

PMC-EF2a

(2.04.02)

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



STATE: NE

RECIPIENT: Nebraska Energy Office

PROJECT TITLE : Biogas to Regenerative Thermal Oxidizer

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000134	GFO-10-330	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.
- B2.5** Safety and environmental improvements of a facility, including replacement and upgrade of facility components, that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements may include, but are not limited to: Replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping if there is no evidence of leakage, based on testing that meets performance requirements in 40 CFR part 280, subpart D (40 CFR part 280.40). This includes activities taken under RCRA, subtitle I; 40 CFR part 265, subpart J; 40 CFR part 280, subparts B, C, and D; and other applicable state, Federal and local requirements for underground storage tanks. These actions do not include rebuilding or modifying substantial portions of a facility, such as replacing a reactor vessel.

## Rational for determination:

The State of NE is proposing to provide \$275,000 of Recovery Act funds to AGP Corn Processing, Inc. to design and install a branch line between two existing plant structures in order to capture and use off-gas that would otherwise be flared.

The project is located at the AGP Plant at 2801 East 7th Street, Hastings, NE. The project will provide a 1200 foot pipe connection between the plant's anaerobic digester and the Regenerative Thermal Oxidizer (RTO). The connection will allow biogas from the anaerobic digester to displace the natural gas input to the RTO and eliminate the need to flare the gas from the anaerobic digester. By making use of the digester gas, the project will eliminate the use of propane for the anaerobic digester flare and thus reduce the amount of gas used at the RTO by a total of 45,558 MMBTU per year.

The project is not located on a wetland or a site of historic or cultural importance. The branch line carrying the biogas will be constructed completely within plant property. The line will extend 1200 feet at a depth of 52 inches below the surface. The trench will traverse previously disturbed land and will be back-filled after the pipe is laid. Part of the line will run underneath the plant's railroad track. This portion of the line will be protected by cathodic protected casing, which will be vented at both ends. The knockout pot connected to the RTO will be provided with a condensate pump with built-in safety valves to prevent discharge of biogas to the industrial sewer flowing back to the anaerobic digester. The company has ensured that the entire pipeline structure and associated connector valves will undergo extensive testing prior to use.

Based on information provided by the State and recipient, that the project is fully within the plant's boundaries, involves a trenching operation on previously disturbed land that will be restored, involves assurances from the recipient to install safety features and measures in the final system construct, and that the project offers an energy efficient and environmentally friendly approach over current operations, I have determined that the project is classified as Categorical Exclusion B5.1 and B2.5.



**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, the funding associated with this project is \$275,000. Unless the scope of the project changes significantly, 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: \_\_\_\_\_

3/31/10

**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: \_\_\_\_\_