PMC-EF2a

(2.0.4.02)

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

RECIPIENT: Sapphire Energy, Inc. **STATE:** NM

PROJECT TITLE : The Development of Value-Added Products from Algae Residual Biomass

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000393	GFO-0000393-001	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).

Rational for determination:

Sapphire Energy proposes to use federal funding to implement a 4-phase project aimed at developing marketable bio-based products. In this project sapphire Energy will engineer algae based feedstock for use as animal feed for poultry, swine, and cattle.

Phase 1 of this project will include biomass production of 200 lbs of algae, purchase and install a nutrient recycling unit, algae strain composition analysis, and storage and processing.
Phase 2 of this project will include the production of 1,000lbs of algae biomass; the chosen algae strains will undergo analysis within livestock bio-systems, and storage and processing.
Phase 3 of this project will include production of 2,000lbs of algae biomass, and analysis of how the chosen algal strains interact with livestock health and growth. 20 animals will be used for these experiments.
Phase 4 of this project will include production of 5,000lbs of algae biomass and the analysis on a larger scale of how animal growth, health, and reproduction are affected in the livestock. 100 animals will be used for these experiments.
This project will also have a project management and reporting component.

The applicant has submitted an R & D Questionnaire which thoroughly addresses chemical and safety handling protocols.

Sapphire Energy has been approved by the Institutional Animal Care and Use Committee of Eastern New Mexico University for their use of animal testing, as per ENMU IACUC# 3-11/2010.

This project is comprised of conventional laboratory research and analysis activities; therefore a CX 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 12-7-2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerr Date: 12/7/2010

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