

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 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 451.1-1/1) 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 Subcontractor(s): _____
3. Principal Investigator: _____
Telephone Number: _____
4. Project Title: _____
5. Duration: _____
6. Location(s) of Performance (City/Township, County, State): _____

7. Identify and select the 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, and stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

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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):
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).

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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.

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- 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 all work activities related to this project can be classified and described within categories under Group 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 Group(s) A-7b, or A-7c.; then continue filling out questionnaire.

2. Construction Activities and/or Operation

- a. Identify project structure(s), power line(s), pipeline(s), utilities system(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)

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- 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)

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5. Historical/Cultural Resources

- a. Describe any historical, archaeological, 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, archaeological, 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 Group 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 Non-Attainment Areas for Criteria Pollutants located at <http://epa.gov.oar/oaqps/greenbk> or <http://www.epa.gov/air/oaqps/greenbk/astate.html>

	Attainment	Non-Attainment
O ₃ - 1 Hour	<input type="checkbox"/>	<input type="checkbox"/>
O ₃ - 8 Hour	<input type="checkbox"/>	<input type="checkbox"/>
SO _x	<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 ₂	<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? ☐ No (explain) ☐ Yes

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- d. Would the proposed project be classified as either a New Source or a major modification to an existing source?
☐ No ☐ Yes (describe)
- e. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the maximum annual rate of emissions for the project?

	Maximum per Year	Total for Project
<input type="checkbox"/> SO _x		
<input type="checkbox"/> NO _x		
<input type="checkbox"/> PM - 2.5		
<input type="checkbox"/> PM - 10		
<input type="checkbox"/> CO		
<input type="checkbox"/> CO ₂		
<input type="checkbox"/> Lead		
<input type="checkbox"/> H ₂ S		
<input type="checkbox"/> Organic solvent vapors or other volatile organic compounds--List:		
<input type="checkbox"/> Hazardous air pollutants -- List:		
<input type="checkbox"/> Other -- List:		
<input type="checkbox"/> None		

- f. Would any types of emission control or particulate collection devices be used?
☐ No ☐ Yes (describe, including collection efficiencies)

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

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?
- b. What sources would supply potable and process water for the proposed project?

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- c. Quantify the daily or annual amount of wastewater that would be generated by the proposed project.

	Gallons
<input type="checkbox"/> Non-contact cooling water	
<input type="checkbox"/> Process water	
<input type="checkbox"/> Sanitary and/or grey water	
<input type="checkbox"/> Other -- describe:	
<input type="checkbox"/> None	

- d. What would be the major components of each type of wastewater (e.g., coal fines)? ☐ No wastewater produced
- e. Identify the local treatment facility that would receive wastewater from the proposed project.
☐ No discharges to local treatment facility
- f. Describe how wastewater would be collected and treated.
- g. Would any run-off or leachates be produced from storage piles or waste disposal sites? ☐ No ☐ Yes (describe source)
- h. Would project require issuance of new or modified water permits to perform project work or site development activities?
☐ No ☐ Yes (describe)
- 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?
☐ No ☐ Yes (describe)

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8. Solid and Hazardous Wastes

- a. Identify and estimate major non-hazardous 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](#) and [Municipal Solid by State](#)).

	Annual Quantity
<input type="checkbox"/> Municipal solid waste, i.e., paper, plastic, etc.	
<input type="checkbox"/> Coal or coal by-products	
<input type="checkbox"/> Other -- Identify:	
<input type="checkbox"/> 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)
- d. How would wastes for disposal be transported?
- e. Identify hazardous wastes that would be generated, used, or stored under this project. Hazardous waste information can be found at [EPA Hazardous Waste](#) website. ☐ 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 materials that would be used (identify):

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- 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 including 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)

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- 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 [Major Environmental Law](#) website):
- 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)

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- 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)

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 (mm/dd/yyyy): _____

Typed Name: _____

Title: _____

Organization: _____

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):

- ☐ The proposed action falls under one or more of the categorical exclusions (CXes) 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 transportation, storage and disposal or recovery facilities, (3) disturb hazardous materials (excluding naturally occurring petroleum and natural gas), thus producing uncontrolled or unpermitted releases, and (4) adversely affect environmentally sensitive resources.

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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.

- ☐ 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 of Environmental Impact Statement.

Project Manager

Signature: _____

Date (mm/dd/yyyy): _____

Typed Name: _____