

PMC-EF2a

(204.02)

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



RECIPIENT: Cellana LLC Consortium

STATE: HI

PROJECT TITLE : Large Scale Production of Fuels and Feeds from Marine Microalgae

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-000123	EE0003371	GFO-10-616	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:

- B3.6** Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).
- 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.

Rational for determination:

The Cellana LLC Consortium, which is comprised of private industry, university laboratories, and commercial partners, proposes to use federal funding to deliver a design report which analyzes life cycle and costs for a commercial scale algae cultivation and harvesting process based on technologies studied. This project focus' on optimization of known technologies for impacts on yield, costs, energy input, carbon footprint, and product value.

This project will include feedstock supply strain development to include strain improvement, biochemical characterization, metabolic pathway development, and high output screening; feedstock supply cultivation to include optimization through flashing light/turbulence studies, nutrient stress, pond depth, and halotolerance lab studies; feedstock logistics harvesting and dewatering studies to include re-suspension and 3 alternate dewatering process; feedstock logistics extraction to include toll processing to increase defatted biomass and ash studies to measure moisture content of the organic material; product development to include aquaculture feed trials to test the nutritional value of biomass at fish farms; and delivery of a Design Report for a full scale commercial algae cultivation and harvesting process.

This project involves multiple research and development studies in conventional laboratories. Each lab associated with this project has submitted an R & D Questionnaire which thoroughly addresses chemical and safety handling protocols. No GMO's will be used in the implementation of this project.

This project is comprised of research and development and information dissemination via a Design Report; therefore a CX A9 & B3.6 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/21/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin
NEPA Compliance Officer

Date: 9/22/2010

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: _____
Field Office Manager

Date: _____