

NETL F 451.1-1/3  
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(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 policy directs at the earliest possible stage in a project whether such actions will require preparation of an Environmental Assessment, an Environmental Impact Statement, or a Categorical Exclusion. To comply with these requirements, an Environmental Questionnaire (NETL Form F 451.1-1/3) must be completed for each proposed action to provide DOE with the information necessary to determine the appropriate level of NEPA review and documentation. If the proposed project qualifies for Categorical Exclusion designation, a Categorical Exclusion Designation Form ([NETL Form F451.1-1/1](#)) will also be completed in addition to the Environmental Questionnaire.

**II. INSTRUCTIONS**

Separate copies of the Environmental Questionnaire and Categorical Exclusion Designation Form (if required) should be completed by the principal proposer and principal subcontractor(s). 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: \_\_\_\_\_
2. Proposer and Subcontractors: \_\_\_\_\_
3. Principal Investigator: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_
4. Project Title: \_\_\_\_\_
5. Duration: \_\_\_\_\_
6. Location(s) of Performance (City/Township, County, State): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Identify and select checkbox with the predominant project work activities under Group A-7a, A-7b, or A-7c.

**Group A-7a**

- Categorical Exclusion CX-A: Routine administrative, procurement, training, and personnel actions. Contract activities/awards for management support, financial assistance, and technical services in support of agency business, programs, projects, and goals. Literature searches and information gathering, material inventories, property surveys; data analysis, computer modeling, analytical reviews, technical summary, conceptual design, feasibility studies, document preparation, data dissemination, and paper studies. Technical assistance including financial planning, assistance, classroom training, public meetings, management training, survey participation, academic contribution, technical consultation, stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

### Group A-7b

- Categorical Exclusion CX-B: Laboratory Scale Research, Bench Scale Research, Pilot Scale Research, Proof-of-Concept Scale Research, or Field Test Research. Work DOES NOT involve new building/facilities construction and site excavation/groundbreaking activities. This work typically involves routine operation of existing laboratories, commercial buildings/properties, offices and homes, project test facilities, factories/power plants, vehicles test stands and components, refueling facilities, utility systems, or other existing structures/facilities. Work will NOT involve major change in facilities missions and operations, land use planning, new/modified regulatory/operating permit requirements. Includes work specific to routine DOE Site operations and Lab research work activities, but NOT building construction and site preparation. DOE work typically involves laboratory facilities and lab equipment operations, buildings and grounds management activities; and buildings and facilities maintenance, repairs, reconfiguration, remodeling, equipment use and replacement.

### Group A-7c

- Categorical Exclusion CX-B, Environmental Assessment (EA), Environmental Impact Statement (EIS): Pilot Test Facilities Construction, Pilot Scale Research, Field Scale Demonstration, or Commercial Scale Application. Work typically involves facility construction, site preparation/excavation/groundbreaking, and/or demolition. This work would include construction, retrofit, replacement, and/or major modifications of laboratories, test facilities, energy system prototypes, and power generation infrastructure. Work may also involve construction and maintenance of utilities system right-of-ways, roads, vehicle test facilities, commercial buildings/properties, fuel refinery/mixing facilities, refueling facility, power plants, underground wells, and pipelines, and other types of energy research related facilities. This work may require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review. Includes work specific to DOE Site Operations and Lab operation activities involving building and facilities construction, replacement, decommissioning/demolition, site preparation, land use changes, or change in research facilities mission or operations.
- Other (please describe):

*If all work activities related to this project can be classified and described within categories under item A-7a, it is a categorically excluded action. Proceed directly to Section IV CERTIFICATION BY PROPOSER, completing information and signatures as requested. The questionnaire is now complete and no additional information is required.*

*If project work activities are described under either item(s) A-7b, or A-7c.; then continue filling out questionnaire starting below with Question.A.8.*

8. Summarize the objectives of the proposed work. List activities planned at the location as covered by this Environmental Questionnaire.
9. List all other locations where work would be performed by the primary contractor of the project and primary subcontractor(s). (Note: An environmental questionnaire may be required for each new location after reviewing the SOW/SOPO, project scope, tasks, and environmental affects).

10. Identify major materials that would be used and produced by the project when projects are larger than lab or bench scale.

Materials Used (input)	(Estimate Quantity)	Materials Produced (output)	(Estimate Quantity)
<input type="checkbox"/> Coal	(     )	<input type="checkbox"/> Wastewater	(     )
<input type="checkbox"/> Natural Gas	(     )	<input type="checkbox"/> Air Emissions	(     )
<input type="checkbox"/> Oil	(     )	<input type="checkbox"/> Solid Waste	(     )
<input type="checkbox"/> Electricity	(     )	<input type="checkbox"/> Hazardous Waste	(     )
<input type="checkbox"/> Water	(     )	<input type="checkbox"/> Others -- List	(     )
<input type="checkbox"/> Others – List	(     )		

#### B. PROPOSED PROJECT ALTERNATIVES

1. If applicable, list any project alternative considered to achieve the project objectives.

#### C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).
2. Attach a project site location map of the project work area. Project site photos and topographical maps may be requested for further review.

#### D. ENVIRONMENTAL IMPACTS

This section is designed to obtain information concerning environmental impacts and regulatory compliance 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. The [Environmental Virtual Campus](#) website has valuable information concerning environment impacts and regulatory compliance.

##### 1. Land Use

- a. Characterize present land use where the proposed project would be located.
- |                                   |  |                                      |  |
|-----------------------------------|--|--------------------------------------|--|
| <input type="checkbox"/> Urban    | <input 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. Identify the total size of the facility, structure, or system and what portion would be used for the proposed project.
- c. Describe planned construction, installation, and/or demolition activities, i.e., roads, utilities system right-of-ways, parking lots, buildings, laboratories, storage tanks, fueling facilities, underground wells, pipelines, or other structures.  
 No construction would be anticipated for this project.
- d. Describe how land use would be affected by operational activities associated with the proposed project.  
 No land areas would be affected.
- e. Describe any plans to reclaim areas that would be affected by the proposed project.  
 No land areas would be affected.
- f. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)?  
 No                       Yes (describe)

- g. Would the proposed project be located in or near local, state, or federal parks; forests; monuments; scenic waterways; wilderness; recreation facilities; or tribal lands?  
 No  Yes (describe)

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

## 2. Construction Activities and/or Operation

- a. Identify project structure(s), power line(s), pipeline(s), utilities systems(s), right-of-way(s) or road(s) that will be constructed and clearly mark them on a project site map or topographic map as appropriate.  
 None
- b. Would the proposed project require the construction of waste pits or 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 impact a floodplain or wetland?  
 No  Yes (describe)
- e. Would the proposed project cause runoff/sedimentation/erosion?  
 No  Yes (describe)
- f. Describe any instability (e.g., subsidence, perma-frost, erosion, faulting/fracturing) affecting building construction, site development, and/or project operation.

## 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 threatened or endangered species habitat be affected by the proposed project?  
 No  Yes (describe)
- c. Describe any impacts that construction would have on any other types of sensitive or unique habitats.  
 No planned construction  No habitats  None  Impact (describe)
- d. Would any unnatural substances/materials be introduced into ground or surface waters, soil, or other earth/geologic resource because of project activities? How would these foreign substances/materials affect the water, soil, and geologic resources.  
 No  Yes (describe)
- e. 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 the proposed project create a significant increase in local energy usage?  
 No             Yes (describe)

## 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)             No Impact (Discuss)
- c. Has the State Historic Preservation Office been contacted with regard to this project?  
 No             Yes (describe)
- d. 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 D6 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 [Green Book Nonattainment Areas for Criteria Pollutants](http://epa.gov/oar/oaqps/greenbk), located at <http://epa.gov/oar/oaqps/greenbk> or <http://www.epa.gov/air/oaqps/greenbk/astate.html>

	<u>Attainment</u>	<u>Non-Attainment</u>
O <sub>3</sub> - 1 Hour	<input type="checkbox"/>	<input type="checkbox"/>
O <sub>3</sub> - 8 Hour	<input type="checkbox"/>	<input type="checkbox"/>
SO <sub>x</sub>	<input type="checkbox"/>	<input type="checkbox"/>
PM-2.5	<input type="checkbox"/>	<input type="checkbox"/>
PM-10	<input type="checkbox"/>	<input type="checkbox"/>
CO	<input type="checkbox"/>	<input type="checkbox"/>
NO <sub>2</sub>	<input type="checkbox"/>	<input type="checkbox"/>
Lead	<input type="checkbox"/>	<input type="checkbox"/>

- b. Would proposed project require issuance of new or modified local, state, or federal air permits to perform project related work and activities?  
 No             Yes (describe)
- c. Would the proposed project be in compliance with local and state air quality requirements?



- i. Where would wastewater effluents from the proposed project be discharged?  
 No wastewater produced
- j. Would the proposed project be permitted to discharge effluents into an existing body of water?  
 No       Yes (describe water use and effluent impact)
- k. Would a new or modified National Pollutant Discharge Elimination System (NPDES) permit be required?  
 No       Yes (describe)
- l. Would the proposed project adversely affect the quality or movement of groundwater?  
 No       Yes (describe)
- m. Would the proposed project require issuance of an [Underground Injection Control \(UIC\)](#) permit?  
       Yes (describe)

## 8. Solid and Hazardous Wastes

- a. Identify 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 (See [EPA Municipal Solid Waste](#) at <http://www.epa.gov/msw/> and [Municipal Solid by State](#) at <http://www.epa.gov/msw/states.htm>).

	<u>Annual Quantity</u>
<input type="checkbox"/> None	
<input type="checkbox"/> Municipal solid waste, i.e., paper, plastic, etc.	(    ___  )
<input type="checkbox"/> Coal or coal by-products	(    ___  )
<input type="checkbox"/> Other -- identify	(    ___  )

- 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)
- d. How would wastes for disposal be transported?
- e. Identify hazardous wastes that would be generated, used, or stored under this project. Hazardous information can be found at [EPA Hazardous Waste](#) website at <http://www.epa.gov/epaoswer/osw/hazwaste.htm>.  
 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):

**9. Health/Safety Factors**

- a. Identify hazardous or toxic materials that would be used in the proposed project.  
 None       Hazardous or toxic substances that would be used (identify):
- b. What would be the likely impacts of these project related hazardous materials on human health and the environment?  
 None       Yes (explain)
- c. Would there be any special physical hazards or health risks associated with the project?  
 No       Yes (describe)
- d. Does a worker safety program exist at the location of the proposed project?  
 No       Yes (describe)
- e. Would safety training be necessary for any laboratory, equipment, or processes involved with the project?  
 No       Yes (describe)
- f. Describe any increases in ambient noise levels to the public from construction and operational activities.  
 None       Increase in ambient noise level (describe)
- g. Would project construction result in the removal of natural barriers that act as noise screens?  
 No construction planned       No       Yes (describe)
- h. Would hearing protection be required for workers?  
 No       Yes (describe)

**10. Environmental Restoration and/or Waste Management**

- a. Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?  
 No       Yes (describe)
- 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       Yes (describe)
- c. Would the proposed project involve operations of environmental monitoring and control systems?  
 No       Yes (describe)
- 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       Yes (describe)

**E. REGULATORY COMPLIANCE**

1. For the following laws, describe any existing permits, new or modified permits, manifests, responsible authorities or agencies, contacts, etc., that would be required for the proposed project (Information on the following environmental laws can be found at the Major Environmental Law website <http://www.epa.gov/epahome/laws.htm>):
- a. Resource Conservation and Recovery Act ([RCRA](#)):  
 None       Required (describe)
- b. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):  
 None       Required (describe)
- c. Toxic Substance Control Act (TSCA):  
 None       Required (describe)
- d. Clean Water Act (CWA):

None       Required (describe)

e. Underground Storage Tank Control Program ([UST](#)):

None       Required (describe)

f. Underground Injection Control Program ([UIC](#)):

None       Required (describe)

g. Clean Air Act (CAA):

None       Required (describe)

h. Endangered Species Act (ESA):

None       Required (describe)

i. [Floodplains and Wetlands Regulations](#):

None       Required (describe)

j. Fish and Wildlife Coordination Act (FWCA):

None       Required (describe)

k. National Historic Preservation Act (NHPA):

None       Required (describe)

l. Coastal Zone Management Act (CZMA):

None       Required (describe)

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.

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

None

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

No       Yes (describe)

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

None (provide supporting detail)       Significant impacts (describe)



**U.S. DEPARTMENT OF ENERGY**  
**CATEGORICAL EXCLUSION (CX) DESIGNATION FORM**

Action or Project No. \_\_\_\_\_  
Title \_\_\_\_\_  
: \_\_\_\_\_  
Performing Organization: \_\_\_\_\_

FY: \_\_\_\_\_  
Performance Period: \_\_\_\_\_  
Location: \_\_\_\_\_

**THE PROPOSED ACTION FALLS WITHIN THE FOLLOWING CX CLASS OF ACTIONS FOUND IN APPENDIX A and/or B OF THE DOE NEPA IMPLEMENTING PROCEDURES. (CHECK ONE OR MORE):**

General Administration/Management

- A1 - Routine business actions
- A2 - Administrative contract amendments
- A4 - Interpretations/rulings for existing regulations
- A5 - Regulatory interpretations without environmental effect
- A6 - Procedural rulemakings
- A7 - Transfer of property, use unchanged
- A8 - Award of technical support/M&O/personal service contracts
- A9 - Info gathering, analysis, documentation, dissemination, and training
- A10 - Reports on non-DOE legislation
- A11 - Technical advice and planning assistance
- A12 - Emergency Preparedness planning
- A13 - Procedural Orders, Notices, and Guidelines
- A14 - Approval of technical exchange arrangements
- A15 - International umbrella agreements for energy R&D

Facility Operations

- B1.2 - Training exercises and simulation
- B1.3 - Routine maintenance and custodial services
- B1.4 - Air conditioning installation for existing equipment
- B1.5 - Cooling water system improvements in existing structures
- B1.6 - Installation of runoff/spill control retention tanks and basins
- B1.7 - Communication system and data processing equipment acquisition, installation, operation, removal
- B1.8 - Screened water intake/outflow structure mods, within permits
- B1.11 - Fence installation, no adverse effect on wildlife or water flow
- B1.12 - Detonation/burning of failed/damaged high explosives or propellants in designated areas, within permits
- B1.13 - On-site pathway or short access road construction/acquisition
- B1.15 - Support building or structure, non-waste storage, const/oper
- B1.16 - Removal of asbestos in accordance with regulations
- B1.17 - Removal of PCB items from aboveground structures
- B1.18 - Water supply well const/oper, from existing field, no degradation
- B1.21 - Noise abatement
- B1.22 - Building relocation to developed area/demolition/disposal
- B1.23 - Demolition/disposal of buildings, equipment, and structures
- B1.24 - Transfer, disposition, or acquisition of uncontaminated structures or equipment, environmental quality maintained
- B1.25 - Transfer, disposition, or acquisition of uncontaminated land for habitat preservation/wildlife management
- B1.26 - Small (<250,000 GPD) WWT facility const/oper/decom
- B1.27 - Disconnection of utilities
- B1.28 - Placement of unused facilities in environmentally safe condition
- B1.29 - Small on-site const/demolition waste disposal facility const/oper/decom
- B1.30 - Transfer/transportation actions, quantities incidental to amounts at receiving site
- B1.31 - Relocation/operation of machinery or equipment, similar use
- B1.32 - Traffic flow adjustments, existing roads

Safety and Health

- B2.1 - Modifications to enhance workplace habitability
- B2.2 - Installation/improvement of building/equipment instrumentation
- B2.3 - Installation of equipment for personnel safety and health
- B2.5 - Facility safety and environmental improvements, replacement or upgrade of facility components, no change in useful life

General Research

- B3.1 - Site characterization/environmental monitoring
- B3.3 - Research related to conservation of fish and wildlife
- B3.4 - Transport packaging tests for radioactive/hazardous material
- B3.6 - R&D or pilot facility construction/operation/decommissioning
- B3.7 - New infill exploratory, experimental oil/gas/geothermal well construction/operation
- B3.8 - Outdoor ecological/environmental research in small area
- B3.9 - Certain CCT demonstration activities, emissions unchanged
- B3.11 - Outdoor tests, experiments on materials and equipment components, no source, special nuclear, or by-product materials

Conservation, Fossil, and Renewable Energy Activities

- B5.1 - Actions to conserve energy, no indoor air quality degradation
- B5.2 - Modification to oil/gas/geothermal pumps and piping, no flow changes, or air emission effects
- B5.3 - Modification (not expansion)/abandonment of oil storage access/brine injection/gas/geothermal wells; no site closure
- B5.4 - Repair/replacement of pipeline sections within maintenance provisions of a Section 404 permit
- B5.5 - Short crude oil/gas/steam/geothermal pipeline const/oper within a single industrial complex/existing right-of-way
- B5.6 - Oil spill cleanup operations
- B5.12 - Workover of existing oil, gas, geothermal wells to restore production

Environmental Restoration/Waste Minimization

- B6.1 - Cleanup actions: small-scale, short-term (< \$5MM and 5 years)
- B6.2 - Siting/construction/operation of temporary pilot-scale waste collection/treatment/stabilization/containment facilities
- B6.3 - Environmental control system improvements in existing structures, recycle/release/disposal within permitted facility
- B6.4 - Packaged hazardous waste storage facility const/oper/decom
- B6.5 - Const/oper/decom of on-site facility for characterizing/sorting or overpacking previously packaged waste (not high-level or spent nuclear fuel; no unpacking)
- B6.6 - Modification of facility for storing, packaging, or repacking waste (not high-level or spent nuclear fuel)
- B6.8 - Minor operational changes to minimize waste or reuse materials
- B6.9 - Small-scale, temporary measures to reduce contaminated GW migration
- B6.10 - Upgraded waste storage facility (<50,000 ft) for existing waste const/oper/decom

Other

- Specify category:

This action 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. Furthermore, this 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. Therefore, the proposed action may be categorically excluded from further review.

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

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

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

NEPA Compliance Officer: \_\_\_\_\_

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