

CALIFORNIA RICE COMMISSION

November 11, 2011

Kathryn Goldman Senior Policy Manager Climate Action Reserve 523 W. 6th Street, Suite 428 Los Angeles, CA 90014

Subject: Rice Cultivation Project Protocol, Version 1.0

Dear Ms. Goldman,

We are writing to provide comments on the proposed Rice Cultivation Protocol Version 1.0. These comments are submitted on behalf of the 2,500 California rice growers that produce premium-quality rice on approximately 500,000 acres. About 95 percent of these acres are located in the Sacramento Valley.

First of all, we want to thank you and your dedicated staff for putting together such a thoughtful proposal that takes on many new concepts required to consider agricultural offsets. We hope that many concepts tackled here, such as the use of modeling for verification, will help move the ball forward on agricultural offsets across the board.

These comments will be presented in two categories. The first set being fundamental concerns over how the overall program is designed. The second set will be comprised of remarks about specific elements of the proposal.

Overall Program Concerns

• <u>Transaction Costs and Data Requirements</u>: We are concerned that the technical and data requirements to support participation by farmers is too extensive given the quite modest offset potential from the eligible practices. In short, we are concerned that farmers will decide that the economic benefits are not adequate to justify the efforts required to participate. We suggest that more simplification be considered throughout the protocol.

• <u>Essential Role of Early Adopters</u>: The practices proposed in this protocol are currently being implemented by only a small percentage of operators in the rice industry. Those who have adopted these practices are very few and are generally the same group of individuals year over year. With offset revenue potential from the practices being quite modest, these early adopters will become important "salespersons" for demonstrating that participation in the program is a worthwhile investment of time and resources. We believe that developing a strategy for allowing them to participate will be essential to the ultimate success of this protocol.

Comments on Specific Elements

- 1. <u>Pages 24 and 25</u>: The "Biomass Fraction" and "C:N Ratio" for the leaf+stems and roots are probably not something that a grower has measured. Therefore, we believe the protocol should probably provide these for common rice cultivars rather than having everyone refer to the "local university extension" (footnote 25). The Jenkins group at UC Davis has measured the leaf and stems yields over several seasons for common cultivars in the late-1990s.
- 2. <u>Pages 27 through 29</u>: The discussion of the Monte Carlo statistical technique seems overly technical and possibly confusing for those trying to get to the end result. We suggest that this can possibly be embedded in the model calculation of each parameter for field "i". Then the equations in 5.6 and 5.7 might be simplified to a single equation, summing the parameters computed by the model. The discussion can still be in an appendix.
- 3. <u>Pages 28 and 29</u>: We think the SOC parameter should have a minus sign. If SOC increases, that means less CO2 emissions, right? Please double-check this.
- 4. <u>Page 29 (bottom)</u>: This uncertainty calculation seems quite complicated. We are concerned that leaving the uncertainty calculations to the users could get confusing and time consuming. We wonder if this is something that could be simplified and automated by using a certain range of assumptions embedded in the model. If so, then this discussion could move to an appendix.
- 5. <u>Page 30</u>: Equation 5.2 should have MPER in the definitions as opposed to SDER.

- 6. <u>Page 35</u>: The emission factor EFswb seems very rough and Reference 31 does not appear particularly defensible. The Jenkins group did extensive time and motion studies on rice straw harvesting and has publications with better numbers.
- 7. <u>Pages 35 and 36</u>: The SEps calculation looks fairly complex and we suggest considering a strategy of automating this function within the model functions.
- 8. <u>Sections 6 and 7, Monitoring and Reporting</u>: Appears like a significant amount of data and recordkeeping is being required here. We suggest making sure that everything is absolutely required to defend the credit and that all data is readily available to the grower. If this is too burdensome, the cost of verification and chance of failure (from missing records during verification) will be high.
- 9. <u>Page 52</u>: We suggest more details regarding what exactly is required in the Monitoring Plan.
- 10. <u>Page 63</u>: We disagree with the erosion control factor. Rice straw is a replacement for other materials used for erosion control so it should probably be treated the same as animal bedding (i.e. "0").

Thank you again for all of your hard work. We know this hasn't been as easy one for your team. We appreciate your consideration of our comments and hope they are helpful. Please feel free to contact me at (916) 387-2264 if you have any questions.

Sincerely,

Paul Butter

Paul Buttner Manager of Environmental Affairs