PMC-EF2n 2.04.021

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



RECIPIENT: Haldor Topsoe, Inc.

STATE: IL

PROJECT TITLE:

Green Gasoline from Wood using Carbona Gasification and Topsoe TIGAS Processes

Funding Opportunity Announcement Number DE-FOA-0000096

Procurement Instrument Number NEPA Control Number CID Number DE-EE0002874

GFO-0002874-001

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, analysis, and dissemination

B3.6 Small-scale research and development, and pilot projects

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) laboratory operations, frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rational for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Haldor Topsoe, Inc. to conduct engine emission tests of "green" gasoline produced from woody biomass at their integrated biorefinery. This proposed activity (Task 2.4 - Preparing for new fuel registration with the EPA) would be an additional task to this award and would involve small scale laboratory testing, information gathering and data analysis activities.

Prior to the addition of this activity a NEPA determination (CX A9 and B3.6; GFO-10-281; 3/18/2010) was made for all activities and tasks associated with the design, procurement, installation, and operation of a pilot scale integrated biorefinery to be used to demonstrate the thermochemical conversion of woody biomass into "green" gasoline.

Funding for this proposed task would be used to conduct engine emissions tests using a fuel blend that includes the new "green" gasoline as part of the requirements for registration with the Environmental Protection Agency (EPA). Various engine emissions tests would be carried out at the Southwest Research Institute (SwRI) located at 6220 Culebra Road in San Antonio, Texas. Activities would be performed at SwRI's existing Department of Emissions Research laboratories, which are designed and used for similar activities.

SwRI completed an environmental questionnaire addressing the protocols in place for safety, risk management, chemical handling and waste disposal at their research and development facility. All handling and disposal of gases, chemicals, effluents and wastes comply with all appropriate regulations. All standard safety equipment is in place at the facility. The facility operates under all applicable permits to conduct laboratory research and pilot project operations, including state and federal air operating permits. GMOs would not be used during this project.

Based on review of the project information and the above analysis, DOE has determined the proposed emission testing, information gathering and data analysis activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed activities are consistent with actions contained in DOE categorical exclusions A9 "information gathering, analysis and dissemination," and B3.6 "smallscale research and development, laboratory operations and pilot projects," and are categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

| | Insert the following language in the award: |
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| | If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. |
| | Note to Specialist: |
| | Obadiah Broughton 7/18/2013 |
| CIA | GNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION. |
| | 41. b. 1 |
| NE | EPA Compliance Officer Signature: NEPA Compliance Officer Date: |
| FI | ELD OFFICE MANAGER DETERMINATION |
| П | Field Office Manager review required |
| N/C | CO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON: |
| | Manager's attention. Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination. ASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO: |
| rie | eld Office Manager's Signature: Date: Date: |
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