

ENVIRONMENTAL QUESTIONNAIRE

For: Storm-Water Retention Pond, NETL Morgantown

I. BACKGROUND

The Department of Energy's (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. DOE must determine at the earliest possible time whether such actions require either an Environmental Assessment or an Environmental Impact Statement, or whether they qualify for 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 this Environmental Questionnaire should be completed by the principal offeror and each proposed 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 quantities regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer should identify the exact location of the project and specifically describe the activities that would occur at that location.

To expedite completion of this questionnaire, electronic versions in WordPerfect 6.1 or Word 97 format are available upon request. Questions regarding the type of information requested or the approach to preparing responses should be referred to Lloyd Lorenzi, U.S. Department of Energy, National Energy Technology Laboratory, by phone (412) 386-6159, fax (412) 386-4604, or e-mail (lorenzi@netl.doe.gov).

III. QUESTIONNAIRE

A. PROJECT SUMMARY

- 1. Solicitation Number: N/A [see Public Law 107-63 (HR 2217), Sec. 135(e)]
- 2. Proposer & all Proposed Subcontractors: NETL (Site Operations Division); Eichleay Engineers & Constructors, Inc.
- 3. Principal Investigator: Donald Wieczenski
Telephone Number: (412) 386-6056
- 4. Project Title: NETL New Building & Renovation Project (new Pond)
- 5. Duration: 2-months
- 6. Location (city/township, county, state): Morgantown, Monongalia County, West Virginia

- 7. Indicate the type or scale of project:

a. <input checked="" type="checkbox"/> Computer Modeling	b. <input checked="" type="checkbox"/> Library/Literature Search
c. <input checked="" type="checkbox"/> Paper Study	d. <input checked="" type="checkbox"/> Workshop/Conference
e. <input checked="" type="checkbox"/> Laboratory (Batch) Research	f. <input checked="" type="checkbox"/> Bench-scale Research
g. <input checked="" type="checkbox"/> Pilot- or Proof-of-Concept-Scale Research	h. <input checked="" type="checkbox"/> Pilot Plant Construction/Operation
i. <input checked="" type="checkbox"/> Full-scale Demonstration	j. <input checked="" type="checkbox"/> Other (please describe): <u>New pond for storm-water retention and for geothermal heat pump applications</u>

If either item a, b, c, or d was selected for Question A.7, proceed to Section IV (CERTIFICATION BY PROPOSER);submittal of the intervening parts of this Questionnaire is not required.

However, if either item e, f, g, h, i or j was selected, continue with Question A.8.

8. Indicate the size of the proposed project and the primary material processed (e.g., 200 tph of coal).

	tph (of)		MM Btu/hr	
	scfm (of)		MW	<input type="checkbox"/> electric <input type="checkbox"/> thermal
	acfm (of)		<input checked="" type="checkbox"/> Other: <= 1 acre pond	

9a. Summarize the proposed work. List all activities or tasks planned at the location covered by this Environmental Questionnaire.

The project involves the construction of a permanent new pond for storm-water retention and for geothermal heat-pump applications for the proposed new office building and proposed new child-care facility. A dam will be constructed on the small stream flowing across the land that is the subject of a proposed purchase. Construction activities for the new pond will create a disturbed area of less than or equal to 1 acre and could include the removal of trees in a significant portion of the forested area of the proposed five acre acquisition. Water will be retained in the pond, perhaps with the aid of a plastic liner. This project, as described here, depends entirely on the purchase of the five acre parcel of land adjoining the northwestern side of the developed area of the Morgantown site.

9b. Characterize the work site at this location (check all that apply).

Existing Building (indoors) Developed site Undeveloped site

10. List all other locations where work would be performed. (**Note: Submit a separate Environmental Questionnaire for each location.**)

Construction activities for the new pond will be performed on part of a five-acre parcel of land adjoining the NETL Morgantown site. This land is the subject of a new purchase by NETL.

11. Describe the objectives of the proposed project.

The main objective is to provide a pond for storm-water retention and for a geothermal heat-pump application for the proposed new office building.

12. Identify the planned number of tests, the frequency of testing (e.g., tests per week), and the duration of tests by type (e.g., laboratory tests, pilot unit runs, etc.).

N/A

13. Identify all materials that would be used and produced by the project (materials can be grouped by category) and estimate their total quantities over the entire duration of the proposed project.

Materials Used (total quantity)		Materials Produced (total quantity)	
G	coal ()	G	wastewater ()
G	natural gas ()	G	air emissions ()
G	oil ()	G	solid waste ()
G	electricity ()	G	hazardous waste ()
G	water ()	G	salable by-products --
G	air ()		list and note quantity
G	organic solvents ()		
G	others -- list and note quantity:	G	others -- list and note quantity:
G	None	G	None

During normal operations of the proposed new office building, energy consumption could be reduced by a geothermal heat pump utilizing the pond as a heat sink/source.

In comparison to normal operations, construction work will temporarily lead to a net increase in the consumption of fuel resources and an increase in vehicle/equipment engine emissions at the Morgantown site.

B. PROPOSED PROJECT AND ITS ALTERNATIVES

1. List all alternative approaches considered to achieve the objectives described in A.11 and discuss the anticipated environmental effects of each. (Place the selected approach at the top of the list.)

Regarding the control of storm-water runoff, there are several options:

1. Retention Basin (Pond): The construction of a pond with an earthen dam and a stream flow regulating outlet is the most practical method to locally compensate for the increased runoff that results from increased roof areas and increased hard-top surfaces (e.g., parking areas). The pond may enhance the local landscape and provide extra lacustrine habitat. However, ponds decrease natural sediment transport in the stream and change the water temperature fluctuations, both being generally adverse to native stream dweller species. The construction of the pond could require the removal of several very large trees (> 20 inches diameter) that live along the steep slopes of the stream valley. These trees contribute to the quality of the natural forest setting, which would be ideal for a nature trail and or park to be used by NETL employees and the child-care facility. Water in the stream currently exhibits an orangeish color, indicative of iron-laden acidic drainage. The construction of a pond would probably require the removal or isolation of fill deposits that cause the acid-mine drainage problem.

2. Detention Basin (Weir): A small concrete dam and weir may be installed to provide flood storage. These devices consist of a concrete wall across the stream with a notch or v-shaped outflow for major storm flows. Some include an additional pipe that transmits normal flow. Water is retained by these structures briefly during high runoff events. At other times, no storage occurs. Earthen dams with undersized-culverts, commonly used for low-usage driveways, may be used instead of concrete dams.

3. Dry Wells: Runoff from roof tops and, perhaps, parking areas can be collected and diverted into shallow dry wells, which are gravel-filled holes that are several feet wide and several feet deep. The water percolates into the ground to recharge the ground-water supplies. Dry wells are commonly used to compensate for the infiltration capacity lost to building roofs. Trenches can be used instead of wells.

4. Porous Pavement Parking Lots: Parking lots may be designed to permit greater infiltration of rainwater than would normally occur beneath conventional concrete or asphalt parking surfaces. These parking lots are typically constructed with concrete blocks and/or granular materials (such as crushed stone or gravel) overlying a surface designed to pond one to three inches of water, which can slowly infiltrate the soil beneath the parking lot. Some designs are effective at improving infiltration but not at controlling large storm runoff events, so the design must match the objective.

Regarding geothermal heat-pump applications, there are several options:

1. Pond-Sourced: The heat exchanger coils of the heat pump can be placed on the bed of a pond, where the pond can serve as a heat source in the winter and a heat sink in the summer. The advantages are that the water in a pond efficiently moves heat into or out of the coils. This is usually the lowest cost geothermal heat pump application. The disadvantages are that a sizable pond must be constructed, with sufficient depth (> 8 ft for home applications) to avoid excessive freezing during the winter.

2. Ground-Sourced: the heat exchanger coils of the heat pump can be placed in the soil to either extract heat from or to exhaust heat to the soil. The disadvantage of this system is that soil is a relatively good insulator and a large quantity of tubing must be buried. Leaks in the buried tubing are not easily found and fixed.

3. Water Well Sourced: The heat exchanger coils of the heat pump can be placed within water wells, where the ground water provides for faster heat transfer than the unsaturated soil. The disadvantages are that numerous water wells are required (e.g., a typical house requires three wells). At the site of the proposed new office building in Morgantown, there is 40 to 70 ft of unconsolidated sediment that can be easily drilled to create the wells. However, in most commercial applications, the wells are drilled more than 100 ft deep. Depending on the number of wells required, this could be a viable option for the Morgantown site; however, it would be more expensive than a pond-sourced system.

2. Identify the environmental consequences of not implementing this project (e.g., emission increase).

No-Action: Storm-water runoff from the new office building and parking garage is not expected to greatly increase because the affected areas are mostly covered with parking lots at the present time. At the site of the proposed child-care facility, the relative increase in runoff would be much greater. Erosion rates in the stream should increase slightly because of the increase in storm-water runoff. However, it is not expected that significant erosion would occur.

Geothermal heat pumps are recognized as one of the most energy efficient HVAC systems available. If geothermal heat-pumps are not used in the new building, it is likely that less energy efficient HVAC systems will be installed. The result would be a greater energy consumption over the life of the building.

C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).

The proposed new facility would sit within a newly purchased five acre parcel of land located immediately north of the existing North Parking Lot of NETL, Morgantown. The land presently contains two houses (one is occupied), some abandoned agricultural land and approximately 2.0 acres of forest land with an ephemeral stream running through it. This land is owned by a commercial real estate developer. One of the houses is temporarily rented until this land can be developed for commercial ventures. Several other residences are located more than 200 ft further north, but one or more of these may have been purchased as part of a project to build a pharmaceutical distribution center.

The site of the pond is within the wooded area, on the eastern side of the five acre parcel. The wooded area contains mature trees, in a variety of species, with a few of the trees having diameters greater than 20 inches. The stream valley itself is steep-sided and narrow.

The wooded area is surrounded to the south and east by NETL parking lots and lawns. To the north is a strip of wooded land adjacent to the stream. West of the stream and north of the five acre parcel is abandoned agricultural land, owned by Mylan Pharmaceuticals and flagged for construction. West of the wooded area is a narrow (100 ft wide) strip of abandoned agricultural land, then two houses and a garage.

- 2. Attach a site plan or topographic map of the area that would be affected by the project and highlight (or otherwise identify) the specific location where the project would be performed.

See file Attachment1.jpg. Locations and sizes of proposed new facilities are approximate. Locations and sizes of off-site structures are approximate.

D. ENVIRONMENTAL IMPACTS

This section is designed to obtain information for objectively assessing the environmental impacts of a proposed project. NEPA procedures require evaluations of all possible effects (including: land use, energy requirements, natural or depletable resource use, historic and cultural resources, and pollutants) from proposed projects on the environment. Answer the following questions as completely as possible. Also, for "yes" or "no" questions, answer "yes" if there would be any effect, or if there may be an effect. (Failure to answer the questions completely could produce delays in project awards.)

1. Land Use

- a. Identify the location of the proposed project (i.e., city, county, state).

Morgantown, Monongalia County, West Virginia

- b. Identify the total size of the facility and the portion would be used for the proposed project.

The Morgantown site of NETL contains approximately 132 acres of land. The proposed new facility would be located on an adjoining five acre parcel of land, that would be purchased. The area subject to alteration for construction of the pond is approximately one acre.

- c. Characterize present land use where the proposed project would be located.

<p><input type="checkbox"/> Urban</p> <p><input type="checkbox"/> Commercial</p> <p><input type="checkbox"/> Suburban</p> <p><input checked="" type="checkbox"/> Residential</p> <p><input checked="" type="checkbox"/> Forest</p> <p><input type="checkbox"/> Other:</p>	<p><input type="checkbox"/> Industrial</p> <p><input type="checkbox"/> Agricultural</p> <p><input type="checkbox"/> Rural</p> <p><input type="checkbox"/> Research Facility</p> <p><input type="checkbox"/> University Campus</p>
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- d. Describe how land use would be affected by planned construction activities.

Overall, land use along the Collins Ferry Road would not be affected by the construction of a small pond. There would be dust and noise associated with clearing the trees and earth moving work. The noise and dust would impact the nearest residences to the northwest. Other land uses should not be significantly affected by the construction activities.

- e. Describe how land use would be affected by operational activities associated with the proposed project.

Land at the pond site would be converted from forest land to a pond. There should be no other impacts.

- f. Describe any plans to reclaim and/or revegetate areas that would be affected by the proposed project.

Disturbed ground surrounding the new pond will be revegetated.

- g. Would changes resulting from the proposed project affect future uses of the site or surrounding areas?

The pond site would be semi-permanently converted from forest land. Future uses of the surrounding land would not be affected.

- h. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)?

No.

- i. Would the proposed project affect existing or future recreational opportunities in the area?

No.

- j. Would the proposed project be located in or near a national park or wilderness area?

No.

If the project would involve only laboratory or bench-scale research and be conducted within an existing building, proceed to Part D.8 (Atmospheric Conditions/Air Quality). If the project would be larger than bench-scale, continue with Part D.2.

2. Construction Activities and/or Operation

- a. Describe the topography at the project site, including any significant land forms, etc.

Topographically, the project sits within the Monongahela River Valley at an elevation of 920 ft. The site is in a small north-south trending valley of a first-order stream.

- b. Identify any transmission lines and/or pipelines that traverse the proposed site and clearly mark them on the site plan or topographic map.

A major electrical transmission line (138kV) crosses the northern border of the five acre parcel of land and project site. A smaller electrical transmission line (23kV) traverses near the south side and east side of the five acre parcel and project site.

- c. Would the proposed project require the construction of settling ponds?

No other settling ponds would be required to control siltation of wetlands, ponds or streams.

- d. Would the proposed project affect any existing body of water?

Runoff from the proposed facility site drains into an old entrenched meander that contains small wetlands. Sediment from construction activities enter the old meander downstream of the wetlands, thereby avoiding siltation of the wetlands. After draining through the meander, the runoff would enter West Run, a small stream that is substantially polluted with acid mine drainage and urban/suburban runoff.

- e. Would the proposed project be located in or impact a floodplain?

No. The project is at the head of a first order stream valley.

- f. Would the proposed project be located on (or near) or impact wetlands?

There are significant wetland areas in an old entrenched meander northeast of the proposed site. The runoff drains into the meander downstream of the wetland areas. It is unlikely that drainage into the old meander could cause siltation and in filling of these wetland areas.

A wetland in the stream bottom has developed where previous power line installation work dammed the stream and where the NETL fence catches litter and sediment. This wetland is on the proposed dam site.

- g. Would the proposed project be likely to cause erosion?

The proposed project would cause some erosion during the construction phase; however, standard sediment control techniques would be applied to abate erosion.

- h. Would any wetlands be impacted by the discharge of wastewater from project activities?

No.

- i. Would any construction activities planned under the proposed project result in stream diversion?

The stream would not be rerouted.

3. Geological/Soil Conditions

- a. Describe any instability (e.g., subsidence) in the topography near the proposed project.

Soils in the valley walls at the pond site are Pleistocene-aged Lake Monongahela sediments, which consist of interbedded clay, silt and sand layers. These sediments are significantly unconsolidated. Sand layers may outcrop at the proposed pond site, so the possibility of water seepage around the dam must be considered. A plastic liner may be required for the pond. There is no coal mining beneath this site.

- b. Is there faulting in the vicinity of the proposed project area?

There is no known active faulting in the immediate vicinity of the proposed building. Seismic risks maps show a very low risk of damage from earthquakes in this region.

- c. Describe the soil in the vicinity of the proposed project in terms of productivity, presence of unique species, and susceptibility to erosion.

Soils in the old Lake Monongahela terraces around Morgantown are generally of moderate productivity, tillable with few stones, and of relatively low susceptibility to erosion. It is not believed that unique species are found in this area.

- d. Would any construction activities planned under the proposed project result in subsidence or changes in soil permeability/filtration?

No.

4. Vegetation and Wildlife Resources

- a. Describe the indigenous flora and fauna in the vicinity of the proposed project.

The proposed pond site is within a forested area that contains various species of hardwood trees. A few of these trees located along the steep-sided valley of the stream, are more than 20 inches in diameter. Fauna within this area include rodents and birds, but no large mammals.

- b. Identify any state- or Federal-listed endangered or threatened species in the vicinity of the proposed project.

Previous EAs have not identified endangered or threatened species in the vicinity (within 1.5 miles) of the site.

- c. Would any threatened or endangered species or their habitat be affected by the proposed project?

No significant habitats have been identified in the vicinity of the site. The project would not affect any threatened or endangered species.

- d. Describe any impacts that construction would have on sensitive or unique habitats.

None. Construction activities would not occur in or near sensitive or unique habitats.

- e. Would any species or subspecies, not indigenous to the area, be introduced as a result of the project (e.g., introducing a new bacterial strain, as in microbial desulfurization projects)?

No.

- f. Would any migratory corridors be impacted or disrupted by the proposed project?

No.

- g. What regulatory authority maintains cognizance over indigenous wildlife species?

1. West Virginia Division of Natural Resources
2. U.S. Department of the Interior, Fish and Wildlife Service

5. Socioeconomic and Infrastructure Conditions

- a. What is the population in the vicinity of the proposed project and in communities near the project site?

The proposed building site is on the edge of Morgantown, which has a population of approximately 26,809 (census 2000). The host county, Monongalia, has a population of 81,866 (census 2000). West Virginia University, located in Morgantown, has a student population listed as 21,500.

- b. Describe employment and labor mix in the vicinity of the proposed project.

Employment in the vicinity of the proposed building is dominated by a university and two hospitals. There is also a variety of retail vendors and service providers. A large coal mine maintains barge loading facilities

across the river from the project site. NETL and Mylan Pharmaceuticals are the major employers in the immediate vicinity. The local labor mix serves these employers.

- c. Would changes (increases/decreases) in regional labor requirements be created by the proposed project?

No.

- d. Would the proposed project alter present traffic patterns?

No.

- e. Would the proposed project require new transportation access (roads, rail, etc.)?

No.

- f. Would the proposed project create an increase in local energy usage?

An insignificant increase fuel consumption would occur only during construction.

- g. Would the proposed project increase local energy efficiency?

One objective of this project is to provide for the possibility of a geothermal heat pump application, which is considered to be the most electricity efficient HVAC system. The idea is to improve NETL's energy efficiency and to showcase highly energy efficient technologies.

- h. Would the proposed project significantly impact local fuel or energy supply?

No.

- i. Would any new transmission lines be required?

No.

6. Historical/Cultural Resources

- a. Describe any historical or cultural places in the vicinity of the proposed project; note any sites included on the National Register of Historic Places.

There are no nearby (within 0.5 miles) places listed on the National Register. The nearest property listed on the National Register is the D.I.B. Anderson Farmhouse at 3333 Collins Ferry Road. There are no known historical or cultural places that might be disturbed by construction of the pond.

- b. Are there any known archeological sites in the vicinity of the proposed project?

Previous archaeological surveys on NETL property have revealed both historic and pre-historic artifacts. No surveys have been conducted in the area to be disturbed by the proposed pond.

- c. Would construction or operational activities planned under the proposed project disturb any historical or cultural sites?

No known cultural or historic sites exist within the project site.

- d. Has the State Historic Preservation Office been contacted with regard to this project?

No.

7. Visual Resources

- a. Describe any scenic vistas or aesthetic landscaping in the vicinity of the proposed project?

None.

- b. Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape?

No.

- c. Would any facilities constructed under the proposed project contrast with the present landscape?

No.

For all proposed projects involving laboratory, bench-scale, or larger research and development activities, respond to the following questions.

8. Atmospheric Conditions/Air Quality

- a. Describe the local climate.

The climate is continental with an average January temperature of 29.7 F and an average July temperature of 73.1 F. The average annual precipitation is 40.6 inches.

- b. Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards. (This information should be available from the county environmental agency.)

	<u>Attainment</u>	<u>Non-Attainment</u>
O ₃	☒	G
SO _x	☒	G
PM ₁₀	☒	G
CO	☒	G
NO ₂	☒	G
Lead	☒	G

- c. Would the proposed project be in compliance with the National Emissions Standards for Hazardous Air Pollutants?

N/A

- d. Would the proposed project be classified as either a New Source or a major modification to an existing source?

N/A

e. Would the proposed project be in compliance with the New Source Performance Standards?

N/A

f. Would the proposed project be subject to prevention of significant deterioration review?

N/A

g. What authority regulates air quality in the project area (identify Federal, state, and local authorities)?

1. West Virginia Department of Environmental Protection, Division of Air Quality

h. Identify the contact person, address, and telephone number for each authority.

i. When were these authorities contacted regarding the proposed project (if necessary)? Include results of discussions.

Not contacted.

j. How does each regulator (authority) define a major source (e.g., greater than 100 ton/year; thermal input of 250 MMBtu/hr)?

N/A

k. Would any types of emission control or particulate collection devices be used?

N/A

l. If no control devices are used, how would emissions be vented?

N/A

m. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the total quantity and maximum annual rate of emissions over the duration of the project?

G None	(Maximum per year)	(Total for project)
G SO _x	_____	_____
G NO _x	_____	_____
G PM ₁₀	_____	_____
G CO	_____	_____
G Lead	_____	_____
G H ₂ S	_____	_____
G organic solvent vapors or other volatile organic compounds -- list		
G hazardous air pollutants -- list		
G other -- list		
Fugitive dust from construction activities; engine emissions from construction machinery		

n. Would the proposed project reduce the amount of air emissions in the area?

No.

o. Identify Federal, state, and local air quality regulations that govern emissions in the project area.

None regarding pond construction. [check WV fugitive dust regulations]

9. 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? Indicate on the site plan, if provided.

The distance to the Monongahela River is 1400ft. The distance is approximately 600 ft to the small wetland areas in the old meander bend of West Run.

b. What sources would supply potable and process water for the proposed project? Identify quantities consumed and uses. Identify the names of municipal or other water systems that would be used.

N/A.

c. Quantify the total amount of wastewater that would be generated by the proposed project.

G	None (small amounts may be generated during construction; porta potties will accommodate sewage)		
G	non-contact cooling water	(gallons)
G	process water	(gallons)
G	sanitary and/or grey water	(gallons)
G	other -- describe	(gallons)

d. What would be the components of each type of wastewater (e.g., coal fines)?

N/A.

e. Identify the local treatment facility that would receive wastewater from the proposed project.

N/A.

f. Describe how wastewater would be collected and treated.

N/A.

g. What Federal, state, and local authorities regulate water quality in the proposed project area?

1. Morgantown Utility Board
2. West Virginia Department of Environmental Protection, Division of Water Resources.

- h. Identify the contact person, address, and telephone number for each authority.

- i. When were these authorities contacted regarding the proposed project (if necessary)? Include results of discussions.
Not contacted.

- j. Would any run-off or leachates be produced from storage piles or waste disposal sites?
No.

- k. Identify Federal, state, and local regulations that govern water effluents/water quality in the project area.
West Virginia NPDES Program regulations.

- l. Where would wastewater effluents from the proposed project be discharged?
N/A.

- m. Would the proposed project be permitted to discharge effluents into an existing body of water?
N/A.

- n. Would a new or modified National Pollutant Discharge Elimination System (NPDES) permit be required?
NETL's West Virginia Storm Water Permit may require modification. Thermal loading from a geothermal heat pump may require an NPDES permit modification or a special permit.

- o. Would the proposed project increase or decrease the surface area of an existing body of water?
The surface area of the stream will be increased to make the pond..

- p. Would the proposed project adversely affect the quality or movement of groundwater?
There would be negligible change in ground-water flow and no change in ground water quality.

10. Solid and Hazardous Wastes

- a. Describe in detail and provide the total quantity of all nonhazardous wastes that would be generated from the project. Solid wastes are defined in RCRA as any solid, liquid, semi-solid, or contained gaseous material that is discarded, has served its intended purpose, or is a manufacturing or mining by-product (40 CFR 260, Appendix I).

	<u>Quantity</u>
G None	
G municipal solid waste, i.e., paper, plastic, etc.	()
G coal or coal by-products	()
G other -- identify	()
_____	()
_____	()

b. Describe in detail and provide the total quantity of all hazardous wastes (40 CFR 261.3) that would be generated, used, or stored under this project.

None.

c. How and where would solid waste disposal be accomplished?

Construction/demolition wastes would be sent to the local municipal landfill or to the appropriate local construction waste landfill. Tree and brush debris may be burned on site.

d. How would wastes for disposal be transported?

Construction/demolition wastes would be hauled by dump trucks and by dumpster trucks.

e. How many trips would be required for landfill disposal?

1 truck load.

f. What volume of the landfill would the solid waste occupy?

5 cubic yards

g. What Federal, State, and local waste management authorities would have permit authority for the landfill?

1. Monongalia County Solid Waste Authority
2. West Virginia Department of Environmental Protection, Division of Waste Management

h. Identify the contact person, address, and telephone number for each authority.

i. When were these authorities contacted regarding the proposed project (if necessary)? Include results of discussions.

Not contacted.

j. How would hazardous or toxic products be collected and stored?

There should be no hazardous or toxic wastes.

- k. If hazardous/toxic solid wastes are subject to land disposal restrictions, how would collection, treatment, and disposal of the wastes be accomplished?

N/A.

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

N/A.

- m. How would hazardous waste(s) be transported?

N/A.

- n. What treatment/storage/disposal methods would be used for hazardous wastes?

N/A.

11. Health/Safety Factors

- a. Identify any hazardous or toxic substances that would be used in the proposed project.

None.

- b. What would be the likely impacts of these substances on human health and the environment?

N/A.

- c. Would there be any potential for workers to be exposed to toxic/hazardous chemicals or wastes?

N/A.

- d. Would there be any potential for exposure to extreme temperatures?

Construction workers will work outside where they are exposed to the full range of outdoor temperatures.

- e. Would there be any special physical hazards associated with the project?

Construction workers are at high risk for various accidents, including heavy equipment tipovers. The construction contractor(s) will be required to show DOE their safety plans.

- f. Would personal protective equipment or clothing be required?

Various specialized work by construction workers will require safety glasses, hardhats, hearing protection, gloves, dust masks or respirators, safety shoes, etc.

- g. Does a worker safety program exist at the location of the proposed project?

NETL maintains a worker safety program. The construction contractor will be required to have a worker safety program and to submit their plan to DOE. Construction workers are required to comply with OSHA safety requirements.

- h. Would safety training be necessary for any laboratory, equipment, or processes involved with the project?

N/A.

- i. Describe any increases in ambient noise levels from construction and operational activities.

Construction activities are expected to significantly increase noise levels, both on-site and in nearby areas off-site.

- j. Would project construction result in the removal of natural barriers that act as noise screens?

The project will remove some trees that may help attenuate noise from the developed portion of the NETL site.

- k. Identify the expected highest decibel level at the closest point of public access.

70 dBA

- l. Identify the highest expected decibel level in the work area.

95 dBA

- m. Would hearing protection be required for workers?

Hearing protection would be required for construction workers when performing certain tasks.

12. Environmental Restoration and/or Waste Management

- a. Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities, meeting CERCLA cost/time limits?

No.

- b. Would the proposed project include siting, construction, and operation of temporary pilot-scale waste collection and treatment facilities or pilot-scale waste stabilization and containment facilities?

No.

- c. Would the proposed project involve improvements to environmental monitoring and control systems of an existing structure or building?

No.

- d. Would the proposed project involve siting, construction, operation, and decommissioning of a facility for storing packaged hazardous waste for 90 days or less?

No.

E. REGULATORY COMPLIANCE

1. For the following laws, describe any new or modified permits, manifests, contacts, etc., that would be required for the proposed project:
 - a. Resource Conservation and Recovery Act (RCRA):
N/A
 - b. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):
N/A
 - c. Toxic Substance Control Act (TSCA):
N/A
 - d. Water Pollution Control Act (WPCA):
Modification of NPDES general permit may be required.
 - e. Clean Air Act (CAA):
N/A
 - f. Endangered Species Act (ESA):
N/A
 - g. Floodplains and Wetlands Regulations:
 - h. Fish and Wildlife Coordination Act (FWCA):
N/A
 - i. Farmland Protection Policy Act (FPPA):
N/A
 - j. National Historic Preservation Act (NHPA):
N/A
 - k. Coastal Zone Management Act (CZMA):
N/A
 - l. American Indian Religions Freedom Act (AIRFA):
N/A

m. Wild and Scenic Rivers Act (WSRA):

N/A

2. Identify any other environmental laws and regulations (Federal, state, and local) for which compliance would be necessary for this project, and describe the permits, manifests, and contacts that would be required.

1. Compliance with City of Morgantown Land Development Code is not required w/in a Federal site.

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

1. Noise and dust impacts in the nearest residences (3) to the northwest and north and in the nearby town house complex and nearby sections of the trailer court.

2. If a geothermal heat pump system transfers heat to and from the pond, then water discharged from the pond will be warmer than normal during the summer and cooler than normal during the winter. This thermal loading will affect the downstream waters leading to West Run.

G. WOULD THE PROPOSED PROJECT PRODUCE ADDITIONAL DEVELOPMENT, OR ARE OTHER MAJOR DEVELOPMENTS PLANNED OR UNDERWAY, IN THE PROJECT AREA?

No.

H. SUMMARIZE THE SIGNIFICANT IMPACTS THAT WOULD RESULT FROM THE PROPOSED PROJECT.

1. Construction activities would create significant noise impacts for nearby residents. Noise control regulations will be followed.

2. Construction activities would create some additional traffic on Collins Ferry Road and would create some dust for nearby residents.

3. A geothermal heat pump system using the pond as a heat source/sink would create thermal loading on downstream waters leading to West Run.

IV. CERTIFICATION BY PROPOSER

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

DATE: 5 / 1 / 2002
 month day year

SIGNATURE: _____

TYPED NAME: Mark L. McKoy

TITLE: NEPA Project Manager

ORGANIZATION: DOE/ES&H, NETL

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. Based on the information in the questionnaire, I conclude the following (check the appropriate box):

- G The proposed action falls under one or more of the categorical exclusions (CXs) listed in Appendix A or B of Subpart D of the DOE NEPA Implementing Procedures and would not (1) violate applicable ES&H requirements, (2) require siting of waste TSD or recovery facilities, (3) disturb hazardous substances (excluding naturally occurring petroleum and natural gas), thus producing uncontrolled or unpermitted releases, and (4) adversely affect environmentally sensitive resources.

Additionally, the proposed action (1) would not present any extraordinary circumstances such that the action might have a significant impact upon the human environment, (2) is not connected to other actions with potentially significant impacts, and (3) is not related to other actions with cumulatively significant impacts.

Based on the Environmental Questionnaire and these conclusions, Categorical Exclusion of the proposed action would be appropriate.

- G The proposed action does not qualify as a CX as identified in Subpart D of DOE's NEPA Implementing Procedures; therefore, the proposed action may require further documentation in the form of an Environmental Assessment or Environmental Impact Statement.

Project Manager: _____

Date: _____