PMC-EF2a
(2.06.02)

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

RECIPIENT: State of North Carolina - Subrecipient Wilkes County **STATE:** NC

PROJECT TITLE : Greenhouse Gas to Energy Project

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

Wilkes County is proposing to use EECBG ARRA funding to complete a landfill gas capture system that will power a greenhouse. The EECBG funding will be used to install an electric blower, a monitoring system, a 100kW generator and a flare to burn off any excess gas. Funding will also be used to construct a green house. The greenhouse will be 30ft x 70ft and will be used for production of vegetables. All converted energy will be used on site by the greenhouse. The proposed project will occur on the closed landfill which takes up 12 acres of the 67 acre landfill property and no additional acreage will be used.

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. An air permit is required from the NC DNR Division of Air Quality.
• Water Quality – State of NC requires a Sedimentation and Erosion Plan if more than one (1) acre is being disturbed. Most of the site is pre-graded. Disturbance is not expected to exceed one acre. Landfill closure guidelines require a stormwater management plan be in place. The proposed project is not expected to have adverse effects to water quality.
• Ground Disturbance – A 30ft x 70ft concrete pad will be set as foundation for the proposed green house. 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 or critical habitat as a result of the proposed project.

• Noise – The generator will be located inside an enclosed structure, which should minimize the noise. The site is a low density, rural area with no occupied structure within 100 yards. Adverse effects from noise will be negligible.
• Visual – The proposed project will occur at a closed landfill in a rural area that is surrounded by a wooded area. Adverse visual effects are not expected as a result of the proposed project.
• Threatened and Endangered Species – The proposed project will occur on a closed landfill that is fenced. The site is graded and graveled. There will be no adverse effects to threatened and endangered species or critical habitat as a result of the proposed project.
• Permits –An air permit is required and will be obtained from the NC DNR Division of Air Quality. A permit modification is required and will be obtained from the NC DNR Waste Management Division.

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 Categorically Excluded B5.1 "actions to conserve energy," from

further NEPA review.

NEPA PROVISION

Insert the following language in the award:

You are required to:

The recipient is required to obtain the necessary permits for all actions involved with the proposed project.

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/7/10

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