camco

5/16/17

LCFS Workshop
LCFSworkshop@arb.ca.gov

RE: Feedback regarding LCFS Pathway for Renewable Natural Gas from Livestock Manure

Dear ARB LCFS Program Team:

Thank you for allowing us the opportunity to comment on the LCFS Pathway from Renewable Natural Gas from Livestock Manure. Camco represents the largest number of livestock offset projects in the ARB's Cap and Trade Program with 25 Listed livestock projects. We have been qualifying emissions reductions from Livestock projects under the Climate Action Reserve's Livestock Protocol (the pre-cursor to ARBs protocol) since 2008 and have successfully completed 33 verifications under ARBs Livestock Protocol.

Many Livestock projects are currently evaluating the potential to generate biomethane and earn credit under California's LCFS program. Having a clear pathway in regards to how best to calculate avoided methane emissions will help these projects to determine the number of LCFS credits they could generate with a greater degree of certainty than is currently the case.

Camco supports the process of using the existing ARB Livestock Protocol to determine the amount of methane avoided from a biomethane livestock project. The approach taken in the protocol is well-grounded and has been developed over the last 15 years. It is also used on all livestock projects generating California Carbon Offsets (CCOs) with similar versions being used, or being proposed, in other jurisdictions.

We provide some feedback on the questions asked by the ARB in the April 2017 discussion paper below. Note that we are still working through some aspects of ARBs paper and the GREET model and may have additional feedback at a future date.

<u>Emissions Quantification and CI Determination Methods:</u>

- Not clear how to account for situations where gas is sent to other destruction devices but is not destroyed (or partially destroyed). Would this be considered venting?
- Will be important to provide guidance that the input numbers from the spreadsheet are broken out in documentation provided by the project owner and verifier. The spreadsheet references formulae but there is no requirement in the protocol to show the volume of gas which goes to different destruction devices, rather it is a requirement to show the overall Biogas Destruction Efficiency of the Biogas Control System.
- Want to clarify that under LCFS gas is measured according to 60 degrees Farenheit and 1 atmosphere.

<u>Timing of Application and Reporting Periods</u>:

- Currently the cap-and-trade regulation requires that Reporting Periods are 12 months (with an exception for the first Reporting Period). It is not possible to shorten or adjust this to move to a calendar year under the cap-and-trade regulation. To convert to a calendar year it would be possible to pro-rate credits based on a full-years generation

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under the Compliance Offset Protocol. However, there would need to be an understanding with the Compliance Offset program that the Reporting Period had been shortened with the Project Owner being able to issue offsets for less than one year.

- LCFS staff should look to align the timelines with those in the cap-and-trade program, namely that an Offset project has to produce a verification reporting within 11 months of the end of its Reporting Period. ROC issuance then needs to occur with 60 days of that but may be extended by an additional 30 days.
- If large numbers of Livestock Projects begin generating LCFS credits it will be challenging to find sufficient numbers of verifiers who will all need to be available in January to verify projects. The verification process takes 6 – 9 months and there are only around 10 verification bodies and 28 individual verifiers accredited for livestock projects currently.

Importance of Participating in both Cap-and-Trade and LCFS

- Camco thinks it important to allow projects to choose whether to generate LCFS or ARBOCs and to retain that flexibility over time. When considering Reporting Periods etc.. there should be the ability for a Project to revert back to the cap-and-trade program if it chooses
- Camco also thinks it important for Projects to be able to generate both types of credits at the same time. This could occur not only if some gas is used to generate power or heat but also if some gas is not used for fuel in California – this may because of existing contractual requirements or specification requirements. Projects should not be penalized for not sending gas to fuel in California or forced into an all or nothing decision. Camco has some thoughts on how this could be determined which we would be happy to share separately if ARB decides to pursue.

Regulatory Compliance Requirement:

- We support the continued use of the ARB Livestock Protocol as the precursor to LCFS credits and which requires Regulatory Compliance, with the understanding the Regulatory Compliance should be limited to the actual biogas control system that is producing and upgrading the methane that will be used for fuel.

Potential Regulatory Amendments: While we support 3rd party verification of the Livestock Digester facility and biogas cleaning/processing equipment at the Project site (required for the generation of ROCs), we believe that downstream verification of fuel users would be problematic and costly. Fuel consumption should be confirmed through the analysis of biogas sales/transaction records.

Timing of Credit Generation: We support the concept of quarterly credit generation during any vintage year with a yearly true-up based on actual ROC issuance. More frequent verifications are not recommended due to cost and the relative stability of Livestock digester projects.

Example CA-GREET template: We suggest allowing the continued use of estimated Project energy use as long as the estimates are verified by a 3rd party. Often at dairy farms there may be a multitude of different meters for different aspects of manure management (e.g. solids separation) that are difficult to separate from the digester operation or biogas upgrade equipment.

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Additionality: The reduction of financial incentives associated with voluntary reduction of greenhouse gas emissions from livestock farms (such as offsets or LCFS credits) will most likely reduce the development of anaerobic digestion projects, which is counter-productive to ARB's goal for emission reductions within the livestock industry. We will provide continued input as ARB and the State of California continue to explore the topic of mandatory emission reductions for the livestock industry.

Feel free to contact us if you have any questions.

Sincerely,

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