



California Department of Food and Agriculture

Dairy Digester Research and Development Program (DDRDP)

GRANT APPLICATION WORKSHOP

JANUARY 2015

2015 Request for Grant Applications

1

- About the Program
- Funding and Duration
- Eligibility
- Application Process and Timeline
- Program Requirements
- Grant Application
- Scoring Criteria
- Review Process
- Assistance and Questions

About the Program

2

- California Department of Food and Agriculture (CDFA) received funding from the Greenhouse Gas Reduction Fund to administer the Dairy Digester Research and Development Program (DDRDP) to support projects that reduce greenhouse gas (GHG) emissions.
- The program's objective is to support the development of dairy digesters to promote GHG emission reductions by capturing methane on California dairy operations.

DDRDP Website

www.cdffa.ca.gov/go/DD

4

The screenshot shows a web browser window displaying the California Department of Food and Agriculture (CDFA) website. The address bar shows the URL: www.cdffa.ca.gov/EnvironmentalStewardship/Dairy_Digesters.html#workplan. The page header includes the CDFA logo and navigation tabs: Home, Divisions, Customer Service, Meetings, News, Jobs, Laws/Regs, Statistics, and Publications. Below the header is a search bar and a secondary navigation menu with links like Find Subject, Programs & Services, Public Meetings, Site Map, FAQs, Contact Us, About CDFA, and Español. The main content area features a large image of a landscape with hills and a field, followed by the heading "DAIRY DIGESTER RESEARCH AND DEVELOPMENT PROGRAM". Below this heading are two bullet points: "Request for Grant Application - Application Guidelines" and "Application Workshop Schedule". A paragraph of text describes the program's purpose and funding. To the right of the main content is a sidebar with two sections: "RESOURCES" and "WEBLINKS". The "RESOURCES" section lists links for Fertilizer Research & Education, Western Plant Health Association, and FREP/WPHA Conference Proceedings. The "WEBLINKS" section lists several links related to the DDRDP, including Phase I Request for Grant Applications, Work Plan Attachment, Cost Summary, Press Release, Phase I Public Comments Summary, Grant Proposal Upload Site, and the Program Framework (Phase I). The browser's taskbar at the bottom shows various application icons and the system clock indicating 1:51 PM on 1/22/2015.

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

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CDFA Home > Environmental Stewardship > Dairy Digester Research and Development Program



DAIRY DIGESTER RESEARCH AND DEVELOPMENT PROGRAM

- Request for Grant Application - Application Guidelines
- Application Workshop Schedule

Dairy digesters are a renewable technology that uses livestock manure to produce methane, which is a renewable source of electrical energy generation and transportation fuel. The technology has many environmental and social benefits. More information on dairy digesters can be found on the [CalEPA Dairy Digesters webpage](#) and the [USEPA AgSTAR Anaerobic Digestion webpage](#).

The California Department of Food and Agriculture (CDFA) is developing a new Dairy Digester Research and Development Program authorized by the Budget Act of 2014 (Chapter 25, Statutes of 2014). CDFA was appropriated \$12 million dollars from the Greenhouse Gas Reduction Fund to provide financial assistance for the installation of dairy digesters in California, which will result in reduced greenhouse gas emissions. An estimated \$11 million in competitive grant funding will be awarded to provide financial assistance for the installation of dairy digesters that result in reduced greenhouse gas emissions and other environmental benefits, and an estimated \$500,000 will be made available for research and demonstration projects that improve the economic performance of dairy digesters in California. The objective will be met by providing funds on a competitive basis for: a) dairy digester development (Phase I) and b) dairy digester research (Phase II).

The program is guided by the [Statement of Principles](#) of the California–Federal Dairy Digester Working Group. The Working Group is a partnership of state, federal and local agencies with the common goal of identifying and removing barriers to the wide adoption of dairy digester systems in California.

RESOURCES

- Fertilizer Research & Education
- Western Plant Health Association
- FREP/WPHA Conference Proceedings

WEBLINKS

- CDFA DDRDP Phase I Request for Grant Applications (*new)
- CDFA DDRDP Work Plan Attachment to Request for Grant Applications (*new)
- CDFA DDRDP Cost Summary Attachment to Request for Grant Applications (*new)
- CDFA DDRDP Press Release Announcing Available Funding (*new)
- CDFA DDRDP Phase I Public Comments Summary (*new)
- CDFA Grant Proposal Upload Site (*new)
- CDFA Dairy Digester Research and Development Program Framework (Phase I)

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1/22/2015

Funding and Duration

- CDFA will award up to \$11 million in competitive grants for implementation of dairy digesters.
- Project Grant Amounts: up to 50% of the total project costs with a maximum grant award of \$3 million
- Project Duration: July 1, 2015 to June 30, 2017

Eligibility

4

- Project site must be located on a California Dairy Operation.
 - ▣ A group of dairy operations can submit one grant application to develop a centralized dairy digester.
- Dairy operations and dairy digester developers are eligible.
 - ▣ Dairy operation is defined as an organization that operates a dairy herd, which produces milk or cream commercially, and whose bulk milk or bulk cream is received or handled by any distributor, manufacturer, or any nonprofit cooperative association of dairy milk producers.

Application Timeline

7

Grant Application Timeline	
January 12, 2015	Invitation to Submit Grant Applications
January 21, 2015	Application Workshops
January 27, 2015	Application Workshop - Webinar
January 28, 2015	Application Workshops
February 5, 2015	FAQ updates by CDFA
February 12, 2015	FAQ updates by CDFA
February 19, 2015	FAQ updates by CDFA
February 23, 2015 5 p.m. PST	Grant Applications Due
March – April 2015	Technical Review Process
May – June 2015	Announce and Award Funding

Late submissions will not be accepted.

Application Process

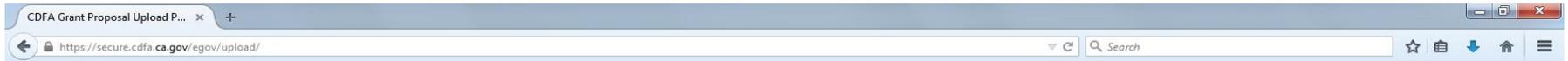
8

- **Submission website** - <https://secure.cdfa.ca.gov/egov/upload/>
- Email CDFA at grants@cdfa.ca.gov to request login information to upload grant applications electronically on the submission website.
- Grant application sections must be combined into a single PDF file (not exceeding 1.9 GB).
- Upload PDF using the following name format:
[Dairy Operation Name]_[Last 4 of Tax ID]
- CDFA will send a notification email to confirm grant applications were received within 2 business days of receipt.

DDRDP Grant Upload Website

<https://secure.cdfa.ca.gov/egov/upload/>

9



Grant Proposal
Upload Site

Grant Applications Due February 23, 2015 p.m. PST

To upload grant applications to this website, email California Department of Food and Agriculture (CDFA) at grants@cdfa.ca.gov to request a login account. CDFA will provide applicants a login account within 2 business days of receiving the request.

Grant applications must be uploaded in a single PDF file and named using the following format:
(dairy operation name)_last 4 of Tax ID

Following grant application submission, CDFA will send applicants a notification email to confirm their grant application(s) were received within 2 business days of receipt. CDFA will only consider a grant application complete, if all application components are included in the single PDF file. In case an application is submitted more than once before the close of submission deadline, the last version (i.e. most recent) submitted will be considered final.

Enter password:



Program Requirements

5

- Projects must result in permanent, annual, and measurable GHG emission reductions.
- Grant applications must represent an individual digester project at a unique project site.
- A group of dairy operations can submit one grant application to develop a centralized dairy digester.

Program Requirements (cont.)

11

- Defunct digesters that were constructed in the past and have become entirely non-functional, or never became functional since their construction, due to technical or other (e.g. regulatory) issues are eligible for this program.

Grant funds cannot be used for upgrades to existing, functional dairy digesters.

- Projects cannot propose to switch existing management practices to practices that increase baseline GHG emissions.
- Projects must use methane for energy production (electric or RNG) with no more than 20% flared on an annual basis.
- At least 80% or more dry weight of the feedstock for anaerobic digestion must be manure from dairy livestock.

Program Requirements (cont.)

12

CEQA AND PERMITS

- CDFR's intent is to fund projects that can demonstrate “shovel readiness.”
 - ▣ Shovel readiness will be evaluated based on evidence of readiness by applicants.

CEQA compliance is required for all funded projects.

Program Requirements (cont.)

13

PROJECT TECHNOLOGY

- Projects must use technologies commercially-available in California.
 - ▣ *Commercially-available technologies:* A system having a proven operating history specific to the grant application. Such a system is based on established design and installation procedures and practices. Professional service providers, traders, large construction equipment providers, and labor are familiar with installation procedures and practices.
- Grant funds cannot be used for pre-commercial or new technology development.

Program Requirements (cont.)

14

GHG EMISSIONS REDUCTION CALCULATIONS

- Appendix A, Attachment 5. Page number 31.
- California Air Resources Board Compliance Offset Protocol – Livestock Projects
<http://www.arb.ca.gov/cc/capandtrade/protocols/livestock/livestock.htm>
- GHG calculations must be provided in three formats:
 - ▣ Total annual GHG emission reduction
 - ▣ GHG reduction per unit of energy-corrected milk produced by the dairy operation
 - ▣ GHG reduction per CDFA grant dollar invested

CARB Compliance Offset Protocol – Livestock Projects

<http://www.arb.ca.gov/cc/capandtrade/protocols/livestock/livestock.htm>

15

The screenshot shows a web browser window displaying the California Air Resources Board (ARB) website. The page title is "Compliance Offset Protocol Livestock Projects". The website header includes the ARB logo, navigation links (Home, Reducing Air Pollution, Air Quality, Business Assistance, Laws & Regulations, Health), and a search bar. The main content area features an "Introduction" section with text explaining the protocol's purpose and a photograph of several cows in a field. A sidebar on the left contains "Up LINKS" and "PROGRAM LINKS" sections. The footer includes contact information for Yachun Chow and a "climate CHANGE" logo.

Friday, January 16, 2015

Up LINKS

- Reducing Air Pollution - ARB Programs
- Climate Change Programs
- Cap-and-Trade Program

PROGRAM LINKS

- Regulation Documents
- Regulation
- Regulatory Guidance Documents
- Auction Information
- Compliance Instrument Tracking System Service (CITSS)
- Compliance Offset Program
- List of Covered Entities
- Adaptive Management
- Voluntary Renewable Electricity Program
- Reported Emissions Data
- 2020 Forecast Inventory
- Economic and Allocation Advisory Committee (EAAC)
- Workshops / Meetings

Board Resolutions:

- 13-7 (4/19/2013)
- 12-51 (10/18/2012)
- Attachment A
- 12-33 (9/20/2012)
- 11-32 (10/20/2011)
- 10-42 (12/16/2010)

Economics:

- Economic Analysis
- Economic Models

California Environmental Protection Agency
Air Resources Board

Home | Reducing Air Pollution | Air Quality | Business Assistance | Laws & Regulations | Health

This page last reviewed August 7, 2014

Compliance Offset Protocol Livestock Projects

Introduction

The Compliance Offset Protocol Livestock Projects provides methods to quantify and report greenhouse gas (GHG) emission reductions associated with the installation of a biogas control system (BCS) for manure management on dairy cattle and swine farms. The protocol focuses on quantifying the change in methane emissions, but also accounts for effects on carbon dioxide emissions.



Offset Project Operators or Authorized Project Designees that install manure biogas capture and destruction technologies must use the methods contained in this protocol to quantify and report GHGs. The protocol provides eligibility rules, methods to quantify GHG reductions, offset project-monitoring instructions, and procedures for preparing Offset Project Data Reports. Additionally, all offset projects must submit to annual, independent verification by ARB-accredited verification bodies. Regulatory requirements for verification of Offset Project Data Reports are provided in the Cap and Trade Regulation.

This protocol is designed to ensure the complete, consistent, transparent, accurate, and conservative quantification of GHG emission reductions associated with a livestock digester project. The protocol is comprised of both quantification methodologies and regulatory program requirements to develop a livestock project for generating ARB offset credits.

ARB Compliance Offset Protocol—Livestock Projects (Adopted 10/20/2011)

Frequently asked questions for Livestock projects

Back to ARB offset program

For questions or comments regarding the Livestock Protocol,
please contact Yachun Chow at (916) 322-7450 or via email at: ychow@arb.ca.gov



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Program Requirements (cont.)

16

ENVIRONMENTAL PROTECTION (WATER & AIR QUALITY)

- The design and construction of digester vessels shall be demonstrated to be protective of surface and ground water quality.
 - ▣ To meet water quality requirements, one of the following is required:
 - (i) double-lined ponds consistent with the Tier 1 specification of the Dairy General Order (R5-2013-0122) of the Central Valley Regional Water Quality Control Board,
 - (ii) above-ground concrete tank, or,
 - (iii) below-grade concrete lined tank.

- The digester system design, construction, and operation must minimize emission of air pollutants.
 - ▣ For power production projects, the total NO_x emissions must be no greater than 0.50 lb/ MW-hr.

See Additional Guidance in the Application Guidelines for information on water quality requirements.

Program Requirements (cont.)

17

MATCHING FUNDS

- Grant applications must include 50% matching funds of the total project costs, of which 25% can include in-kind contributions.
- Activities (i.e. tasks part of the Work Plan) funded under the DDRDP cannot duplicate activities funded by another Federal or State Program.

Documentation must be submitted describing the contribution source, type, and amount of contributions in support of the project.

Program Requirements (cont.)

18

ALLOWABLE COSTS

- Project costs must clearly support the implementation of the digester, including, but not limited to, supplies and materials, equipment, contractor/consultants, and other costs associated with the project.

UNALLOWABLE COSTS

- Cost incurred outside the grant term
- Cost covered by another Federal or State agency
- Pre-development costs
- Costs associated with environmental review required for permits
- Expenditures for purchasing or leasing land or buildings
- Purchase of manure (tipping fees) or other feedstocks
- Cost associated with the 10 year GHG reporting requirement
- Travel cost

Grant Application

19

- The grant application consists of the following list of required forms, attachments and supporting documents:
 1. Cover Page (attachment 1)
 2. Applications Checklist (attachment 2)
 3. Project Narrative
 - a. Work Plan (attachment 3)
 - b. Cost Summary (attachment 4)
 - c. Greenhouse Gas Emissions Reductions (attachment 5)
 - d. Economic/Environmental Benefits and Impacts to Disadvantaged Communities (attachment 6)
 - e. Permit Check List (attachment 7)
 4. Any other supplemental documents

Cost Summary

Applicant Organization		DDRDP Funds	Matching Funds	In-kind	State/Federal	Other Funds	Total Funds
Budget Category	Description	DDRDP Funds	Matching Funds	In-kind	State/Federal	Other Funds	Total Funds
<i>Personnel (Salaries and Wages)</i>							
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
	Personnel Subtotal:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>*Travel (Travel costs necessary to complete the project)</i>							
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
	Travel Subtotal:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Supplies and Materials (Items with an acquisition cost under \$5,000 per unit)</i>							
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
	Supplies and Materials Subtotal:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Equipment (An article of nonexpendable, tangible personal property having a useful life more than one year, and a purchase cost which equals or exceeds \$5,000 per unit)</i>							
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
	Equipment Subtotal:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Contractor/Consultant (Indicate flat fee or hourly rate, and provide a short description of services)</i>							
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
	Contractor/Consultant Subtotal:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Other (Other costs or general expenses not covered in any of the previous categories)</i>							
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
		\$	\$	\$	\$	\$	\$ -
	Other Subtotal:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL DDRDP FUNDS		\$ -					
TOTAL MATCHING FUNDS			\$ -				
TOTAL IN-KIND CONTRIBUTIONS				\$ -			
TOTAL STATE/FEDERAL FUNDS					\$ -		
OTHER FUNDS						\$ -	
TOTAL PROJECT FUNDS							\$ -
Additional description of project costs (if necessary):							

Benefits to Disadvantaged Communities

22

- Appendix A, Attachment 6, Page 32
- OEHHAS's CalEnviroScreen Tool: <http://oehha.ca.gov/ej/ces2.html>

The screenshot shows the OEHHAS CalEnviroScreen 2.0 website. The main content area features a large banner for "CalEnviroScreen 2.0" with the URL www.oehha.ca.gov/ej. Below the banner, the text reads: "The Office of Environmental Health Hazard Assessment (OEHHAS), on behalf of the California Environmental Protection Agency (CalEPA), announces the availability of the California Communities Environmental Health Screening Tool: CalEnviroScreen Version 2.0 (CalEnviroScreen 2.0). CalEnviroScreen is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution. CalEPA has used the tool to designate California communities as disadvantaged pursuant to Senate Bill 535." It also mentions an update in October 2014 and provides a link to a press release: "Press Release - CalEPA Finalizes Major Update of Environmental Health Screening Tool: CalEnviroScreen 2.0 to Help Direct Investments to Disadvantaged Communities".

The sidebar on the right includes a "DIRECTOR" section for George Alexeff and a "MORE RESOURCES" section with links to: Air Pollution and Children's Health, Child-Specific Reference Doses (chRDs), CalEnviroScreen 2, Environmental Protection Indicators for California - Reports, Pesticides - Physician's Information, Risk Assessment for the Layperson, and Toxic Air Contaminants. There are also social media links for Facebook and Twitter.

At the bottom of the page, there are two large blue circular buttons labeled "ALL MAPS" and "MOBILE MAP".

CARB Disadvantaged Communities

<http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/535top25map.htm>

23

The screenshot displays a web browser window with the URL www.arb.ca.gov/cc/capandtrade/auctionproceeds/535top25map.htm. The page header includes the California Environmental Protection Agency (CalEPA) and Air Resources Board (ARB) logos, along with navigation links for Home, Reducing Air Pollution, Air Quality, Business Assistance, Laws & Regulations, and Health. The date is Friday, January 16, 2015, and the page was last reviewed on November 19, 2014.

Disadvantaged Community Map - Top 25%

Senate Bill 535 (De León, Chapter 830, Statutes of 2012) directs State and local agencies to make significant investments that improve California's most vulnerable communities. The development of tools to implement SB 535 is a multi-agency effort among the California Environmental Protection Agency (CalEPA), the Office of Environmental Health Hazard Assessment (OEHHA), and the Air Resources Board (ARB).

Maps for Evaluating Benefits to Disadvantaged Communities Based on Appendix A of Interim Guidance

Appendix A of the Interim Guidance document identifies a number of geographic based criteria that an administering agency could use to determine if a project provides a benefit to disadvantaged communities (e.g. improved local bus service for riders using stations or stops that are accessible by walking within a half-mile of a disadvantaged community or incentives for cleaner vehicles or equipment with a physical address in a ZIP code that contains a disadvantaged census tract).

Census Tracts That Have Been Identified by CalEPA as Disadvantaged Communities

The map shows the state of California with several census tracts highlighted in dark blue, indicating they are identified as disadvantaged communities. These tracts are primarily located in the Central Valley and the San Joaquin Valley, including areas around Sacramento, Stockton, Modesto, and Fresno. Other cities shown on the map include Medford, Redding, Reno, Carson City, Santa Rosa, San Francisco, San Jose, Salinas, San Diego, Los Angeles, Las Vegas, Boise, Nampa, Idaho Falls, Ogden, Salt Lake City, and Provo. The map also shows state boundaries for Oregon, Idaho, Nevada, and Utah.

The browser's taskbar at the bottom shows the Windows Start button and several application icons, including Internet Explorer, File Explorer, and various office applications. The system clock in the bottom right corner shows the time as 2:20 PM on 1/16/2015.

Scoring Criteria

Criteria	Max. Points
Feasibility of the Digester Project	20
Financial Soundness and Budget	15
Greenhouse Gas Emissions Reductions Calculation and Reporting	30
Environmental Benefits	10
Economic Benefits	5
Additional Co-Benefits	5
Benefits to Disadvantaged Communities	5
Project Readiness - Regulatory Information, Permits and CEQA	10
TOTAL	100

Review Process

25

CDFA's intent is to fund projects that can produce the highest results in permanent, annual GHG reductions from handling dairy waste.

Review:

- Administrative – Internal
- Technical – External
 - ▣ California Universities – GHG Emissions Reduction Calculations
 - ▣ CDFA's Audit Office – Financial Soundness and Credibility
- TAC: Technical Advisory Committee assigns final scores and makes recommendations to the CDFA Secretary.

During the review process, CDFA will take the necessary precautions to protect confidential and proprietary information provided in the grant application.

Assistance and Questions

26

- Email questions to: grants@cdfa.ca.gov
- Q&As posted to CDFA's website:
www.cdfa.ca.gov/go/dd

February 16, 2015 at 5:00 P.M. PST is the final deadline to submit questions

*Application submission deadline: **February 23, 2015 5:00 P.M. PST***