PMC-ND
(1.08.09.13)

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION

RECIPIENT: Siluria Technologies, Inc. **STATE:** CA

PROJECT TITLE: Low-Energy, Low-Cost Production of Ethylene by Low-Temperature Oxidative Coupling of Methane

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000560	DE-EE0005769	GFO-0005769-001	GO5769

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

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Siluria Technologies, Inc. to develop a catalytic process technology for distributed small-scale production of ethylene by oxidative coupling of methane at low temperatures using an advanced catalyst.

Proposed project activities would include intellectual and analytical activities and indoor, bench-scale laboratory testing to assess and gather data on technology solutions in the process design for small-scale production of ethylene using Siluria's Low Temperature Oxidative Coupling of Methane (LT-OCM). The intellectual/analytical activities are expected to include information gathering, conceptual design engineering, economic analysis and process computer modeling to identify and develop technology and process solutions and would take place at the existing Siluria facility in San Francisco, CA. The laboratory testing would involve gas separations and material development and would take place at the existing RTI International facility in Research Triangle Park, NC. Gas separations testing would include procuring gas separations technologies such as membranes or sorbents and exposing gas mixtures to evaluate the separations performance. Materials development may be utilized to test novel materials that need to be synthesized using wet chemistry techniques. All chemical handling and experimental testing would be performed in our on-site, secure laboratory facility with no public access. Existing corporate health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. All facilities are designed for this type of work; therefore, no modifications or new permits, additional licenses and/or authorizations would be necessary.

Based on a review of the project information and the above analysis, DOE has determined that the proposed project would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that this project is consistent with actions outlined in DOE categorical exclusion A9 "Information gathering" and B3.6 "small-scale research and development, laboratory operations and pilot projects" and is therefore 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:

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 :

Advanced Manufacturing Office
This NEPA Determination does NOT require a tailored NEPA provision.
NEPA review completed by Logan Sholar, 9/21/15

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/21/2015
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