PMC-EF2a

(2.04.02)

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

RECIPIENT: Escambia County **STATE:** FL

PROJECT TITLE: Landfill Gas Extraction and Control System Expansion and Modernization

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

A11 Technical advice and planning assistance to international, national, state, and local organizations.

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.

Rational for determination:

Escambia County would use $1,055,769 in EECBG funds to upgrade the existing landfill gas collection and control system (LGCCS) within the Perdido Landfill, a Class I/III Municipal Solid Waste (MSW) Landfill in west-central Escambia County. The current permitted facility covers approximately 350 acres; the existing LGCCS provides methane recovery over roughly 116 acres and the expansion project would extend the coverage to an additional 26 acres. All improvements would be made entirely within the permitted landfill footprint.

This project would improve the existing LGCCS by installing 37 new vertical landfill gas extraction wells totaling approximately 2,500 linear feet of PVC pipe, over 8,500 feet of new HDPE piping for landfill gas collection headers, and 2,500 feet of HDPE pipe as a landfill gas transmission line to a new electrical power generator facility to be constructed by project partner Gulf Power. The transmission line would be constructed entirely within the permitted landfill footprint. The facility would be a 3,500 square foot building designed to accommodate three 3520 CAT Power Systems SR-4 generators, producing 1.6 Mw, 4160 volt, 3-phase power. Initially two SR-4 generators would be installed to produce a total of 3.2 Mw of electrical power that would be channeled back to the Gulf Power distribution grid. The electrical substation located at the south end of the landfill is adequate to handle delivering the new capacity back to the grid and the only improvements to be made to transmit the generated power would involve replacing 12 existing power poles within the boundaries of the landfill. Upgrades also include an energy efficient blower/flare station consisting of a 2,200 standard cubic feet per minute (scfm) blower assembly, with a stub out for future installation of a second 2,200 scfm blower, a 4,400 scfm flare for the destruction of landfill gas during periods when the electrical generator facility is off line. The Perdido Landfill is expected to generate 2,398 to 2,881 scfm by the end of 2010 and will increase 3,003 to 3,479 scfm by 2021 at 48 to 50 percent methane.

The County provided Title V Air Construction Permit documentation and engineering design plans/specifications for the project. All excavated waste would be disposed on-site in the permitted Class I MSW landfill; no waste would be transported off-site. The County would be required to obtain all applicable local, state, and federal permits before implementing the project.

The proposed activity would capture and reuse methane to the maximum extent practicable, thereby conserving conventional energy/fuel used for electrical generation in the region and is therefore categorically excluded from further NEPA review under A9, A11, and B5.1.

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: 4/22/10
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