

PMC-EF2a

(2.04.02)

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



RECIPIENT: Ohio Department of Development

STATE: OH

PROJECT TITLE : SEP ARRA - Wooster Renewable Energy, LLC

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000165	GFO-0000165-043	GO

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:

B5.20 Biomass power plants The installation, modification, operation, and removal of small-scale biomass power plants (generally less than 10 megawatts), using commercially available technology (1) intended primarily to support operations in single facilities (such as a school and community center) or contiguous facilities (such as an office complex); (2) that would not affect the air quality attainment status of the area and would not have the potential to cause a significant increase in the quantity or rate of air emissions and would not have the potential to cause significant impacts to water resources; and (3) would be located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rational for determination:

The U.S. Department of Energy (DOE) provided federal funding to the State of Ohio Department of Development (ODOD) under the DOE's American Recovery and Reinvestment Act of 2009 (ARRA) State Energy Program (SEP). ODOD is proposing to provide federal ARRA funding to Wooster Renewable Energy, LLC. (Wooster RE) to partially fund the modification of existing anaerobic digester equipment and the purchase and installation of new equipment to install and incorporate a renewable energy anaerobic digester system, with an 800 kW combined heat and power (CHP) generator, at the City of Wooster's existing Waste Water Treatment Plant (WWTP). The system would generate electricity from the combustion of biogas produced from approximately 133 wet tons per day of biomass feedstock. Feedstock would be composed of bio-solids from the WWTP and delivered food-waste organics. Produced electricity would be used onsite to supplement the WWTP's power needs with a renewable energy source. The system would be grid-tied and any excess power not used by the WWTP would be net metered with the local utility.

A previous DOE NEPA determination, (CX B5.1; GFO-0000165-023; 5/17/2011), was made to modify existing anaerobic digester equipment and purchase and install new equipment to install and incorporate a renewable energy anaerobic digester system into the WWTP. Wooster RE did not construct the facility and has subsequently made modifications to the system's design. The changes to the system include; a reduction in the size of the CHP generator from 1.15 MW to 800 kW; the addition of a 40 foot by 40 foot operations building and a redesign of the facility layout within the WWTP footprint. This NEPA determination applies to the redesigned system and facility as it is currently proposed.

Wooster RE has received additional funding for this project from the U.S. Department of Agriculture's (USDA) Rural Energy for America Program. Wooster RE has received a financial assistance grant and a loan guarantee from USDA. USDA performed a NEPA Class I Environmental Assessment of the proposed project and issued a Finding of No Significant Environmental Impact (FONSI), on 8/31/2011. USDA has required environmental impact mitigation measures to be included into the construction of the project. DOE has determined that these mitigation measures are integral elements of the project and must be adhered to by the recipient.

The system, as previously proposed, would be constructed on a portion of the City of Wooster's existing WWTP located at 1123 Old Columbus Road in Wooster, Ohio. The site has been previously disturbed and is located entirely within the WWTP.

To install the proposed system, site work (less than one acre) would include grading, trenching and excavation activities for structure foundations, utility connections and an expanded truck unloading/turnaround area. Three existing anaerobic digester tanks would be retrofitted and modified with new roofs and new components. An existing liquid receiving in-ground receiving tank would be connected to the new system. New infrastructure would include

various piping and components, a 230,000 gallon feedstock tank, a 40 foot by 40 foot operations building, an 800 kW CHP generator unit housed within a noise reducing container equipped with a sound damping muffler (68 dB at two meters), a gas flare, and a truck unloading/turnaround area with retaining walls would be extended onto an existing onsite access road.

Operation of the facility would process approximately 133 wet tons per day of feedstock. Bio-solid feedstock would be obtained from the existing WWTP and food-waste organic feedstock would be delivered in dump and tank trucks. Biogas generated from the anaerobic digester would be burned in the 800 kW CHP unit and thermal heat would be reintroduced into the process. An additional by-product the system would generate Class B effluent (digestate) which would contain plant nutrients and organic matter. Effluent would be stored onsite in permitted lagoons and seasonally hauled out for land application. The storage, disposal and land application of effluent has been permitted by Ohio Environmental Protection Agency (EPA). Approximately a combined eight trucks a day would transfer feedstock in and transport effluent out of the facility.

Prior to the previous NEPA determination, the Ohio Dept. of Natural Resources and the U.S. Fish and Wildlife Service were consulted and they both determined that the proposed project would not result in adverse effects to state or federal threatened and endangered species. Prior to the previous determination, the Ohio State Historic Preservation Office was consulted and concluded the proposed project would not affect historic properties. As the project is still proposed for the same previously disturbed project site and proposed the modifications to the system's design are contained within the previously assessed project site, DOE has determined no additional consultations are needed. The proposed project would not have adverse impacts to a floodplain or wetlands.

Wooster RE has received and supplied DOE with copies of pertinent Ohio Environmental Protection Agency (EPA) permits in regards to air emissions, handling and disposal of bio-solids, wastes, and effluents, and storm water discharges during construction:

- Air Pollution Permit-to-Install and Operate (PTIO) (Facility ID 0285032008; Permit # P0109347)
- Stormwater Construction General Permit - OHC000003 (Facility Permit #3GC05052*AG);
- National Pollutant Discharge Elimination System (NPDES) permit authorization to handle bio-solids, discharge Stormwater and land apply system effluents (Permit # 3IN00375*BD);
- Wastewater Permit-to-Install (PTI) wastewater disposal system (#864212)

Based on the review of the project information and the above analysis, DOE has determined the modification of existing anaerobic digester equipment and the installation a renewable energy anaerobic digester system with a CHP generator to produce electricity at an existing waste water treatment plant, would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusions B5.20 "installation of small-scale biomass power plants" and is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Insert the following language in the award:

You are required to:

Adhere to the following required environmental mitigation measures from the USDA Class I Environmental Assessment and FONSI (8/31/2011):

1. Control of unnecessary noise.
2. Dust control measure.
3. Permanent erosion control through suitable drainage, finish grading and seeding.
4. Compliance with OSHA and ODOT safety standards and regulations.
5. Provide temporary sanitary facilities.
6. Measures during construction include erosion and sedimentation control in accordance with ODNR Rainwater and Land Development Manual.
7. During operation, the facility will obtain and operate within required local and state permits.
8. The project will be required to comply with the Ohio Environmental Protection Agency (OEPA) regulation regarding Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES).

- The Contractor should apply for, obtain, and pay for the NPDES Construction Storm Water Permit.
9. No further coordination with OHPO (Ohio Historic Preservation Office) is required unless the project scope changes or historical or cultural resources are discovered during the course of the project. Any excavation by the contractor(s) that uncovers an historical or archaeological artifact shall be immediately reported to the borrower and the State Environmental Coordinator. Construction shall be temporarily halted pending the notification process and further directions issued by the Agency after consultation with the State Historic Preservation Office (SHPO).
10. The footprint of the anaerobic digester project shall not go beyond the current diked footprint of the waste water treatment facility.

Note to Specialist :

Obadiah Broughton 6/10/2013

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____
Kurtin Ke
 NEPA Compliance Officer

Date: 6/14/2013

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: _____