

PMC-EF2a

(2.04.02)

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



RECIPIENT: State of North Carolina - Subrecipient Caldwell County

STATE: NC

PROJECT TITLE : EECBG - Caldwell County Landfill Gas Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000771	GFO-0000771-011	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:

Caldwell County is proposing to use EECBG funding to complete a landfill gas to energy project that includes the construction of a small building adjacent to the existing blower/flare skid to house two 100kW generators, gas treatment equipment, and electrical equipment. There is an existing gas collection system with a flare at the Mount Herman landfill that will be used to supply fuel for electricity generation. The electricity generated will be fed back onto the grid. It will be placed on the grid as an exempt Qualifying Facility under FERC. The County will consult with the local electrical co-op to site the necessary electrical interconnection facility, which will be housed on a simple gravel pad. All equipment and construction will take place on the existing landfill site. The proposed project will occur on 50 acres of the 90 acre Mount Herman landfill. The landfill property is surrounded by low-density residential with wooded areas separating the landfill property from all other properties.

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 flared directly into the atmosphere will be used to generate 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** – Ground disturbance for the proposed project will consist of two concrete pads for the generator building and interconnection equipment totaling 962 square feet. No new transmission lines will be needed. All aspects of the proposed project will occur within the landfill property boundary on previously disturbed land. 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 as these resources do not exist at the project site.
- **Visual** – The proposed project will occur at a closed landfill in a rural area that is surrounded by wooded areas with no nearby residences. Adverse visual effects are not expected as a result of the proposed project.
- **Noise** – The generators will be housed in a small building. There are no residences within close proximity to the proposed generators. Adverse effects from noise will be negligible.
- **Threatened and Endangered Species** – The proposed project will occur on a closed landfill that is regularly mowed and otherwise maintained. There is no critical habitat onsite; therefore, there is not expected to be adverse effects to threatened and endangered species as a result of the proposed project.

• Permits – The County has obtained Air Permit No. 09961R00 for the Mount Herman Landfill, Hudson, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances. The full permit has been uploaded and attached. A modification to this permit will be obtained for the proposed project.

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: _____

NEPA Compliance Officer

Date: _____

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: _____

Field Office Manager

Date: _____