

METHANE EMISSION REDUCTION PROGRAMS:

Alternative Manure Management Program (AMMP), Dairy Digester Research and Development Program (DDRDP), and Dairy Plus Program

Request for Proposals:

Consideration of New Manure Management Practices for the AMMP and Post-Digestion Practices for DDRDP Benefits Calculator Tools

Release Date: August 10, 2023

Proposals Due: **September 11, 2023, by 5:00 p.m. PT** by email to

cdfa.oefi_dairyplus@cdfa.ca.gov

Late submissions will not be considered.



The 2023 Alternative Manure Management Program is part of California Climate Investments, a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.



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Office of Environmental Farming and Innovation
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Background

The California Department of Food and Agriculture's (CDFA) [Alternative Manure Management Program](#) (AMMP), [Dairy Digester Research and Development Program](#) (DDRDP), and the [Dairy Plus Program](#) award competitive grants to California dairy and livestock operations for technologies and specific management practices that result in long-term methane emission reductions and maximize environmental benefits.

As part of AMMP and DDRDP's initial program development process, CDFA identified specific management practices¹ eligible for funding through AMMP and DDRDP. The California Air Resources Board (CARB) developed the [AMMP Quantification Methodology \(QM\) and AMMP Benefits Calculator Tool](#) and the [DDRDP Quantification Methodology \(QM\) and DDRDP Benefits Calculator Tool](#) to estimate greenhouse gas (GHG) emissions reduction and co-benefits achieved through the implementation of these practices.

For the Dairy Plus Program, CDFA and the California Dairy Research Foundation (CDRF), under the United States Department of Agriculture (USDA) [Partnership for Climate-Smart Commodities \(PCSC\)](#) initiative requirements, have identified initial manure management practices² that both result in further methane emission reductions beyond AMMP and DDRDP and address nutrient surplus in California dairies. These practices are supported by the AMMP and DDRDP Benefits Calculator Tools as a method to quantify GHG emission reductions and achieve the goals of the PCSC grant funding.

CDFA recognizes that there could be additional management practices that would further the programs' objective to reduce GHG emissions from California dairy and livestock operations. In addition, new practices may be able to expand the methane reducing options and nutrient management benefits that Dairy Plus Program can achieve. This request for new management practices for potential inclusion in the [AMMP Quantification Methodology \(QM\) and AMMP Benefits](#)

¹ 2023 AMMP Request for Grant Applications guideline document:
https://www.cdfa.ca.gov/oefi/AMMP/docs/2023_AMMP_RGA.pdf (pp 7-9), 2023 DDRDP

Request for Grant Applications guideline document:
https://www.cdfa.ca.gov/oefi/DDRDP/docs/2023_DDRDP_Request_for_Grant_Applications.pdf.

² 2023 Dairy Plus Program Request for Grant Applications guideline document:
https://www.cdfa.ca.gov/oefi/dairyplus/docs/2023_DairyPlus_RGA.pdf (pp 2-4)

[Calculator Tool](#) and the [DDRDP Quantification Methodology \(QM\) and DDRDP Benefits Calculator Tool](#) outlines the requirements and evaluation process.

Proposal Submission Guidelines

All interested parties must submit proposals that adhere to the following guidelines:

- A submission must include the full name, organizational affiliation (if applicable) and contact information (phone number and email at a minimum) of the submitting individual or entity.
- Practices proposed must result in the quantifiable reduction of methane emissions from dairy and livestock manure as well as address nutrient surplus in dairy and livestock operations.
- Practices proposed for consideration must not be proprietary or involve the usage of exclusive, proprietary products, materials, or equipment.
- Proposed new technologies must be ready to deploy on a commercial³ scale.
- Proposals must include, at minimum, third-party verified data and preferably peer-reviewed and publicly available research literature supporting the proposed practice(s), demonstrating that implementing these practices will achieve measurable permanent methane GHG reduction benefits and address nutrient surplus in California livestock operations.
- Field study design and research findings submitted in support of the practice must be statistically sound and significant.
- Proposed practices involving the addition of manure additives must include an analysis of environmental and health impacts and materials' safety, waste management, and disposal procedures.
- CDFA encourages submissions to include life cycle assessment data for proposed manure management practices, if available.
- CDFA encourages submissions to include additional published peer-reviewed data to demonstrate the environmental co-benefits of proposed practices.

³ *Commercially available technologies* are those having a proven operating history specific to the grant application. Such a system is based on established design and installation procedures and practices. For more detail see reference 1, p 32 for AMMP RGA and p 38 for DDRDP RGA.

- Applicants must submit proposals in PDF format, single-spaced with a font size of 11, and a maximum of 5 pages. The page limit does not include supporting information such as research papers and data.
- Applicants must email proposals to CDFA.OEFI_DairyPlus@cdfa.ca.gov no later than 5:00 p.m. PT on September 11, 2023.

Evaluation Process

The evaluation process will involve multiple steps. Scientific staff at CDFA's Office of Environmental Farming and Innovation, in consultation with CARB, will evaluate submitted proposals for scientific soundness of the proposed practices and their potential to achieve quantifiable GHG emission reductions and address nutrient surplus on California dairy and livestock operations. CDFA will provide additional opportunities for public comments on the shortlisted practices. QM development for a finalized list following consideration of public input will take place in coordination with CARB. A tentative timeline for this process is outlined below:

Activity	Tentative Dates (subject to change)
Request for Proposals released	August 10, 2023
Proposals due	September 11, 2023
Review of Proposals	October 2023 – January 2024
Public Input Workshop	January 2024
Finalize list of practices for further consultation and QM development	February – May 2024