# 2018 DAIRY DIGESTER RESEARCH AND DEVELOPMENT PROGRAM

## Request for Grant Applications

Released: December 15, 2017

Applications Due: ~~January 26~~ February 23, 2018 by 5:00 p.m. PST
*No late submissions accepted.*

**California Department of Food and Agriculture**

# Contents

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# About the Program

## Purpose

The California Department of Food and Agriculture's (CDFA) 2018 Dairy Digester Research and Development Program (DDRDP), https://www.cdfa.ca.gov/go/DD, awards competitive grants to California dairy operations and digester developers for the implementation of dairy digesters that result in long-term methane emission reductions on California dairies and minimize or mitigate adverse environmental impacts.

## Funding and Duration

Assembly Bill 109 (Chapter 249, Statutes of 2017) appropriated $99 million dollars from the Greenhouse Gas Reduction Fund (GGRF) to CDFA for early and extra methane emissions reductions from dairy and livestock operations. CDFA will make $61-75 million (65-80% of $94.1 million) available for the 2018 DDRDP. $19-$33 million (20-35% of $94.1 million) will be provided in incentives to support non-digester practices that reduce methane emissions from dairy and livestock operations through a separate program, the Alternative Manure Management Program. A range of award amount has been included to ensure encumbrance of funds in each program by high-quality projects that will result in verifiable and quantifiable GHG reductions.

CDFA will fund up to 50% of the total project cost with a maximum grant award of $3 million per project. Therefore, a minimum of 50% matching funds are required (no more than 25% in-kind contributions). See Matching Funds for more details.

The maximum project term is two (2) years and grant funds cannot be expended before July 1, 2018, and after June 30, 2020. CDFA may offer an award different than the amount requested.

## Eligibility and Exclusions

The project site must be located on a commercial California dairy operation. A *dairy operation* is defined as an entity 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 producers. Existing milk producers and dairy digester developers are eligible for this program.

An applicant may submit multiple grant applications; however, each grant application must represent an individual digester project at a unique project site (i.e., dairy operation).

A group of dairy operations can submit one grant application to develop centralized dairy digesters and gas clean up facilities, known as a “cluster” or “hub and spoke” project. The location of the centralized digester and/or gas clean up facility can be one determined appropriate by participating dairy operations.

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. Defunct digesters must be non-functional for a minimum of 12 consecutive months.

2018 DDRDP grant funds ***cannot*** be used for the following:

- Upgrades to existing, functional dairy digesters to boost emission reductions and energy production.
- To fund projects on dairy operations that propose to switch existing management practices to those that increase baseline greenhouse gas (GHG) emissions (e.g., from dry scrape to flush lagoon systems).
- Duplicate equipment or activities that will receive funding from the California Public Utilities Commission (CPUC) pilot project authorized by California Health and Safety Code Section 39730.7(d)(2) (e.g., interconnection costs). *Note: Biogas conditioning and clean-up costs are allowable under the 2018 DDRDP.*

## Timeline

| 2018 DDRDP Timeline | |
|---|---|
| Invitation to submit Grant Applications | December 15, 2017 |
| Application Workshops and Webinar | January 4 – 8, 2018 |
| Grant Applications Due | ~~January 26~~ February 23, 2018 at 5:00 p.m. PST |
| Review Process | February – ~~May~~ June 2018 |
| Announce and Award Funding | ~~June~~ July 2018 |

# Requirements and Limitations

## Program Requirements

The 2018 DDRDP will support implementation of dairy digester projects on California dairy operations that result in permanent, annual, and measurable GHG emission reductions. All projects that receive GGRF monies are required by statute (Government Code Section 16428.9) to achieve GHG emission reductions and further the purposes of the Global Warming Solutions Acts of 2016.

Projects must use methane for energy production or transportation fuel (e.g., compressed natural gas). Projects that propose flaring as the sole end-use for biogas will not be eligible for funding. Projects must either convert bio-methane to renewable electricity or fuel (e.g., renewable natural gas [RNG] or renewable compressed natural gas [RCNG]), to use on-site or inject into an existing pipeline, or for the utilization of useful thermal energy onsite or at a neighboring facility.

At least 80% or more dry weight of the feedstock for anaerobic digestion must be manure from dairy livestock. Other substrates, such as dairy processing wastes including whey, or other agricultural waste, can be added to the feedstock to up to 20% dry weight. Applicants must provide details regarding the nature and sources of all co-substrates.

Grant recipients will be required to submit quarterly status reports to CDFA explaining in detail the project's progress. Recipients must also report their annual GHG emissions reduction data to CDFA for five years after the end of the project term and/or the digester becomes operational.

## California Environmental Quality Act and Permits

CDFA's intent is to fund projects that can demonstrate a project's "readiness." Project readiness will be evaluated based on evidence that applicants are ready to start project implementation. Evidence includes, but is not limited to, a list of permits already obtained and details of the process required to obtain remaining permits clearly outlined in the FAAST Questionnaire under the Project Readiness section.

If awarded, grant recipients are expected to demonstrate compliance with California Environmental Quality Act (CEQA) and all applicable permitting within six (6) months of the execution of the grant agreement.

## Project Technology

Projects must use commercially available technologies. *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. Professional service providers, traders, large construction equipment providers, and labor are familiar with installation procedures and practices. Please refer to Key Terms (Appendix D) for a detailed definition of "commercially available" as applicable to this program.

2018 DDRDP grant funds ***cannot*** be used for pre-commercial or new technology development. *Pre-commercial technologies* are defined as new technologies or enhancements of existing technologies that are not commercially available.

## Greenhouse Gas Emission Reduction Calculations

Applicants are required to use the quantification methodology titled "Greenhouse Gas Quantification Methodology for the California Department of Food and Agriculture Dairy Digester Research and Development Program: Fiscal Year 2017-18" and associated "Calculator Tool for Dairy Digester Research and Development Program: Fiscal Year 2017-18" (hereafter referred to as Estimated GHG Reduction Calculator) developed by the California Air Resources Board (CARB). The quantification methodology and calculator are available on CARB's website at www.arb.ca.gov/cci-quantification.

This quantification methodology and calculator were developed specifically for the 2018 DDRDP and are based on the CARB Compliance Offset Protocol – Livestock Projects (2014) with some modifications to allow for the calculation of anticipated net GHG reductions of a DDRDP project prior to implementation.

Applicants are required to provide GHG calculations in the following four formats: (1) total project emission reductions over 10 years; (2) GHG reduction per unit of energy-corrected milk (ECM) produced by the dairy operation over 10 years; (3) GHG reduction per dollar 2018 DDRDP grant money requested over 10 years; and (4) GHG reduction per dollar total GGRF grant money requested over 10 years.

## Disadvantaged and Low-Income Communities

SB 535 established statutory requirements that a minimum of 25 percent of California Climate Investments is allocated to projects that provide benefits to disadvantaged communities, and of that 25 percent, a minimum of 10 percentage points is allocated to projects that are also located within disadvantaged communities. Assembly Bill (AB) 1550 (Gomez, Chapter 369, Statutes of 2016) amended these requirements by increasing the percent of funds for projects located in disadvantaged communities from 10 to 25 percent and added a focus on investments in low-income communities and households. AB 1550 investment minimums apply to the overall appropriations of monies from the GGRF, not the individual agency programs. However, all California Climate Investments programs including the DDRDP are encouraged to maximize benefits to disadvantaged communities, low-income communities and low-income households.

The California Environmental Protection Agency (CalEPA) identified disadvantaged communities using CalEnviroScreen, a tool developed by the Office of Environmental Health Hazard Assessment that assesses all census tracts in California to identify the areas disproportionately burdened by and vulnerable to multiple sources of pollution. Additionally, maps identifying low-income communities based on statutory definitions are also made available by the CARB here: https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm

Projects are not required to provide benefits to disadvantaged and low-income communities. However, the projects that are determined to be providing benefits based on their responses to the questions within FAAST are eligible to receive additional points during the review process. Consistent with CARB Funding Guidelines for Administering Agencies (Draft – August 2017), priority will be given to those

projects that maximize benefits to disadvantaged communities and low-income communities using criteria addressed as questions within Financial Assistance Application Submittal Tool (FAAST).

## Environmental (Water and Air Quality) Protection

Projects must demonstrate protection of water and air quality. Accordingly, the design and construction of digester vessels (i.e., ponds and tanks) under this program must be demonstrated to be protective of surface and ground water quality. To meet the DDRDP water quality requirements, one of the following is required: 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, above-ground concrete tank, or below-grade concrete lined tank.

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

See Additional Guidance and Resources for detailed information regarding water quality requirements and Best Available Control Technologies (BACT). In making awards, CDFA will prioritize projects that minimize emissions of criteria pollutants, (See Scoring Criteria for more information).

## Matching Funds

CDFA will fund up to 50% of the total project costs with a maximum grant award not to exceed $3 million per project. The applicant must contribute a minimum of 50% of total project cost in matching funds of which only 25% can include in-kind contributions. Grant recipients must report matching funds contributed to the project and ability to commence work while waiting for grant payments in arrears.

*Matching funds* are a portion of project costs not borne by the GGRF. Matching contributions include allowable costs incurred that are directly related to the implementation of the digester system (i.e., supplies and materials, equipment, and contractor/consultant fees, and other associated project costs).

*In-kind contributions* are donated goods or services for which fees would ordinarily be paid or provided to the applicant at no cash cost. Donated goods and services must be necessary to the project to be considered in-kind (i.e., goods/services would be otherwise purchased if not donated). For professional donated services, the professional donating the service must be licensed to work in that profession and value their service at the same rate at which an ordinary professional with the same expertise and training would charge for the same or similar service.

In-kind contributions also include contributions in the form of labor for project installation and pre-development activities conducted prior to the proposed project term that contributed to the project's "readiness." Examples include but are not limited to: pre-development activities such as permits and project design.

Applicants must provide the contribution source, type, and amount of all contributions in support of the project. Grant recipients will be required to expend matching funds committed to the project throughout

the project term. If matching funds are not expended at a rate consistent with grant funds, CDFA will withhold grant funds until matching funds are expended at a consistent rate.

## Allowable Costs

Project costs must clearly support the implementation of the digester, including, but not limited to:

*Supplies:* Supplies and materials are items with an acquisition cost less than $5,000 per unit and have a useful life of less than one year.

*Equipment:* Equipment is an article of nonexpendable, tangible personal property and has a useful life of more than one year, and a purchase cost which equals or exceeds $5,000 per unit.

*Contractor/Consultant:* Contractor fees are limited to labor to install the project. Consultant fees are for a specific and identifiable service that is directly related to project implementation.

*NOTE: Compensation for individual contractor/consultant fees must be reasonable and consistent with fees in the marketplace for the same or similar services.*

*Design and engineering:* Design and engineering costs, including those provided by contractor/consultants up to 5% of the total amount requested are allowable.

*Other Costs*: Other direct costs and expenses for implementing the project not covered in any of the previous categories.

## Unallowable Costs

The following costs are ***not*** allowed:

- Costs incurred outside of the grant term.
- Costs covered by another State or Federal grant program, including funds provided by the Investor Owned Utilities as result of the CPUC Order Instituting Rulemaking to implement dairy biomethane pilot project process.
- Pre-development costs, including, but not limited to: permits, project designs, and any other activities that contributed to a project's readiness.
- Costs associated with environmental review required for project permits, including preparation of Environmental Impact Reports.
- Expenditures for purchasing or leasing land or buildings.
- Purchase of dairy manure (tipping fees) or other feedstocks.
- Costs associated with the five-year GHG emissions reductions reporting.
- Costs incurred during community outreach.
- Costs associated with mitigation of potential adverse impacts (i.e., California Government Code Section 16428.86(a)).

# How to Apply

## Financial Assistance Application Submittal Tool (FAAST)

Applicants are required to complete and submit their grant applications online using the FAAST. FAAST is hosted by the State Water Resources Control Board (SWRCB) and can be accessed through the SWRCB website at https://faast.waterboards.ca.gov.

Applicants must create a user account in FAAST in order to submit a grant application. The FAAST Proposal Identification Number (PIN) will be used throughout the application process as a project identifier. FAAST is organized into several tabs and includes a question and answer format. The Questionnaire tab in FAAST contains the grant application, which is a series of questions regarding the proposed project.

Questions are answered in one or more of the following formats: a drop down menu; a check box; a text box with predetermined character limitations; or as a document attachment. Responses to all questions must be submitted in the manner and format required by the application questionnaire in FAAST without exception.

The SWRCB website contains a Frequently Asked Questions section and a User Manual. After reading the information available on the website, applicants that have additional questions about the FAAST system may contact FAAST customer service at (866) 434-1083, Monday through Friday, 8:00 am to 5:00 pm PDT or via email, faast_admin@waterboards.ca.gov.

## Computer System Requirements

To ensure applications and attachments are submitted successfully, CDFA encourages applicants to comply with FAAST's computer system recommendations. CDFA cannot guarantee that the FAAST system or the required templates will be compatible with other browsers or operating systems. Use of other browsers or operating systems will limit the ability of CDFA and FAAST staff to provide applicants with technical assistance, should any issues arise.

FAAST computer system recommendations:

- Use a Windows PC with Internet Explorer 6.0 or higher.
- Disable pop-up blocking software while using FAAST.
- Save work often – the system will time out after 90 minutes and any unsaved work will be lost.

# Grant Application: FAAST Questionnaire and Attachments

Applicants must respond to the questionnaire in FAAST and upload all attachments into the FAAST system. Attachments must be submitted in Times New Roman font size 11, with one (1) inch margins, and page numbers should be on bottom right corner. Attachments listed as single PDF files (supporting documents, letters of support, design plans, etc.) have recommended page limits noted in the section below.

All attachments should include the FAAST PIN, assigned to your application by the FAAST system, in top left corner.

## FAAST Questionnaire

The FAAST Questionnaire can only be accessed within the FAAST system. Click Preview FAAST Questionnaire to view the questions as they will appear in FAAST. Previewing the questions will assist applicants in determining what information is necessary to complete the FAAST Questionnaire.

## Attachments

For attachments and supporting materials that do not have a required template, applicants are encouraged to create a linkable table of contents and/or hyperlinks to reference applicable sections within a document. Do not include extraneous or duplicate information.

### Digester Project Plan and Long-Term Viability

**Attachment 1: Project Narrative Template**
The Project Narrative should detail the history and background of the dairy operation, the type of digester to be used in the proposal, plans for renewable power or low-carbon fuels, site control, sustainability of the project, operations, maintenance, organization of project team, and experience. For projects that are a part of a larger cluster, include 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.

Complete and upload the Project Narrative template to FAAST.

In addition to the Project Narrative template, include the following supporting materials:

- **Supporting Materials 1.1:** Site plan, project design documents, cluster maps, schematic diagrams, etc. Upload to FAAST as a single PDF file; 50 pages recommended.
- **Supporting Materials 1.2:** Resumes, team commitment letters, etc. Upload to FAAST as a single PDF file; 30 pages recommended.
- **Supporting Materials 1.3:** Copy of Deed and/or Lease Agreement (if applicable). Upload to FAAST as a single PDF file; no total page limit.

**Attachment 2: Work Plan Template**
The Work Plan must clearly and concisely describe the tasks and activities required to accomplish goals/objectives in the proposed Project Narrative. It must identify measurable targets and timelines and

include an evaluation component to measure the success of the project and determine whether the project objectives were accomplished.

Complete and upload the Work Plan template to FAAST.

## Budget Worksheet and Financials

**Attachment 3: Budget Worksheet Template**

Applicants must provide a clear accounting of costs, work hours, and equipment associated with all activities necessary to complete the project. Applicants must identify 2018 DDRDP funds requested, the source and amount of matching (cash) funds, in-kind contributions, State and Federal funds, and all other funding sources necessary to complete the project.

Complete and upload the Budget Worksheet template to FAAST.

**Attachment 4: Financials**

There is no template to complete for Financials; however, applicants must attach the following documentation:

- Provide documentation regarding the dairy and the developer's financial strength. In case of a partnership, information from all partners (including the dairy operation) is required. This information includes:
  - Independent CPA Auditor's Report (preferred).
  - Three most recent fiscal year balance sheets.
  - Profit/loss statements and federal tax returns.
  - Other appropriate documentation that demonstrates your organization's (e.g. Limited Liability Company) financial stability, such as: Articles of Organization; Operating Agreement; Bank Statements (including those related to operating and payroll, and lines of credit if applicable); or General Ledger.
- If the project will be a new partnership with little or no history, please submit key financial information from all collaborators (e.g. dairy operators and developer).
- Indicate all additional funding sources and ability to commence work while waiting for grant payments in arrears.

*Note: Project partners must not have filed for bankruptcy in the past five years.*

Upload to FAAST as a single PDF file; no total page limit.

## Estimated GHG Emissions Reduction

**Attachment 5: Estimated GHG Reduction Calculator**

Estimate the project GHG emissions reduction with the Estimated GHG Reduction Calculator template.

Complete and upload the Estimated GHG Reduction Calculator template to FAAST.

In addition to the Estimated GHG Reduction Calculator template, include the following supporting materials:

- **Supporting Materials 5.1:** Explanation of variables different from the Estimated GHG Reduction Calculator. For example, non-default volume of manure volatile solids deposited on land and not entering the anaerobic environment; and, use of default values for standard milk in absence of dairy-specific data (if applicable). Upload to FAAST as a single PDF file; 20 pages recommended.

## Project Readiness

**Attachment 6: Additional Permitting Documents**
There is no template to complete for Project Readiness; however, applicants must attach the following documentation:

- Depending on the type of project, additional local, State, or Federal permits may be required. Potential permits may include: Department of Toxic Substances Control; Federal Dept. of Transportation, Caltrans and the CHP; City/County Fire Departments; City/Fire Building and Safety Departments; and Air Tank Permits from CA Department of Industrial Relations, etc.

*Please see Additional Guidance, Project Readiness Resources, for resources to assist with the project readiness component.*

Upload to FAAST as a single PDF file; 100 pages recommended.

## Environmental Performance

**Attachment 7: Environmental Performance Template**
The Environmental Performance attachment should describe the proposals impact on criteria pollutants (such as NOx), toxic air contaminants and hazardous air pollutants. Provide an explanation of additional benefits such as: water conservation, value-added products, utilization of waste heat, reduction of odor, etc.

Completed and upload the Environmental Performance template to FAAST.

In addition to the Environmental Performance template, include the following supporting materials:

- **Supporting Materials 7.1:** Provide documentation, including but not limited to an explanation and citations from published literature, to support project's environmental performance claims. Upload to FAAST as a single PDF file; 100 pages recommended.

## Community Impact

**Attachment 8: Community Impact Template**
The Community Impact template should describe how a proposal will create an economic benefit in the community, detail any negative impacts, and explain the mitigation measures that will be implemented.

Complete and upload the Community Impact template to FAAST.

In addition to the Community Impact template, include the following supporting materials:

- **Supporting Materials 8.1:** Provide up to three (3) letters of support from community members, local government, and community organizations demonstrating that outreach was conducted. Upload to FAAST as a single PDF file; 20 pages recommended.
- **Supporting Materials 8.2:** Provide documentation to justify responses in FAAST to the AB 1550 Benefits questions. Upload to FAAST as a single PDF file; 10 pages recommended.

***Note:*** **Detailed Scoring Criteria are included in Appendix E.**

# Review and Notification

## Review Process

CDFA will fund highest scoring projects that result in permanent annual greenhouse gas emission reductions from handling dairy manure and maximize project benefits.

CDFA will conduct two levels of review during the grant application process. The first is an administrative review to determine whether grant application requirements are met. Grants applications disqualified as a result of the administrative review may be appealed. The second is a comprehensive and technical review to evaluate the merits of the grant applications based on the scoring criteria. The Technical Advisory Committee (TAC) will complete the second level review. Final award decisions as a result of the comprehensive and technical reviews cannot be appealed.

The TAC is a sub-committee of the California-Federal Dairy Digester Working Group. The TAC will review evaluations from experts regarding the GHG emission reduction calculations and financial soundness components of the grant application. The GHG emission reductions calculations will be reviewed by academic experts associated with California universities.

CDFA's Audit Office will review the financial information submitted with the grant application, and provide feedback regarding the applicant's financial soundness and credibility.

CDFA will follow the procedures set forth in Appendix C: Confidential Information with respect to confidential and proprietary information provided in the grant application.

CDFA may assess applicants' past grant performance in determining if a new project will receive funding. Prior performance will include timely completion of projects and submission of all required documentation and data during and after project completion.

## Disqualifications

During the administrative review, the following will result in the automatic disqualification of a grant application:

- One or more unanswered questions necessary for the administrative, fiscal, or technical review;
- Missing, blank, unreadable, or corrupt content;
- Unusable or unreadable attachments;
- Requests for more than the maximum award amount.

APPEAL RIGHTS: Any disqualification taken by the Office of Grants Administration (OGA) during the administrative review for the preceding reasons may be appealed to CDFA's Office of Hearings and Appeals Office within 10 days of receiving a notice of disqualification from CDFA. The appeal must be in writing and signed by the responsible party name on the grant application or his/her authorized agent. It must state the grounds for the appeal and include any supporting documents and a copy of the OGA decision being challenged. The submissions must be sent to the California Department of Food and

Agriculture, Office of Hearings and Appeals, 1220 N Street, 4th Floor, Sacramento, CA 95814 or emailed to CDFA.LegalOffice@cdfa.ca.gov. If submissions are not received within the time frame provided above, the appeal will be denied.

## Notification and Feedback

All applicants will be notified regarding the status of their grant applications. Successful applicants will receive specific instructions regarding the award process, including information on invoicing and reporting requirements. Applicants not selected for funding will receive feedback regarding their applications within 60 days after receiving notification.

In accordance with CARB Funding Guidelines for Agencies that Administer California Climate Investments, CDFA will post basic information on the DDRDP web site about all of the applications it has received at least 10 days before awarding grant funds. After projects are selected and all funds are encumbered, CDFA will post an updated list within 90 days that identifies status of all project applications.

# Assistance and Questions

## Workshops and Webinar

CDFA will conduct workshops and a webinar on the 2018 DDRDP solicitation process; please visit www.cdfa.ca.gov/go/dd for more details. All applicants are encouraged to participate in a workshop or webinar.

## Questions and Answers (Q&A)

General questions regarding the solicitation process may be submitted to cdfa.oefi_ddrdp_tech@cdfa.ca.gov. Responses to all questions received during the workshops, webinar, or by email will be posted to CDFA's DDRDP website according the following schedule:

| Questions Received by: | Responses Posted by: |
|---|---|
| January 8, 2018 at 8:00am | January 12, 2018 at 5:00pm |
| January 15, 2018 at 8:00am | January 19, 2018 at 5:00pm |
| January 29, 2018 at 8:00 am, | February 2, 2018 at 5:00 pm |
| February 5, 2018 at 8:00 am, | February 9, 2018 at 5:00 pm |

Note: All times listed above are Pacific Standard Time (PST).

~~**January 15**~~ **February 5, 2018, at 8:00 am PST** is the final deadline to submit questions for the 2018 DDRDP grant application.

To maintain the integrity of the competitive grant process, CDFA is unable to advise and/or provide individuals with any information regarding specific grant application questions during the solicitation process.

## Community Outreach Assistance

CDFA will provide community outreach assistance through an agreement with the University of California, Davis Extension – Collaboration Center. The Collaboration Center will provide assistance to applicants on addressing the community outreach part of the application process.

The process for accessing community outreach assistance is available on the DDRDP webpage: https://www.cdfa.ca.gov/go/DD.

Applicants are encouraged to contact the Collaboration Center in a timely fashion to avail consultation and assistance.

# Additional Guidance and Resources

## Project Requirement on Water Quality Protection

Design and construction of digester vessels (i.e. ponds, tanks, or other vessels where bio-methane is produced) under the program must be protective of surface and groundwater quality. Digester vessel designs considered protective of water quality under the program include double lined ponds consistent with the Tier 1 criteria of the Central Valley Regional Water Quality Control Board (Region 5) Dairy General Order. Above-ground and below-ground digester vessels are also considered protective of water quality provided they are designed to be water tight (e.g., vinyl water seals at joints, proper rebar density to minimize cracking) and built in accordance with a strict construction quality assurance (CQA) program (e.g., any cracks sealed).

Alternative digester vessel designs may be accepted provided they are demonstrated to the appropriate Regional Board through the submittal of technical reports that the design is as protective as or more protective than the three specified designs: doubled lined pond with a leachate collection and removal system, above-ground vessel, and below-ground concrete digester vessel. The Design Report for a double lined pond, above-ground vessel, and below-ground concrete digester vessel, or proposed alternative design must be signed and stamped by an appropriately licensed professional (e.g., California registered civil engineer) and submitted to the Regional Water Quality Control Board in the Region where the project is located for approval.

## Project Readiness Resources

To assist applicants with this component of their project, the following information is provided as a resource:

- CalEPA's general information on dairy digesters
- General assistance with siting and permitting a digester: http://business.ca.gov/
- CalEPA's consolidated permit process to aid permitting of digesters and to clarify permitting processes and requirements
- ***Water Quality:*** The Central Valley Water Board released a Programmatic Environmental Impact Report for dairy digester projects to simplify the CEQA review and permitting of these facilities. Note: this PEIR is for projects located in the Central Valley Region
- ***Air Quality***: San Joaquin Air Pollution Control District Best Available Control Technologies (BACT) Guideline 3.3.15 for Waste Gas-Fired IC Engines applies to engines fueled with digester gas. The District BACT Guidelines can be found in the BACT Clearinghouse: http://www.valleyair.org/busind/pto/bact/bactidx.htm
- Sacramento Metropolitan Air Quality Management District's BACT Clearinghouse: http://www.airquality.org/businesses/permits-registration-programs/best-available-control-technology-(bact)

- South Coast Air Quality Management District's BACT Guidelines: http://www.aqmd.gov/home/permits/bact/guidelines
- BACT contact's for other air Districts can be found here: http://www.arb.ca.gov/bact/contact.htm

# Appendix A: Attachments

Attachments should be submitted as PDF files, in Times New Roman font size 11, with one (1) inch margins, page numbers should be on bottom right corner. Attachments listed as single PDF files (examples include but not limited to: supporting documents, letters of support, and design plans) have recommended page limits. Each attachment may not exceed 25 MB. All attachments should include FAAST PIN on top left corner.

| Application Attachments | |
|---|---|
| **Digester Project Plan and Long-Term Viability** | |
| Attachment 1 | Project Narrative Template (Single PDF file, 10 pages maximum [max]) |
| Supporting Materials 1.1 | Site plan, project design documents, schematic diagrams, cluster maps, etc. (Single PDF file, 50 pages recommended) |
| Supporting Materials 1.2 | Resumes, team commitment letters, etc. (Single PDF file, 30 pages recommended) |
| Supporting Materials 1.3 | Copy of Deed and/or Lease Agreement (if applicable) (Single PDF file, no page max) |
| Attachment 2 | Work Plan Template ( Single PDF file, 4 page max) |
| **Financials and Budget Worksheet** | |
| Attachment 3 | Budget Worksheet Template (Single PDF file, template provided) |
| Attachment 4 | Financials (Single PDF file, no page max) |
| **Estimated GHG Emissions Reduction** | |
| Attachment 5 | Estimated GHG Reduction Calculator |
| Supporting Materials 5.1 | Explanation of variables different from the Estimated GHG Reduction Calculator. Upload to FAAST as a single PDF file; 20 pages recommended. |
| **Project Readiness** | |
| Attachment 6 | Additional Permitting Documents (Single PDF file, 100 pages recommended) |
| **Environmental Performance** | |
| Attachment 7 | Environmental Performance Template (Single PDF file, 5 pages max) |
| Supporting Materials 7.1 | Explanation and citations from published literature, to support project's environmental performance claims. (Single PDF file, 100 pages recommended) |
| **Community Impact** | |
| Attachment 8 | Community Impacts Template (Single PDF file, 5 pages max) |
| Supporting Materials 8.1 | Up to 3 Letters of Support (Single PDF file, 20 pages recommended) |
| Supporting Materials 8.2 | Explanation of AB 1550 Benefits (Single PDF file, 10 pages recommended) |

# Appendix B: Grant Recipient Requirements

## Grant Agreement

Applicants with projects selected for award of funds will receive a Grant Agreement package with specific instructions regarding award requirements including information on project implementation and payment process.

Once a Grant Agreement is executed, grant recipients can begin implementation of the project. Grant recipients are responsible for the overall management of their awarded project to ensure all project activities, including labor associated with the installation are completed no later than June 30, 2020.

## Payment Process

CDFA will provide grant recipients with the necessary grant award and invoicing documents. The remaining funds will be allocated on a reimbursement basis. Invoices must be submitted quarterly and include all supporting financial documentation to substantiate expenses. CDFA will withhold 10 percent from the total grant award until the verification requirement is complete to ensure grant recipients install their project as approved by CDFA. Invoicing and closeout of all project expenditures must be completed no later than June 30, 2020.

The grant recipients matching fund expenditures must equal or exceed the 2018 DDRDP grant expenditures throughout the grant agreement term. If matching funds are not expended at a rate consistent with grant funds, CDFA will withhold grant funds until matching funds are expended at a consistent rate.

## Reporting

Grant recipients will be required to submit quarterly Progress Reports during the project term. The Progress Report is used to identify tasks and activities achieved, potential concerns, matching funds expended to date, and other pertinent information, such as greenhouse gas reductions and project benefits. The Progress Report will require recipients provide project information including but not limited to:

- GHG emission reductions estimated using the Estimated GHG Reduction Calculator.
- Detailed explanation of project co-benefits achieved and description of efforts planned or in place for sustaining the project's co-benefits through the life of the project.
- Detailed explanation of economic benefits (including but not limited to number of jobs provided, average wages and benefits) achieved and describe efforts planned or in place for sustaining the project's economic benefits.

A Final Performance Report will be required no later than 30 days after the project installation is complete. The Final Performance Report will require grant recipients to provide an evaluation of project outcomes and how the project contributed to greenhouse gas reductions from the dairy operation. Among other important information, grant recipients must report on the following:

- Greenhouse gas reductions, in $MTCO_2e$, achieved during the grant term (if any), along with all supporting calculations. Estimate the annual GHG reductions in $MTCO_2e$ that will occur in each year until five years after completion.

- Describe benefits to local communities, including improvements in air and water quality (quantified, if applicable), and economic and social benefits identified in the grant application. Using the grant application as a guide, provide a comprehensive account of all benefits accorded to communities over the project term, and describe efforts planned or in place for sustaining the project's benefits to disadvantaged communities through the life of the project.

## Critical Project Review

Grant recipients must agree to a Critical Project Review/Site Visit during the project term to verify project progress as reported in Progress Reports submitted to CDFA.

If it is determined by CDFA from the Critical Project Review that at that time the grant project is not meeting, and is unlikely to meet, certain milestones CDFA has the right to terminate the Grant Agreement pursuant to the Terms and Conditions of the Grant Agreement. If the grant is terminated and has incurred any costs during the term, the Grantee must return any previously reimbursed funds. Termination may result in forfeiture by the grantee of any funds retained pursuant to 10 percent retention policy.

## Post-Project Completion Requirements

Execution of the Grant Agreement is conditional upon agreement to post-project completion requirements. Grant recipients are expected to maintain documentation related to the 2018 DDRDP-funded project, including GHG emissions reduction and energy generation. Grant recipients will be required to report actual GHG reduction benefits achieved for a period of five years after project completion. Project emissions reductions determination and reporting must be consistent with guidelines provided in the requirements for Phase 2 Project Outcome Reporting in the CARB Funding Guidelines: www.arb.ca.gov/cci-fundingguidelines.

The data to be reported will include (but may not be limited to):

- Average population of livestock in each livestock category
- Quantity of methane captured and destroyed in any biogas destruction device (e.g. MT $CH_4$/year from metered data, if available).
- Quantity of methane captured and utilized for electricity generation, useful thermal energy production, or upgrading to biomethane transportation fuel (MT $CH_4$/year), as applicable.
- Renewable energy generated (kWh, scf, MMBtu, or gallons fuel/year), as applicable.
- For all stationary and mobile sources associated with manure management activities and all project equipment not powered by biogas, energy consumption by fuel type (kWh, scf, MMBtu, or gallons fuel/year), as applicable.

Reported information on project outcomes will be made publically available on CARB's website (www.arb.ca.gov/auctionproceeds) and in the Annual Report to the Legislature per CARB requirements.

The purpose of this reporting is to demonstrate the long-term success of DDRDP-awarded projects by documenting GHG emission reductions and other project benefits. In accordance with CARB Funding Guidelines for Agencies that Administer California Climate Investments, reported information will be made publically available per CARB requirements. After the project is operational, CDFA will work with grant recipients to collect the necessary data and quantify GHG emission reductions. Failure to work with CDFA or its designees to provide the necessary project-related documentation will be considered non-

performance. In the event of non-performance, CDFA shall take any action deemed necessary to recover all or any portion of the grant funding.

# Appendix C: Confidential Information

The California Public Records Act (Government Code sections 6250, et seq.) and related statutory definitions of "confidential or proprietary information" (also known as "trade secrets") determine what information provided by the applicant is exempt from public disclosure. The following describes how questions are resolved regarding what information is confidential, the legal protections for confidential information, and internal and program procedures to maintain confidentiality.

## What is "confidential?"

The California Public Records Act prevents the disclosure of confidential or proprietary information including, but not limited to:

- Confidential Business and financial information, including volume of business, costs and prices, customers, financial condition, trade secrets, and similar information obtained under an express or implied pledge of confidence. (Ev. Code § 1060 and Gov. Code § 6254).
- Personal data including tax information prohibited from disclosure. (Gov. Code § 6254 and Rev. & Taxation Code § 19542.
- Information Practices Act of 1977 (Civ. Code section 1798 et seq.)

Applicants are directed to clearly marked, on each page, “confidential/proprietary information” those documents they feel contain confidential or proprietary information. However, the mere marking of documents as "confidential/proprietary information" will not result in their being treated as confidential if they are not exempt from disclosure under the California Public Records Act.

## What if there is a question about what is confidential?

If CDFA receives a Public Records Act request for documents submitted by the applicant, CDFA will notify the applicant of the request. The CDFA Legal Office will review the records and make a determination as to whether or not the records are exempt from disclosure.

## What program procedures will keep information confidential?

Financial information will be analyzed, on a need-to-know basis, by staff from the CDFA, kept confidential, and will be maintained with restricted access. Grantee businesses will agree to provide specific key financial information for three years to develop benchmarks to evaluate the program. The records will be kept for the amount of time set forth in CDFA’s Internal Record Retention Policy.

# Appendix D: Key Terms and Definitions

| Word/Term | Definition |
|---|---|
| Applicant | The respondent to this solicitation. |
| Application | An applicant's formal written response to this solicitation. |
| Cluster Project | Projects that propose to develop centralized dairy digesters serving more than one dairy (also known as clusters or "hub and spoke" model) are eligible. These projects could include a hub facility where centrally located operations would occur such as the collection of raw dairy biogas from a group or cluster of existing dairy operations. The hub could serve as focal point for cleaning and conditioning, upgrading and injection to a pipeline. |
| Commercially-available Technologies | A system that has a proven operating history specific to the proposed application. Such a system is based on established design, and installation procedures and practices. Professional service providers, trades, large construction equipment providers, and labor are familiar with installation procedures and practices. Proprietary and balance of system equipment and spare parts are readily available. Service is readily available to properly maintain and operate the system. An established warranty exists for parts, labor, and performance.<br><br>Pre-commercial technologies are new technologies or enhancements of existing technologies that are not commercially available in California. Technologies can include pre-commercial and commercial components, but for the purposes of this solicitation, technology should be commercially available in CA for the particular component. |
| GHG | *Greenhouse Gas*(es), atmospheric gases that have the ability to trap infra-red radiation from the sun and contribute toward global warming and climate change, such as carbon dioxide, methane and nitrous oxide. The current solicitation will address projects aimed at reducing methane emissions. |
| GHG Emission Reduction | A calculated decrease in GHG emissions relative to a project baseline scenario over a specified period of time. |
| Greenhouse Gas Reduction Fund (GGRF) | A fund established in 2012 to receive State Cap and Trade Auction proceeds and define requirements for how funds must be used. |
| Matching Funds | Funds provided by the applicant toward the implementation of the dairy digester project, at least 50% of the total project cost. |
| Milk Producer | "Producer" means any person 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 producers. |
| Permanent Greenhouse Gas Emission Reductions | "Permanent" means either that GHG reductions and GHG removal enhancements are not reversible, or that when GHG reductions and GHG removal enhancements may be reversible, mechanisms are in place to replace any reversed GHG emission reductions and GHG removal enhancements to ensure that all reductions endure for |

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| | at least 100 years. |
| Baseline Scenario | "Baseline scenario" represents the GHG emissions presently occurring at the project location and that would occur in the absence of a 2018 DDRDP project. |
| Project Scenario | "Project scenario" represents the GHG emissions and emission reductions that are reasonably expected to occur as a result of implementing a 2018 DDRDP project. |
| Project Manager | The person designated by the applicant to oversee the project and to serve as the main point of contact for the CDFA. |

# Appendix E: Detailed Scoring Criteria

| SCORING CRITERIA | MAX POINTS |
|---|---|
| **DIGESTER PROJECT PLAN AND LONG-TERM VIABILITY** | **20** |
| Addressed all requirements of the feasibility section and Work Plan including, but not limited to:<br>a. Provided details of the technology (or technologies) to be employed in digester facility and for subsequent utilization of captured methane, including but not limited to PPA agreement in place, or, steps needed or taken to achieve PPA and plan for RNG pipeline injection or other details of utilization of captured methane.<br>b. Provide tonnes of material digested and details of materials other than dairy manure if included in the project.<br>c. Technologies have a track record of success and are commercially available.<br>d. Documentation that demonstrates control of the dairy site provided (if applicable).<br>e. Guarantees that an adequate amount of feedstock will be provided to make the project feasible through a signed contract, letter of intent, or other documentation which showed the feedstock will be available by the time the project is operational.<br>f. Specific list of all tasks needed to complete project using the Work Plan template provided.<br>g. Detailed Work Plan clearly and concisely described the tasks and activities required to achieve the goals/objectives in the proposed project narrative.<br>h. Included major work items (including but not limited to permitting, site planning, engineering, construction, equipment, field supervision, health and safety requirements, testing and bonds)<br>i. Reasonable estimate of projected timeline for the project to be operating at full capacity included.<br>j. Demonstrated that all tasks are logical and achievable within the grant term, and with available resources. Identified measurable targets that must be met to accomplish project within the grant timeline, with specific dates for each target.<br>k. Included an evaluation component to measure success of the project and to determine whether the goals/objectives were accomplished, and build in measurable milestones and a timeline to complete the evaluation before the grant term expires. Evaluation plan consistent with work plan.<br>l. Long term operations and maintenance plan included.<br>m. Demonstrated that the applicant (including its contractors) and cooperating organizations have sufficient staff resources, technical expertise, and experience to successfully complete the proposed project. Provided resumes of key project personnel and contractors.<br>n. For defunct digester project, included additional details of the defunct digester including but not limited to funding source(s), reason(s) for non-function, and current method of methane destruction or management. | |

| **BUDGET WORKSHEET AND FINANCIALS** | **10** |
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| Adequate documentation regarding organization's financial strength provided through financial documents listed in the application. Additionally:<br>a. Evidence of ability to fund upfront costs while waiting for reimbursement provided. Demonstrated financial strength to sustain project beyond grant term.<br>b. Described and quantified sources and amount of local, state, and federal funds, loans, other grants, and all other funding necessary to complete the proposed project (if applicable).<br>c. Described and quantified expenditures already incurred to initiate work on project, such as engineering, site preparation, infrastructure, utility hookups, permitting and environmental review.<br>d. Provided a complete Budget Worksheet addressing issues including, but not limited to:<br>1. Itemized costs consistent with the Work Plan.<br>2. Back-up documentation including quotes, estimates, and equipment details in support of budget costs.<br>3. Overall budget well justified and consistent with Work Plan.<br>e. Provided a clear accounting of all costs associated with all activities necessary to complete the project. | |
| **ESTIMATED GREENHOUSE GAS EMISSIONS REDUCTION** | **35** |
| a. Described the proposed project and explained how it will result in reduction of metric tonnes of Greenhouse Gas (GHG) emissions annually compared to existing practices for the dairy.<br>b. Completed the Estimated GHG Reduction Calculator template for 2018 DDRDP. Proper justification for all assumptions made in the calculation process provided.<br><br>Applicants reported GHG emission reduction results (in MTCO2e) as:<br>a. Total project emission reductions over 10 years;<br>b. GHG reduction per unit of energy-corrected milk (ECM) produced by the dairy operation over 10 years;<br>c. GHG reduction per dollar 2018 DDRDP grant money requested over 10 years;<br>d. GHG reduction per dollar total Greenhouse Grass Reduction Fund (GGRF) grant money requested over 10 years (Includes 2018 DDRDP and other GGRF grants).<br><br>Applications will be competitively evaluated on their projected emissions reductions. | |
| **PROJECT READINESS** | **10** |
| The permit check list is complete. Copies of permits obtained attached.<br>CEQA: Notice of Determination (NOD) submitted.<br><br>Projects will be competitively evaluated with regards to how far along they are in their permitting process. | |
| **ENVIRONMENTAL PERFORMANCE** | **15** |
| **NOx and Criteria Pollutants (10 points)**<br>a. Described the project's impact on criteria pollutants such as NOx, toxic air contaminants | |

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| and hazardous air pollutants. Included all potential emission sources and described how emissions will change before and after implementation of project. Provided supporting information/documents to support impacts and mitigation measures (5 points)<br>b. Is the biogas end-use in project one that reduces or eliminates NOx emissions, such as RCNG generation for pipeline injection or transportation fuel? (5 points).<br>**Project Co-Benefits (5)**<br>Described project co-benefits in detail. Described benefits achieved beyond methane reduction and mitigation of NOx, criteria air pollutants, toxic air contaminants and hazardous air pollutant impacts. Supporting documentation must show feasibility and plan for success of any proposed co-benefits. Any assumptions must be explained in sufficient detail. | |
| **COMMUNITY IMPACT** | **10** |
| **<u>Community Impacts and Mitigation</u>**<br>I. *Community Outreach Actions by Applicant*<br>a. Described how community was engaged. Did community-based non-profit organization(s) involved in potentially impacted communities provide assistance in engagement efforts? Did the topic of discussion include potential adverse impacts of digester projects, including a net increase in criteria pollutants, toxic air contaminants, hazardous air pollutants, groundwater and surface water impacts, and truck traffic and odor?<br>b. Listed the public and/or government stakeholders involved.<br>c. Provided details of community meetings, including but not limited to method of notification, attendance, location, date/time, translation services provided, childcare provided, meals provided.<br>II. *Mitigation Measures*: Described in detail specific mitigation measures that will be included in the project, including but not limited to, methods to mitigate impacts such as toxic air contaminants, hazardous air pollutants, groundwater and surface water impacts, truck traffic and odor.<br>III. *Letters of Support*: Provided support letters from community members and/or leaders demonstrating that outreach was conducted (up to 3).<br>**<u>Localized Economic Benefits</u>**<br>Provided jobs-related information including but not limited to:<br>a. Number of permanent jobs created as a result of this project<br>b. Number of temporary jobs created as a result of this project<br>c. Job classification/trade<br>d. Number of project hours<br>e. Wages/salaries and benefits for each job classification and trade and how long they will last.<br>f. Comparison of newly-created jobs compared to current unemployment rates.<br>g. Training provided, credentials or certifications.<br>**<u>Benefits to Disadvantaged and Low-Income Communities</u>**<br>Provided direct, meaningful, and assured benefits to one or more disadvantaged and/or low-income communities AND meaningfully addresses an important community need. | |
| **TOTAL** | **100** |