WINROCK INTERNATIONAL

American Carbon Registry

April 23, 2013

Steven Cliff, Ph.D.
Chief - Climate Change Market Branch
California Air Resources Board
1001 I Street
Sacramento, CA 95812-2828

Re: American Carbon Registry comments on the Air Resources Board Cap-and-Trade Public Meeting to Discuss New Offset Protocols

Dear Dr. Cliff:

Thank you for the opportunity to comment in support of ARB's efforts to adopt additional compliance offset protocols for the California cap-and-trade market.

Core to the American Carbon Registry's (ACR) work since we began operating in 1996 is a belief that market mechanisms are the most efficient and cost-effective means for achieving many environmental objectives. Regulations create the market, but once regulations are in place, flexible compliance mechanisms such as allowance trading and offsets allow regulated entities to reduce GHG emissions in the most cost-effective way. Analyses by USEPA and ARB have concluded that cap-and-trade systems allowing use of offsets can achieve GHG reduction goals at approximately half the cost to society as systems that do not include offsets. Offsets also provide a means of achieving GHG reductions outside the cap, rewarding innovation, and delivering environmental, economic and social co-benefits.

Thus we commend ARB on making offsets an important component of your cap-and-trade program, approving four compliance protocols to date, and recognizing early action. We likewise commend your staff's tireless dedication to making the offsets program run smoothly and effectively. ACR is honored to be able to assist in this endeavor as an approved Offset Project Registry and Early Action Offset Program.

Offset Supply

ACR has voiced our concern that offset supply from the protocols thus far adopted is unlikely to meet demand, particularly in the second and third compliance periods. Our analysis, based on the maximum allowed offset usage and conservative supply predictions, forecasts a 67% supply shortfall over 2013-2020 if only the four currently approved protocols are available.[1] Approval

[1] See http://americancarbonregistry.org/acr-compliance-offset-supply-forecast-for-the-ca-cap-and-trade-program,

of additional protocols is key to closing the supply gap, particularly in the second and third compliance periods.

Thus we congratulate ARB on initiating development of coal mine methane and rice cultivation offset protocols. We think these two project types can yield high-quality GHG reductions while delivering environmental and economic benefits within California and outside. We look forward to participating in your protocol work groups for both protocols.

We also urge ARB to continue to consider adopting additional compliance offset protocols beyond these two. Based on ACR's research into the most significant undeveloped GHG mitigation potentials, we believe the areas of nitrous oxide from fertilizer management, grazing land and livestock management, avoided conversion of grasslands, restoration and avoided conversion of wetlands, and carbon capture and storage all offer opportunities worth considering. ACR has or will shortly have approved methodologies in each of these areas which we offer for CARB's consideration. In particular we urge you to consider the following ACR methodologies which are posted, along with documentation of the public consultation and scientific peer review process that led to their adoption, at http://americancarbonregistry.org/carbon-accounting/carbon-accounting:

- *N_2O Emission Reductions through Changes in Fertilizer Management* (v1.0 adopted November 2010; v2.0 currently in development)
- *N_2O Emission Reductions through Reduced Use of Fertilizer on Agricultural Crops* (adopted July 2012)
- *Restoration of Degraded Deltaic Wetlands of the Mississippi Delta* (adopted September 2012; currently being expanded to include California deltaic and coastal wetlands)
- *Grazing Land and Livestock Management* (in peer review for adoption summer 2013)
- *Avoided Conversion of Grasslands & Shrublands to Crop Production* (in peer review for adoption summer 2013)
- *Carbon Capture and Storage (CCS) in Oil and Gas Reservoirs* (in peer review for adoption summer 2013)

In addition, we have followed with interest the work of the Governors Climate and Forests Task Force – REDD Offset Working Group to develop recommendations for ARB for the crediting of sector-based offsets from REDD under §95993 – 94995 of the Regulation. We think crediting REDD+ emissions reductions will also be crucial to filling the offset supply gap. ACR has developed methodologies for REDD+[2] and a *Nested REDD+ Standard*[3], which provides technical requirements for registration of REDD+ projects nested within a jurisdictional accounting framework. The scope of eligible activities includes conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks, following baseline, leakage, monitoring and other technical requirements developed at the jurisdictional level provided these meet certain technical criteria. The *ACR Nested REDD+ Standard* also

[2] See http://americancarbonregistry.org/carbon-accounting/carbon-accounting/redd-methodology-modules-1 and http://americancarbonregistry.org/carbon-accounting/carbon-accounting/redd-2013-avoiding-planned-deforestation.

[3] See http://americancarbonregistry.org/carbon-accounting/carbon-accounting/acr-nested-redd-requirements.

defines social and environmental safeguard requirements for registration of REDD+ projects. We hope that ACR's REDD+ methodologies and *Nested REDD+ Standard* can help inform the process if and when ARB develops technical guidance for REDD+ projects in linked jurisdictions.

Rice Cultivation Protocol

We strongly support ARB's adoption of a compliance offset protocol for rice cultivation projects. We hope ACR's *Voluntary Emission Reductions in Rice Management Systems* methodology can serve as a model for ARB to use. This methodology recognizes reductions through residue removal, dry seeding, and early drainage in California's half million acres of rice fields, and through residue removal, early drainage, intermittent flooding, and increased water and energy use efficiency in the Mid-South's approximately 2 million acres. We would be happy to respond to any questions that ARB may have on the California or Mid-South modules of the ACR methodology.

Our rice methodology calculates credits using the DNDC model, which has been used in over 250 peer-reviewed publications over the past twenty years and has been validated in rice production systems across California, the Mid-South U.S., and worldwide, using data collected independently of the data used to develop the model. This up-front calibration and validation, in addition to the project-specific calibration and validation required in the methodology, gives us great confidence that uncertainty can be managed and that DNDC can predict GHG reductions rigorously and conservatively.

In addition, our partners – in particular Environmental Defense Fund, Terra Global Capital, DNDC-ART, and the Delta Institute – are working to develop user-friendly interfaces to streamline data collection and data management as required for DNDC. We are confident that these efforts will result in a relatively small time burden for rice growers to provide the necessary data to participate in projects. This, along with cost-effective aggregation and verification approaches, will be critical to broad uptake in the rice sector. In addition, establishing through the rice cultivation protocol the rigor and conservativeness of DNDC, as well as efficient aggregation and verification methodologies, will enable ARB to apply these lessons if you should proceed to consider a nitrous oxide from fertilizer management protocol in 2014.

Pneumatic Controllers

We urge CARB to reconsider your June 2012 decision to drop development of a compliance offset protocol for the replacement of existing (not new) high-bleed pneumatic controllers in oil & gas production with low-bleed options. This project type is clearly additional to existing and anticipated regulations and industry common practice, is very straightforward to measure, monitor and verify, and could offer several million tCO_2e in low-cost, additional, permanent and verifiable reductions over the coming years. We understand the need to exclude projects starting after 2014, since the use of natural gas comes under the cap in California at that time, but we believe projects commenced prior to the end of 2014 should be given a full crediting period in order to make these projects financially feasible.

Early Action

ARB has stated that projects registered under voluntary protocols found to be consistent with a compliance offset protocol adopted by ARB may be made eligible for early action credit through addition of these voluntary protocols to the list of recognized offset quantification methodologies in §95990(c)(5). However projects currently in development using those protocols may not be able to list with an Early Action Offset Program by the current §95990(c)(3) deadline of January 1, 2014. We urge ARB to consider extending this deadline at least to December 31, 2014, matching the timeframe eligible for crediting in §95990(c)(1).

Thank you again for the opportunity to comment and we look forward to supporting CARB as you continue your efforts.

Sincerely,

Nicholas Martin
Chief Technical Officer
American Carbon Registry