Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

August 11, 2011

James Goldstene, Chair Mary Nichols and California Air Resources Board members
CA Air Resources Board (CARB)
P.O. Box 2815
Sacramento, CA 95812

Re: Comments on Proposed (15-day) Revisions to AB 32 Cap-and-Trade Regulation

Dear Mr. Goldstene, Chair Nichols and CARB Board Members:

Thank you for the opportunity to offer constructive comments and recommendations on the proposed cap-and-trade regulation under AB 32. As you know, the Union of Concerned Scientists (UCS) continues to support the inclusion of a cap on greenhouse gas emissions for all large emitters along with a well-designed market-based trading mechanism that can facilitate cost-effective compliance.
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Specifically, UCS offers recommendations on allowance allocation methods and the need to re-assess the leakage analysis taking into account transportation costs and competitiveness of non-Californian products, necessary features of a GHG performance benchmark, and finally explaining why the Western States Petroleum Association (WSPA) proposal to use the Solomon Energy Intensity Index (EII) for a refinery benchmark is fundamentally flawed. We further offer constructive recommendations on offset protocol approval and offset credit verification.

Summary of Recommendations on Industrial allocations, GHG benchmarks, and specific refinery benchmarks:

UCS makes the following recommendations for allocating allowances to refineries in California.

A. The preferred option would be to allocate allowances exclusively with auctioning and address leakage issues via border adjustment if and when they arise.
B. If some free allocations are deemed necessary, then UCS urges CARB to promote best practices by basing the benchmarks on best-in-class international or national carbon intensity standards which are transparent and based on publicly available information.
C. The WSPA proposal should be rejected as it (i) ranks refinery performance on the basis of a energy efficiency index rather than carbon efficiency; (ii) lacks transparency and accountability being based on an industry funded, proprietary

ranking system; (iii) does not address leakage issues given the emission basis of the proposal; and (iv) dilutes incentives for carbon reductions by deliberately compressing the distribution range of allowances among refineries to avoid financial consequences for poor performance.

A UCS advocates the use of maximum auctioning for allowances.

Economists strongly advocate for auctions over free allocations because auctions provide transparency, help to ascertain emission abatement costs, and impose lower costs on those who take early action (see Economic Allowance Allocation Committee (EAAC), Allocating Emissions Allowances Under a California Cap-and-Trade Program, March 2010, pages 14-21). Another benefit is that auctions generate revenues that can be used to reduce the overall costs of implementing AB 32 as well as achieve additional reductions of emissions. These substantial benefits do not arise if allowances are distributed freely to polluters. Free distribution results in higher revenues and profits to polluters at the expense of the California public. Furthermore, since the overall statewide emission cap is fixed, giving free allowances to one sector but not others will necessitate larger emission reductions in the remaining sectors and increase the carbon compliance costs for the whole statewide economy.

The main argument in favor of freely allocating allowances is that economic and emission leakage will occur if California producers face increased carbon costs while non-California producers do not. To maintain a level playing field between competing producers, so the argument goes, it is important not to impose carbon costs on the local producers who face leakage risk. Instead, they should be given allowances at no cost. It is not clear what the leakage risk is for the refining sector in California. The CARB assessment of leakage risk was a partial analysis constrained by resources and did not consider many relevant features to potential competition in the refining sector such as transportation costs and the specificity of California fuel requirements.

UCS is concerned that CARB is overestimating the likelihood of leakage and that this is resulting in the subsidization (via free allocations) of carbon intensive industries, such as refineries. As discussed, there are significant costs from the free allocation of valuable allowances since these public monies could instead be spent on lowering the costs of the cap-and-trade program. A reassessment of leakage risk should be undertaken which takes into account transportation costs and the ability of non-Californian companies to compete with California producers.

Recommendation: Leakage risk analysis should be re-evaluated before the start of the second compliance period.

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B Free allowance allocation for polluters who face competitive threats.

If allowances are to be distributed freely, then the regulatory authority needs a rule to determine the number of allowances to distribute to that sector and how to allocate those allowances across firms within the sector. One method to design the rule is to set the sectoral distribution equal to a proportion of historically observed emissions for the sector. The rationale for this type of rule is that it preserves the status quo ranking and thereby seems 'fair' and more politically acceptable than any other administratively determined alternative. The distribution across emitters in a sector should mimic the distribution of allowances under an auction system, whereby relatively lower costs are imposed on emitters that have invested in emission reduction technologies. This will promote and maximize adoption of carbon reduction production techniques. CARB is proposing the use of a GHG performance benchmark to assess the relative carbon intensity of emitters. Polluters who meet or beat the benchmark will be given more allowances and so face lower costs relative to producers who are heavy emitters with higher carbon intensities.

USC recommends the following criteria be used to evaluate alternative GHG performance benchmarks.

a. The benchmarks should be transparent and based on publicly available information
b. The benchmark should be output (product) based, to maximize production in California.
c. The benchmark should be best in class to maximize carbon reductions and minimize associated criteria pollutants

Recommendation: Use these criteria to evaluate the GHG performance benchmarks.

Stringency of Benchmarks

The GHG performance benchmarks are metrics used to evaluate and compare carbon emission intensity performance across emitters in an industry. In the cap-and-trade program these benchmarks provide key incentives to maximize carbon reductions if allocation rules reflect this performance. UCS is very concerned, however, over CARB's mixed approach based on 90% of average in some cases and best-in-class in other cases. We urge ARB to adopt a consistent best-in-class approach based on national and international data where possible.

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For the refining sector, CARB has proposed an output based benchmark of 0.0465 allowances per barrel of primary product. The rationale for this proposal is that it is 90% of the value of the average emissions per unit of primary product among California refineries. The supposition is that this percentage reflects a 'best practice' assessment of carbon intensity performance in the refining sector. Under this proposal nearly half (7/15) of refineries lie below the proposed benchmark indicating that almost 50% of refineries will have surplus allowances to sell. This windfall occurs as a direct result of the proposed weak benchmark standards. The proposal, if adopted, would be a missed opportunity to promote refinery best practices and compares poorly with the EU ETS performance benchmarks in which only the top 10% of refineries are deemed 'good' performers and get all their allowances for free.

Another major and well documented problem of using averages is that this metric is heavily influenced by outliers. This is clearly evident in Figure 3 (Appendix B) where the first 14 facilities have emissions intensities with a range of high 20s to low 60s, and the outlier has an emission intensity of nearly 90 - almost 3 times the level of the lowest intensity. This outlier significantly alters the average metric upward and considerably weakens the stringency of the proposed benchmark.

Refinery Benchmarks should be based on National or world class performance
Many of the benchmarks proposed are based on the historical GHG intensity performance of California producers. In some cases these data restrictions will result in weaker performance benchmarks. For example, California refineries have the highest emissions intensities in the US, (Karras, 2010,2011)[1]. California refineries have emissions intensities that are around 30% higher than the East Coast and the Midwest. Calculations show that if the CARB methodology was used with national rather than California data, the refinery GHG benchmarks would be around twenty percent lower, (approximately 0.0385 allowances per primary product), rather than the CARB proposed value of 0.0465 allowances per primary product[2].

> Recommendation: The refinery emission intensity benchmark should be based on best-in-class performers at the national or international level rather than the California level.

C Flaws of WSPA's proposed use of the Solomon EII index as a performance benchmark for refineries

[1] 'Oil Refinery CO2 Performance Measurement', Report prepared for the Union of Concerned Scientists, Greg Karras, Communities for a Better Environment, August 2011
[2] Op cite

The WSPA proposal to use the Solomon EII index to rank the refineries' GHG performance is flawed since the proposed ranking is based on energy rather than carbon efficiency. This can encourage use of high carbon feedstocks which would undermine the carbon reduction objectives of AB 32. In addition this index is an industry sponsored and funded benchmarking service which is proprietary. The rankings lack public accountability since the proprietary methodology is non-transparent and based on confidential information. The WSPA allocation proposal is not based on California production and so does not maximize production in California. Finally the proposal dilutes incentives for carbon reductions by compressing the range of the distribution of allowances. In effect poor performers are not 'penalized' too much and will obtain significant subsidies to continue carbon intensive production. This payment for poor performance will dilute the incentives for improving performance.

Recommendation: Do not use the WSPA proposed Solomon EII index as the refinery GHG performance benchmark.

RECOMMENDED CHANGES TO OFFSETS PROTOCOL EVALUATION AND VERIFIER OVERSIGHT PROCEDURES

Offsetting adds uncertainty to the emissions reductions under a cap-and-trade program. Offsetting requires measuring emissions against a counterfactual scenario of what would have happened without the offsets program. Assessments must be made regarding whether the credited activities would have happened regardless of the offsetting program (additionality) and the direct and non-direct effects of the additional projects on emissions. The below comments respond to the challenges involved in developing an offsets program that avoids crediting non-additional business-as-usual activities, effectively oversees the work of third party verifiers, and ensures that emissions reduction calculations are conservative enough, given the uncertainties, to ensure that credits represent real reductions. The concerns raised herein derive from the poor performance of the UN's Clean Development Mechanism, as well as from concerns that ARB's adopted Forest Project Protocol allows non-additional activities to generate credits and over-credits the reductions from some projects. The below changes to the draft regulation would provide some assurance that CARB is implementing the requirements and procedures needed to assure that its offsets credits represent real and additional emissions reductions.

Herein we include:

1. A summary of our recommended changes
2. A background description of why we believe these changes are necessary
3. Detailed and elaborated recommended revisions to the draft regulation

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SUMMARY OF OUR RECOMMENDATIONS ON OFFSET PROTOCOL APPROVAL AND REVIEW AND VERIFIER OVERSIGHT PROCEDURES

OFFSETS QUANTITY

- No more than 2.5 percent of total emissions in the second compliance period and no more than one percent of total emissions in the third (and any subsequent) compliance period should be permitted to come from any type of offset.
- We oppose any suggestion to have one offset usage limit through 2020. Limits on offsets should remain as a per compliance period percentage and not be counted cumulatively across compliance periods.

PROTOCOL DEVELOPMENT

Fulfilling the mandate that all emission reductions from offsets be real and additional protects the integrity of the AB 32 market-based program by ensuring that the reductions required by the capped sectors are only avoided, or offset, by true additional reductions outside of cap.

Protocols should only be adopted, and should only remain valid for new projects, if:

- there is a high degree of confidence that the quantity of credits generated by the projects credited under the protocol in total will not exceed the total reductions and enhancements enabled by that protocol;
- the project types credited under the protocol, absent being eligible as part of the compliance offset protocol, are not likely to be pursued, would be pursued at significantly lower rates, or result in reductions that are negligible in number;
- the business-as-usual reductions that are inadvertently credited under the protocol are counter-balanced by conservative methods to calculate emissions reductions.

The regulation should incorporate specific procedures for adopting new protocols and periodically reviewing existing protocols consistent with the above criteria. At a minimum, for the project types allowed to generate credits under offset protocols, CARB 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.

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Moreover, periodic reviews of existing protocols should assess the influence that the protocol has already had on new project development.

In addition, each approved protocol should conservatively account for uncertainty in quantification factors for the offset project type.

Each approved protocol should 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.

CARB should monitor research advances, modifications to associated registry protocols and market conditions related to project types eligible for crediting under CARB protocols and revise protocols as necessary to ensure that offsets credits are real and additional and that uncertainty is accounted for in a conservative manner.

VERIFIER OVERSIGHT AND TRACKING

CARB has taken a few important steps towards strengthening and elaborating the procedures it will use, and the authority it has, to oversee the quality of offset project verification in their 15-day changes. Offset project developers are now required to disclose if reductions from their projects are also being credited under another voluntary or mandatory greenhouse gas program making the double counting of emissions reductions a violation. It is also now explicit that ARB will be the final arbiter of disputes between the verifier and the project developer, and that the submittal of any report containing fraudulent information, or in which information is concealed, is a violation. These are positive changes that strengthen the offsets program.

At present, offsets developers directly hire verifiers to verify the reductions they claim to have made. There is an inherent conflict of interest in the relationship between the developer and the verifier. Under this arrangement, verifiers have incentives to charge less, do less, and be less strict in their assessments in order to be hired again by the same developer or other developers. Given this inherent conflict of interest, effective government oversight of the quality of verification services is essential.

- An important change that needs to be made to the draft regulation is to institute a performance review of verification bodies. The results of performance reviews should be factored into the reaccreditation process.
- CARB should periodically review the relationships between verifiers and project developers and consider a system where the Board assigns verification bodies to each offset project.

- CARB must ensure that the registries participating in ARB offset generation have the expertise needed to perform their role overseeing verifiers and offset report quality and that they are performing their oversight tasks adequately. CARB must review the performance of the registries in conducting their oversight tasks and use discretion in approving registries.
- Offset Project Data Reports should be made publically available along with the verification reports.
- Offsets projects should be required to not cause significant adverse effects on human health or the environment.
- It is a positive improvement that developers must disclose if their projects are generating credits under another voluntary or mandatory greenhouse gas program. To ensure that developer statements are correct and that credits are not double counted, CARB must also actively reach out to other voluntary and mandatory crediting programs to seek instances of double counting.

THE FOREST PROJECT PROTOCOL

The eligibility requirements for the Forest Project Protocol should be revised to exclude activities that are currently being pursued without carbon credits and which could result in a non-negligible number of non-additional offsets credits.

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BACKGROUND – WHY THESE CHANGES ARE NEEDED

Additionality is essential to the integrity of a carbon offsets program

The biggest challenge to running a high quality offsets program is ensuring the credits it generates are additional. An offsets program allows a company to choose to reduce emissions outside of the cap instead of reducing their own emissions. Offsets credits are only justified when the company *causes* additional emissions to be reduced that would not have been reduced otherwise. When offsets credits are generated by business-as-usual projects that were going forward regardless of the offsets payments, the companies under the cap are able to emit more than the cap, but equivalent additional emissions aren't reduced elsewhere. The companies are simply paying project owners outside of the cap to do what they were doing anyway.

Even if the projects being supported are projects that reduce emissions (whether or not they are additional), have other benefits, and need support, it is still essential to assure offsets credits are additional. An offsets program does not just provide new support for worthwhile projects. It is ostensibly a means for achieving compliance with the emissions reduction requirement of AB 32. Emitters are allowed to fulfill their obligation to reduce emissions by buying offsets credits. To the extent that offsets used for compliance do not represent real additional reductions, California would fail to meet its emissions reduction obligations. Further, such failure would be generally not transparent. To the extent that offsets credits are non-additional, California's high emitting companies may appear to have reduced emissions when in fact they have not.

Experience with the world's largest offsets program established under the Kyoto Protocol shows what can happen if an offsets program is poorly designed. The majority of those offset projects have been shown to be non-additional business-as-usual projects that were going ahead anyway.

CARB's current procedures need to be enhanced in order to avoid generating non-additional credits.

CARB has taken a better approach to ensuring the additionality of its offset projects. CARB defines categories of projects that are eligible to generate offset credits instead of testing the additionality of each individual project. Under CARB's approach, any projects that fit into those clearly defined categories are able to generate offsets credits. The challenge then is identifying types of projects that are not already being built or are being built at relatively slow rates, and would be effectively enabled with the help of carbon credits. This requires grounded analysis of the project type(s) proposed for crediting under each proposed protocol, to assess the extent to business-as-usual projects will be able to generate credits under the protocol and the expected effect of offset credit generation on new project development.

CARB's draft regulation neither adequately spells out the operational requirements for achieving additionality for protocol approval, nor sufficiently defines the terms or procedures of any rigorous analysis that must occur to provide assurance that the credits generated by a protocol will be real and additional. Such analyses had not been made available leading up to the adoption of the four protocols by CARB last year.

Two adopted CARB protocols allow non-additional projects to generate credits.

CARB's US Forest and Livestock protocols each allow non-additional projects to generate offsets credits. Under the US Forest Project protocol adopted by CARB last year, any change in forest management that results in a higher storage of carbon than the average of similar forests in the region is eligible for offset crediting. This means, for example, that land that will be conserved through land purchases and conservation easements will be eligible to generate carbon credits, even if it would have been conserved anyway. Let's, for example, say a conservation organization purchases five thousand acres of forest land per year for conservation. Now they are able to generate carbon credits from that land conservation under the Forest Project protocol even though they would have preserved the land anyway. The new revenues they receive from the sale of carbon credits might allow them to purchase more land per year. But instead of creating offset credits for just the additional land that is preserved, they would be credited for all the land they purchase, including the five thousand acres that they would have preserved anyway. In addition, timber operators are now able to generate carbon credits in forest areas that they were already planning not to harvest.

Failing to enact strong offset oversight procedures risks undermining California's cap-and-trade program

CARB has made the risky decision to allow for the use of an expansive quantity of offsets. Along with that decision is the need to perform the rigorous oversight necessary to ensure the quality of the program. Failure to put in place strong oversight procedures risks undermining California's entire cap-and-trade program. Repercussions, when they inevitably come to light, will likely harm California's efforts to be seen as having developed a model cap-and-trade program and could undermine the ability to meet our long term climate protection goals.

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Detailed Proposed Changes to the draft Cap-and-Trade Regulation, Mandatory Reporting Regulation, Forest Project Protocol and CARB Procedures: Protocol Development and Review, and Offset Verification

I. Offsets Quantity

§ 95854 Quantitative Usage Limit on Designated Compliance Instruments—Including Offset Credits.

We recommend that in the second and third compliance periods, the percentage of total emissions that would be permitted to come from offsets is reduced. We propose that no more than 2.5 percent of total emissions in the second compliance period and no more than one percent of total emissions in the third (and any subsequent) compliance period be permitted to come from any type of offset. This would be equivalent to roughly one-third of emission reductions from business as usual in the 2nd compliance period and 12% of emission reductions in the 3rd compliance period.

These modifications in quantity will help promote technological innovation in the highest-emitting sectors, increase opportunities for in-state co-benefits (including air quality benefits), and reduce the risk that a high proportion of compliance credits will not represent real and additional reductions in emissions.

We oppose any suggestion to have one offset usage limit through 2020. Limits on offsets should remain as a per compliance period percentage and not be counted cumulatively across compliance periods.

II. Offsets Protocol Approval and Review

We recommend making the following revisions and additions to the requirements for offset protocol approval and review

§ 95972. Requirements for Compliance Offset Protocols.
(**a**) To be approved by the Board, a Compliance Offset Protocol must:
(1) ~~accurately determine~~ Conservatively estimate the extent to which GHG emission reductions or GHG removal enhancements are achieved by the offset project type;

Rationale: It is not possible to accurately determine GHG reductions when measuring emissions against a counterfactual scenario. This recommended language change acknowledges the uncertainty involved in estimating emissions reduced by individual projects, and the need to assess and account for this uncertainty with conservative assumptions consistent with the definitions of "offset protocol" and "additional."

(5) Conservatively account for uncertainty in quantification factors for the offset project type;

Rationale: Where there is systematic uncertainty (defined here when an incorrect value would result in the incorrect estimate of the emissions reduced by all projects of a certain type in the same direction (high or low)), calculation methods should be conservative (defined as leaning towards under-crediting). This is necessary to ensure that California meets its emissions reduction targets.

add: (10) 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;

Rationale: This proposed revision 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. This proposed addition avoids rewarding offset project developers in states with regulations weaker than California's.

add: (11) Ensure, with a high degree of confidence, that the total credits generated under the protocol will not exceed the total reductions and enhancements enabled by that protocol;

Rationale: This is meant to provide an operational definition of the terms "real" and "additional." A protocol should not over-credit emissions reductions. It is impossible to assure that every single credit represents a real and additional reduction. But it is possible to have a high degree of confidence that, in total, the protocol does not generate more credits than reductions it enables (causes). (1) and (5) above helps ensure credits are real by specifying that uncertainty should be accounted for in a conservative manner. In addition, (11) below ensures that most of the credits are additional and (12) assures that the credits that are non-additional are counterbalanced by reducing the number of credits each project will generate under the protocol.

add (12) Ensure the project types that qualify under the protocol, absent being eligible as part of the compliance offset protocol, are not likely to be pursued, would be

pursued at significantly lower rates, or result in reductions that are negligible in number;

add (13) Ensure the business-as-usual reductions that are inadvertently credited under the protocol are counter-balanced by conservative methods to calculate emissions reductions;

> *Rationale: The biggest challenge of administering an effective carbon offsets program is ensuring that credits meet the statutory requirement of being additional. The extent to which this criterion is met is a function of two factors: the number of credits generated from business-as-usual activities (which should be minimized) and the reductions from new projects enabled by the protocol (which should be substantially larger than the credits from business-as-usual projects). Approved protocols must only allow the generation of credits from project types that, (a) would not be built without carbon credits or would be built at a slow rate, and (b) would be effectively enabled by the revenues generated by the offsets program.*

add (14) Ensure the project types that qualify under the protocol do not hinder the long term sustainability of the related sector, including the resilience and adaptability of agricultural systems.

Add three new subsections to § 95972 or publish these procedures in an adopted procedures document:

***add*: (d) Review of new protocols:** All protocols adopted after January 2012 shall undergo a thorough review before adoption to ensure that each protocol meets the requirements established in 95972(a). This review shall include:

(1) A review of research on emissions quantification and verification related to that project type;

(2) A study of the considerations facing existing and potential developers regarding the development or expansion of the project type(s) covered by the protocol.

(A) At a minimum, this study shall include:

1. interviews with potential developers of the project types included under the offset project protocol,
2. interviews with developers of some existing projects, if relevant, and
3. input from experts familiar with the considerations of developers of project type/s supported by the protocol;

(B) In conducting this study, the Board shall consider:

1. the factors that influence project development decisions of the project types that qualify under the protocol;

2. the expected influence of offsets credits on those decisions;
3. the business-as-usual activities that are likely to go forward regardless of the ability to generate offsets credits; and
4. whether the business-as-usual reductions that are inadvertently credited under the protocol are counter-balanced by conservative methods to calculate emissions reductions.

(3) Review by one or more independent experts. At least one independent expert must have demonstrated expertise in the quantification of emissions reductions related to the project type;

(4) A timely opportunity for public comment on the review results.

add **(e) Periodic review of all adopted protocols:** All adopted protocols shall be reviewed, and revised if necessary, at least once every three years, or less frequently if the number of credits issued under a particular protocol is very small (*CARB staff to decide on what this threshold should be*) to ensure that it meets the requirements established in 95972(a). Each review shall include:

(1) Updating methods of calculating emissions reductions under the protocol when there have been substantial advances in research on emissions quantification related to that project type;

(2) A thorough review and evaluation of updates made to related registry protocols;

(3) A study of the considerations facing existing and potential developers of the project type/s covered by the protocol. At a minimum, this study shall include:

(A) input from experts familiar with the considerations of developers of project type/s supported by the protocol;

(B) interviews with existing and potential developers of projects of the project type/s covered under the protocol;

(4) Assessment of the extent to which the protocol has enabled additional emissions reductions or enhancements that would not otherwise have taken place without the offset protocol. This shall involve an analysis of the incentives that have been created through the offset program and whether those incentives have been a significant factor in allowing for the development of or expansion of projects pursuant to the proposed protocol; and

(5) Assessment of the extent to which the protocol may have credited business-as-usual activities;

(6) Review by one or more independent experts. At least one independent expert must have demonstrated expertise in the quantification of emissions reductions related to the project type;

(7) A timely opportunity for public comment on the review results.

add **(f) Ongoing monitoring of protocols:** protocols shall be monitored to ensure their consistency with the requirements of 95972(a). Protocols shall be revised when any of the following would result in substantial changes in the estimation of emissions reductions from offset projects:

(1) Research advancements on quantifying emissions reductions from protocol project types;
(2) Updates to related registry protocols that lead to more accurate or conservative measurement of emissions reductions;
(3) Significant changes in market conditions affecting the rate at which projects would be developed without the offset protocol; or
(4) Changes in the baseline.

III. Offsets Verifier Oversight

Regulation for the Mandatory Reporting of Greenhouse Gas Emissions

We have also submitted this one recommendation separately as a comment on the Mandatory Reporting Regulation.

Reaccreditation of offsets verifiers

We strongly recommend that the accreditation and reaccreditation procedures for verifiers be made more rigorous than currently outlined in the draft regulation. Below we lay out minimum requirements that could be included in the regulation text, or could otherwise be adopted by CARB.

§ 95132(c)(4)

add to the end of this sub-section: The applicant must pass a performance review.

(A) At a minimum, a performance review of a verification body shall include:
1. review of the detailed sampling plans and verification reports from a representative sampling of geographic locations, lead verifiers and project types;
2. visits to a sampling of project sites;
3. visit to verifier primary office to review verification systems;
4. comparisons to other accredited verifiers who have verified projects of the same project type; (*variability of verification procedures and interpretations can indicate differences in the quality of the verifications*)
5. investigative review of the conflict of interest assessment provided by the verification body; and

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6. opportunity for public comment on verification body performance.

(B) At a minimum, a performance review of a verifier involves review of the detailed verification reports and sampling plans from a representative sampling projects and documentation of any discrepancies found during the review.

Cap-and-trade regulation

§ 95986. Executive Officer Approval Requirements for Offset Project Registries.
CARB has delegated two important program oversight responsibilities to the registries for registry offsets that become ARB offsets. Registries are responsible for reviewing each validation report submitted, and registries must audit 10% of the annual verifications for each compliance protocol. The Board must therefore ensure that the registries participating in ARB offset generation have the expertise needed to perform this role and that they are performing their oversight tasks adequately. In addition to reviewing the performance of verifiers and verification bodies directly, CARB must also review the performance of the registries in conducting their oversight tasks. CARB must use discretion in approving registries.

§ 95973. Requirements for Offset Projects Using ARB Compliance Offset Protocols.
(a) General Requirements for Offset Projects. To qualify under the provisions set forth in this article, an Offset Project Operator or Authorized Project Designee must ensure that an offset project must:
add: (e) not cause significant adverse effects on human health or the environment;

> *Rationale: For offset projects in CA, CEQA and other California environmental laws would presumably ensure this requirement is met. For projects in states with laws substantially weaker than California's, this requirement ensures that California's cap-and-trade program is not the cause of significant environmental degradation and health impacts in these other states.*

§ 95987 Offset Project Registry Requirements.
(b) The Offset Project Registry must make the following information publicly available for each offset project:
(2) within 10 working days of the Offset Project Data Report being issued an Offset Verification Statement:
add: (F) Offset Project Data Report for each year the Offset Project Data Report was verified. Confidential information shall be treated as per section 96021.

§ 95977. Verification of GHG Emission Reductions or GHG Removal Enhancements from Offset Projects.

add: (g) The Board shall periodically review and evaluate the relationships between verifiers and verification bodies and project developers and consider a system where the Board assigns verifiers or verification bodies for each project.

§ 95985. Invalidation of ARB Offset Credits.

(f) Requirements for Non-Sequestration Offset Projects.

UCS supports the buyer liability laid out in this section.

IV. Tracking

CARB should formally reach out to registries and other compliance regimes to aide in ensuring that each offset credit used for compliance has not been claimed by another person or entity under any GHG compliance program.

> *The 15-day changes included the requirement that offsets developers disclose whether their offsets projects are generating credits under a different voluntary or mandatory crediting program. In addition, CARB must establish procedures for formally reaching out to all relevant carbon registries and compliance regimes to try to catch instances of double counting.*

V. Forest Project Protocol

The eligibility requirements for the Forest Project Protocol should be revised to exclude activities that are currently being pursued without carbon credits and which could result in a non-negligible number of non-additional offsets credits. For example, the Improved Forest Management project type could credit substantial business-as-usual practice. Improved forest management is worthy of support. But this project type, as it is currently defined, could generate a non-negligible number of credits from non-additional activities. The eligibility for all of the project types in this protocol should be evaluated to only allow projects which would not be pursued absent the protocol, or would be pursued at rates that result in a negligible number of credits. Alternatively, a discount could be applied to counterbalance the non-additional activities that would generate offset credits under this protocol; however, such an analysis may be particularly difficult for these project types.

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We appreciate this opportunity to provide comments and thank CARB staff for their dedication and effort in this very important milestone for California. We look forward to working with staff on these issues. #

Sincerely,

Dan Kalb
California Policy Manager

Jasmin Ansar, Ph.D.
Western State Climate Economist