## 2019 Alternative Manure Management Program

# **Attachment 1: Project Narrative Template**

Draft for Public Comment

#### **APPLICANT ID:**

Limit document to 8 pages total (Project Implementation Plan - 5 pages; Long-Term Viability of Project - 1 page; Project Team Qualifications - 2 pages). Times New Roman font size 11, 1-inch margins, and single-spaced. Do not change order of sections, margins, font size, or spacing.

#### (REMOVE ALL BLUE TEXT PRIOR TO SUBMITTAL)

## I. Project Implementation Plan

History and Background of Operation

Provide the details of the history and background of the dairy and/or livestock operation.

Provide herd size and breed, including average number of lactating cows (in freestalls and in open lot corrals), dry cows, replacement calves, replacement heifers, and/or other livestock at your operation over the last 12 months.

Identify which livestock will be included in the project boundary, where the project boundary includes only the animals for which manure management will be affected by the AMMP project.

Explain your current management practices in detail, including a description of lagoon(s) size (depth and volume) if currently using lagoon storage, parlor water use, bedding type, method and frequency of manure collection including percent of manure collected from each production group (i.e., lactating cows, heifers etc.).

Provide a schematic diagram, including aerial images (e.g., Google Maps) of the operation, showing total solids flows into and lost from the current manure treatment system (i.e. before project implementation), and how these will change in the proposed/new system (i.e. after project implementation). Provide details of quantity, location, and source of manure to be managed at the operation and specifically in the proposed project.

For projects that are part of a larger cluster (e.g. centralized composting facility), provide a detailed plan for the entire cluster, including a feasibility analysis indicating the minimum number of projects critical to the economic and technical viability of the cluster. Individual dairy or livestock operations that are part of the cluster should be prioritized in the order of their importance to the viability of the cluster.

Explain how the individual dairy operations part of the cluster will achieve methane emissions reduction from collected manure (e.g. through solid separation or scraping) in the event of the centralized composting facility becoming non-functional.

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Type of Project (e.g. conversion to pasture, conversion from flush to scrape, etc.)

Provide details of type of project planned and alternative manure management. Project design documents, including schematics, figures, graphics and plans, must be submitted as part of the grant application. Provide a clear distinction about what the project is currently committed to accomplish and future plans.

## Equipment

Describe the equipment to be used in implementing the alternative manure management practice, including: justification for use of general purpose equipment (e.g., tractors, loaders, etc.), frequency and duration of use, and a rational for selecting the chosen equipment.

#### Site Control

Will project be located and serve one location or multiple locations (i.e. cluster projects)?

#### Provide:

- Timeline for the project to be operating at full capacity, and a clear and concise description of the goals and objectives of the project,
- Justification for the need for CDFA funding, and an explanation of market viability including target markets, barriers, financial risks, partners, and economic viability with cash-flow projections as applicable, and,
- Discuss the potential for replicability of the project.

Describe any potential challenges that applicant foresees to project implementation and provide plans to avoid or overcome them.

## II. Long-Term Viability of Project

Demonstrate how the operations and maintenance costs of the project will be sustained beyond the project term (i.e. development and construction period ending August 31, 2020), and for the life of the project (minimum expected lifetime of projects is 5 years). Explain all ongoing funding sources for the project. List personnel positions assigned to carry out operations and maintenance through the life of the project.

### Component Repair and Support

Examine, compare and describe the availability of required replacement parts and qualified service personnel to keep the system operating as effectively as possible with a minimum amount of downtime for repairs or maintenance. Provide information regarding availability of replacement

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parts and qualified service technicians, the cost of commonly replaced parts/services, and the availability of included maintenance packages. Include vendor quotes and agreements if available.

#### Maintenance

Provide information regarding necessary maintenance intervals, common maintenance requirements, cost of common maintenance parts/fluid replacement, complexity of maintenance, warranty required services, need for technicians to perform maintenance, typical annual maintenance cost, and time required for maintenance tasks. Include vendor quotes and agreements if available.

## **III.** Project Team Qualifications

## Organization

Provide a list of team members along with a short description of their qualifications, experience, technical expertise, capabilities, and credentials (e.g., a professional resume). This must include at a minimum, project developers, project manager, and participating dairy farmer(s) and/or livestock operator. Applicant must identify why this particular team composition and representation will enable successful implementation of the proposed work plan. Collaboration is encouraged.

## Experience

If a project is being submitted by a project developer, a contractual agreement documenting project support from the dairy or producer/livestock operator must be included. Letters of commitment from team members demonstrating understanding of their participation and specific role(s) in the project must be included.

Provide an explanation of how various tasks will be managed and coordinated and how the project manager's technical expertise will help achieve the goals of the project. Describe previous experience of the project team with similar projects in California or other parts of the United States.

List past successful projects developed by the project team, including projects implemented in California and their operational status.