



Jenny Lester Moffit, Deputy Secretary
Amrith Gunasekara, Science Advisor
Geetika Joshi, Office of Environmental Farming & Innovation
California Department of Food and Agriculture
1220 N Street
Sacramento, CA 95814

May 8, 2017

RE: AMMP Program Comments

Dear Deputy Secretary Moffit and Drs. Gunasekara and Joshi,

Thank you for the opportunity to provide comments on the proposed draft framework for the new Alternative Manure Management Practices (AMMP) Program. We cannot achieve the state's methane reduction goals and related improved water and air quality goals without investments like AMMP.

Please find our comments below.

Sincerely,

Ryan Flaherty & Stacey Sullivan
Sustainable Conservation

Nicole Rakobitsch
Organic Valley/CROPP Cooperative

Jeff Creque & Torri Estrada
Carbon Cycle Institute

John Wick
Co-founder, Marin Carbon Project

Jeanne Merrill & Renata Brillinger
California Climate & Agriculture Network

Calla Rose Ostrander
Consultant

1. Project requirements and eligibility.

Rather than the proposed quarterly status reports for AMMP projects, we suggest that CDFA require annual reporting. However, more information is needed on the kind of data necessary for the annual reporting. If the reports are to include verification of greenhouse gas emission reductions, then we suggest that CDFA contract with the Resource Conservation Districts, Cooperative Extension or other qualified entities to work with producers to verify their GHG emission reduction. The onus of GHG reporting should not be

on the dairy producer, but on experts in the field familiar with GHG emissions data collection, models, etc.

2. Grant size/matching funds. We support CDFA’s proposed \$1 million project cap. Based on our experience working with dairy producers throughout the state, the \$1 million project cap should adequately capture the project types envisioned under AMMP. CDFA may want to consider in future years of the program lowering the project cap to better distribute the funds, depending on future funding levels and project types.

We also support matching funds being preferred, but not required. This will allow for a greater number of dairy producers to apply to participate in the program and improve their manure management.

3. Scoring Criteria.

Increase weighting for the “Environmental Performance (air and water quality)” criteria. Projects funded through the AMMP should not only achieve significant methane reductions but they should also improve water and air quality. To best ensure the AMMP achieves its goals of generating multiple improved environmental outcomes, we recommend that CDFA increase the points for the “Environmental Performance (air and water quality)” criterion. This could be accomplished by reducing the points for “Project Feasibility, Financial Soundness and Budget.” While it makes sense to weight the financial soundness aspect of this criterion very high for the Dairy Digester Research and Development Program, AMMPs do not present quite as much risk in this area because AMMPs are comparatively lower cost and are more integrated into a dairy’s operation.

Increasing the “Environmental Performance (air and water quality)” criterion scoring to at least 20 points would better reflect the goal of achieving multiple environmental benefits by placing the weight of air and water quality outcomes closer to the weight of GHG reduction outcomes. By increasing the points available for environmental performance, CDFA appropriately signals to potential applicants the importance of considering the air and water quality improvements of their projects in addition to the necessary methane reductions.

Revise Criteria names so they more clearly reflect the intent. The current criteria names “Greenhouse Gas Emissions Reduction Estimation” and “Environmental Performance (air and water quality)” can be confusing and misleading. Criteria names such as “Estimated Greenhouse Gas Emissions Reductions” and “Environmental Co-Benefits (air and water quality)” or “Air and Water Quality Performance” would more clearly reflect what we understand to be the intent of those criteria.

4. Eligible practices. We recommend including a suite of practices so that the incredibly diverse dairies in California can choose the most relevant practice(s) for their operations. These practices should have a proven track record of success and scientifically-sound research documenting methane reductions. Based on our knowledge and experience, we believe the adoption of the following methane-reducing practices, individually or in combination, meet the above criteria and should be included under AMMP:

- A drier manure management system (e.g. flush to scrape or vacuum)

- Advanced solid separation, in a flush or a dry system
- Composting of solids
- Pasture-based practices
- Compost pack barns

Some additional comments on the practices listed above:

1. *Adopting a drier manure management system.* It will be important to distinguish among management systems and associated methane reduction potential based on how quickly they separate solids after manure collection. Dry systems that store manure in slurry form for extended periods prior to solid separation will generate significantly more methane than those that separate solids immediately after manure collection.
2. *Adopting advanced solid separation, in a flush or a dry system.* It will be important to associate methane reduction potential with reduction in volatile solids. Removing volatile solids will decrease methane emissions from both slurries and liquid manure. However, different advanced solid separation technologies achieve different volatile solids removal rates and, therefore, have different methane reduction potentials.
3. *Adopting well-managed composting of solids.* Well-managed composting will reduce methane emissions as compared to storing of solid manure in anaerobic static piles. It will be important to associate methane reduction potential with different compost methodologies (windrows, aerated static piles, and in-vessel). Note that moisture and oxygen levels within compost determine methane emission levels, so compliance with best practices should also be considered.
4. *Adopting pasture-based practices.* This may include keeping a portion of the herd (e.g. replacement heifers) or the entire herd on pasture for a portion of, or the entire year, reducing the amount of manure held in a lagoon. It will be important to associate methane reduction potential with the amount of manure diverted from the lagoon, and important to require a pasture management plan as a prerequisite for AMMP funding for support of this practice to insure environmental benefits and feasibility.
5. *Adopting compost pack barns.* Composting barns are an alternative to other dairy cow housing systems that maintain manure under cover throughout the wet season and provide for active aerobic decomposition of manure and bedding. It will be important to associate methane reduction potential with the extent to which the bedding pack is kept dry and aerated.

5. SB 859, Section 6 Requirements. The outreach and mitigation requirements from SB 859, Section 6 could be onerous and a deterrent to applying to AMMP. One option could be for CDFA (or a contractor) to host regional meetings for community members for eligible AMMP project types. CDFA should also provide guidance on permit and CEQA review for AMMP project types.

6. Funding issues. It is our understanding that CDFA plans to hold back \$7 million in Dairy Methane funding and will determine how those funds will be split between Dairy Digester Research and Development Program and AMMP projects, following the review of the

DDRDP and AMMP applications. As CDFA reviews applications from the two programs to determine funding, we suggest the following, assuming all other things equal:

- Prioritize projects with higher scores on the “Environmental Performance (air and water quality)” criteria.
- Prioritize projects that make the portfolio of funded projects more reflective of the diversity of dairies in California, including geographies and sizes.

7. Technical assistance/Administrative costs. The state lacks adequate funding to provide much-needed technical assistance to dairy producers to identify and plan for alternative manure management practices that achieve the goals of AMMP.

Currently, CDFA is proposing holding back \$5 million in GGRF funds for their administrative costs for the dairy methane programs. According to the Air Resources Board, state agencies can use a portion of their administrative funds under GGRF programs to fund technical assistance. We strongly encourage CDFA to use a significant portion of its administrative funds to adequately fund RCDs, Cooperative Extension and other qualified technical service providers to identify AMMP projects, assist with grant applications and assist with implementation of projects.

Additionally, CDFA may want to consider making available a portion of the available administrative funds for related project costs like GHG emissions reduction verification and community outreach.

Finally, we ask that CDFA report on how it plans to use the proposed administrative funds, including a detailed budget.