

NETL F 451.1-EECBG  
(3/2009) OPI=320  
(Previous Editions Obsolete)

U.S. DEPARTMENT OF ENERGY

**ENVIRONMENTAL QUESTIONNAIRE**

**I. BACKGROUND**

The Department of Energy (DOE) National Environmental Policy Act (NEPA) Implementing Procedures (10 CFR 1021) require careful consideration of the potential environmental consequences of all proposed actions during the early planning stages of a project or activity. DOE must determine at the earliest possible time whether such actions will require either an Environmental Assessment or an Environmental Impact Statement, or whether they qualify for a Categorical Exclusion. To comply with these requirements, an Environmental Questionnaire must be completed for each proposed action to provide DOE with the information necessary to determine the appropriate level of NEPA review.

**II. INSTRUCTIONS**

Separate copies of the Environmental Questionnaire should be completed by the principal proposer and appropriate proposer's subcontractor. In addition, if the proposed project includes activities at different locations, an independent questionnaire should be prepared for each location. Supporting information can be provided as attachments.

In completing this Questionnaire, the proposer is requested to provide specific information and quantities, when applicable, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. The proposer should identify the location of the project and specifically describe the activities that would occur at that location. In addition, the proposer will be required to submit an official copy of the project's statement of work (SOW) or statement of project objective (SOPO) that will be used in the contract/agreement between the proposer and DOE.

**III. QUESTIONNAIRE**

**A. PROJECT SUMMARY**

1. Solicitation/Project Number: DE-FOA-0000013
2. Proposer: Kent, County of
3. Principal Investigator: James J. Newton, P.E., BCEE  
Telephone Number: 302-335-6000
4. Project Title: Geothermal HVAC
5. Duration: July 1, 2009 - June 30, 2011
6. Location(s) of Performance (City/Township, County, State): Milford  
Kent  
DE
7. Identify and select checkbox with the predominant project work activities under Group A-7b or A-7c.

**Group A-7b**

- Work or project activities does NOT involve new building/facilities construction and site preparation activities. This work typically involves routine operation, modification, and retrofit of existing utility and transportation infrastructure, laboratories, commercial buildings/properties, offices and homes, test facilities, factories/power plants, vehicles test stands and components, refueling facilities, greenspace infrastructure, or other existing facilities.

**Group A-7c**

- Work or project activities typically involves major building or facility construction, site preparation; the installation, replacement, or major modifications of energy system prototypes and infrastructure, access right-of-ways and roads; utility, greenspace, and transportation infrastructure, vehicle test facilities; commercial buildings/properties, fuel refinery/mixing facilities, factories/power plants; and other types of energy efficiency/conservation related systems, structures, and facilities. This work can require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review.
- Other types of work or project activities not listed. (please describe):
8. Summarize the objectives of the proposed work. List activities planned at the location as covered by this Environmental Questionnaire. The scope of work is to convert two administration building HVAC operations by utilizing the stored heat in the treated wastewater, thus reducing the electrical load required to heat and cool these buildings.
9. List all other locations where proposed work or project would be performed by project's proposer and subcontractors. None
10. Identify major project operation related materials and waste that would be used, consumed, and produced by this project or activity. The construction activities would require the replacement of ductwork in two buildings and the addition of piping between various treatment processes and the buildings. All removed metal material will be recycled.
11. Provide a brief description of the project location (physical location, surrounding area, adjacent structures). The project is located at an existing wastewater treatment facility.
12. Attach a site plan or topographic map of the project work area.

**B. ENVIRONMENTAL IMPACTS**

This section is designed to obtain information for objectively assessing the environmental impacts of a proposed project. NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment.

**1. Land Use**

- a. Characterize present land use where the proposed project would be located.
- |                                   |  |                                      |  |
|-----------------------------------|--|--------------------------------------|--|
| <input type="checkbox"/> Urban    | <input checked="" type="checkbox"/> Industrial | <input type="checkbox"/> Commercial  | <input type="checkbox"/> Agricultural        |
| <input type="checkbox"/> Suburban | <input type="checkbox"/> Rural                 | <input type="checkbox"/> Residential | <input type="checkbox"/> Research Facilities |
| <input type="checkbox"/> Forest   | <input type="checkbox"/> University Campus     | <input type="checkbox"/> Other       |  |
- b. Describe how land use would be affected by planned construction and project activities.
- No construction would be anticipated for this project.  
All construction activities would be on land currently used as a wastewater treatment facility and previously disturbed
- c. Describe any plans to reclaim/replant areas that would be affected by the proposed project.
- No land areas would be affected.
- d. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)?
- No       Yes (describe)

- e. Would the proposed project be located in or near a national park or wilderness area?  
 No  Yes (describe)

*If project work activities falls under item A-7b; then proceed directly to question B.6 (Atmospheric Conditions/Air Quality) and continue to fill out questionnaire.*

*If project work falls under item A-7c; then proceed directly below to question B.2 (Construction Activities and/or Operations) and continue to fill out questionnaire.*

## 2. Construction Activities and/or Operations

- a. Identify any roads, trails, or utility right of ways that traverse the proposed site or will be constructed and clearly mark them on project site maps.  
 None
- b. Would the proposed project require the construction of settling ponds?  
 No  Yes (describe and identify location, and estimate surface area disturbed)
- c. Would the proposed project affect any existing body of water?  
 No  Yes (describe)
- d. Would the proposed project be located in or impact a floodplain or wetland?  
 No  Yes (describe)
- e. Would the proposed project be likely to cause runoff/sedimentation/erosion?  
 No  Yes (describe)

## 3. Vegetation and Wildlife Resources

- a. Identify any State- or Federal-listed endangered or threatened plant or animal species affected by the proposed project.  
 None
- b. Would any foreign substances/materials be introduced into ground or surface waters, or other earth/geologic resource because of project activities? Would these foreign substances/materials affect the water, soil, and geologic resources?  
 No  Yes (describe)
- c. Would any migratory animal corridors be impacted or disrupted by the proposed project?  
 No  Yes (describe)

## 4. Socioeconomic and Infrastructure Conditions.

- a. Would local socio-economic changes result from the proposed project?  
 No  Yes (describe)
- b. Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas?  
 No  Yes (describe)
- c. Would the proposed project require new transportation access (roads, rail, etc.)? Describe location, impacts, costs.  
 No  Yes (describe)
- d. Would any new transmission lines and/or power line right-of-ways be required?  
 No  Yes (describe location, voltage, and length of line)

**5. Historical/Cultural Resources**

- a. Describe any historical, archeological, or cultural sites in the vicinity of the proposed project; note any sites included on the National Register of Historic Places.  
 None
- b. Would construction or operational activities planned under the proposed project disturb any historical, archeological, or cultural sites?  
 No planned construction       No historic sites       Yes (describe)
- c. Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape?  
 No       Yes (describe)

*For all proposed project work activities identified under item A-7b, respond to item B6 directly below and continue filling out environmental questionnaire.*

**6. Atmospheric Conditions/Air Quality**

- a. Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards (NAAQS). This information is available under the NAAQS tables from the U.S. EPA Air and Radiation Division.

	<u>Attainment</u>	<u>Non-Attainment</u>
O <sub>3</sub>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SO <sub>x</sub>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PM <sub>10</sub>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CO	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NO <sub>2</sub>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lead	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- b. Would proposed project require issuance of new or modified major source air quality permits?  
 No       Yes (describe)
- c. Would the proposed project be in compliance with the National Emissions Standards for Hazardous Air Pollutants?  
 No (explain)       Yes
- d. Would the proposed project be classified as either a New Source or a major modification to an existing source?  
 No       Yes (describe)
- e. Would the proposed project be in compliance with the New Source Performance Standards?  
 Not Applicable       No (explain)       Yes
- f. Would the proposed project be subject to prevention of significant deterioration air quality review?  
 Not applicable       No (explain)       Yes (describe)
- g. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project?  
 Reduced emissions since it will reduce the need for fossil-fuel produced electricity
- h. Would any types of emission control or particulate collection devices be used?  
 No       Yes (describe, including collection efficiencies)
- i. If no control devices are used, how would emissions be vented? N/A

**7. Hydrologic Conditions/Water Quality**

- a. What is the closest body of water to the proposed project area and what is its distance from the project site?  
Murderkill River, 1000 feet
- b. What sources would supply potable and process water for the proposed project?  
N/A
- c. Quantify the daily or annual amount of wastewater that would be generated by the proposed project.  
None
- d. Identify the local treatment facility that would receive wastewater from the proposed project.  
 No discharges to local treatment facility
- e. Describe how wastewater would be collected and treated.  
N/A
- f. Would any run-off or leachates be produced from storage piles or waste disposal sites?  
 No                     Yes (describe source)
- g. Would project require issuance of new or modified water permits to perform project work or site development?  
 No                     Yes (describe)
- h. Where would wastewater effluents from the proposed project be discharged?  
 No wastewater produced
- i. Would the proposed project be permitted to discharge effluents into an existing body of water?  
 No                     Yes (describe water use and effluent impact)
- j. Would a new or modified National Pollutant Discharge Elimination System (NPDES) permit be required?  
 No                     Yes (describe)
- k. Would the proposed project adversely affect the quality or movement of groundwater?  
 No                     Yes (describe)

**8. Solid and Hazardous Wastes**

- a. Describe and estimate major nonhazardous solid wastes that would be generated from the project. Solid wastes are defined as any solid, liquid, semi-solid, or contained gaseous material that is discarded or has served its intended purpose, or is a manufacturing or mining by-product (40 CFR 260, Appendix I). None
- b. Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform project work activities?  
 No                     Yes (explain)
- c. How and where would solid waste disposal be accomplished?  
 On-site (identify and describe location)  
 Off-site (identify location and describe facility and treatment) DSWA Central Landfill
- d. How would wastes for disposal be transported?  
Roll offs
- e. Describe and estimate the quantity of hazardous wastes (40 CFR 261.31) that would be generated, used, or stored under this project.  
 None

f. How would hazardous or toxic waste be collected and stored?

None used or produced

g. If hazardous wastes would require off-site disposal, have arrangements been made with a certified TSD (Treatment, Storage, and Disposal) facility?

Not required     Arrangements not yet made     Arrangements made with a certified TSD facility (identify):

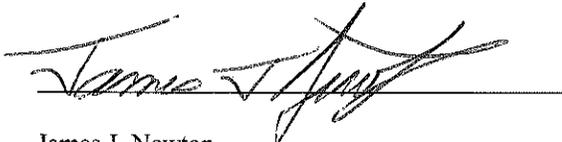
**C. DESCRIBE ANY ISSUES THAT WOULD GENERATE PUBLIC CONTROVERSY REGARDING THE PROPOSED PROJECT.**

None

**IV. CERTIFICATION BY PROPOSER**

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

SIGNATURE:



DATE: 06 / 16 / 2009  
month    day    year

TYPED NAME:

James J. Newton

TITLE:

Environmental Programs Manager

ORGANIZATION:

Kent County Dept. of Public Works

**V. REVIEW AND APPROVAL BY DOE**

I hereby certify that I have reviewed the information provided in this questionnaire, have determined that all questions have been appropriately answered, and judge the responses to be consistent with the efforts proposed.

PROJECT MANAGER:

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
month    day    year

TYPED NAME: \_\_\_\_\_