

**California/Federal Dairy Digester Working Group**  
**Statement of Principles**

*At the December 18, 2012 meeting of the CA/Federal Dairy Digester Working Group, this statement of principles was agreed upon by the following agencies:*

*California Department of Food and Agriculture  
California Energy Commission  
California Governor's Office of Economic Development, Go Biz  
California Public Utilities Commission  
Cal Recycle  
Central Valley Regional Water Quality Control Board  
San Joaquin Valley Air Pollution Control District  
U.S. Department of Agriculture, Natural Resources Conservation Service  
U.S. Department of Agriculture, Rural Development  
U.S. Environmental Protection Agency*

**Introduction**

In May 2011, the U.S Environmental Protection Agency, U.S. Department of Agriculture and the California Department of Food and Agriculture convened the CA/Federal Dairy Digester Working Group. This partnership of state, federal and local agencies<sup>1</sup> has the common goal of identifying and removing barriers to the wide spread adoption of dairy digester systems in California. In addition to government representatives, the CA/Federal Dairy Digester Working Group includes stakeholders from academia, industry, non-profits and utilities that participated in subcommittees on economics, regulatory issues, and technology. The ultimate goals of the collaboration are to see the widespread adoption of digester systems to better manage manure and nutrients, help address air and water quality concerns, reduce greenhouse gas emissions and produce renewable energy, fertilizer, and other value-added products. The work throughout the past year has culminated in the following specific recommendations to the California Governor's Office that will potentially reduce the economic, technical and regulatory hurdles currently in place, making digester systems more feasible in the nation's number one dairy producing state.

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<sup>1</sup> Agencies participating in the CA/Federal Dairy Digester Working Group include: U.S. EPA (Office of the Administrator, Region 9 and AgSTAR), USDA Secretary's Office, NRCS and Rural Development, California Department of Food and Agriculture, Cal EPA, California Energy Commission, California Public Utilities Commission, California Air Resources Board, California State Water Board, San Joaquin Valley Air Pollution Control District, Central Valley Regional Water Quality Control Board, California Governor's Office of Business and Economic Development and Cal Recycle. In addition, industry groups, non-profits and academia's involvement in the effort helped form more balanced and realistic goals and recommendations.

## **Recommendations**

During 2013, the CA/Federal Dairy Digester Working Group intends to adopt formal recommendations that if implemented, could increase the number of dairy digesters voluntarily installed. The recommendations are:

1. Establish a 90MW dairy and other agriculture renewable bioenergy development target, to be achieved by 2016.
2. Utilize and perfect the California Consolidated Permitting Process for Dairy Digesters, utilizing a single web-based portal and on-line repository for managing the permit application process. This should help to identify hurdles and regulatory duplication that may exist. This process begins by meeting with all relevant permitting agencies early in the development process to avoid incurring unnecessary costs and delays and designating one lead agency to work directly with the permittee.
3. Establish a Digester Incubation Program with dedicated funding for up-front financial incentives (e.g. Self-Generation Incentive Program) to encourage development of biogas projects. Sufficient funds should be provided to achieve the 90 MW target during the Incubation Program.
4. Support and encourage research funding for technical areas, including:
  - Development of an integrated research agenda to address water quality, air quality, energy and digestate by-product issues
  - Refinement and continued development of cheaper, more effective nitrogen oxide (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) control technologies as well as continuing to push for cleaner alternatives to power generation such as microturbines and fuel cells.
  - Development of effective and affordable gas conditioning systems that would allow digester gas to be injected into natural gas pipelines and/or compressed for use as vehicle fuel
  - Further development of the upgrading, distribution, storage, and transport systems for biogas.
  - Development of a series of case studies of digesters and technologies that have been installed in California, both successful and failed, and determination if there were technical reasons for the level of success achieved. In addition, California Air Resources Board will continue to maintain a list of operating digesters.
  - Development of digestate treatment and utilization to advance fertilizer production.
5. Further develop and utilize a California Equipment Precertification Process to approve technologies that meet regulatory standards.
6. Develop a California Biomass Feedstock Precertification process for co-digestion of feedstocks that would help expedite the permitting and approval process.
7. The design and construction of new collection, handling and storage facilities and upgrades or expansion to existing facilities for new digester system should be done in a manner that protects environmental impacts (i.e. groundwater and surface water quality, air quality, etc.).
8. Maximize the use of new technologies and control measures in a manner that protects environmental quality (i.e. groundwater and surface water quality, air quality, etc.) from impacts by existing collection, handling and storage facilities that are employed as

integral components of dairy digester systems. Support the acceptance of off-site organic wastes for co-digestion and support the adoption of nutrient management technologies to reduce the environmental impacts of nitrogen from manure.

### **Principles and Action Items**

**Goal:** Participating agencies will coordinate efforts to permit and provide funding and/or support to dairy digester projects that will demonstrate the concepts outlined in the recommendations, above.

1. Agencies (i.e., U.S. Department of Agriculture (USDA), USDA Natural Resources Conservation Service (NRCS), USDA Rural Development (RD), U.S. Environmental Protection Agency (EPA), San Joaquin Valley Air Pollution Control District (SJVAPCD), California Department of Food and Agriculture (CDFA), California Go Biz, Central Valley Regional Water Quality Control Board (CVRWQCB), and California Energy Commission (CEC) ) will work together, consistent with existing statutory limitations, to develop a coordinated funding mechanism that will streamline funding opportunities for dairy digesters in California and serve the public more effectively and efficiently. By March, 2013, the group will develop a simplified funding process, and work with the dairy industry to identify and publicize other funding opportunities. The California Governor's Office of Business and Economic Development (Go-Biz) will serve as the point of contact for the consolidated funding process.
2. The California Consolidated Permitting System will reduce permitting time, agency duplication and streamline the application process to enhance the development of dairy digesters in California. In addition, regulatory Agency coordination is necessary to ensure regulations are not duplicative, and, when required, are amended or revised to avoid duplication or conflicts. Cal EPA, CDFA, SJVAPCD, Go Biz and CVRWQCB will work to implement the California Consolidated Permitting System and reduce Agency duplication.
3. Co-digestion of offsite organic waste can support economically sustainable digester projects in California and help to accomplish California waste diversion goals. CalEPA will continue to work with CalRecycle and CVRWQCB on creating a more efficient permitting process for co-digestion of organic wastes at dairies.
4. Agency funding for technology research and development is necessary to advance technologies that address environmental concerns and impacts resulting from digester operations in California. As part of the streamlined funding process and through separate funding opportunities, funds will be available for researching technologies that reduce environmental impacts on air and water quality and that provide benefits to ratepayers.
5. The San Joaquin Valley Air Pollution Control District will support the Working Group recommendations by:

- a. Collaborating with other permitting agencies to streamline the permitting process by participation in the California Consolidated Permitting Process for Dairy Digesters, use of California Equipment Precertification Process and collaboration on the development of a single unified web portal for the permit application process;
  - b. Continuing to identify and make available funding for the demonstration of cost effective zero or near zero-emissions dairy digester technologies for various applications including power generation and biogas conditioning for the purpose of vehicle fueling or pipeline injection;
6. U.S. Environmental Protection Agency, Region 9 intends to support the Working Group recommendations by:
  - a. Providing logistical and coordination support for the continued meetings and work of the Working Group, resulting in a streamlined funding process and on-the-ground pilot projects. In addition, funding support may be provided to support air and water quality at dairy digesters, though all commitments made by EPA are subject to the availability of appropriated funds and nothing obligates EPA to expend appropriations or to enter into any contract, assistance agreement, interagency agreement, or incur other financial obligations that would be inconsistent with Agency budget priorities.
7. The California Department of Food and Agriculture will support the Working Group recommendations by:
  - a. Collaborating with other agencies to streamline the permitting process by monitoring the California Consolidated Permitting Process for Dairy Digesters, participation in the use of the California Equipment Precertification process and California Biomass Feedstock Precertification process, and collaboration on development of a single unified web portal for the permit application process;
  - b. Continuing to identify and make available funding for the demonstration of sustainable dairy digester technologies for various applications including power generation and biogas conditioning for the purpose of vehicle fueling or pipeline injection;
  - c. Monitoring the procurement of 90 MW of dairy and other agricultural bioenergy pursuant to SB1122.
  - d. Collaborating with other agencies and research institutions to promote research on the co-benefits of dairy digesters and beneficial uses for the digestate.
8. California Go-Biz will support the Working Group recommendations by:
  - a. Providing individualized permitting assistance and guidance to project applicants

- b. Facilitating clarification of regulations and permitting rules and processes
- c. Supporting and assist in interagency permitting collaboration
- d. Identifying regulatory duplication should it occur
- e. Maintaining a listing of available funding sources, applicability, requirements and amounts.