

## Comments Re: Compliance Offsets Protocol Task Force Initial Draft Recommendations

November 6, 2020

To Whom It May Concern:

Thank you for the opportunity to provide comments related to the October 7, 2020 Compliance Offsets Protocol Task Force Initial Draft Recommendations. We appreciate the detailed research, extensive discussion, and thorough report provided by the Task Force.

Ag Methane Advisors supports dairies around the country in reducing their methane emissions, including more than 13 compliance offset projects that participate in CARB's Compliance Offset Program, along with many others that are participating in, or planning for participation in CARB's Low Carbon Fuel Standard program. With a focus on livestock agriculture the majority of our comments are directed to the Livestock, Agriculture and Rangeland portion of the report although some comments are related the Overarching Considerations for the Offset Program.

### Regarding Overarching Considerations for the Offset Program

1. Discussion of supply and demand for offsets through 2030 suggests that new protocols may not be necessary. If this proved true their implementation may increase supply to an extent that causes the market price for offsets in general to be low preventing a barrier to adoption of new projects and reducing the viability of existing projects. We appreciate the report's emphasis on developing additional policies and partnerships with other programs (eg. CORSIA and NY CLCPA) in order to create additional demand for CARB offsets.
2. We support the recommendation to expand the utilization of offsets including the specific recommendations to:
  - a. Reduce all invalidation timeframes from 8 years to 3 years and to remove the requirements to double verify to reduce the invalidation timeframe.
  - b. Allow offset usage limits to be traded among compliance entities
  - c. Allow allowance supply adjustments that tighten the allowance supply
  - d. Recognize and continue to create linkages with other programs
3. While CARB's priority in the development of additional protocols should be their applicability and viability in California, where possible and efficient the scope of new protocols should not be limited only to participation in California. Two examples of potential livestock related project types, feed additives to reduce enteric methane emissions and alternative manure management (AMM) projects, can be used to articulate this point. New protocols related to these project types could be written to

allow projects anywhere in the US to use them while still being applicable to California dairies. This is how the current CARB Livestock Offset Protocol (LOP) is structured. The DEBS requirements would provide additional incentives to projects in California who used the protocol while simultaneously the existence of the new protocols could serve as valuable market infrastructure, developed by CARB, but which could be adopted by other programs and jurisdictions over time. This dual purpose goal could allow CARB to transfer their successful policies and programs to other jurisdictions while still using limited resources efficiently.

4. We support the recommendation to allow more methods to aggregate project participants within protocols. New protocols related to feed additives to reduce enteric methane and AAM projects, may be of particular interest at dairies that are substantially smaller than those who build and operate digesters and currently use the Livestock Offset Protocol. If so aggregation mechanisms will likely be necessary for economic viability. Here's an example:
  - a. The report estimates that feed additives may reduce methane emissions by about 1.3 mtCO<sub>2</sub>e/cow/year. That would substantially limit the number of offsets that could be created by any one dairy. The general trend in the dairy and livestock industry over recent decades has been toward consolidation but many dairies even in California still have relatively small herd sizes (i.e. between several hundred and several thousand cows). The report estimates only \$17.55 per cow per year as revenue to the farm. Given the regular everyday production costs of operating a dairy, and the added cost of having to buy the feed supplement, \$17.55 per cow per year from offset revenue is not likely to be enough incentive for a dairy farmer to even consider changes to their feed regime. Therefore, aggregation would be essential to the economic viability of participation in a compliance offset project so that accounting, verification, registration fees could be minimized.
5. Recommendations 5, 6, and 7 from the Forestry subgroup related to invalidation guidance, verification guidance and ARB guidance are all very relevant to other project types and can be included in the overarching considerations for the offset program.

Especially when new protocols are adopted there are commonly many questions that projects, verifiers, and registries have. A clear, regular and transparent system so that CARB's perspectives and guidance can be efficiently communicated to all stakeholders in the market at the same time is essential for effective functioning of the program.

- a. In addition, the recommendation to, "Limit offset invalidation to infractions that occur on the project site and have an environmental impact. Apply a remedy that is proportional to the violation's direct effect on carbon stocks." would be very relevant to projects that currently use the Livestock Offset Protocol. The current guidance in the C&T regulation's Appendix E Section B related to the scope of EH&S regulatory compliance issues relevant to livestock projects is unnecessarily broad and extends to farm activities and fields that are not directly relevant to the offset project. Regulatory compliance issues related

to land application of manure are independent of offset project activities and therefore should be considered outside the scope of applicability to the offset project.

## Regarding the Recommendations on Livestock, Agriculture and Rangeland

6. Regarding aggregation or “joint project development” the report says,

“The rationale for this approach is to avoid the invalidation of all producers and fields if one field in the project is investigated and results in the invalidation of some or all of their credits. We recommend that CARB allow for full joint development of projects including the development of a single Offset Project Data Report, Verification, and Offset Verification Statement for the project. Through this approach, agricultural producers would need to accept the risk of full project invalidation as a trade-off to lowering transaction costs.”

We do not see why “full project invalidation” would be necessary. Feed additive or AAM projects would likely require quantification on a farm by farm basis even if project listing, verification and other administrative activities were aggregated.

Currently if there is an invalidation related to an LOP project the invalidated credits are limited to the period of time the project was out of compliance. If offset quantification happens on a farm by farm basis then this same concept could be applied. If any one farm had an issue that prevented issuance or resulted in invalidation of the offsets then the credits from that specific farm for that specific timeframe could be removed from the overall project.

7. We strongly support the analysis of the task force related to development of a protocol related to livestock feed additives. However, as discussed in the report the volume and value of offsets alone may not be sufficient for farms to start using these feed additives. For many years offsets have been a piece of the pie contributing to successful economics in building and operating manure digesters. Offsets related to feed additives can be one piece of the pie that makes adoption of these additives economically viable. Other value streams may potentially be related to improvements in animal health, production and also possibly financial incentives from processors and marketers who have made carbon neutral commitments in response to consumer demand.
8. We also strongly agree with the Subgroups recommendation to develop, “a technology-neutral regulatory protocol that will allow use of any feed additive, available now or in the future, that meets minimum standards for safety and effectiveness.” As the development of the feed additives are at early stages some may prove more effective and economical than others over time. In addition, different segments of the dairy, beef and swine industries may prefer to use one additive over another. For example the “all natural” attributes of Mootral may fit the marketing and consumer preferences of some producers while 3NOP may make more sense for others.

The effectiveness and adoption of an offset protocol would depend on the ability of farms and ranches to adapt based on shifting consumer demands.

9. We strongly support the analysis related to AAM projects and integration of this project type with the current LOP. We do have concerns about the additionality of solids-liquids separation (SLS) projects since the report mentions these technologies, “are estimated to be in use on approximately 30 percent of the state’s dairies”.

However as noted in the report the performance of SLS systems is variable and there are numerous emerging technologies for nutrient recovery and improving water quality (i.e. DAF and RO) that can also divert volatile solids from lagoons leading to GHG benefits. Perhaps additionality could be determined based on a performance threshold rather than just the prevalence of SLS systems in the industry.

- a. In order to monitor, report and verify that performance thresholds are being met it is likely that a protocol would need to include more default VS separation efficiencies along with guidance on specific testing and analysis protocols for projects that wish to demonstrate site specific VS separation efficiencies. The current LOP allows for site specific VS data but does not provide guidance on sampling methods or frequency. In addition, the SLS technologies with default VS separation efficiencies in the LOP have not kept pace with the development of new technologies or combined technologies (i.e operation of a slope screen and a screw press in series).
10. Finally, recognizing and agreeing with the report’s description of barriers to adoption of a protocol for addition of compost to grazed grasslands, and in particular the cost of the procurement, transportation and spreading of the compost, we wonder if a protocol related to implementation of management intensive grazing (MIG) on range and or grassland could reduce those barriers. Through the increased stocking density of MIG the procurement, transportation and spreading costs would be reduced. The grazing herd would be depositing manure on the project land and through trampling in repeated grazing cycles can facilitate integration of the manure and forage into the soil producing a result very similar to that of adding compost.

Thank you for your consideration of these comments. Please feel free to reach out with any questions.



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