PMC-EF2a
(2.04.02)

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

RECIPIENT: Gas Technology Institute **STATE:** AL

PROJECT TITLE : Developing Thermal Conversion Options for Biorefinery Residues

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
CDP	DE-FG36-01GO11082	GFO-GO11082-003	GO11082

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:

The Gas Technology Institute proposes to use federal funds to carry out laboratory research to determine if hydrothermal pretreatment of lingnocellulosic biomass is technologically and economically viable for conversion into an energy dense fuel source for pyrolysis, gasification, and combustion methods of energy development. This project has been re-scoped from a previous NEPA review - GFO-08-006.

This project will include the final design of the Process Development Unit (PDU), assembly installation and shakedown of the PDU, Hydrothermal Pretreatment of representative western biomass feedstocks in the PDU, supporting laboratory analysis of the HTP biomass, and project management and reporting.

The PDU will be constructed and operated on a subplot coal mining/shipping facility at 8701 Birmingport Rd, Mulga, AL 35118. This location where the PDU will be assembled is a previously disturbed industrial coal mining area. The PDU design will be able to incorporate and transform 226 kg/day of dry biomass, in continuous operation, into pellet form for a total output of 113 kg/day. Laboratory work associated with this project will help identify species of biomass which are most useful as universal fuel sources. The applicant has submitted an R & D Questionnaire which thoroughly addresses the chemical and safety handling protocols associated with the project.

This project is comprises construction and operation of a facility for indoor bench-scale research; 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 1/13/2011

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Dustin Ker Date: 1/27/2011

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