March 6, 2015

Greg Mayeur, Ph.D.

California Air Resources Board

1001 I Street

Sacramento, California 95814

RE: Additionality and third-party verification

Dear Dr. Mayeur,

Our research team at the Stanford Law School has participated in the Technical Working Group established by the California Air Resources Board (ARB) from its inception in May 2013. For well over a year, we have asked a number of questions about validation of the DNDC model, the risk of N2O spikes that may not be captured by the DNDC model from alternate wetting and drying (AWD) projects, verification procedures, and current practice for the additionality assessment. Each time we have asked these questions, we have been assured that we will receive, and have a chance to discuss with ARB staff, answers to our questions prior to finalization of the protocol. ARB staff have failed, as of this date, to respond substantively to many of our questions and have repeatedly canceled scheduled meetings with us. This leaves us unable to assess whether the DNDC model has been properly validated, and to understand the basis on which ARB asserts that the creditable project types should be considered additional and able to be adequately verified. We understand that today, March 6, is the final deadline for submitting comments on the protocol prior to ARB’s release of the final draft of the protocol for 15-day comments and possible adoption by the Board several months from now.

We request that ARB keep the current public comment period open, and wait to advance the protocol to the next stage in the development/adoption process, until ARB has made the information used in its assessments of the DNDC model and the information requested below on additionality and verification publically available.

We appreciate ARB’s general approach to policy development that provides opportunity for public comment, and discussion with stakeholders. We believe that it is especially important for ARB to apply those principles to its offset program. Our questions are basic about the scientific basis for the protocol, and questions that ARB must have answered in its protocol development process in order to ensure internally that the protocol meets the requirements of AB 32. ARB’s program is structured in a way that allows the state to avoid the poor performance of the Kyoto Protocol’s offset program. This earlier program is documented to have generated many more credits than reductions actually achieved by the program. We believe that openness and transparency will help distinguish ARB’s program from this earlier offset program and cultivate public confidence in the program. Simply, we understand that ARB should answer questions asked by stakeholders and scientists, especially when the answers are important to understanding the scientific basis of the protocol.

We note that the following questions about additionality and verification should be viewed within the context of ARB’s decision to conservatively estimate the emissions reduced by activities under the Rice Cultivation protocol. Choosing a 90% confidence interval from the results of the Monte Carlo runs of the DNDC model, and applying an additional uncertainty deduction factor, avoids the possibility of over-crediting due to uncertainty in the model estimates. Doing so also creates buffer for some non-additional crediting and over-crediting due to difficulty verifying all input parameters. The outcomes of any offset protocol are a function of the strength of the incentives created for new reductions (additional reductions), the crediting that occurs from activities that were already happening for reasons other than the offsets incentive (non-additional crediting), and the conservativeness of the methods for estimating emissions reductions and therefore the amount of credits generated. While the conservativeness in the methods for estimating emissions reductions provides buffer for some non-additional crediting and uncertainty in input parameters, it is still important to understand current practice, and the challenges and capabilities in verifying reductions, in order to understand the overall effects and risks of the protocol over time. Below are our questions about additionality and verification.

Additionality:

1. Dry seeding in CA: We understand from Cline (2003), cited in October 28, 2014 release of the Staff Report on the protocol, that dry seeding is being encouraged in California due to its advantages for herbicide resistant weeds associated with wet seeding. How much has dry seeding increased since the 2003 article? What are current rates of dry seeding in California?
2. AWD in the mid-South: What rates are farmers currently performing AWD in the mid-South? We understand that very few were employing this practice in 2006, but that it has large advantages for water use reduction. What is current practice?
3. Early drainage in CA and the mid-South: What is current practice for early drainage in the mid-South where a model is used to determine the baseline drainage date? In California, where past practice on the participating field is used as the baseline, how much variability is there in farmer drainage dates that could be credited as early drainage under the protocol?

We also request the specific data that you used to assert that each of these four project types is not common practice, in addition to any other questions asked above.

Verification:

1. Baseline drainage date – We understand that in California farmer records are used to verify baseline drainage dates. We look forward to discussing whether all farmers retain such records and how verifiers may verify that those records have not been altered in the context of offset crediting.
2. Fertilizer use (baseline and project) – Similar to baseline drainage date, do all farmers keep records of the amounts, dates and type of fertilizer application on each field? How easily can those data be altered without detection by the verifier?

Sincerely,

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