August 11, 2011

California Air Resources Board
James Goldstene, Executive Officer
1001 I Street, Sacramento, California

Submitted via weblink at:
http://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=capandtrade10&comm_period=1

Re: Proposed Modifications to the AB 32 Greenhouse Gas Cap-and-Trade Regulation

Dear Mr. Goldstene and members of the California Air Resources Board:

On behalf of our more than 300,000 members and activists, the Center for Biological Diversity submits these comments on the proposed modifications to the AB 32 Greenhouse Gas Cap-and-Trade regulation ("proposed modifications"). These comments focus on the sections of the Cap-and-Trade regulation related to offset credits, the forest offset protocol, forest biomass combustion, and the adaptive management program to mitigate environmental impacts to forests.

The proposed modifications include many improvements and clarifications, and we commend the staff of the California Air Resources Board ("ARB") for their thoughtful work on this rule and their commitment to implementing California's landmark effort to reduce statewide greenhouse gas ("GHG") pollution. However, the proposed modifications also include provisions that fail to address problems previously identified in the rule, and are silent on a number of points where modification of the rule is sorely needed.

The Center for Biological Diversity submitted extensive comments on the proposed Cap-and-Trade regulation on December 15, 2010. Those comments remain relevant to the revised regulation as proposed in the 15-day notice, and are hereby incorporated by reference in their entirety. We ask that all of our previous comments on the Cap-and-Trade regulation, and all exhibits to those comments, be included in the administrative record of proceedings in this matter.

1. Determinations based on specific standardized criteria are needed to ensure that offset protocols fulfill the requirements identified in AB 32 and the Cap-and-Trade regulation.

Section 95970 of the Cap-and-Trade regulation restates the mandate of AB 32 that a compliance offset credit must "[r]epresent a GHG emission reduction or GHG removal enhancement that is real, additional, quantifiable, permanent, verifiable, and enforceable." However, section 95971, "Procedures for Approval of Compliance Offset Protocols," identifies no actual procedures to ensure that adopted protocols satisfy these requirements, instead

expressing a general commitment to provide public notice and opportunity for public comment. Section 95972, "Requirements for Compliance Offset Protocols," provides a list of general requirements for offset protocols, but no specific criteria or standards by which to determine the achievement of those requirements. The result of these sections is that there is no clear, consistent process identified for the adoption of compliance offset protocols.

The establishment of specific, standardized, quantitative criteria to be applied in the review of compliance offset protocols is critical to providing clarity, transparency, and consistency in offset protocols and the offset credits they generate. The Cap-and-Trade regulation should identify explicit determinations, based on standardized criteria, which ARB will apply in their evaluation of all offset protocols. For example, the regulation should require specific determination of the risk of non-additionality, reversal, and fraud associated with an offset protocol, provided in the context of the volume of offset credits an offset protocol is expected to generate, and a comparison of these factors among project types within an offset protocol and among offset protocols. Requirements for offset credit buffer pool contributions must be based on these assessments of risk and the volume of offset credits an offset protocol is expected to generate.

Without specific determinations based on consistent, standardized criteria, the Cap-and-Trade regulation does not provide that the review of offset protocols will ensure that offset credits are real, additional, quantifiable, permanent, verifiable, and enforceable. We understand that the wide variation in potential offset projects make the development of specific criteria challenging. However, it is precisely this tremendous variation in the character of offset projects that makes the use of standardized, quantitative criteria necessary to guard against ad hoc reviews that are inconsistent and potentially influenced by the demand for greater volumes of offset credits.

To use the example of the Compliance Offset Protocol U.S. Forest Projects ("Forest Offset Protocol"), this protocol contains a number of inadequacies that substantially increase the risk that the Forest Offset Protocol will generate non-additional offset credits. For example, under the Forest Offset Protocol, forest offset projects are not prohibited from shifting timber harvesting from project areas to elsewhere in their land ownership, and are not even required to report such "leakage;" forest offsets provide a much lower degree of permanence than the other adopted offset projects; forest offsets carry a much greater risk of reversal than offsets from the other adopted protocols; and the forest offset protocol relies significantly on carbon sequestration in a pool beyond the knowledge and control of the project operator, and which is therefore much more uncertain and unenforceable than other offset protocols. The current projections that California's Cap-and-Trade program will rely on offsets from the Forest Offset Protocol more than from any other offset protocol should be included in the context for evaluating the protocol and addressing inadequacies.

Offset protocols should only be adopted, and should remain valid for new projects, only if the project types credited under the protocol are not likely to be pursued, or would be pursued at significantly lower rates, in the absence of the offset protocol, and if the business-as-usual

reductions that are inadvertently credited under the protocol are counter-balanced by conservative methods to calculate emissions reductions. At a minimum, for the project types allowed to generate credits under offset protocols, ARB should thoroughly assess: the factors that influence project development decisions; the expected influence of AB 32 offsets credits on those decisions; the business-as-usual activities that are likely to go forward regardless of the ability to generate offsets credits; and whether the business-as-usual reductions that are inadvertently credited under the protocol are counter-balanced by conservative methods to calculate emissions reductions.

Finally, the regulation should require that all protocols use a baseline that reflects the most stringent combination of statutory and regulatory requirements between California and the jurisdiction where the offset project is located. This would avoid creating a perverse incentive for states to refrain from enacting regulation as strict as in California, since the enactment of such regulation could lead to the generation of fewer carbon credits from activities in their state. States with weaker regulations will have weaker baselines that could lead to the generation of larger numbers of offset credits from the same activity.

The Center for Biological Diversity has submitted a separate comment letter in conjunction with other organizations on this topic, and those comments are incorporated here by reference.

2. Any exemption of forest biomass combustion from compliance obligation must be based on the specific fuel characteristics and sources, secondary emissions associated with harvesting and processing, land use impacts, and effects on carbon stocks and future sequestration capacity.

We strongly support ARB's decision not to exempt emissions from the incineration of municipal solid waste from compliance obligations, an exemption that was proposed in the discussion draft but was ultimately not included in the proposed modifications. Discussion draft at A-90. Such an exemption has no basis in law, science, or sound policy, and would inexplicably and inappropriately exclude an entire category of GHG emissions from the cap.

ARB's proposal in the proposed modifications to maintain exemptions from compliance obligations for other sources of biomass, however, remains fundamentally flawed for these same reasons. As we stated in our comments submitted in response to the proposed cap-and-trade regulation: "*These emissions affect California's ability to achieve AB 32's objectives just as much as emissions from other sources. Moreover, the climate impacts of any particular biomass facility will vary greatly, depending on fuel characteristics and sources, secondary emissions associated with harvesting and processing, land use impacts, and effects on future sequestration.*" Center for Biological Diversity letter, December 15, 2010. We also described that "*unchecked expansion of biomass energy—particularly the use of woody biomass to generate electricity—represents a double threat to the climate and to California's forests… Public incentives for biomass, embodied in renewable energy standards and other policies, are*

both threatening to exacerbate greenhouse pollution and putting increased pressure on the nation's forests by increasing the demand for woody fuel." Center for Biological Diversity comment letter, December 15, 2010.

The Center for Biological Diversity also submitted comments on this topic in conjunction with a coalition of environmental organizations, in which we described why greenhouse gas emissions from the combustion of woody biomass should be included under the cap and generate compliance obligations. "*Entities combusting these fuels should be excused from compliance obligations only to the extent that they can demonstrate that the production and use of the biomass fuel resulted in reduced or avoided greenhouse gas emissions over a timeframe relevant to AB 32, that is, by 2020.*" Group comment letter, December 14, 2010.[1] That is, any exemption from compliance obligations must be based on an explicit and source-specific determination of the GHG emissions associated with the production and combustion of the feedstock. In the case of forest biomass, such a determination would need to take into account fuel characteristics and sources, secondary emissions associated with harvesting and processing, land use impacts, and effects on future sequestration. The blanket exemption proposed in both the original draft regulation and the proposed modifications satisfies none of these criteria, and thus lacks any factual basis.

The proposed modifications to the Mandatory Reporting Rule include new requirements for the reporting of basic information about the source and mass of forest biomass material. "*When reporting the use of forest derived wood and wood waste as identified in section 95852.2(a)(4) of the Cap-and-Trade Regulation and harvested pursuant to any section of the California Forest Practice Rules Title 14, California Code of Regulations, Chapters 4, 4.5 and 10 or federal National Environmental Policy Act, the reporting entity must report the bone-dry mass received and the name, physical address, mailing address, contact person with phone number and e-mail address, and corresponding identification number under which the wood was removed.*" Mandatory Reporting Rule, Section 95103(j). Monitoring and reporting requirements, however, do nothing to address the problems created within the cap-and-trade system by a blanket exemption from compliance obligations for biomass combustion.

That said, we have submitted a letter in response to the proposed modifications to the Mandatory Reporting Rule in conjunction with a number of organizations, recommending ways to improve the utility of that information in identifying the forest biomass utilized for energy generation. However, a determination of the GHG emissions associated with the production and combustion of forest biomass, and understanding how the cap-and-trade program is affecting forest management decisions, will require information on the specific forest areas and forest practices generating that biomass. Such a determination must be based on the specific fuel characteristics and sources, secondary emissions associated with harvesting and processing, land use impacts, and effects on carbon stocks and future sequestration capacity.

[1] We are submitting this comment letter as an attachment to these comments.

3. The proposed modifications lack the legally required performance standards and commitments to specific mitigation actions with respect to environmental impacts.

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. "*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 § 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.*" Center for Biological Diversity comment letter, December 15, 2010.

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…*" ARB Resolution 10-42 at 10. 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.

4. The proposed modifications fail to address significant inadequacies in the Forest Offset Protocol.

In advance of ARB's adoption of the Forest Offset Protocol in December 2010, a broad coalition of public interest organizations dedicated to forest conservation strongly recommended changes to the Forest Protocol in order to improve the integrity of the carbon accounting in the protocol and to protect forest ecosystems and habitats from adverse impacts caused by the Forest Protocol. These recommendations included: 1) Clarify that the Forest Protocol does not permit forest offset projects to generate credits for converting a diverse, natural forest to a simplified even-age stand; 2) Improved forest management projects must include the forest carbon pools associated with lying dead wood and, when there is intense site disturbance above certain thresholds, soil carbon, in order to ensure accurate accounting.

The same day that ARB adopted the Forest Protocol as part of the Cap-and-Trade regulation, the Climate Action Reserve—the entity that had initially developed the forest protocol—made public a series of white papers they had commissioned to provide information on many of these same topics. In short, the white papers state that soil carbon and down woody debris carbon pools comprise substantial portions of the carbon at a forest site; the carbon in these pools can be greatly mobilized (i.e., result in GHG emissions) by disturbance resulting from intensive management actions such as forest clearcutting and soil preparation; and that accurate accounting of the GHG impacts of forest projects requires accounting for the soil and down woody debris carbon pools in projects that include disturbance of these carbon pools.[2]

> "*The papers report that soil carbon accounts for 50-75% of all carbon on forest site, and lying dead wood makes up as much as 12% of total forest carbon on average for some forest types. Obviously, these are large pools that can have significant effects on the overall carbon accounting for the project. The papers on lying dead wood and soil carbon indicate that these carbon pools may eventually recover from harvest activities, given enough time between disturbances. However, even if this can be quantified by project type, it is obviously not acceptable to issue credits in the near term for presumed carbon benefits in the long term. To do so would undermine the intention of the protocol to issue credits for only the net sequestration above baseline achieved in any given time period. Ultimately, the papers find that the current forest protocol runs a high risk of significantly underestimating the carbon emissions associated with forest projects that disturb soil or disrupt dead wood processes over a significant portion of the project area; as a result, the current forest protocol runs a high risk of over-counting carbon benefits from some forest project types. In particular, forest projects that include even-age management may appear to be a carbon benefit in many situations only if one ignores the impacts to soil, lying dead wood, litter and other carbon pools, and only under a number*

[2] We are submitting into the record the following documents via the ARB weblink: the Climate Action Reserve white papers on the Forest Offset protocol, and comments submitted by Center for Biological Diversity and Forest Stewardship Council in response to those papers.

> *of highly uncertain assumptions about the business-as-usual harvest levels and replanting, and the persistence of wood products*." Center for Biological Diversity comment letter to Climate Action Reserve, March 25, 2011.

Following the publication of these white papers, the Climate Action Reserve committed to a series of revisions over the next several months to address these issues. In contrast, the proposed modifications to the Cap-and-Trade regulation currently proposed by ARB fail to address these inadequacies in the Forest Protocol, and we have been told that ARB may not take up revisions to the Forest Protocol until 2012 or later. In order to provide accurate accounting in the Forest Protocol, protect forest ecosystems and habitats from adverse impacts caused by the Forest Protocol, and improve the integrity of the Cap-and-Trade program to the extent that it relies on offset credits from the Forest Protocol, ARB should propose modifications to address these inadequacies.

Thank you for your consideration of these comments.

The Center for Biological Diversity commends the staff of the California Air Resources Board ("ARB") for their thoughtful work on this rule and their commitment to implementing California's landmark effort to reduce statewide greenhouse gas ("GHG") pollution. We look forward to working together with you to address these issues and to improve the integrity of the Cap-and-Trade program. Please contact me if you have any questions. Thank you for your consideration of these comments.

Sincerely,

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