

PMC-EF2a

(20402)

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



RECIPIENT: University of Central Florida

STATE: FL

PROJECT TITLE : Florida Hydrogen Initiative - Enerfuel (Advanced HiFoil Bipolar Plates)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
N/A- CDP	GO14225	GFO-04-221j	GO14225

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.
- 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:

Under the 2004 Congressionally Directed Project (DE-FC36-04GO14225), the University of Central Florida (UCF – formerly Florida Hydrogen Initiative) was awarded funding that would then be used to fund various research projects chosen by the university. Under the original NEPA determination (GFO-04-221) approved on September 20, 2004, UCF must submit NEPA documentation for each new project selected. The scope of the CDP has been expanded to include five new sub-award projects. This NEPA determination specifically analyses the new sub-award given to EnerFuel of West Palm Beach, Florida for the project titled "Advanced HiFoil™ Bipolar Plates."

- Task 1 – Laminate Fabrication
- Task 2 – Flowfield Formation
- Task 3 – Plate Sealing
- Task 4 – Stack Testing
- Task 5 – Performance Validation
- Task 6 – Reports

The project would provide durable, low cost bipolar plates for use in advanced high temperature proton exchange membrane (HT-PEM) fuel cells for stationary, vehicle auxiliary power units (APU), and electric vehicle range extender (EVRE) applications. Research and development would be conducted in advanced fuel cell materials, manufacturing techniques, and process improvements. Research and development work would take place at Enerfuel facilities in West Palm Beach, Florida and also at sub-contractor facilities; University of Florida in Gainesville, Florida and at UCT Coatings in Stuart, Florida. The project would build upon EnerFuel's HiFoil™ laminate technology, UCT's development work on high volume bipolar plate manufacturing, and University of Florida's R&D capabilities.

Environmental questionnaires were submitted by all laboratories involved in the project. All laboratories comply with applicable federal, state, and local regulations as well as having appropriate safety/mitigation plans in place for all laboratory work being done. All chemicals are stored by compatibility in appropriate cabinets. All waste is stored in appropriate waste containers until picked up by a contracted company. No toxic waste or genetically modified organisms are expected to be created over the course of the project. No prototypes will be tested outside of the laboratory facilities.

This project is comprised of information gathering, data analysis, document preparation, dissemination; and conventional laboratory operations; therefore the DOE has categorized this proposal into Categorical Exclusions A9 and B3.6.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a prepared by Casey Strickland

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 9/15/2010
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