

PMC-EF2a

(20102)

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



RECIPIENT: Gas Technology Institute

STATE: AL

PROJECT TITLE : Developing Thermal Conversion Options for Pretreated Biorefinery Residues

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
CDP	DE-FG36-02GO12011	GFO-GO12011-003	GO12011

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:

Under this new scope, Gas Technology Institute will undertake a research effort to determine if hydrothermal pretreatment (HTP) is a technically and economically feasible for conversion of lignocellulosic biomass into bio-fuels. HTP research studies will take place under another award, GO11082. GTI will design and construct a process development unit (PDU) to be used as a chamber for HTP studies. This PDU will utilize 23-96 kg per day and will be located within a laboratory. The PDU has been cleared under a previous NEPA review - GFO-GO11082-003 and includes construction and operation of the PDU. The studies carried out here will take place in a laboratory in on GTI's campus in Des Plaines, IL.

This project will include preliminary design of the PDU for phase 1 that is associated with NEPA review GFO-GO11082-003. Phase 2 of this project will include HTP of representative southern biomass feedstock's in the PDU. Phase 3 will include economic modeling of the pretreatment process, & phase 4 will include project management and reporting.

The applicant has submitted and R & D Questionnaire which thoroughly addresses the chemical and safety handling protocols associated with this project. GTI currently follows OSHA standards as audited by GTI's Environmental, Health, & Safety administrator.

This project is comprised of laboratory bench scale research and development of biomass feedstock as well as modeling and preliminary design activities; therefore a CX A9 & B3.6 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 3/22/2011

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kimberly Keen Date: 6/3/2011
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