

PMC-EF2a

(20402)

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



RECIPIENT: State of North Carolina - Subrecipient Haywood County

STATE: NC

PROJECT TITLE : EECBG - Francis Farm Landfill Gas

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000771	GFO-0000771-008	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.

Rational for determination:

Haywood County is proposing to use EECBG ARRA funding for the construction of a new landfill gas collection, combustion, and power generation system at the closed Francis Farm Municipal Solid Waste Landfill in Haywood County, North Carolina. The planning, engineering, permitting and part of the bidding have been completed. EECBG funding will be used for phases 2 & 3 of the project: the installation of gas collection piping, flare station, gas cleaning equipment, and the two 100kW generators. All electricity generated will supply the adjacent garage and maintenance facility for the local school district. The proposed project will occur on the closed Francis Farm MSW landfill which takes up 16 acres of the 33 acre Haywood County owned landfill property. The landfill property is surrounded by farmland and low-density residential with interspersed wooded areas.

Potential environmental impacts of the project and associated actions include:

- Air Quality – Air quality should improve as a result of the proposed project. Methane gas that is currently being vented directly into the atmosphere will be captured and used to produce electricity.
- Water Quality – Existing erosion control measures, in place for the construction and operation of the landfill, will be utilized to restrain any sedimentation on site. The proposed project is not expected to have adverse effects to water quality.
- Ground Disturbance – The 21 new wells will be spaced at 200 foot intervals to achieve adequate coverage and extend from the waste surface to the within a few feet of the bottom of the waste mass. The wells will have a 30in diameter bore into the waste. The well itself will be constructed of perforated piping surrounded by a gravel backfill. The collection piping will consist of 4-8in solid piping that connects each well to the flare station. There will also be construction of infrastructure to connect gas condensate piping to the public sewer system. The initial phase of the installation of the electrical generation equipment will utilize an underground connection to the tie point at the school bus maintenance facility. This project will require approximately 19,000 sq. ft. of ground disturbance. The proposed project will occur on land that is a closed landfill and previously disturbed. There will be no adverse effects to threatened and endangered species, critical habitat, wetlands, floodplains or cultural resources as a result of the proposed project.
- Noise – The generators that the County will install at the Francis Farm Landfill are high efficiency, low-emission generators with self-contained housing to dampen noise emissions. The proposed location of the generators is such that the sound is directed to the adjacent closed landfill. Adverse effects from noise will be negligible.
- Threatened and Endangered Species – The proposed project will occur on a closed landfill that is fenced. There will

be no adverse effects to threatened and endangered species or critical habitat as a result of the proposed project.

- Permits – The North Carolina Department of Environment and Natural Resources - Solid Waste Section has granted a Permit to Construct the Gas Collection and Combustion System at the Francis Farm Landfill. An air permit from the North Carolina Department of Environment and Natural Resources - Division of Air Quality, required for the flare station, is pending.

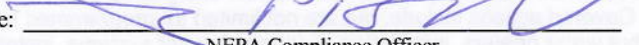
DOE has assessed potential impacts from all phases of the proposed project. After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorical Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION

Note to Specialist :

EF-2a completed by Logan Sholar

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 10/5/2010
 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