

PMC-EF2a

(20102)

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



RECIPIENT: State of Connecticut, Office of Policy and Management

STATE: CT

PROJECT TITLE : EECBG- Windsor - Nature Center Geothermal project

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|--|--------------------------------------|----------------------------|-------------------|
| Funding Opportunity Announcement Number | Procurement Instrument Number | NEPA Control Number | CID Number |
| DE-FOA-0000013 | | | 0 |

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:

- B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.
- 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 Town of Windsor is proposing to use ARRA funds provided by the Department of Energy to install a 14 ton vertical closed-loop ground source heat pump system in the Northwest Park Nature Center. This project will require 4 to 5 bore holes which will be drilled to a depth of 525 feet. Windsor will follow all IGSHA guidelines for installation and grouting. The boreholes will be encased with thermally enhance bentonite grout. The recipient verified that the refrigerant used will be a non-toxic mixture of potable water and 20 to 25% propylene glycol solution. These standards will mitigate the risk of contamination from surface run-off to ground water. This site is not located within an aquifer protection area, the site and surrounding area is currently served by public drinking water provided by the Metropolitan District. The driller will be state licensed; all drilling will be conducted on the lawn directly adjacent to the building, the area has been previously disturbed from the construction of the building. There are neither wetlands nor floodplains located on the site in question. The Connecticut Department of Environmental Protection will be consultant on this matter, though no permits are required for closed loop systems in Connecticut. According to the Fish and Wildlife's Critical Habitat Mapping Platform, there are no areas of critical habitat located in or near the proposed site. In addition, species located within the Nature Center are not listed on the Natural Database. The area will be restored to previous grade and condition, and will be reseeded with native seed. A building permit from the Town of Windsor will be required before project implementation can occur.

The Project will be used as a teaching aide for at least 80 school districts with approximately 6,000 students that visit the park annually. The nature center will also serve as a model of market-ready to distribute renewable energy technologies.

After a thorough review of the information submitted for the proposed project, it has been concluded that the actions involved will not have a significant impact to human health and /or the environment. Therefore the proposed project is hereby Categorical Excluded under CX B5.1 "actions to conserve regulations" and A9 "information gathering, document preparation, and dissemination" from further NEPA review

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:
Obtain a building permit from the Town of Windsor before project implementation can occur.

Note to Specialist :

NEPA review conducted by John Jediny

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Steve Blazek Date: 5/19/2010
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