June 4, 2015

Ms. Mary Nichols
Board Chairman
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Submitted via web

Re: Rice Cultivation Projects Compliance Offset Protocol released May 20, 2015

Dear Chairman Nichols:

The Environmental Defense Fund (EDF) strongly encourages the California Air Resources Board (ARB) to adopt the Rice Cultivation Projects Compliance Offset Protocol (Rice Protocol), released May 20, 2015, at its June 25, 2015 meeting. The adoption of this protocol should not be delayed.

EDF applauds the dedication of ARB staff in developing an offset protocol for rice growers. This protocol has been through an extensive and thorough process, starting with the first workshop in March 2013. Every draft has refined key concepts and reflected feedback from stakeholders. ARB has a long standing reputation for developing informed and scientifically sound policies and regulations; this protocol is no exception. The Rice Protocol is ready for implementation and is a critical step in the generation of offsets from agriculture. This protocol is the logical starting point as rice growers are one of the most progressive industries when it comes to both feeding the world and protecting the environment.

To date there are 21 farmers with 253 fields on 22,213 acres who have listed projects with the American Carbon Registry (ACR). We expect the generation of the first set of credits from this protocol to happen later this year. The adoption of the Rice Protocol, the issuance of voluntary credits and the conversion of those credits into Early Action offsets will encourage other growers to participate – providing capped entities with high-quality offsets from U.S. rice growers. Not being able to convert these credits to Early Action offsets will hamper the ability to engage with other growers, eliminating a very important element to promoting the broader participation of agriculture in the Cap-and-Trade program.

In considering the vote on this protocol, EDF offers the following comments and recommendations:

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I. Ensuring a transition of voluntary projects is vital

As stated in the introduction, three rice cultivation offset projects have been listed with ACR. These farmers have voluntarily taken the initiative to implement GHG reductions and should be recognized as part of the "early voluntary reduction" intent under section 38562 of the AB32 legislation.

We applaud the inclusion of the ACR rice protocols under section 95990 (c)(5)(H) of the Cap-and-Trade regulation amendments. Many of the farmers participating in the listed projects have been engaged in the development, testing and feedback of the ACR protocols for more than four years. ARB staff needs to continue to work with the diverse stakeholders developing these projects to understand the challenges and identify opportunities for these projects to be brought into the Cap-and-Trade program as Early Action projects.

II. The Rice Protocol is rigorous

ARB staff has gone to great lengths to ensure the credits generated by the Rice Protocol are real, additional, quantifiable, permanent, verifiable, and enforceable. Furthermore, staff has developed the protocol in a way that virtually eliminates any adverse impacts resulting from the practice in the protocol. Through their process, ARB held five technical working group meetings to discuss key provisions; engaged world renowned wildlife experts to understand and mitigate potential impacts to wildlife; visited farmers in both California and the Midsouth to understand their practices; and applied the latest science to the measurement of methane from rice cultivation.

The Rice Protocol is the first protocol to use a process-based model, the DeNitrification DeComposition (DNDC) model, which is an important tool to quantify GHG emission reductions from agriculture-based offset projects. DNDC is a very detailed model and as such requires significant inputs and generates comprehensive outputs. We support the ARB's ongoing effort to develop a simplified front and back end to the tool to make it more accessible to growers and offset project developers. This tool will ease the burden of entering input data into DNDC and consolidating DNDC output data, and thus will lower the barriers to the adoption of the protocol. We encourage the ARB to release a draft of the tool this fall

in advance of the anticipated the training of ARB-Accredited Verification Bodies, ARB Approved Offset Project Registries, Offset Project Operators (OPO) and Authorized Project Designees (APD).

III. Consolidated reporting will allow more growers to participate

For agricultural offset protocols to generate emission reductions, growers need to combine their individual GHG emission reductions into quantities large enough to be cost effective to implement and sell to compliance entities. In addition, many compliance entities will only purchase projects which have the potential to generate more than 25,000 metric tons. To get to scale, there are two significant drivers important to making these projects successful– reporting and verification.

We are pleased that the ARB will allow multiple growers to report their GHG emission reductions on a single Offset Project Data Report (OPDR). The identification of each OPO in the consolidated OPDR will allow the project to continue if there is a problem with one of the OPOs. Consolidating growers in one report will reduce the overall time, paperwork, and cost required to create a project while maintaining the highest quality of offsets. There are significant data collection requirements necessary to produce an OPDR from rice cultivation activities and the reductions per acre are forecasted to be small – less than one ton per acre. Therefore, we applaud the ARB's willingness to create a consolidated reporting template, which will reduce the time required to participate, thus encouraging more growers to undertake GHG-reducing activities.

IV. The Verification Pilot will determine the most cost-effective certification mechanism for agriculture projects

Verification is the single largest and most time-consuming cost of developing agricultural offset projects. According to EDF's economic analysis, this cost is typically 50% of the total rice project development cost. In order for the agricultural sector to participate in California's Cap-and-Trade program, risk-based and randomized verification is necessary.

We support the proposed Rice Cultivation Pilot Verification Program, during which traditional verification and risk-based and randomized verification will both be conducted and the results of the two will be compared. The current Cap-and-Trade regulations require a verifier to visit each participating farm every year. This process is time consuming and expensive and will hinder the development of agricultural offsets. We encourage the development of a risk-based and randomized verification procedure which requires the verifier to review the APD's business and data management processes including the types of supporting evidence, evidence collection and evidence storage in order to develop a thorough risk-based sampling plan. In addition, the inclusion of statistically randomized sampling allows for science-based verification. Under this approach, the verifier would develop a verification plan based upon their assessment of the projects risks in much the same way as verifiers currently develop their Sampling Plan as required under section 95977.1(b)(3)(G) of

the Cap-and-Trade regulations. This approach is much more cost effective and can demonstrate the reasonable assurance standard required for offset projects.

As a part of risk-based and randomized verification, the verifier would be required to visit the APD's office in order to conduct a thorough review of all processes, procedures, controls, and records for rigor, consistency, and accuracy. The verifier would interview the OPOs in a project depending upon their risk assessment identified through the Sampling Plan. If the Sampling Plan results in an Adverse Offset Verification Statement or a Qualified Positive Offset Verification Statement, the verifier and the APD would have the opportunity to increase the number of OPOs visited in order to determine errors with the report and to generate a Positive Offset Verification Statement.

The design of the Verification Pilot is critically important. EDF encourages the ARB to work with a diverse team in its development, much as it did with the development of the Rice Protocol. We recommend that the team should include a statistician, an agronomist, a grower or grower representative, a scientist from CDFA, a representative from the UC Cooperative Extension, a verifier, and a representative from one of the Offset Project Registries.

The results from this Verification Pilot will be useful in developing specific verification requirements for future agriculture-based projects. We believe that this approach is consistent with the design and intent of the Cap-and-Trade regulations and encourage the development of offset projects from rice producers and allow for greater participation of the agriculture sector in meeting the state's GHG reduction goal. We look forward to additional information on the Verification Pilot Program to be released later this year and will encourage our rice growing partners to apply for the Verification Pilot funding.

V. The Staff have thoroughly investigated wildlife and environmental impacts

The ARB has done a significant amount of work to analyze the potential environmental and habitat impacts that could occur due to implementation of the Rice Protocol. We appreciate that the protocol only allows project activities during the rice growing season. We are encouraged by the Staff's research that the Early Drainage practice "could serve as a benefit to giant garter snake populations." Also, we are pleased to see that rice cultivation within the Butte Sink Wildlife Management Area will not be eligible to participate, considering the critical importance of that habitat for waterfowl.

VI. This Protocol sets a precedent for a Nutrient Management Protocol

The Rice Protocol provides a strong foundation for future agricultural protocols. EDF has reviewed the current voluntary offset protocols and based on overall GHG reduction potential, applicability to California, and overall feasibility for project implementation, EDF believes that a nutrient management protocol presents the greatest opportunity as ARB's next offset protocol. EDF is in the process of developing a multi-state, multi-crop nutrient

management project which will serve as powerful example of the reduction potential of this protocol.

The Rice Protocol has established a framework that can enable the creation of a Nutrient Management Protocol. A Nutrient Management Protocol built on this framework will supply compliance entities with additional high-quality agriculture-based offsets and could be designed with crop and geographically based modules which will dramatically speed adoption of additional crops and geographies. This protocol could start with a California-based crop such as almonds and be rapidly expanded to include corn, leafy greens, sugar beets and barley. To do this, the Quantification Methodologies chapter would be amended to include the new crop quantification equations. The other chapters, such as Assessment Boundary, Monitoring, Reporting, and Verification would all be written to apply to all applications of fertilizer, regardless of crop. This approach would allow the ARB to expand the protocol without having to enact a separate rulemaking and protocol for each crop considered.

Despite the precedent set by the Rice Protocol, EDF finds itself in a catch-22 with the development of a nutrient management project. ARB staff has indicated the importance of developing several pilot projects to "road test" the protocols. Conversely, farmers have expressed reluctance at investing the time and effort in the development of a pilot project with no indication that ARB will consider this protocol in the future. Both a signal from ARB and a pilot project with issued credits are important milestones. EDF strongly encourages ARB to hold a workshop to discuss broad concepts important to be included in a potential nutrient management protocol to send the critical market signal that the ARB could develop a nutrient management protocol in the future.

VII. Maintaining confidential business information is important

We understand the need for transparency for the Rice Protocol, as with all compliance offset protocols. However, this must be balanced with protecting confidential business information. Therefore, we recommend the ARB provide detailed guidance regarding the specific grower information which will be made publically available and which data will be maintained by the ARB. In order to ensure grower participation, it is important to recognize the willingness and ability of growers to protect details of their operation that could be considered confidential business information (CBI).

VIII. Conclusion

We appreciate the hard work that went into the development of the Rice Protocol and we look forward to having the Board adopt the Rice Protocol at the ARB's June Board meeting. This protocol demonstrates the role and opportunity agriculture can play within California's Cap-and-Trade program to generate valuable offsets and contribute toward the state's 2020 goal.

Once the Board adopts the Rice Protocol, EDF will support ARB efforts to implement the above described Verification Pilot. Streamlined requirements, while still ensuring rigorous execution, will allow the greatest uptake of the practices and the generation of GHG reductions. We are excited to help ARB and CDFA pilot specific reporting and verification requirements, which will make it easier and less expensive for farmers to participate in the Rice Protocol. In addition we will continue to work with ARB and stakeholders to create the first Rice Protocol Early Action Project.

We thank ARB for this opportunity to offer comments. We look forward to continued collaboration with ARB and other stakeholders throughout the implementation of this and other agriculture-based offset protocols.

Sincerely,

Robert Parkhurst
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