PMC-ND

(1.08.09.13)

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



**RECIPIENT:** University of Washington

STATE: WA

**PROJECT** 

Multidisciplinary design of an innovative natural draft, forced diffusion cookstove for woody and

TITLE:

herbaceous biomass fuels in East Africa

Funding Opportunity Announcement Number DE-FOA-0000709

DE-EE0006284

Procurement Instrument Number NEPA Control Number CID Number

DE-EE0006284-001

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

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, 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) 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.

## Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to University of Washington (UW) to research and develop a commercially viable, natural draft biomass cookstove using woody and herbaceous biomass fuels that would exceed ISO tier 4 criteria while meeting the needs of rural and urban cooks in East Africa. UW would develop a market ready, cleaner burning cookstove that meets the manufacturing cost and usability expectations of the final users, including durability, safety, comfort, aspirational value and compatibility with local fuels, foods, and customs, while improve indoor air quality. Funding would be used to research, design, fabricate, and test biomass cookstoves. Funding would be used for administrative, equipment and supply purchases, cookstove fabrication, laboratory performance and emission testing, field performance and emission testing, data analysis and prototype design activities.

The proposed research and development activities would primarily be completed in laboratories; however some field testing and analysis activities would occur in selected households in East Africa.

UW would partner with the Berkeley Air Monitoring Group (BAMG), located at 46 Shattuck Ave, Berkeley, California and the BURN Design Lab (BURN) located at 188850 103rd Ave SW, Vashon, Washington to perform laboratory based cookstove performance and emission evaluations and product testing. All laboratory burn testing and evaluation activities would occur in indoor laboratories with appropriate emission controls, hoods and safety procedures.

UW would partner with PATH, an international global health nonprofit organization, on the coordination and execution of field based cookstove performance, emission and usability testing and evaluation. Field based testing of cookstoves would be in-home in selected households in East Africa. The field tests would be limited in nature, scope and time as households would temporarily replace their current cookstoves with the test stoves.

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

## NEPA PROVISION

U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Question Page 2 of 2
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:
Obadiah Broughton 8/12/2013
This NEPA Determination does not require a tailored NEPA provision.
SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.
NEPA Compliance Officer Signature:    Signed By: Kristin Kerwin   Date: 8/21/2013
FIELD OFFICE MANAGER DETERMINATION
☐ Field Office Manager review required
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:
<ul> <li>□ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.</li> <li>□ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.</li> </ul>
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BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:
Field Office Manager's Signature: Date: