PMC-EF2a

(2.06.02)

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

RECIPIENT: Genomatica, Inc. **STATE:** CA

PROJECT TITLE : Development of an Integrated Biofuel and Chemical Refinery

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000337	DE-EE0005002	GFO-0005002-001	EE5002

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:

DOE is proposing to provide federal funding to Genomatica for a laboratory-scale research and development project intended to enhance the commercial profitability of integrated biorefineries by developing an engineered organism and optimized fermentation process to enable the conversion of cellulosic sugars to the industrial chemical, 1,4-butanediol.

All work under this award will be completed at the Genomatica facility and at a vendor facility owned and operated by Applied Power Concepts and BlueFire Renewables. Both facilities have current permits for all of the proposed activities. Genetically modified E. coli will be used during this project and further modification of the organism will also occur. All work with E. coli will be done at the Genomatica facility following their established protocols. Genomatica's engineered E. coli strains are experimental in nature and are classified as non pathogenic BSL-1 strains (devoid of pathogenicity genes) which qualify for "Tier 1 Exemptions" by the EPA. These research strains have not yet been classified by the USDA APHIS.

This project comprises laboratory-scale research and development activities. CX B3.6 applies. CX A9 applies to project management activities.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 8/5/2011

NEPA Compliance Officer