

This Environmental Questionnaire is subject to public disclosure and review upon request. Proprietary or business-sensitive information should NOT be included in any response within this Environmental Questionnaire. The disclosure of proprietary or business-sensitive information should be discussed with the DOE Project Manager and the NEPA Compliance Officer.

ENVIRONMENTAL QUESTIONNAIRE

A. PROJECT SUMMARY

1. Solicitation Number: _____ Prime Recipient: _____
2. This Environmental Questionnaire pertains to a : ☐ Prime Recipient ☐ Subrecipient or Subcontractor
Name of Prime or Subrecipient: _____
3. Project Title: _____
4. Principal Investigator: _____ Telephone Number: _____
5. Expected Project Duration: _____
6. Location of Activities covered by this Environmental Questionnaire: (City/Township, County, State):

7. Provide a summary and full scope of activities planned only for the location that is the subject of this Environmental Questionnaire. Describe physical activities, not overall goals and objectives.

8. List all other locations where work would be performed by the prime recipient of the project and/or subrecipient(s). All locations noted below must have an Environmental Questionnaire specific to each location. If more space is needed, please provide an attachment to this Environmental Questionnaire.

Additional Prime Recipient location(s), or subrecipient/ subcontractor location(s)	Location of activities

9. Identify and select the checkbox with the predominant project work activities under Group A, B, or C

Group 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.

STOP! If all work activities related to this project can be classified and described within categories under Group A, proceed directly to CERTIFICATION BY PROPOSER located on page 14. No additional information is required.

If project work activities are described in either Group(s) B or C; then continue filling out questionnaire.



Group 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 C

- ☐ 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.

B. PROPOSED PROJECT ALTERNATIVES

1. If applicable, list any project alternatives 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. Provide a project site location map of the project work area as an **attachment** to this Environmental Questionnaire. **This is required for all Group B and Group C projects. Lack of any site map will delay your NEPA review.** Maps can be attached to this Environmental Questionnaire or provided as a separate attachment when submitting this form for review.

Attached maps will appear in this space



D. ENVIRONMENTAL IMPACTS

NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment.

1. Land Use

- a. Characterize present land use (or zoning) where the proposed project would be located.

☐ Urban	☐ Industrial	☐ Commercial	☐ Agricultural
☐ Suburban	☐ Rural	☐ Residential	☐ Research Facilities
☐ Forest	☐ University Campus	☐ 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, federal or tribal lands, including parks; forests; monuments; scenic waterways; wilderness; recreation facilities?

☐ No ☐ Yes (describe)



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 be located in, or impact a floodplain or wetland?

☐ No

☐ Yes (describe)

- e. Would the proposed project potentially cause runoff/sedimentation/erosion?

☐ No

☐ Yes (describe)

- f. Would the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations?

☐ No

☐ Yes (describe)

- g. Would the proposed project involve any of the following: nanotechnology; recombinant DNA or genetic engineering; facility decommissioning or disposition of equipment/materials; or management of radioactive wastes/materials?

☐ No

☐ Yes (describe)



3. Biological Resources

- a. Identify any State or Federally listed endangered or threatened plant or animal species potentially affected by the proposed project.

☐ None

- b. Would any designated critical 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 foreign 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, biota, 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, 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 habitats ☐ None ☐ Impact (describe)

- 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)

- e. Would the proposed project be located on or adjacent to tribal lands, lands considered to be sacred, or lands used for traditional purposes? Describe any known tribal sensitivities for the proposed project area.



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 website](#).

	Attainment	Non Attainment
O ₃ - 1 Hour	☐	☐
O ₃ - 8 Hour	☐	☐
SO _x	☐	☐
PM - 2.5	☐	☐
PM - 10	☐	☐
CO	☐	☐
NO ₂	☐	☐
Lead	☐	☐

- 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?

☐ Yes ☐ No (please explain)

- 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
☐ SO _x		
☐ NO _x		
☐ PM - 2.5		
☐ PM - 10		
☐ CO		
☐ CO ₂		
☐ Lead		
☐ H ₂ S		

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☐	Organic solvent vapors or other volatile organic compounds List:
☐	Hazardous air pollutants List:
☐	Other List:
☐	None

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

- g. How would emissions be vented?

7. Hydrologic Conditions, Water Sources, and Wastewater Management

- a. What nearby water bodies may be affected by the proposed project?
- Provide distance(s) from the project site.

- b. Would the proposed project adversely affect the quality or movement of groundwater?
- ☐ No ☐ Yes (describe)

- c. What sources would supply potable and process water, and how much water would be required, for the proposed project?

- d. Quantify the wastewater that would be generated by the proposed project.

	Gallons/day	Gallons/year	Total for Project
☐ Non-contact cooling water			
☐ Process water			
☐ Sanitary			
☐ Other Describe			
☐ None			



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

☐ No wastewater produced

- f. Describe how wastewater and/or sewerage from the project location would be collected and treated, and point discharge where wastewater would be received by Waters of the United States.

☐ No wastewater produced

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

☐ No discharges to local treatment facility

- h. Would any run-off or leachates be produced from storage piles or waste disposal sites?

☐ No

☐ Yes (describe source)

- i. Would project require issuance of new or modified water permits to perform project work or site development activities?

☐ No

☐ Yes (describe)

- j. Would the proposed project be permitted to discharge effluents into an existing body of water?

☐ No

☐ Yes (describe discharge location)

- k. Would a new or modified National Pollutant Discharge Elimination System (NPDES) permit be required?

☐ No

☐ Yes (describe discharge)

- l. Would the proposed project require issuance of an Underground Injection Control permit? See EPA's [Underground Injection Control website](#) for more details.

☐ No

☐ Yes (describe discharge location)



- m. Would the proposed project be located in or near a wellhead protection area, drinking water protection area, or above a sole source aquifer or underground source of drinking water (USDW)?

☐ No ☐ Yes (describe discharge location)

8. Solid and Hazardous Wastes

- a. Identify and estimate all solid and hazardous 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, has served its intended purpose, or is a manufacturing or mining by-product. (See EPA's [Land, Waste, and Cleanup Topics website](#) for more details)

	Annual Quantity	Total for Project
☐ Municipal solid waste (e.g., paper, plastic, etc.)		
☐ Coal or coal by-products		
☐ Other Identify:		
☐ Hazardous waste Identify:		
☐ 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)

Solid Waste

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

- ☐ None generated
☐ On-site (identify and describe location)
☐ Off-site (identify location and describe facility and treatment)

- d. How would solid wastes for disposal be transported?

Hazardous Waste

- e. Describe hazardous wastes that would be generated, treated, handled, or stored under this project. Hazardous waste information can be found at EPA's [Land, Waste, and Cleanup Topics 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 utilized in the proposed project.

☐ No

☐ Hazardous or toxic materials that would be utilized (identify)

- b. Describe the potential impacts of this project's hazardous or toxic materials on human health and the environment.

☐ None

- 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 additional safety training be necessary for any new 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 level (describe)

- g. Would hearing protection be required for workers?

☐ No ☐ Yes (describe)

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

☐ No construction planned ☐ No ☐ Yes (describe)

10. Environmental Monitoring, Restoration and Waste Storage

- a. Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?

☐ No ☐ Yes (identify)

- 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 (identify)

- 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, or decommissioning of a facility for storing packaged hazardous waste for 90 days or less?

☐ No ☐ Yes (describe)



E. Environmental Monitoring, Restoration and Waste Storage

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

a. Resource Conservation and Recovery Act ([RCRA](#)):

☐ None

☐ New Required

☐ Modification Required

b. Comprehensive Environmental Response, Compensation, and Liability Act ([CERCLA](#)):

☐ None

☐ New Required

☐ Modification Required

c. Toxic Substance Control Act ([TSCA](#)):

☐ None

☐ New Required

☐ Modification Required

d. Clean Water Act ([CWA](#)):

☐ None

☐ New Required

☐ Modification Required

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

☐ None

☐ New Required

☐ Modification Required

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

☐ None

☐ New Required

☐ Modification Required

g. Clean Air Act ([CAA](#)):

☐ None

☐ New Required

☐ Modification Required



h. Endangered Species Act ([ESA](#)):

☐ None

☐ New Required

☐ Modification Required

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

☐ None

☐ New Required

☐ Modification Required

j. Fish and Wildlife Coordination Act ([FWCA](#)):

☐ None

☐ New Required

☐ Modification Required

k. National Historic Preservation Act ([NHPA](#)):

☐ None

☐ New Required

☐ Modification Required

l. Coastal Zone Management Act ([CZMA](#)):

☐ None

☐ New Required

☐ Modification Required

m. 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?

☐ None



H. SUMMARIZE THE SIGNIFICANT IMPACTS (ADVERSE AND BENEFICIAL) THAT WOULD RESULT FROM THE PROPOSED PROJECT.

☐ None (provide supporting detail)

☐ Significant impacts (provide supporting detail)

I. PROVIDE A DESCRIPTION OF HOW THE PROJECT WOULD BE DECOMMISSIONED, INCLUDING THE DISPOSITION OF EQUIPMENT AND MATERIALS.

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): _____

Printed Name: _____

Title: _____

Organization: _____

REVIEW AND APPROVAL BY DOE FEDERAL PROJECT MANAGER

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.

DOE Project Manager

Signature: _____ Date (mm/dd/yyyy): _____

Printed Name: _____



U.S. DEPARTMENT OF ENERGY – NATIONAL ENERGY TECHNOLOGY LABORATORY

ENVIRONMENTAL QUESTIONNAIRE

This form records the details of site conditions, environmental considerations, and potential significant environmental impacts for a project location to support a National Environmental Policy Act (NEPA) review determination.

Instructions

The proposer shall prepare this Environmental Questionnaire (EQ) as accurately and completely as possible. Supporting information can be provided as attachments. The proposer must identify the location of the project and specifically describe the activities that would occur at that location. The proposer must provide specific information and quantities, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer must submit with this EQ a FINAL 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 the U.S Department of Energy (DOE).

