



PMC-EF2a

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



(2.06.02)

RECIPIENT: State of North Carolina - Subrecipient Rockingham County

STATE: NC

PROJECT TITLE : BizFuel

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000771	GFO-10-634	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:

Rockingham County is proposing to use EECBG ARRA funding to complete a landfill gas capture system that will eventually be used to generate electricity. The EECBG funding will be used to install an electric blower, a gas collection system, and a flare to burn off any excess gas. The proposed landfill gas collection system will be installed on two out of three closed landfill cells and will also pull gas out of the currently open sub-title D landfill's leachate system. This project is the first phase of a renewable energy project that will utilize landfill methane as its energy source. Electricity generation will be phase II of the project. Phase II of the project consists of installing multiple generators and replacing the existing connection to the grid. Phase II will feed electricity onto EnergyUnited's 12.5 kV distribution lines, which will transport to the grid. There will be no new transmission lines necessary for this project. The existing distribution lines will need to be rebuilt. The proposed project will occur on the closed landfill which takes up 30 acres of the 715 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. 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 – All staging areas for the project would occur within the existing landfill footprint. Total disturbance for Phase I is estimated at 55,000 square feet. A metal shell building will be constructed within the landfill footprint on previously disturbed land to house the generators which comprises the ground disturbance for Phase II. All aspects of 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 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 partially 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.

• Threatened and Endangered Species – The proposed project will occur on a partially 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 existing NC Department of Natural Resources air permit will need modification, and the electric generators may qualify as a New Source under the federal Clean Air Act. A permit for emissions from the proposed generators will be applied for before Phase II has begun.

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

Insert the following language in the award:

You are required to:

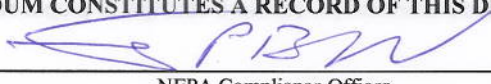
The recipient is required to obtain the necessary permits for all actions involved with the proposed project.

Note to Specialist :

EF-2a prepared by Logan Scholar.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



NEPA Compliance Officer

Date: _____

9/22/10

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: _____