

PMC-EF2a

(2.04.02)

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



RECIPIENT: ENVIRON Holdings Inc

STATE: NJ

PROJECT TITLE : Optimal Ground-Source Heat Pump System Design

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000116	DE-EE0002801	GFO-10-185	GO2801

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 (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:

The ENVIRON International Corporation is proposing "to create a new least-cost design tool ('OptGSHP') that will enable ground-source heat pump ('GSHP') developers to analyse system cost and performance in a variety of building applications (i.e., residential, commercial, government, school and universities) to aid in design as well as purchase decisions". They plan to "develop a least-cost design tool (OptGSHP) which combines GSHP-specific interfaces of existing HVAC software design tool with groundwater flow and heat transport modeling software allowing the modeling of vertical, and pond/lake loops in different climate zones and building types in the presence of groundwater flow".

Project tasks include the following:

- *Building and running models and simulations to improve the GSHP loop design by increasing its reliability and performance with lower cost.
- *Final reports and research paper and analysis of the results for the NGDS

This project involves information gathering only; therefore a CX A9 will apply.

NEPA PROVISION

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: 
NEPA Compliance Officer

Date: 3/9/10

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

PROJECT TITLE: Optimal Ground Source Heat Pump System Design
Funding Opportunity Announcement Number: DE-FOA-000718
Environmental Review Number: DE-EE-000801
NEPA-Central Number: NEPA-Central Number: EIS Number: 003807

Based on my review of the information concerning the proposed action as NEPA Compliance Officer (authorized under DOE Order 481.1A), I have made the following determination:
CX EA EIS APPENDIX TAB NUMBER:
Information gathering (including, but not limited to, literature surveys, interviews, audits, data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies, and decision) (including, but not limited to, document writing, publication, and distribution and classroom training and technical programs), but not including the characterization or environmental monitoring

Return to decision:
The ENVIRO International Corporation is proposing to create a new lead-cost design tool (OIGDH-P) that will analyze ground source heat pump (GSHP) designs to analyze system cost and performance in a variety of building applications (e.g., residential, commercial, government, school, and institutional) to aid in design as well as purchase decisions. They plan to develop a lead-cost design tool (OIGDH-P) which combines GSHP-specific interfaces of existing HVAC software design tool with groundwater flow and heat transport modeling software allowing the modeling of vertical, and horizontal loops in different climate zones and building types in the presence of groundwater flow.
Project tasks include the following:
*Building and running models and simulators to improve the GSHP loop design by increasing its reliability and performance with lower cost.
*Final reports and research paper and analysis of the results for the NCOB.
This project involves information gathering only, therefore a CX EA will apply.

NEPA PROVISION
Not to Proceed
None Given

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION
NEPA Compliance Officer Signature: _____
Date: 3/10/10

FIELD OFFICE MANAGER DETERMINATION
 Field Office Manager review required
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:
 Proposed action falls within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office