

PMC-EF2a

(2.0+02)

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



RECIPIENT: Nebraska Energy Office

STATE: NE

PROJECT TITLE : David City Methane Generation project

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000052	DE-EE0000134		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.
- 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:

The State of Nebraska will provide \$777,800 in Recovery Act funds to David City to purchase one landfill gas (LFG) generator unit for a methane generation project. The project includes site preparation, construction, and installation of an internal combustion engine to produce electricity for sale to the City residents or Nebraska Public Power District (NPPD). The engine would burn landfill gas (LFG) provided by an existing LFG pipeline that is located adjacent to the proposed generator location.

Timberline Energy, LLC owns and operates a LFG production facility at the Butler County Landfill located approximately 3.5 miles east of David City. In 2008, Timberline and the City of David completed a pipeline from the LFG facility into Henningsen Foods' David City plant. The pipeline passes within feet of the project site. The City intends to tap into the existing nearby pipeline to utilize the available methane for energy generation.

The location of the proposed generator is on the east outskirts of the town, approximately ¼ of a mile north of the existing municipal power plant and near a David City water well. The site is accessible from 35½ Road and the LFG pipeline is in the south ditch of the same road. The project construction would consist of clearing and grading an estimated area of less than one acre (0.98) of existing pasture ground to make a pad site. The pad site would include a 40 feet x 60 feet building housing the engine/generator and ancillary equipment. A small entrance, less than 200 feet in length with a culvert has been constructed in the south ditch of 35½ Road. A proposed underground primary or power line (less than 500 feet in length) will be constructed between the pad site and the existing overhead power line on the north side of 35½ Road.

The project construction will be relatively small in scale and on previously disturbed, but undeveloped land in an area with existing buildings. The majority of the proposed property is an undeveloped grass pasture and portions of the property are classified as prime farmland and/or prime farmland if drained. Consultation was initiated with the State of Nebraska Natural Resources Conservation Service (NRCS). NRCS determined that the project was found to be cleared of concerns pertaining to the Farmland Protection Policy Act (FPPA).

The engine combustion emissions will include criteria pollutants, for which permits have been obtained. Absent installation of the engine/generator, the LFG would be flared which would result in similar emissions in greater quantity. Accordingly, the project does not result in a net emissions increase. The project is not located in a non-attainment area and is not located in a Class I Air Quality Control Region. The City has applied for and obtained an Air Quality Construction Permit from the Nebraska Department of Environmental Quality (NDEQ). The emission rates permitted (tons per year) will be as follows: HAP - 11.1, Toxics - 11.1, PM10 - 5.97, SO2 - 3.08, NOx - 20.00, CO -

93.39, VOCs - 18.11.

Noise considerations were taken into account when selecting the project location. The engine/generator will be located within a building which will dampen noise levels from the engine/generator and the engine exhaust stack will have hospital grade attenuation devices.

The project does not exist in a floodplain and there would be no or negligible impacts to cultural resources, wetlands, or other sensitive resources. The project site has been involved in agricultural practices or developed within the road right-of-way for some time and there are no structures on the site other than an existing well house which is of recent construction. Therefore, there are no anticipated impacts to cultural, historical, or archaeological resources due to project activities and the Nebraska State Historical Preservation Office has been consulted for concurrence. The project location is adjacent to a City of David City Municipal Well and within the David City Well Head Protection Area (WHPA). The WHPA and City statute allows the City to construct this project within the WHPA. The facility design will include secondary containment and other spill prevention measures for oil and chemicals stored at the project.

The U.S. Fish and Wildlife Service (USFWS) and the Nebraska Game and Parks Commission (NGPC) concurred with the recipient and determined that due to the project type, size, and location, there are no anticipated impacts or adverse effects on or federally listed species or their critical habitat. The USFWS also determined that there are no Bald or Golden eagle nests or roosting sites located within or near the project area. Therefore, the project will have no significant impacts on federally-listed or state-listed Threatened and Endangered Species. In addition, USFWS recommended that further section 7 consultation would be necessary if construction called for acquisition of borrow materials from offsite sources. The recipient does not anticipate using offsite borrow for this project. Also, the recipient will do a field survey for nesting birds if construction is started during the primary nesting season per US FWS recommendations.

A waste management plan has not been designed yet. The requirements will be in the contract documents and specifications as part of the contractor's responsibilities.

**Waste Stream Requirements:**

Prior to the expenditure of Federal funds to implement any of the above-mentioned activities, the City of David has the affirmative responsibility to ensure that it has a waste management plan addressing waste generated by their proposed actions. The plan will describe the plan to dispose of any sanitary or hazardous waste, e.g. construction and demolition debris, old light bulbs, lead ballasts, piping, roofing materials, discarded equipment, debris, asbestos, etc. generated as a result of the proposed project. The recipient must ensure that it will comply with all federal, state and local regulations for waste disposal.

Based on the above information, the work outlined is consistent with activities identified in Categorical Exclusion B5.1 and A9.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

According to the project officer, funding for this project is \$777,800. Absent a significant change in the scope of this effort, a change in funding will not affect my determination.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_

NEPA Compliance Officer

Date: 6/24/10

**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.