

PMC-ND
(1.08.09.13)

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



RECIPIENT:Aprovecho Research Center

STATE: OR

PROJECT TITLE : Technology Innovations to Improve Biomass Cookstoves to Meet Tier 4 Standards

Funding Opportunity Announcement Number DE-FOA-0000709 **Procurement Instrument Number** DE-EE0006285 **NEPA Control Number** **CID Number**

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 Aprovecho Research Center (ARC) to research and develop high-performance biomass cookstoves developed for specific regions of the world, that meet the emission, efficiency and safety standards set in the February 2012 International Standards Organization - International Workshop Agreement (ISO/IWA). Funding would be used for market research and analysis and the design, development, fabrication and optimization of prototype cookstoves for regional laboratory and field performance and emission testing in the United States and in ARC-developed Regional Stove Development and Testing Centers in China, Africa, Central America and Southeast Asia.

ARC would partner with the Global Alliance for Clean Cookstoves, the China Alliance for Clean Stoves and the Beijing University of Chemical Technology to complete the proposed project. ARC would work with Beijing University to optimize performance of ARC- and Chinese-manufactured stoves that have the potential to meet or exceed Tier 4 standards as defined through the ISO/IWA.

The proposed testing activities would primarily be completed in controlled laboratory environments developed for the testing of cookstoves at ARC-developed Regional Stove Development and Testing Centers. ARC and its partners would also facilitate field testing of cookstove performance and marketability at selected households within these regions. The Regional Test Centers are located in these countries and with these regional partner organizations: Bolivia - GIZ (German Society for International Cooperation); Cambodia - GERES (Group for the Environment, Renewable Energy and Solidarity); Honduras - Zamorano University; India - Prakti Labs; Indonesia - ARECOP (Asia Regional Cookstove Program); Peru - SENCICO (Peru's National Training Service for the Construction Industry); and Uganda - Makerere University.

Additionally, selected cookstoves would be sent to the United States Environmental Protection Agency (EPA) stove testing laboratory in North Carolina for laboratory testing and third party emission and performance verification. Activities at EPA may require NEPA review by the appropriate EPA NEPA Compliance Officer.

All laboratory cookstove testing and evaluation activities would occur in indoor laboratories with appropriate emission controls, hoods and safety procedures. ARC field based cookstove testing and evaluation would occur in selected households with ARC-developed emission equipment and follow standard safety methods and protocols. All cookstove testing would be small-scale (no more than 2 lbs. of wood per burn cycle) and follow the Global Alliance for Clean Cookstoves' Water Boiling Test (WBT) and Controlled Cooking Test (CCT) methods and protocols.

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

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 :

This NEPA Determination does not require a tailored NEPA provision.

Obadiah Broughton 8/19/2013

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____
NEPA Compliance Officer

Date: 8/21/2013

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: _____
Field Office Manager

Date: _____