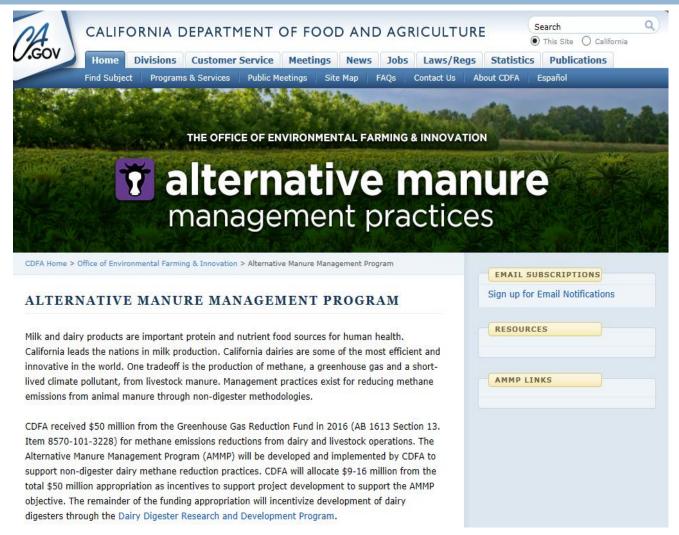
# CALIFORNIA DEPT. OF FOOD AND AGRICULTURE

REQUEST FOR PROPOSALS - EVALUATION OF ALTERNATIVE MANURE MANAGEMENT PRACTICES

# Background

- California has estimated 1,400 dairies.
- The California Air Resources Board (ARB) recently adopted the Short-Lived Climate Pollutant Strategy (SLCP) to reduce emissions of black carbon, methane and other SLCPs, including emissions of manure methane from California dairies
- SB 1383, (Lara 2016) requires implementation of the SLCP strategy by January 1, 2018. The strategy includes a 40% methane emission reduction from 2013 levels by 2030.
- ARB estimates that 20% of methane emissions in 2013 come from dairy enteric fermentation and 25% from dairy manure and 10% from non-dairy cattle.

#### Alternative Manure Mgmnt Program



### CDFA Request for Proposals

Literature review of modeling tools for agricultural/dairy GHG's, especially methane, and other nitrogen and carbon cycle-related emissions.

 Baseline emission measurements on CDFA Alternative Manure Management Program (AMMP)-funded dairies.

#### **Project Goals**

- Identify an appropriate methodology or model for estimating baseline emissions on selected individual dairies that receive AMMP funding,
- Identify appropriate methodology for measuring actual baseline emissions on selected individual dairies that receive AMMP funding,
- 3. Estimate pre-project emissions on several dairies (4 to 6 sites depending on funding availability) using a model or methodology proposed by the research team, based on the results of (1) and approved by the CDFA Ad Hoc Advisory Committee.

#### Project Goals Continued

- 4. Measure pre-project emissions on several dairies (4 to 6 sites depending on funding availability) using a methodology proposed by the awarded team, based on the results of (2) and approved by the CDFA Ad Hoc Advisory Committee.
- 5. Prepare a final report of results comparing estimated and measured emissions pre- and post-installation of AMMP- funded technologies, assessing performance of the estimation methods and making recommendations to improve or calibrate models and methodologies as needed.

### AMMP Practices (non-digester)

 AMMP Practices - mechanical manure solids/liquids separation combined with rapid drying;

Conversion to pasture-based operation;

Collecting manure with scrape systems that rapidly dry the collected manure, or conversion to dry lot manure management systems.

### Project Implementation Timeline

Task#	Task Description	End Date
Task 1	Review of Modeling tools	Dec. 2017
Task 2	Baseline Emissions on CDFA AMMP-funded dairies	Nov. 2018
Task 3	Reporting	March 2019

#### RFP Details

- □ Proposal due May 22, 2017
- □ Funding Amount Up to \$400,000
- Eligible Institutions Academic research institutions, governmental agencies and non-governmental organizations.

#### Request for Proposals -

#### REQUEST FOR PROPOSALS: EVALUATION OF ALTERNATIVE MANURE MANAGEMENT PRACTICES

The California Department of Food and Agriculture (CDFA) is now accepting research applications for the Dairy Marketing Branch on the evaluation of alternative manure management practices. Funding for this research effort is authorized by the Food and Agricultural Code Division 21, Part 3, Chapter 2, Section 61805(d).

Eligible research institutions and organizations may apply for funding of up to \$400,000 for research on methane and other air quality emissions on dairies that are considering the use of AMMP practices.

- Proposal Submittal Requirements
- Proposal Budget Template
- RFP document is located at:
  <a href="https://www.cdfa.ca.gov/dairy/AMMP">https://www.cdfa.ca.gov/dairy/AMMP</a> RFP.html
- Applicants need to submit PDF application and excel budget, see proposal submittal documents.

#### RESEARCH TEAM QUALIFICATIONS

- Applications should include a diverse, collaborative team of scientists,
- Experts in fields of air and water quality,
- Specific expertise in monitoring dairy emissions, greenhouse gas mitigation and modeling,
- Specialists in manure management practices on dairies in California.

# FAQ process

E-mail any additional questions you may have to <u>casey.cady@cdfa.ca.gov</u>.

Responses will be posted according to the schedule below.

Questions Rec'd by:	Responses Posted by:
May 16, 2017 at 8:00 am	May 18, 2017 at 5:00 pm