

PMC-EF2a

(20102)

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



RECIPIENT:WA Dept. of Commerce

STATE: WA

PROJECT TITLE : Barr-Tech – Green waste to Renewable Energy

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000139	GFO-09-155-011	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:

The State of Washington will provide \$2,000,000 in Recovery Act funds to Barr-Tech for the engineering and construction of an anaerobic digester and two combined heat and power (CHP) units at the Odessa Public Development Authority facility in Sprague, Washington. The anaerobic digester will process 80-100 tons per day of food wastes, yard waste, wooden demolition, and construction debris which will be brought to the site via truck. Each truck is expected to carry 22 tons of waste, resulting in an estimated 5 return truck trips per day. The site is along the I-90 corridor and the waste will travel approximately 22 miles from Spokane, WA. Currently these wastes are hauled 60-480 miles roundtrip to various sources for recycling and disposal.

This is one phase of an overall project effort to construct and operate the Barr Regional Bio-Industrial Park. Other parts of the project for which DOE funding is not being used include:

- Composting Facility – where food waste unsuitable for the digester will be placed. The composting facility is in operation.
- Greenhouses that will use the heat and carbon dioxide from the CHP units and the composter to grow organic fruits and vegetables.

The methane produced from the digester will be fed into the 2 CHP engines to produce 2 MW of power that will be fed back into the grid. The composting facility will eventually be expanded to process a total of 125,000 tons from the current capacity of 75,000 tons and an additional CHP unit installed to generate another 1.1MW, feeding a total of 3MW back to the grid. Based on information from the State and Barr-Tech staff, no transmission line connections will be needed until the additional CHP unit is added.

Ground has already been broken on the 40 acre Barr Regional Bio-Industrial Park and the items that remain to be built are the anaerobic digester, the power plant (2 CHP units), and the greenhouses. The Park will be a zero waste, carbon neutral regional organic waste recycling facility.

The DOE funded portion of the project is part of the overall Barr Regional Bio-Industrial Park project and is connected to the composting facility which has already been constructed. Impacts to the environment from the construction and operations of the Barr Regional Bio-Industrial Park were studied in a State Environmental Policy Act (SEPA) document, which resulted in a Mitigated Declaration of Non-Significance. The Mitigated Determination of Non-Significance was issued pursuant to the applicant's compliance with the following:

- Compliance with applicable Lincoln County health, building, zoning and development requirements, including County road ingress/egress standards.
- Compliance with WA State Department of Ecology (DOE) and WA State Department of Health (DOH) permitting requirements.

3. Best Management Practices shall be employed in all phases of operation.

According to the Evaluation of the Integration of Anaerobic Digestion and Composting at the Barr Regional Industrial Park by Barr Tech, Washington State University, June 1, 2009, the projected annual reductions in carbon dioxide equivalent associated by the operation of the digester and use of biogas offsetting fossil fuel use would equal 7,173 metric tons.

This project involves funding an anaerobic digester and 2 combined heat and power (CHP) units. When fully operational, the system will improve energy conservation by reducing the quantity of food and yard waste that is sent to landfill and using the waste to produce energy. The facility is under permit and in operation. Operation and air permits for the CHP units are being sought and are required before the project can go forward. Based on information provide above, this effort is consistent with activities identified in Categorical Exclusion B5.1.

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 effort is \$2,000,000. Unless there is a significant change in the scope of this effort or conditions develop during construction of the digester and CHPs that warrant further review, 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: _____

4/25/10

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: _____