PMC-EF2a

(2.04.02)

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

RECIPIENT: County of Escambia, FL **STATE:** FL

PROJECT TITLE : Road Prison Geothermal Earth Coupled HVAC Upgrade

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000013	DE-EE0000784.001		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:

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.

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

The proposed project activity will consist of removing the existing less efficient air cooled chillers, heating and domestic hot water systems, and ice making machines and installing an energy efficient geothermal heating, cooling, and refrigeration system as building retrofits at the Escambia County Road Department and Road Prison. New equipment installations will consist of installing two 30-ton reversible geothermal chillers, two 30-ton geothermal water heaters, three 10-ton geothermal package heat pumps, two geothermal 1700-1900 pound capacity ice machines, and five geothermal walk in refrigerator/freezer units. The geothermal circulation/heat exchange system will use an existing fresh water pond on the property and will be designed to handle all condenser water loads.

The water source heat pump system will be designed to efficiently condition various buildings and equipment at the referenced project site. The inmate housing building, administration offices, meeting/conference room, ice machines, and cooler/freezers will be included in the design. The geothermal water source system will use an existing 5 acre pond as the heat sink. Circulation piping will be installed below grade to the greatest extent possible and otherwise, be installed above ground. The project will also include installation of water source piping to the various mechanical areas, installation of the inmate housing air conditioning equipment (chillers and heating hot water heat pump units), new condensers for the walk-in cooler/freezers, and new ice machines. This equipment will be operational 24 hours per day year round and will generate the greatest reduction for energy consumption. The administration offices and conference/meeting room shall be identified as additive alternates for installation of new air conditioning equipment. This equipment will be replaced under a normal maintenance cycle utilizing annually budgeted maintenance funds for installation of new heat pump units.

There are three phases for the proposed project. Information gathered from Phase 1 will be used to review the environmental impact of Phase 2 – Final Design of the System and Installation and Commissioning of Equipment, and Phase 3 – Operations monitoring, collecting data on system performance, and reporting; therefore this determination will only apply to Phase 1.

The tasks to be performed for Phase 1 - Feasibility Study and Engineering Design (Conceptual Only).

Phase 1 of the project involves information gathering, document preparation and system design (must be conceptual design, excludes final design) only, and does not present any significant impact to human health and/or environment; therefore it can be categorically excluded under CX A9 "information gathering" and B3.1 "Onsite and offsite site characterization and environmental monitoring" from further NEPA review.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/20/10

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