revised and recirculated before adopting any amendments to the proposed Cap-and-Trade Regulation.

The commenter suggests that ARB has not considered the environmental effects of the proposed changes directed by the Board in its December 2010 resolution. This is not correct. Following a public hearing held on December 16, 2010, the Board adopted Resolution 10-42, which directed staff to make a number of modifications to the proposed Regulation. On July 25, 2011, the first Notice of Public Availability of Modified Text and Availability of Additional Documents (First 15-Day Change Notice) was issued. The public comment period for the First 15-Day Change Notice ended on August 11, 2011. On September 12, 2011, additional modifications to the regulatory text were proposed in a Second Notice of Public Availability of Modified Text and Additional Documents and Information (Second 15-Day Change Notice).

The commenter offers no evidence to support the contention that the analysis in the FED warrants revision and recirculation. ARB staff reviewed the 15-Day changes and determined that the changes would not result in new impacts or change the level of significance of already identified impacts, and therefore does not require revision or recirculation of the FED. (See also response to CPRE4.)

ARB concurrently complies with APA and CEQA requirements through its CRP. ARB typically has multiple regulatory proposals underway on parallel time frames and complies with the environmental review requirements for all of them. ARB has complied with the requirements of its CRP for the preparation and circulation of the FED and preparation of these written responses to comments.

With regard to adoption of the proposed Cap-and-Trade Regulation, ARB disagrees with the commenter. The Board has not taken final action to adopt the proposed Regulation prior to completion of the environmental process. The Board is scheduled to consider the responses to comments on the FED at the October 20, 2011 hearing prior to taking final action on the Regulation.

Comment: ARB's revisions to tables 8-1 and 9-1 of sections 95870 and 95891 would cause more severe and significant environmental effects than those disclosed by the draft FED. These changes revise the timing and amount of refinery emissions which ARB proposes to "allocate" for free (proposes not to control) in ARB's proposed equation given in section 95891. As ARB's own AB 32 program documentation acknowledges, oil refineries are the largest industrial emitter in its program. (CBE4)

Response: As noted by the commenter, the 15-Day changes provide additional detail on industry benchmarking and allowance allocations. The modifications are consistent with anticipated and ongoing refinement of the proposed Regulation and do not substantially alter the magnitude of potential environmental impacts or the suggested level of significance presented in the Draft FED. Benchmarking is a process to estimate representative emission

factors by sector, and provide a baseline for allowance allocation. The referenced 15-Day changes simply incorporate benchmark values that were not available when the Draft FED was prepared. The provision of free allowances is proposed to minimize potential leakage in exposed sectors, and was addressed in the Draft FED on pages 9 and 40:

> "Staff proposes to create a gradual transition into the program through the design of the allocation system. ARB will rely primarily on free allocation at the start of the program to minimize near-term costs to California consumers and businesses and to minimize emissions leakage. The allocation design will reward those who have invested in energy efficiency and GHG emission reductions and will encourage continued investment in clean and efficient technologies in the future."

A common misconception is that the provision of free allowances discourages a covered entity from implementing measures to reduce emissions. In fact, the provision of free allocations does not result in fewer improvements being implemented by covered facilities. Although an entity could simply return allowances at the close of a compliance period, if the value of the allowances exceeds the cost of improvements, free allowances provide opportunities for entities to implement compliance actions at reduced cost.

Comment: ARB added section 95852(a)(2) to the proposed cap and trade regulation. This new section appears to exempt oil refineries from including the major greenhouse gas emissions from combustion of fuels, including natural gas liquids. Natural gas can be stored as liquid natural gas, which is later burned as natural gas. This exemption would cause significant air pollution impacts and exacerbate pollution hotspots by taking one of the largest sources of combustion emissions at refineries completely out of any compliance requirement.

Response: The proposed change does not exempt these fuels from regulatory compliance. In 2015, the compliance requirement for these fuels simply changes from the facility combusting the fuel to the facility/operator providing the fuel. Refineries both provide the fuel and combust the fuel, and as such would continue to be responsible for compliance after 2015.

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CIPA

Name: Norman Plotkin
Affiliation: California Independent Petroleum Association
Written Testimony: 8/11/2011
First 15-Day Changes Comment #: 1134

Comment: In currently pending litigation, a California State trial court found that the analysis of the alternatives identified in the FED was not sufficient for informed decision-making and public review under CEQA. Under the abuse of discretion review taking place, a Supplement was prepared to provide an expanded analysis of the five project alternatives discussed in Section V of the 2008 Scoping Plan FED. Based on Alternative 5 of the Supplement, CARB has met all of the objectives and the emissions targets of AB 32. One need only eliminate Cap and Trade from that mix because the emissions reduction yield from Cap and Trade was always a "plug" number. It was a number to plug in to get to the evolving target, a catch all buffer in case actual reductions didn't materialize as projected. Cap and Trade's inclusion was a sop to business and lip service to those who believe that credit trading was the foundation for a "green economy." More importantly, a Combined Strategies alternative that does not include Cap and Trade also does not constitute a No Project designation, which is a political non-starter. (CIPA)

> **Response:** The commenter urges ARB to consider Alternative 5 from the Scoping Plan FED Supplement (which was a combination of strategies including a cap-and-trade program), but eliminate the Cap-and-Trade Regulation to reduce emissions and meet AB 32 goals. The GHG emissions reductions achieved by Alternative 5 from the Scoping Plan FED Supplement would not meet the AB 32 goal without the use of a cap-and-trade mechanism; therefore, the commenter's suggested approach would not meet the basic objective of AB 32.

Comment: The largest single impediment to the rational policy decision to jettison Cap and Trade and instead rely on the established mix of combined strategies and measures is CARB's desire to construct the mix of measures in such a fashion that the target reductions are skewed higher than necessary to meet AB 32 goals because of a desire to put California on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels because CARB believes this trajectory is consistent with the reductions that are needed globally to help stabilize the climate. CIPA argues that this scale is unachievable at the state level and that this policy horizon is too long for rational development of midterm solutions and is in practical effect the enemy of the good. (CIPA)

> **Response:** The commenter urges ARB to consider eliminating the Cap-and-Trade Regulation and instead consider a mix of measures to reduce emissions and meet AB 32 goals and expresses the opinion that some of the reduction levels are overstated, because of ARB's perceived desire to attain 2050 goals, rather than just 2020 goals. No specific comments on the adequacy

of the environmental analysis were raised; therefore, no further response is required.

If approved, the Cap-and-Trade Regulation would be a single regulation in a suite of GHG reduction measures implemented by ARB to reduce GHG emissions. The list of Ongoing, Approved and Foreseeable Measures is available on the ARB website at:

http://www.arb.ca.gov/cc/inventory/data/tables/reductions_from_scoping_plan_measures_2010-10-28.pdf

These measures alone do not achieve the reductions necessary to reach the AB 32 target in 2020. If the Cap-and-Trade Regulation is approved, it would achieve the additional reductions necessary to reach the target. Further, ARB is continuing to evaluate additional regulatory measures that could be implemented to reduce emissions from specific sources. Most additional measures have not reached a level of development that they can be counted towards achieving the 2020 target with a reasonable level of confidence.

Comment: In CIPA comments on the Supplement to the AB 32 Scoping Plan Functional Equivalent Document, dated July 28, 2011, we noted that the FED Supplement fails to provide an accurate baseline because the GHG reductions attributable to other programs are underestimated or omitted and the effects of the economic recession on statewide GHG emissions have been underestimated. Specifically, we argued that the FED Supplement does not include the GHG reductions associated with two measures that CARB has already adopted or is adopting, namely the Commercial Recycling Measure and the Energy Efficiency And Co-Benefits Assessment. Moreover, we pointed out that the FED Supplement does not include any of the GHG reduction programs that CARB has proposed but not yet adopted. CARB has estimated that the GHG reductions attributable to those measures total 68 MMT exceeding the 22 MMT shortfall. Yet, CARB provides no analysis in the FED Supplement as to the foreseeability of these measures or the likely effect those measures will have on achieving the AB 32 target.

Insofar as the FED Supplement ignores GHG reduction programs implemented or under development by the federal government and other state agencies such as the California Public Utilities Commission, we noted that the baseline has been skewed. Even though CARB states in the FED Supplement that it has updated the environmental baseline to account for events subsequent to the original FED prepared for the Proposed Project, CARB has not included these programs in its updated baseline. As a result, CARB's updated baseline is inflated and overstates any shortfall in achieving the AB 32 target. Indeed, proper accounting for these omitted programs could exceed the 22 MMT shortfall estimated in the Supplemental FED. Although the FED Supplement states that it has updated the environmental baseline by accounting for the effects of the recent economic recession on statewide GHG emissions, there is no explanation, let alone any quantitative analysis, as to how CARB accounted for those recessionary effects. Indeed, the only information provided in the FED Supplement on this issue is a conclusory statement that CARB relied on the energy demand forecast provided in the

2009 “IEPR” prepared by the California Energy Commission (CEC). Yet, in findings issued in March 2011 – before the publication of the FED Supplement – the CEC acknowledged that its 2009 forecast substantially under predicted the depth and duration of the recession. Accordingly, CARB’s baseline of GHG emissions is significantly overstated. CIPA asserts, again, that CARB has met all of the AB 32 objectives and the emissions targets through Alternative 5 of the Supplement- Variation of the Combined Strategies or Measures. One need only eliminate Cap and Trade from that mix to arrive at a Combined Strategies Alternative that satisfies AB 32. (CIPA)

> **Response:** The commenter urges ARB again to consider Alternative 5 of the Supplement to the Scoping Plan FED with elimination of the Cap-and-Trade Regulation. The GHG emissions reductions achieved by Alternative 5 from the Scoping Plan FED Supplement would not meet the AB 32 goal without the Cap-and-Trade Regulation; therefore, the commenter’s suggested approach would not meet the basic objective of AB 32 (recognizing an updated baseline emissions projection). The commenter did not submit specific comments on the environmental analysis conducted for the Cap-and-Trade Regulation in the FED, therefore, no further response is required.

Comment: Do not be afraid to accept that CARB has met all of the AB 32 objectives and the emissions targets through Alternative 5 of the Supplement- Variation of the Combined Strategies or Measures. One need only eliminate cap and trade from that mix to arrive at a Combined Strategies Alternative that satisfies AB 32 and avoids the pitfalls that await an ill-defined market plan and does not suffer the credibility gap of a take no action alternative. We urge you to embrace adaptation as a policy response, fully count the Combined Measures and Strategies taken to date and jettison the dangerous California only Cap and Trade rule. (CIPA)

> **Response:** Refer to response to preceding CIPA comment.

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CRPE1

Name, Affiliation: Sofia Parino, Center on Race, Poverty and the Environment; Tom Frantz, Association of Irritated Residents; Penny Newman, The Center for Community Action and Environmental Justice; Teresa DeAnda, El Comite para el Bienestar de Earlimart; Martha Guzman Aceves, California Rural Legal Assistance Foundation; Anna Yun Lee, Communities for a Better Environment; Jane Williams, California Communities Against Toxics; Nicole Capretz, Environmental Health Coalition
Written Testimony: 12/14/2010
45-Day Comment #: 693

Comment: The Board should not adopt the proposed cap and trade rule. ARB has not conducted a proper foundational analysis to justify this choice of a market mechanism, and ARB has not analyzed a reasonable range of alternatives in accordance with the California Environmental Quality Act ("CEQA"). (CRPE1)

Response: The commenter asserts that ARB has not analyzed a reasonable range of alternatives in accordance with CEQA, but provides no specificity. It is not possible to respond to this general comment, other than to reiterate that the FED complies with all applicable CEQA requirements, including analysis of alternatives.

ARB held a Scoping Meeting for the cap-and-trade FED on August 23, 2010 to solicit public input on environmental impacts and the range of project alternatives to be evaluated. The FED considered five alternatives to the project. See Chapter 6.0, "Alternatives Analysis," of the FED, including a range of market and non-market approaches to GHG reduction. Alternatives consisted of five different cap-and-trade program designs, carbon fee, direct regulation approach, and the no-project alternative. This represents the spectrum of GHG reduction strategies used by states, provinces, and nations. In accordance with the substantive requirements of CEQA, the alternatives analyzed in the FED represent a "reasonable range" that could potentially feasibly attain most of the basic project objectives while having the potential to reduce or eliminate significant environmental effects. Generally, a range of alternatives analyzed in an environmental document is governed by the "rule of reason," requiring evaluation of those alternatives "necessary to permit a reasoned choice" (See Title 14 CCR section 15126[f]). The initial screening of potential alternatives had to at least potentially meet the objectives, and alternatives were included only after consideration of their potential feasibility based on technical, legal, and regulatory grounds. The five alternatives covered a range of policy level alternatives sufficient to permit a reasoned choice.

Comment: ARB'S analysis of alternatives to the proposed Regulation violates the California Environmental Quality Act. AB 32 requires "the state board to adopt greenhouse gas emission limits and emission reduction measures by regulation," which triggers the CEQA requirement for an Environmental Impact Report (EIR). As a

certified regulatory program, ARB discussed possible impacts in the form of a Functional Equivalent Document (FED) in lieu of an Environmental Impact Report, pursuant to Public Resources Code section 21080.5.

ARB failed to adequately analyze project alternatives in the Functional Equivalent Document. Under CEQA, ARB must examine a reasonable range of alternatives to the proposed project that feasibly meet most of 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. 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." In evaluating alternatives, ARB must include "sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project."

For purposes of developing and evaluating the proposed project and alternatives, ARB derived the following objectives from AB 32:

- Achieve technologically feasible and cost-effective aggregate reductions;
- Distribute allowances equitably;
- Avoid disproportionate impacts;
- Credit early action;
- Complement existing air standards;
- Be cost-effective;
- Consider a wide range of public benefits;
- Minimize administrative burden;
- Minimize leakage;
- Weigh relative emissions;
- Achieve real emission reductions;
- Achieve reductions over existing regulation;
- Complement direct measures;
- Consider emissions impacts;
- Prevent increases in other emissions;
- Maximize co-benefits;
- Avoid duplication;
- Establish declining cap;
- Reduce fossil fuel use;
- Link with partners;
- Design enforceable, amendable program; and
- Ensure emissions reductions.

Having articulated these objectives (notably, without regard to their accuracy, and to the statutory requirements in AB 32), ARB then presented a cursory, circular and

results-oriented description of five alternatives to the proposed plan. The five alternatives ARB identified were:

(1) No project. This Alternative comprises the bulk of the alternatives analysis. The section generally describes sector by sector the business as usual impacts compared to the proposed Cap-and-Trade Regulation;

(2) Implement only additional source-specific command-and-control regulations. This alternative purports to consider implementation of source-specific emission limits by regulation. However, in its Executive Summary, ARB demonstrates its preference for cap and trade above all other forms of controls with an unsubstantiated conclusion that direct regulations cannot provide the same assurances for reductions that a cap and trade program because of an uncertainty in emissions reductions caused by the diverse nature of many industrial processes and a lack of data. This conclusion is not only nonsensical to justify the inclusion of these same diverse and data-poor industrial processes in a cap and trade program (under which all reductions must be real, permanent, quantifiable, verifiable, and enforceable) but is unsubstantiated, based only on the excuse that ARB does not have the data to properly regulate these industries. In its analysis, ARB acknowledges that command-and-control regulations "can take several forms."

However, instead of performing a meaningful analysis of any of the forms possible, ARB "assumed that only regulated emission limits would be implemented" on sources (as opposed to technology). As such, ARB failed to identify and analyze the specific command-and-control regulations which would be appropriate here. Instead ARB summarily states that the specifics necessary to conduct such analyses "would depend on the information that is learned in the future during the regulatory development process." And yet, prior to initiating any "regulatory development process," ARB identifies five objectives with which source-specific emission limits would not be likely to achieve in Table 6-1 on "Comparative Likelihood That Alternatives Achieve Project Objectives."

Table 6-1 ranks on a scale of high, medium, and low the likelihood that each alterative considered would be likely to achieve each of the 22 objectives ARB identified. Here, each of the "no or low likelihood to achieve objective" ratings received by the source-specific command-and-control regulation alternative pertained to objectives that were either not applicable to source-specific command-and-control regulations or not analyzed. First, stated objective two is to distribute allowances equitably. Under a source-specific emissions limit program there are no allowances to distribute and thus the objective is inapplicable here. However, the underlying intent of the specified objective appears is to ensure equitable treatment of entities. In this case that purpose is served in that there is an equitable distribution of zero allowances. Stated objective five is to complement existing air standards. While Table 6-1 rates source-specific emissions limits as low here, nowhere else in the FED is the issue addressed. In fact, the brief program description on page 388 discusses how this alternative would "likely focus primarily

on the industrial sector because the transportation, electricity and natural gas sectors are already extensively addressed." Given this cursory analysis, it appears that source-specific regulations would in fact be designed to complement existing air standards.

Stated objective nine is to "minimize leakage." However, in the objectives section ARB specifically notes that "command-and-control regulations can be designed to minimize or avoid leakage." No further explanation as to how leakage is caused, or could be minimize under this alternative, other than to say that administrative burdens may increase, is provided. Stated objective 18 is to establish a declining cap. This objective is either inapplicable, as source-specific emission limits envision no cap to begin with, or it is fulfilled by analogy. The intent of the objective is to "cover 85 percent of the state's GHG emissions in furtherance of California's mandate to reduce GHG emissions to 1990 levels by 2020." Since there is no "cap" in source-specific regulations, the objective of a "declining cap" is not applicable. However, the intent of the objective is to continually lower emission levels and this intent could be fulfilled through a source specific regulatory scheme. In fact, the U.S. EPA regularly writes mobile source emission regulations (source- specific command-and-control regulations) that increase in stringency over time.

Lastly, stated objective 20 is to link with other Western Climate Initiative (WCI) partners to create a regional market system. While Table 6-1 concludes there is no or a low likelihood of achieving this objective, there is no elucidating discussion as to why it is not possible. Generally, command-and-control regulations do not envision a market system; however, no aspect of such a program precludes regulatory schemes from linking together partners in some way. In failing to fully envision, consider, and describe how source-specific emission limits could operate in California, ARB has not included sufficient information on source-specific emission limits "to allow meaningful evaluation, analysis and comparison with the proposed project." ARB preemptively rejects this alternative as "challenging," but acknowledges that "the certainty about avoiding localized increases in emissions could be an environmental advantage of this alternative." This is a key advantage for environmental justice communities, and does not allow ARB to so quickly dismiss it in favor of a cap and trade program;

(3) Carbon fee. ARB describes implementation of a carbon fee as similar to cap and trade in that both programs place a price on GHG emissions, which thereby provides an incentive for businesses and individuals to reduce their emissions. Similarities between the two programs include "reporting, monitoring, verification of covered entities' GHG emissions." ARB states that the main difference between the programs is that implementing a carbon fee "provides price certainty for the covered entities" but lacks emission certainty. ARB's analysis of a carbon fee is fundamentally flawed in again failing to envision and analyze how the program would actually work. Thus, it fails to meet CEQA's requirement for "sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project." Instead of developing a real alternative, ARB focuses on

elements of the proposed cap and trade program which have already been developed and then unfairly compares the developed proposal with the mere title "carbon fee" absent a more developed program which would allow for a more reasoned analysis. For example, ARB acknowledges that the efficiency of a carbon fee could be enhanced by pairing it with "complementary approaches, such as performance standards," yet it "assume[s] that only a carbon fee would be implemented." Also, ARB states that to avoid passing costs on to consumers, a system of offsets could be used, but it fails to consider the alternative with such a system and instead criticizes a carbon fee as passing costs onto consumers. Additionally, ARB finds that the potential for leakage is increased with a carbon fee as opposed to a cap and trade system, but fails to consider how to tailor fee levels to market influences, while at the same time stating that it can be done. In ARB's "Comparative Likelihood That Alternatives Achieve Project Objectives," Table 6-1, four objectives are identified as having a "no or low likelihood to achieve objective."

Stated objective six, to be cost-effective, is identified as not likely to be achieved. Nowhere in ARB's discussion of a carbon fee is cost effectiveness directly discussed. In fact, ARB notes so many potential similarities between cap and trade and a carbon fee, without mention of the apparent cost ineffectiveness associated with a carbon fee that one can only speculate as to how cap and trade has a high likelihood of cost effectiveness while a carbon fee has a low likelihood of cost effectiveness. ARB ranks implementation of a carbon fee as unlikely to minimize leakage, in stated objective nine. However, ARB's incomplete analysis failed to consider a carbon fee program that provides opportunities to tailor the fee level to market influences, while at the same time acknowledging that such mechanisms are possible and that they could decrease the potential for leakage. Without conducting an analysis that fully considers what the likely implementation of a carbon fee program would include, ARB's conclusion is preemptive and arbitrary.

ARB's stated objective 18 is to establish a declining cap. This objective is either inapplicable, as this implementation of a carbon fee envisions no cap to begin with, or it is fulfilled by analogy. The intent of the objective is to "cover 85 percent of the state's GHG emissions in furtherance of California's mandate to reduce GHG emissions to 1990 levels by 2020." Since there is no "cap" in this vision of a carbon fee, the objective of a "declining cap" is not applicable. However, the intent of the objective is to continually lower emission levels and this intent could be fulfilled through increasing the carbon fee.

Lastly, stated objective 20 is to link with other WCI partners to create a regional market system. While Table 6-1 concludes there to be no or a low likelihood of achieving this objective, there is no elucidating discussion as to why is it not possible for WCI partners to also adopt a carbon fee. In failing to fully envision, consider, and describe how a carbon fee could operate in California, ARB has failed to provide sufficient information allow a meaningful evaluation of a carbon fee;

(4) California cap and trade program linked with a Federal cap and trade program. ARB discusses the possibility of linking the proposed California cap and trade program to a Federal cap and trade program in the alternatives analysis sections of both the Initial Statement of Reasons and the Functional Equivalent Document. However, linking a California cap and trade program to a non-existent Federal program is not an alternative at all. In fact, it is not an alternative for two reasons. First, an alternative must be an alternative to the proposed program. Here, the proposed program is cap and trade. The alternative discussed is the exact same cap and trade program but with a Federal partner. Ergo cap and trade is not an alternative program to cap and trade, regardless of what partnerships are formed.

Secondly, an alternative that has "no prospect in the near term," contains no detail whatsoever, has envisioned no mechanisms for implementation, enforcement, etc., is not a reasonable alternative. Thus, any linkage between a California cap and trade program and a Federal cap and trade program ought to have been discussed as an alternative cap and trade design feature and not under the guise of a legitimate cap and trade program alternative; and

(5) Alternatives to specific cap and trade program design features. ARB discusses five design features possibly applicable to the proposed cap and trade program. Conspicuously absent from the alternatives analysis is an alternative that geographically limits offsets. (CRPE1)

Response: See response to CRPE1 regarding the reasonable range of alternatives considered in the FED. The FED evaluated a range of market and non-market approaches to GHG reduction. Alternatives consisted of five different cap-and-trade program designs, carbon fee, direct regulation approach, and the no-project alternative. This represents the spectrum of GHG reduction strategies used by states, provinces, and nations.

With regard to comments on the Additional Source-Specific Command-and-Control Regulation Alternative, the commenter disagrees with the conclusions and reasoning presented in the FED, and suggests that additional detail and rationale is required to describe why certain conclusions presented in Table 6-1 were drawn by ARB. The FED provides on pages 387 to 390 a balanced and adequate discussion of the source-specific, direct regulation approach to reducing GHG emissions. It addresses cost, effectiveness, leakage, and local impact issues, and recognizes that it could have some environmental advantage of avoiding any lingering uncertainty about potential for emissions to increase locally. It describes potential environmental impacts being generally similar to the Cap-and-Trade Regulation because the compliance responses would be comparable (i.e., primarily onsite emissions reductions actions). See also CBE1 response. The potential disadvantages of high compliance costs (because of the lack of a market approach that can find the most cost-effective strategies) and the potential for leakage are noted. The additional detail sought by the

commenter is not necessary for an informed consideration of the source-specific, command-and-control approach.

The commenter expresses concern about the ranking of the source-specific, command-and-control approach as not likely to fulfill the objective of linking with other WCI-partner programs. It is important to note that the primary reason for linkage would be to provide for connection of market-based approaches to broaden opportunities for emissions reductions, trading of allowances, or development of offset projects. The direct regulation approach, like the source-specific, command-and-control regulation, is not facilitated by linking with other jurisdictions, which is why its ranking for this objective was low likelihood in Table 6-1.

The commenter criticizes the analysis of the carbon fee alternative and recommends consideration of several variations of the design of a carbon fee program. The FED sought to define a reasonable carbon fee strategy, which is discussed on pages 390 to 393 of the document. Certainly, a wide range of potential design features and concepts could be considered within a carbon fee program. It is not necessary or feasible to evaluate many design variations of a carbon fee strategy to understand its environmental impacts. Because it assigns a price to carbon, the compliance responses and, therefore, the environmental impacts of a carbon fee approach would be similar to cap-and-trade, as noted on page 392 of the FED. The potential for differences is also discussed, in terms of the achievement of project objectives and certain possibilities for environmental effects.

Related to achievement of project objectives, the commenter criticizes the rankings in Table 6-1 for several alternatives and declares that some low likelihood rankings should be “inapplicable” instead (i.e., not ranked for that objective). This change would disguise a potential shortcoming of an alternative. The table compares how well each objective is achieved. If an objective is considered inapplicable for an alternative, it is not fulfilling that objective, and the table shows it as a low likelihood of achieving that objective. Also, the substantiation of the rankings is based on information in the descriptions of alternatives and subsections specifically devoted to consideration of objectives (see subsection a under the Impact Discussion of each alternative). Consequently, the analysis of the carbon fee alternative is adequate for purposes of CEQA.

The commenter indicates that linkage with a Federal program should not have been dismissed from more detailed evaluation. ARB disagrees, recognizing that there is no Federal program, nor the prospect of one because of the lack of Congressional action at this time. Therefore, it would be too speculative to attempt to predict the character and content of a Federal program. Consequently, it is appropriate to not discuss it in further detail.

Finally, the commenter noted that a cap-and-trade design option of geographic limits for offset projects should have been considered. No other detail is provided regarding the commenter's goal for including such a design variation. The success of offsets depends, in part, on allowing for the market sufficient capacity to respond to the opportunity to develop offset projects and offer credits. Constraining the market geographically would also limit market opportunities, so it could hinder an offset program's effectiveness. Because it is not clear what perceived environmental advantage the commenter is seeking to derive from geographic limits, no further response can be provided.

Comment: ARB failed to adequately analyze a range of project alternatives in the Functional Equivalent Document. ARB did not satisfy the CEQA requirement to examine a reasonable range of alternatives. Under CEQA, ARB must examine a reasonable range of alternatives to the proposed project that feasibly meet most of the project's basic objectives while avoiding or substantially reducing the significant effects of the project. CEQA does not supply the number of alternatives that are necessary for a meaningful analysis to take place, but it makes clear that a rule of reason governs requiring the EIR document to set forth "those alternatives necessary to permit a reasoned choice." In the ISOR, ARB purports to analyze four alternatives. In reality, only two alternatives are presented. The "no project" alternative is not a real option in this case given the statutory obligation provided in AB 32. Second, linking a California cap and trade program to a non-existent Federal cap and trade program is not a reasonable alternative for the reasons stated above (see section IV.A.). Lastly, presenting program design features which do not alter the program itself is not a project alternative. For these reasons, a mere two alternatives were considered in the FED. Given the size and implication of a statewide cap and trade program, as well as the broad range of possible avenues to attain the achievement of AB 32, the rule of reason dictates that a reasonable range of alternatives exceed two. Therefore, ARB has failed to satisfy CEQA's requirement to examine a range of reasonable alternatives to the project. (CRPE1)

Response: ARB disagrees with the commenter's assertion that it did not evaluate a reasonable range of alternatives in the FED. The alternatives presented in the FED were selected to evaluate a range of plausible actions that could achieve project objectives. The basis for the selection of the FED's alternatives included:

- A no project alternative is standard in ARB alternatives analyses, and is called for by the CEQA guidelines,
- Consideration of other ways to achieve project objectives is a sound basis for formulation of alternatives, e.g. cap-and-dividend, cap-and-fee, or carbon fee,
- Consideration of public and stakeholder input. ARB held a scoping meeting for the FED (August 23, 2010) for this purpose,
- Alternatives based on ARB's experience and research, and,

- Direct regulations and a carbon fee are the most often cited alternatives to the proposed Cap-and-Trade Regulation, so they were evaluated as alternatives in the FED.

The commenter offers no evidence why the alternatives analysis provided in the FED is not adequate, therefore, no further response is necessary.

Comment: The analysis of offsets produced by manure digesters violates CEQA. The FED finds no impact on air quality and no cumulative impact on air quality from implementation of the Compliance Offset Protocol for Manure Digesters. The FED concedes that engines combusting digester gas emit criteria and toxic emissions. However, the FED assumes that all offset generating projects would be subject to Clean Air Act requirements and local land use decisions that would fully mitigate the criteria and toxic emissions. The FED fails to demonstrate that to be the case, or to require air pollution controls as a condition of receiving offsets. For the same reason, the FED has failed to adequately analyze the emissions of criteria and toxic air pollutants from offsets produced at dairy digesters when there is no reasonable basis to conclude that all such projects would be reduced to a less than significant level (there is no substantial evidence supporting this assumption). (CRPE1)

Response: The commenter states that the FED failed to demonstrate that air quality impacts of offset generating projects would be fully mitigated to a less-than-significant level. The commenter mistakenly states that the FED assumes that all digester facilities would not be subject to Clean Air Act (CAA) requirements. In fact, the Livestock Offset Protocol specifically describes that in order for a livestock digester project to qualify for the offset, it must be implemented in accordance, as required by law, with all applicable federal, state, and local regulations and regulatory oversight requirements. The FED identified (see page 240) that these regulations included federal, state, and local construction and operational air quality permits; CAA and the California CAA; local land use entitlements including environmental (CEQA/NEPA) review; and dust abatement plans for facilities located in PM nonattainment areas. Where a facility would result in a net increase in criteria pollutant (or precursor) emissions in an extreme nonattainment area, it would not be permitted by the local air district. Based on all of these requirements, ARB concluded that the Livestock Offset Protocol would not conflict with adopted air quality plans, violate Ambient Air Quality Standards, and/or result in cumulatively significant increases in criteria pollutants. The commenter offers no other evidence to dispute this conclusion; therefore, no further response is necessary.

Comment: Conclusion. For the reasons set forth above, the Board should not adopt the proposed cap and trade regulation. Instead, the undersigned organizations are asking the Board to consider the impact of the Superior Court's ruling in the pending Scoping Plan challenge, to prepare a proper foundational analysis for whether cap and trade is the maximum feasible and cost-effective reduction, to adopt more appropriate direct regulations and market-based compliance mechanisms than a cap and trade rule, and meaningfully analyze a reasonable range of alternatives in accordance with CEQA.

The Board should seize this opportunity to set California on a path that protects vulnerable communities, fosters green jobs, and stimulates a path to a green economy for California. (CRPE1)

Response: This comment summarizes the commenter's previous comments. See previous responses to CRPE comments.

CRPE4

Name, Affiliation: Sofia Parino, Center on Race, Poverty & the Environment; Maria Covarrubias, Comité ROSAS; Domitila Lemus, Comité Unido de Plainview; Maria Buenrostro, Comité Luchando por Frutas y Aire Limpio; Penny Newman, The Center for Community Action and Environmental Justice; Linda Mackay, TriCounty Watchdogs; Jesse Marquez, Coalition for a Safe Environment; Angela Meszros; Strela Cervas, California Environmental Justice Alliance; Tom Frantz, Association of Irritated Residents; Salvador Partida, Committee for a Better Arvin; Ruth Martinez, Comité Si Se Puede; Ana Ceballor, La Voz de Toniville; Teresa DeAnda, El Comité Para El Bienestar de Earlimart; Gary Lasky, Sierra Club Tehipite Chapter; Shabaka Heru, Society for Positive Action; Caroline Farrell
Written Testimony: 8/11/2011
First 15-Day Comment #: 1110

Comment: The modified Cap and Trade Regulation released on July 7, 2011 is different enough from the version that the Functional Equivalent Document was based upon that it must be recirculated and go through another EIR process before it can be approved in accordance with CEQA. CEQA does not allow the Board to delegate the review of an EIR to the Executive Officer. Because of the failure to complete environmental review before approving the project as well as the substantial modifications to the rule that require recirculation, the full Board must complete the legally-required environmental review process before approving this rule. (CRPE4)

Response: ARB disagrees that the FED must be revised and recirculated. Although the regulation has been amended in several respects, the cap on emissions has remained the same and the method of allocation of allowances has not appreciably changed. ARB staff reviewed 15-Day changes to the regulation language and determined that the proposed changes would not result in new impacts or substantially change the type or significance of impacts disclosed in the FED. Therefore, no revisions were required to the FED. No significant new information was added to the FED and the FED was not changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project, or a feasible way to mitigate or avoid such an effect. The public was provided opportunity to comment on the environmental analysis during the initial 45-day public comment period, as well as two subsequent 15-Day comment periods associated with proposed revisions of the Regulation language. Therefore, the requirements that would trigger revision or recirculation of the FED did not occur.

ARB also disagrees that it approved the project in advance of the 15-Day changes or prior to completion of the environmental process. The Board has not taken final action to adopt the proposed Regulation. The Board is scheduled to consider for approval the written responses to comments on the FED at the October 20, 2011 hearing prior to taking final action on the Regulation.

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DWR

Name: Veronica Hicks
Affiliation: California Department of Water Resources
Written Testimony: 12/15/2010
45-Day Comment #: 728

Comment: The environmental impacts of imposing a surrender obligation on DWR were not evaluated. If DWR is required to surrender compliance instruments, it will need to pass these costs on to its water contractors, who in turn will pass the costs on to the end-users of water. An analysis should be conducted to determine the environmental impacts of this regulation. Water is integral to the agricultural sector and important for environmental needs. As reported in the California Water Plan, Update 2009:

> "California is facing one of the most significant water crises in its history- one that is hitting hard because it has many aspects and consequences. Reduced water supplies and a growing population are worsening the effects of a multi-year drought. Climate change is reducing our snowpack storage and increasing the frequency and intensity of floods. Court decisions and new regulations have resulted in the reduction of water deliveries from the Delta by about 20 to 30 percent. Key fish species continue to decline. In some areas of the state, our ecosystems and quality of underground and surface waters are unhealthy. The current global financial crisis will make it even more difficult to invest in solutions. We must act now to provide integrated, reliable, sustainable, and secure water resources and management systems for our health, economy, and ecosystems".

The regulation imposes an additional burden on DWR and California's water users without acknowledging this water crisis or evaluating the impact of this burden under all existing circumstances. (DWR)

> **Response:** The commenter states that the FED does not evaluate the environmental effects of imposing a surrender obligation on DWR and suggests that the additional costs associated with a surrender obligation would result in environmental impacts that were not evaluated in the FED; however, the commenter is not specific as to what those impacts may be.
>
> CEQA does not require discussion of economic changes unless the economic change would result in a physical effect on the environment (see CCR section 15064[e]). The commenter does not provide specifics as to how the economic impacts of the proposed Regulation would cause adverse physical environmental effects. Therefore, it is not possible to meaningfully respond to this general comment, other than to state that we believe the FED adequately evaluates the environmental effects of the proposed project in programmatic analysis in accordance with its CRP.
>
> Higher prices would be expected to increase water conservation and improve the efficiency of water use, which could be considered beneficial effects. Non-CEQA

aspects of this comment are addressed in the FSOR prepared in accordance with APA requirements.

DWR2

Name: Veronica Hicks
Affiliation: Department of Water Resources
Written Testimony: 8/11/2011
First 15-Day Changes Comment #: 1107

Comment: Did CARB conduct any analysis on the impact of the Regulation on different classes of water users (e.g. urban, agricultural, and environmental)? (DWR2)

> **Response:** The FED provides the environmental analysis of impacts related to compliance responses of covered entities. ARB considered the potential impacts of the proposed Regulation.
>
> Water users would not be subject to the proposed Cap-and-Trade Regulation except to that water purveyors that generate electricity, such as DWR, would be subject to the electrical generation sections of the proposed Regulation. The proposed the Cap-and-Trade Regulation would not regulate the availability, distribution, or use of water. Any impacts to water users that might occur would be the result of secondary price changes associated with electrical generation. A detailed environmental analysis of potential impacts to water users is not necessary under CEQA.
>
> A substantial proportion of the energy consumed in California is used for conveyance and treatment of water, and energy use represents the primary nexus between the proposed Cap-and-Trade Regulation and water. Energy providers (electricity generation and fuel providers) that would be subject to the Cap-and-Trade Regulation may pass increased costs to customers, including customers that use energy to convey and treat water. The proposed market-based program would allow covered entities to seek the least expensive manner of compliance and thus minimize costs. Further, increased costs may result in more efficient use of water. The FED appropriately provides a programmatic level environmental analysis. No direct adverse environmental impacts to water users are expected to result from this activity. The evaluation of indirect environmental impacts that might affect individual classes of water users (most of whom are not regulated entities) resulting from economic changes and the presumed actions of individual water purveyors is beyond the scope of a programmatic analysis and are too speculative to evaluate in the FED.

Comment: Did CARB conduct an analysis identifying the economic and environmental impacts of this regulation, specifically based on impacts to water uses? More specifically, did CARB analyze the impacts on agricultural water users, who may have a disproportionately high level of water use compared to their electricity use? (DWR2)

> **Response:** The commenter questions whether the FED evaluates the economic and environmental effects of the Regulation on water users. Refer to the

response to the preceding comment. Non-CEQA aspects of this comment are addressed in the FSOR prepared in accordance with APA requirements.

Comment: Did CARB consider the economic and environmental impacts such as land use changes and crop-shifting that could result from this regulation's possibly larger impact on agriculture, particularly in light of the assertion by federal power providers that they are not obligated to comply with this regulation, and the resulting incentives which would encourage additional water use on lands entitled to receive federal water deliveries? (DWR2)

Response: Agriculture activities are not directly regulated under the Cap-and-Trade Regulation. Potential indirect impacts to agriculture would be economic, consisting of secondary price changes. CEQA does not require discussion of economic changes unless the economic change would result in a physical effect on the environment (see CCR section 15064[e]). The expected outcome of possible incremental increases in the price of water would be increased water conservation and more efficient use of water, which could be considered beneficial effects. Further environmental analysis is not necessary.

Federal water is allocated based on water rights and not price. The proposed regulation would not change water rights nor would it alter the price of water provided by federal agencies.

ARB prepared the Updated Economic Evaluation of California's Climate Change Scoping Plan, which includes a cap-and-trade program. That evaluation used the ENERGY 2020 model to assess the potential changes in energy use, both type and volume, brought on by the proposed Cap-and-Trade Regulation. The model did not indicate that the use of biomass would increase in response to the proposed Cap-and-Trade Regulation, and consequently crop switching to increase the production of fuel crops or other changes in land use would not be expected. Table 27 of the report demonstrates that potential economic impacts to agriculture from AB 32 climate policies would be comparable to those in other sectors of the economy. Consequently, a detailed analysis of potential economic impacts to agriculture is not warranted. The FED appropriately provides a programmatic level environmental analysis.

DWR3

Name: Veronica Hicks
Affiliation: Department of Water Resources
Written Testimony: 9/27/2011
Second 15-Day Changes Comment #: 2064

Comment: DWR references comments from their earlier comment letters, and asserts that the environmental and economic impacts on DWR and water users have not been addressed.

Response: Refer to responses to DWR and DWR2.

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FRIENDSOFEARTH2

Name, Affiliation: Kate Horner, Friends of the Earth US; Rolf Skar, Greenpeace; Victor Menotti, International Forum on Globalization; Bill Barclay, Rainforest Action Network
Written Testimony: 8/11/2011
15-Day Changes Comment #: 1175

Comment: It is inappropriate for the ARB to move ahead with amendments to, or approval of, these regulations. The ongoing litigation by environmental justice groups under the California Environmental Quality Act raises legitimate concerns regarding the harm of implementing a cap and trade program on California's environment and vulnerable, overburdened communities across the state. As noted by plaintiffs in the case and as we note below, the original regulation failed to meet the criteria set out by AB 32 for market-based compliance mechanisms, and the modifications do not cure these defects. In general, we find that the amendments offered as part of the 15-Day Rulemaking Package do not ensure either environmental or financial market integrity within the proposed cap and trade rules. The ARB should take this opportunity to perform a meaningful and comprehensive alternatives analysis rather than moving forward with the same program at issue in the litigation. (FRIENDSOFEARTH2)

Response: The commenter suggests that because of ongoing litigation on the Scoping Plan, it is inappropriate for ARB to proceed with consideration of the Cap-and Trade Regulation. The commenter further suggests that ARB should prepare a comprehensive alternatives analysis. The commenter references a lawsuit filed against ARB on the Scoping Plan FED. In response to that lawsuit, ARB prepared and circulated the Supplement to the AB 32 Scoping Plan FED (June 13, 2011), which was considered and approved by the Board prior to taking action to re-approve the Scoping Plan on August 24, 2011. The Scoping Plan is a valid approved plan, within which the proposed Cap-and-Trade Regulation is a recommended measure.

The 2008 Scoping Plan outlines the State's strategy to reduce GHG emissions to 1990 levels by 2020, as required by the Global Warming Solutions Act of 2006 (AB 32; Núñez, Chapter 488, Statutes of 2006). A "scoping plan" is required by one provision of AB 32 (Health and Safety Code (HSC) section 38561), and ARB's adoption of GHG reduction measures is authorized under a separate provision (HSC section 38562). It is not required that a particular measure be encompassed in a scoping plan in order for ARB to pursue such a measure as a proposed regulation.

In the Cap-and-Trade FED, ARB evaluated five alternatives to the Cap-and-Trade Regulation, including several iterations of the cap-and-trade program design. The alternatives analysis provides a comparative evaluation of environmental impacts of each alternative (see pp. 365 to 395 of the FED). ARB made a good faith effort to provide a comprehensive analysis of the comparative environmental effects and achievement of project objectives for each of the

alternatives. No specific inadequacies of the alternatives analysis were provided by the commenter; therefore, no further response is necessary.

HDDP2

Name: Bradley K. Heisey
Affiliation: High Desert Power Project
Written Testimony: 12/14/2010
45-Day Comment #: 617

Comment: Based on the HDPP situation, ARB's CEQA review of the proposed Cap-and-Trade Regulation is deficient with respect to 2012 if ARB adopts it as proposed. ARB has not determined the economic or environmental effects of requiring "locked-in" generators like HDPP to purchase 100 percent of their GHG allowances through the proposed auctions at the outset of the program in 2012, with the resulting potential loss of relatively low emitting MWh of energy production in California and replacement by higher GHG emitting electrical generators from the outset of the cap-and-trade program in 2012. (HDPP2)

Response: The commenter suggests that the economic and environmental impacts of requiring “locked-in” generators (i.e., locked into electricity rates by contract) to purchase allowances at auction was not analyzed in the FED.

The first compliance period is now proposed to begin January 2013, a year later than originally proposed. If the Board approves, the Regulation this modification resolves the concern expressed by the commenter.

With regard to environmental impacts, the commenter suggests that the Cap-and-Trade Regulation as proposed would force HDPP (a private utility) to shut down or limit operations in 2012. The concern appears to be the perception that HDPP would be economically penalized for having to purchase GHG allowances without being able to pass the costs of the allowances along to its customers because it is currently operating under a fixed price contract through December 2012 and cannot change the prices to reflect the increased costs of the GHG allowances. The commenter suggests, although the reasoning behind the suggestion is not clear, that higher GHG-emitting electrical generators would replace the lower GHG-emitting electrical generation provided by HDPP in the event of such a shutdown.

The FED provides a comprehensive environmental analysis of the proposed Cap-and-Trade Regulation, including the potential for leakage of emissions outside of California as a result of the cost of allowances and the environmental effects of potential offsets, which are intended to help reduce allowance prices. It is too speculative to suggest that significant or substantially greater environmental impacts would occur as a result of an individual locked-in generator not being able to pass along the GHG allowance costs to their customers. There are many economic, regulatory, and environmental factors to consider. It is not feasible to predict the possibility of closing a power plant (versus other potential compliance responses) because of the cost of allowances. Further, even if electrical generation by lower GHG-emitting

generators would cease or be replaced by higher-emitting GHG generators for 2012, implementation of the overall cap-and-trade program over its 20-year time horizon would result in substantially less GHG emissions compared to baseline conditions, because the declining cap controls overall emissions. This was described as an environmental benefit on page 105 of the FED.

NCPA3

Name: Susie Berlin
Affiliation; McCarthy & Berlin, P.C. for Northern California Power Agency
Written Testimony: 8/11/2011
First 15-Day Changes Comment #: 1176

Comment: NCPA urges CARB to work with local air quality districts as those agencies undertake CEQA reviews of proposed geothermal projects to ensure that the local air districts apply the same metrics for evaluating a project's impact as CARB does when measuring that impact for compliance with the Cap and Trade Regulation. All of the State's environmental objectives are best served by a uniform and comprehensive approach to the treatment of GHG emissions from geothermal facilities. (NCPA3)

> **Response:** ARB concurs that the State's environmental objectives are best served by a uniform and comprehensive approach to the treatment of GHG emissions, including those from geothermal facilities. ARB will continue to work with the local air districts. Local air districts have discretionary authority in preparation of their environmental analyses and determination of significance of impacts, including GHG impacts.

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NRDC4

Name: Alex Jackson
Affiliation: Natural Resources Defense Council
Written Comment: 12/16/2010
45-Day Comment #: 958

Comment: NRDC believes that the FED is a careful and thorough review of the potential environmental impacts of the cap and trade regulation, in particular in its choice of alternatives to examine. We are also pleased that ARB chose to include adaptive management not as mitigation but rather as part of the program design with respect to forest offset projects and local air quality impacts (FED at 45-47). This use of adaptive management adds legitimacy to the FED in these two areas that have been the subject of much public comment and concern. Moreover, to its credit, ARB is not attempting to take credit for adaptive management as mitigation for recognized, potential negative impacts to air quality or forestry practices. (NRDC4)

> **Response:** This comment supports the alternative analysis and the adaptive management approach. No further response is necessary.

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PCAPCD2

Name: Thomas Christofk
Affiliation: Placer County Air Pollution Control District
Written Testimony: 8/11/2011
15-Day Comment #: 1051

Comment: CEQA should be explicitly distinguished within the regulation because it is not a law that in and of itself imposes reductions requirements. Public Resources Code section 21004 states that "a public agency may exercise only those requirements or implied powers provided by law other than [CEQA]." We recommend that the regulation recognize that offset credits used by a facility for the compliance obligation under the CARB Cap and Trade Regulation should be a part of any CEQA analysis that may be required for that same facility. Offset credits should be taken into account either early on within the setting of the baseline for a project, or as mitigation. The recognition of the purchase of offset credits within the CEQA process is not 'double dipping' because CEQA only requires that a project discloses its impacts. It does not independently provide the legal authority to impose any legal obligation. (PCAPCD2)

Response: The commenter recommends that the regulation recognize that offset credits used by a facility should be part of any CEQA analysis required for that facility, and that offset credits should be identified in the setting of a CEQA document as an existing condition, or as mitigation in the impact analysis. This comment addresses the future treatment of offsets under local CEQA analyses, but does not challenge the adequacy of the environmental analysis prepared for the proposed Cap-and-Trade Regulation. Nonetheless, this document appeared to be a logical location to identify the comment and respond accordingly.

The proposed Cap-and-Trade Regulation establishes criteria for GHG offsets to be used as a compliance mechanism in a market-based reduction program. Offset credits are included in the regulation essentially as cost-containment mechanisms. Under the proposed Cap-and-Trade Regulation, offsets do not mitigate for increased emissions, but rather provide an option to defer expensive onsite improvements during a specified reporting period for covered entities.

The proposed Regulation does not provide for any other use of offset credits, supersede any other air quality regulation that might require GHG reductions, or alleviate the requirement for a lead agency to fully comply with CEQA. ARB rejects commenter's suggestion that the Regulation be amended to allow the use of offsets for CEQA mitigation purposes by lead agencies. Staff does not believe that ARB has the authority to make determinations regarding CEQA mitigation requirements for projects for which it is not the lead agency, e.g. projects that fall within the authority of local permitting authorities. Lead agencies are responsible for determining the baselines for GHG emissions for their respective projects that are subject to CEQA, and for determining the level of significance for impacts. The recognition of offsets in any capacity in a project-specific CEQA analysis is at the discretion of the lead agency and permitting authorities, notably local air

districts for CEQA air quality analyses. ARB staff is not aware of any existing mechanism in the CEQA statute or Guidelines that allows the purchase of an offset credit under the cap-and-trade program as mitigation for projects subject to CEQA.

The environmental impacts of developing a specific offset project consistent with a protocol may need to comply with CEQA. The protocol requires compliance with all other applicable federal and state laws and regulations. The environmental impacts of the offset protocols have been programmatically evaluated in the FED. For example, the Urban Forest Protocol identifies that facilities that pursue this offset could result in increased urban tree plantings the installation of which would result in environmental impacts (e.g., dusts, noise, etc.).

SACREB

Name: Karen Klinger
Affiliation: Sacramento Real Estate Broker
Written Testimony: 12/16/10
45-Day Review Comment #: 983

Comment: There has not been appropriate outreach to the public or full disclosure telling the people what AB 32 really is, what it is linked to, and how all of the other links will accumulatively impact us. Knowing these many links exist, were they included in the DEIR and FEID? (SACREB)

> **Response:** ARB conducted over 30 workshops and public meetings related to the Cap-and-Trade Regulation, including a Scoping Meeting for the FED, available at the following website:
>
> http://www.arb.ca.gov/cc/capandtrade/meetings/meetings.htm#archive.
>
> ARB provides an assortment of AB 32 and Climate Change fact sheets that can be downloaded from the ARB website, and has web pages that are developed for specific audiences such as, general public, small business, local government, students and teachers. The FED was noticed in a 45 day Notice of Proposed Regulatory Action posted on ARB's website, noticed and circulated through the State Clearinghouse for agency review and comment, and publicly noticed in major newspapers in northern and southern California.

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USFLAW

Name: Alice Kaswan
Affiliation: University of San Francisco School of Law
Written Testimony: 12/10/2010
45-Day Comment #: 486

Comment: Alternative Rejected by Staff – Implement Only Additional Source-Specific Command-and-Control Regulations. CARB staff rejected the alternative of replacing the cap-and-trade program with a direct regulatory program for industrial sources. The Staff Report presents a number of convincing arguments for why regulation should not replace a cap-and-trade program, but did not address the value of complementing the cap-and-trade program with limited and targeted regulatory efforts where appropriate. The Staff Report expresses concerns about the cost-effectiveness of regulation if applied to all industries. But if regulation were used to complement cap-and-trade only where appropriate, CARB could take cost-effectiveness into account in deciding whether to impose regulations. In determining cost-effectiveness, it is also important for CARB to consider not only the costs of regulation to the relevant industry, but also the economic benefits of enhanced emissions reductions.

The Staff Report also observes that regulations would be difficult to draft given the lack of data on effective emission reduction mechanisms and the variation among facilities. However, CARB is requiring energy audits at industrial facilities, a process that includes an assessment of associated co-pollutant impacts. While current data may be insufficient, the audits could provide a much stronger basis for identifying cost-effective energy efficiency mechanisms that could be required at industrial facilities, and that could achieve both GHG and co-pollutant reductions.

CARB staff may be assuming that facilities will adopt cost-effective reduction strategies in response to the price signal created by the cap-and-trade program, without the need for command-and-control regulations. But industrial investment decisions are complex. Inertia, uncertainty about future carbon markets, concerns about short-term capital expenditures, and other factors could impede otherwise cost-effective investment in emission reductions. If price signals do not end up prompting cost-effective measures with significant co-pollutant benefits, then CARB should retain the authority to require appropriate measures.

In addition, if CARB identifies cost-effective GHG emission reduction measures with particularly significant co-pollutant benefits, then it would be consistent with AB 32's goals to require those measures rather than relying upon the vagaries of the market to incentivize them. Co-pollutant benefits could be particularly significant either because GHG reductions lead to a large reduction in associated co-pollutants, and/or because the industries to be regulated are located in especially polluted areas. (USF-LAW)

> **Response:** See response to CRPE1 regarding the reasonable range of alternatives considered in the FED and source-specific alternative response.

ARB believes that it has provided a reasonable range of alternatives for evaluation under the FED.

It is also important to note that ARB always retains the ability to pursue additional regulations. In fact, ARB is currently collecting information on opportunities for further GHG and co-pollutant emission reductions through the Energy Efficiency and Co-benefits Assessment Regulation for Large Stationary Sources. ARB is scheduled to receive these data by the end of 2011. Staff would then initiate a process to ensure that large industrial sources subject to the regulation be required to take all cost-effective and technically feasible actions identified under those audits. The audit results, due to ARB by the end of 2011, will inform the development of regulatory requirements staff intends to propose to the Board in 2012. Staff plans to initiate a separate public process in Fall 2011 to discuss metrics and actions to implement this commitment.

Also see the response to CBE1 regarding ARB's plans to implement an adaptive management plan.

Comment: In all provisions relating to the burning of biomass and biofuels, CARB should carefully assess associated co-pollutant and other environmental implications. For example, if biomass-derived fuel sources do not have to account for their GHG emissions, the rule could create incentives to use biomass that have incidental adverse environmental consequences. (USFLAW)

Response: The increased use of biomass is already incentivized by existing regulations such as the Renewables Portfolio Standards and the Low Carbon Fuel Standard. The Renewables Portfolio Standard (RPS) requires public owned utilities to obtain 33% of their energy from renewable resources. Most utilities are challenged to achieve the renewable target despite the availability of biomass as a renewable fuel.

ARB used the ENERGY 2020 model to assess the potential changes in energy use, both type and volume, brought on by the proposed Cap-and-Trade Regulation. The model did not indicate that the use of biomass would increase in response to the proposed Cap-and-Trade Regulation. Further, the proposed Cap-and-Trade Regulation would not supersede other air quality regulations. Combustion of biomass is subject to local permitting and emission control requirements.

ARB proposes to monitor the use of biomass as part of our monitoring and oversight of the implementation of the Cap-and-Trade Regulation.

VALERO2

Name: Matthew H. Hodges for Patrick Covert
Affiliation: Valero Companies
Written Testimony: 8/11/2011
First 15-Day Changes Comment #: 1062

Comment: It is presumptuous of CARB to continue development of a cap and trade regulation when the alternatives discussed in the Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED) have not been fully vetted. With the FED public comment period closing on July 28, 2011, CARB has not had sufficient time to consider all comments and respond appropriately. From a general perspective, the FED was a hastily prepared document lacking in critical details that draws upon a foregone conclusion that California must have a cap and trade regulation to meet the goals of AB 32. Resolution 10-42 (approved at a December 16, 2010 Board Hearing to consider adoption of the proposed Cap and Trade program), requires the Executive Officer to report on the progress being made on implementing the Cap and Trade program, provided the Cap and Trade program is approved. In the absence of a complete review of comments submitted in response to the FED and making a formal determination that other alternatives are not feasible or appropriate, it appears premature to continue the Cap and Trade rulemaking process. (VALERO2)

> **Response:** ARB prepared and circulated the Supplement to the AB 32 Scoping Plan FED (June 13, 2011). At a public hearing on August 24, 2011,the Board, after consideration of the alternatives analysis in the Supplement, public comment and staff's written responses to comments, voted to re-approve the Scoping Plan. The responses in this document incorporate information from the Scoping Plan FED Supplement as appropriate.

Comment: Valero strongly urges ARB to complete the regulatory development process prior to adoption, including full consideration of comments and alternatives presented in the FED, so that all impacts can be thoroughly reviewed as an entire package by the impacted parties. Valero believes that, if ARB presents a complete regulatory package, the impact to the economy, industry and consumers would be minimized. (VALERO2)

> **Response:** The commenter urges ARB to complete the regulatory process prior to adoption of the project, including full consideration of comments and alternatives presented in the FED. ARB has put forward a good-faith effort in preparing the FED for the Cap-and-Trade Regulation that was circulated for public review and comment, and staff has prepared written responses to comments on the FED in this document. The Board is scheduled to consider the FED, comments on the FED, staff's written responses to those comments, prior to taking final action on the proposed Regulation at a public hearing on October 20, 2011.

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III. EVALUATION OF REGULATORY (PROJECT) CHANGES

The Draft FED was included as Appendix O to the Staff Report prepared for the Regulation, and was circulated for public review and comment from October 28, 2010 to December 16, 2010. Since circulation of the FED, the Regulation language was modified, and two Notices of Public Availability of Modified Text and Availability of Additional Documents were issued.

The first 15-Day Change clarifies and revises the Regulation language to allow California's cap-and-trade program to better align with rulemaking efforts in other Western Climate Initiative (WCI) jurisdictions. These changes allow for future linkage that supports a broader, regional cap-and-trade program, provides more cost containment benefits to California-covered entities, and ensures greater reductions in regional emissions of greenhouse gases to the atmosphere. Staff also modified the Regulation language to begin the first compliance obligation in 2013. The allocation, auction, trading, and other activities will begin in 2012 before the start of the compliance obligation and the first compliance period. The 15-Day Change language provides that three-fourths of the "excess emissions" will be placed into the auction holding account, and not in the price containment reserve. Staff added flexibility to the statutes of limitations for invalidation of ARB offset credits, and added an equation to calculate how a compliance obligation would be assessed for electricity providers. The notice of the first 15-Day change can be found at: http://www.arb.ca.gov/regact/2010/capandtrade10/2nd15daynotice.

The second 15-Day Change modifies or clarifies numerous sections of the Regulation, including those sections that apply to roles and responsibilities of covered entities, accounting and tracking, ensuring confidentiality and security of account representatives, and other key program design elements. The second notice can be found at: http://www.arb.ca.gov/regact/2010/capandtrade10/2nd15daynotice.pdf.

In addition, the general offset provision was modified to be more stringent, and the four Compliance Offset Protocols analyzed in the Draft FED were modified. These changes generally resulted in the protocols to be more environmentally protective. The Urban Forest Projects Protocol was modified to require an urban forester to be involved in the review of the project and offset project data report. The Livestock Projects protocol was modified to allow some mechanical flexibility, and thermo couplers for flares have been expanded to include engines, as well as adjustments to metered biogas flow data were replaced by a more conservative method to ensure rigorous accounting. The Ozone Depleting Substances Protocol was modified to include CFC-13 as an eligible gas into the methodology based on information from U.S. Environmental Protection Agency, and others. The U.S. Forest Project Protocol was modified to be more stringent by incorporating administrative, procedural, and legal provisions identified earlier in this document.

ARB staff reviewed the regulatory language modifications and evaluated whether they warranted any revisions to the environmental analysis in the FED, e.g. to reflect any new impacts or levels of significance of identified impacts. Staff has determined that the

modifications consist largely of administrative and program design modifications that would not change the results or findings of the environmental analysis in the FED. Therefore, revision of the environmental analysis or recirculation the FED for further public review and comment is not required.

IV. REFERENCES

Amador, County of. 2010a. *Subsequent Environmental Impact Report for the Buena Vista Biomass Power Plant Use Permit Amendment, Draft* (August). http://www.co.amador.ca.us/Modules/ShowDocument.aspx?documentid=8542

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California Air Resources Board. *ARB Responses to Public Comments on the Functional Equivalent Document (FED) for the Proposed Climate Change Scoping Plan.* http://www.arb.ca.gov/cc/scopingplan/response_to_comments_on_fed.pdf

California Air Resources Board. *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document. Attachment D of the FSOR.* Released August 19, 2011to be considered at the August 24, 2011 Board Hearing. http://www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf

California Air Resources Board. *Functional Equivalent Document prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms*. October 28, 2010. (Appendix O of the ARB Staff Report for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms). http://www.arb.ca.gov/regact/2010/capandtrade10/capv5appo.pdf

California Air Resources Board. *Updated Economic Analysis of California's Climate Change Scoping Plan. Staff Report to the Air Resources Board.* March 24, 2010. http://www.arb.ca.gov/cc/scopingplan/economics-sp/updated-analysis/updated_sp_analysis.pdf

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