PMC-EF2a

(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Sacramento Municipal Utility District **STATE:** CA

PROJECT TITLE: CRED - SMUD: Van Warmerdam Dairy

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000122	DE-EE0003070		0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

DOE proposes to provide funding to the Sacramento Municipal Utility District to facilitate the installation of an advanced anaerobic digester system at Warmerdam Farm, Elk Grove, California. The biogas produced would be fed to a 600 kW fuel cell and turbine. Electricity generated would be sold to SMUD. Heat from the fuel cell would be used to warm the digester.

The project would consist of the following components: installation of the anaerobic digester system, grid interconnection, testing, and monitoring of the digester and fuel cell systems. Anticipated performance improvements include enhanced biogas production, better manure management systems, more stable organic effluents (e.g. fertilizer) and implementation of low-NOx biogas conversion technologies that would meet or exceed CARB and Water Resource Control Board requirements. All new equipment and facilities would be installed within the existing operations area for the Dairy.

• Air quality – The project would occur in an area that is in nonattainment for ozone and particulate matter. Operation of the fuel cell would have de minimis emissions. Thus, a Clean Air Act conformity review would not be required for this project.
• Odor - There should be a beneficial decrease in odors.
• Surface waters – No impacts to wetlands or other surface waters, as all disturbances will occur within the developed area of the dairy.
• Waste water and solid waste – Waste water will be treated and recycled for use in flushing the dairy barns or for irrigation. Solid wastes will be used as fertilizer on organic and silage crops, or sold as soil amendment.

There will be no or minimal impacts to land use, cultural resources, biological resources, or other sensitive resources.

No public controversy was noted.

This small-scale conservation and renewable energy research and development pilot project would have negligible impacts on the environment and would not increase indoor concentrations of potentially harmful substances. There are no extraordinary circumstances or controversy related to the project that would affect the significance of environmental impacts.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/10/10
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager