U.S. DEPARTMENT OF ENERGY NATIONAL ENERGY TECHNOLOGY LABORATORY

ENVIRONMENTAL QUESTIONNAIRE

NETL F 451.1-1-3 P.1 Revised: 08.27.2024 Reviewed: 08.27.2024 (previous editions obsolete)

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

Prime Red	cipient:
	Subrecipient or Subcontractor
	e Number:
	//Township, County, State):
	Provide the state of the Following Laboratory
	tion that is the subject of this Environmental
al Questionnaire spec	cipient of the project and/or subrecipient(s). All ific to each location. If more space is needed,
ecipient/	Location of activities
r	Prime Recipient Telephon al Questionnaire: (City nned only for the local rerall goals and object read by the prime recal Questionnaire spectal Questionnaire.

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.





PROPOSED PROJECT ALTERNATIVES

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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.

1.	If applicable, list any project alternatives considered to achieve the project objectives.			
C.	PROJECT LOCATION			
1.	If applicable, list any project alternatives considered to achieve the project objectives.			
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			





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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.

١.	Land Use					
ı.	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:			
).	Identify the total size of th	ne facility, structure, or system and	what portion would be used fo	r the proposed project.		
Ξ.		uction, installation, and/or demolitions, storage tanks, fueling facilities, u				
	No construction	would be anticipated for this proje	ct.			
d.	Describe how land use w	ould be affected by operational a	ctivities associated with the pro	oposed project.		
	No land areas would be affected.					
€.	Describe any plans to reclaim areas that would be affected by the proposed project.					
	No land areas w	ould be affected.				
	Would the proposed proi	ect affect any unique or unusual lo	andforms (e.a., cliffs, waterfalls,	etc.)?		
	No	Yes (describe)		,		
		(
g .		ect be located in or near local, sta ness; recreation facilities?	te, federal or tribal lands, inclu	ding parks; forests; monuments		
	No	Yes (describe)				



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2. Construction Activities and/or Operation

None	
Would the proposed t	project require the construction of waste pits or settling ponds?
No	Yes (describe and identify location, and estimate surface area disturbed)
	103 (designate dria identity lecation, dria commune somete drea distribute)
Would the proposed p	project affect any existing body of water?
No	Yes (describe)
Would the proposed p	project be located in, or impact a floodplain or wetland?
No	Yes (describe)
Would the proposed p	oroject potentially cause runoff/sedimentation/erosion? Yes (describe)
	project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling sequestration, active seismic data collection, and/or deepwater operations?
No	Yes (describe)
	project involve any of the following: nanotechnology; recombinant DNA or genetic engineering ing or disposition of equipment/materials; or management of radioactive wastes/materials?
No No	Yes (describe)
	. 55 (4.555.1.55)





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I	Biological Resourc	ces			
	Identify any State or Federally listed endangered or threatened plant or animal species potentially affected by the proposed project.				
	None				
_	Would any designated	d critical habitat b	pe affected by the propos	ed project?	
	No	Yes (de	escribe)		
[would have on any other		
[Describe any impacts No planned c		would have on any other No habitats	types of sensitive or u	unique habitats. Impact (describe)
	No planned o	construction ostances/materials	No habitats s be introduced into grour	None d or surface waters, s	Impact (describe) soil, or other earth/geologic
\rangle r	No planned o	construction ostances/materials	No habitats s be introduced into grour	None d or surface waters, s	Impact (describe)
\rangle r	No planned of Would any foreign sub	eonstruction ostances/materials oroject activities?	No habitats s be introduced into grour	None d or surface waters, s	Impact (describe) soil, or other earth/geologic
\rangle r	No planned of Would any foreign subtresource because of pageologic resources?	eonstruction ostances/materials oroject activities?	No habitats s be introduced into groun How would these foreign	None d or surface waters, s	Impact (describe) soil, or other earth/geologic
\rangle r	No planned of Would any foreign subtresource because of pageologic resources?	eonstruction ostances/materials oroject activities?	No habitats s be introduced into groun How would these foreign	None d or surface waters, s	Impact (describe) soil, or other earth/geologic
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	No planned of Would any foreign subsequence because of pageologic resources?	eonstruction ostances/materials oroject activities? Yes (de	No habitats s be introduced into groun How would these foreign	None d or surface waters, substances/materials	Impact (describe) soil, or other earth/geologic s affect the water, soil, biota, and

4. Socioeconomic and Infrastructure Conditions

a.	Would local socio-economic changes result from the proposed project?			
	No	Yes (describe)		

Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas?
 No
 Yes (describe)





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Would the proposed pr		v transportation access (reescribe)	pads, rail, etc.)? Desc	cribe location, impacts, costs.
		gnificant increase in local	energy usage?	
No	Yes (de	escribe)		
Historical/Cultural	Resources			
Describe any historica the <u>National Register</u>	_	or cultural sites in the vicir	nity of the proposed p	oroject; note any sites included o
None				
Would construction or cultural sites?	operational activi	ities planned under the pr	oposed project distu	rb any historical, archaeological,
No planned o	construction	No habitats	None	Impact (describe)
Has the State Historic	Preservation Office	e been contacted with reg	gard to this project?	
No	Yes (de	escribe)		
Would the proposed p	oroject interfere wi	th visual resources (e.g., e	liminate scenic views	s) or alter the present landscape?
No	Yes (de	escribe)		
	=	I on or adjacent to tribal lown tribal sensitivities for the		ed to be sacred, or lands used for rea.
11	- /			





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6. Atmospheric Conditions/Air Quality

CO
 CO₂
 Lead
 H₂S

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 <u>Green Book Non-Attainment Areas for Criteria Pollutants website</u>.

	Attainment	Non Attainment
O ₃ - 1 Hour		
O ₃ - 8 Hour		
SOx		
PM - 2.5		
PM - 10		
СО		
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 pro	posed project be in compliance with local and state of	sir quality requirements?		
	Yes	No (please explain)			
d.	Would the pro	posed project be classified as either a New Source or	a major modification to an existing source?		
	No	Yes (describe)			
		,			
e.		air emissions, including fugitive emissions, would be an um annual rate of emissions for the project?	ticipated from the proposed project, and what would		
		Maximum per Year	Total for Project		
	□ SO _x				
	□ NO _x				
	□ PM - 2.5				
	□ PM - 10				



This table is continued on next page...

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ı	continued from previous pa	ge.			
ľ			nds		
	Organic solvent vapors or other volatile organic compoundsList:				
	☐ Hazardous air pollutants List:				
	Other List:				
ŀ	□ None				
L		ontrol or particulate collection	devices he used?		
	No	Yes (describe, including coll			
Г	INO	Tes (describe, including con	ection efficiencies)		_
L	How would emissions be vente				
Γ	11011 110010 011113310113 DO 1011110	741			
L					
,	Hydrologic Conditions, W	later Sources, and Waster	water Manaaem	ent	
		ay be affected by the proposed	•		
			a projecty		
Γ	Provide distance(s) from the p	rojeci siie.			
L					
		adversely affect the quality or m	novement of ground	iwater?	
Г	No	Yes (describe)			
L					
		otable and process water, and	how much water wo	ould be required, fo	or the proposed
Г	project?				
L	Quantify the westervator that	would be generated by the se	anasad prajact		
ı	Quality the wastewater that	would be generated by the pro			T 1 10 - D 1 - 1
ļ			Gallons/day	Gallons/year	Total for Project
ļ	□ Non-contact cooling w	rater			
ļ	Process water				
	■ Sanitary			1	



Other Describe

None



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	vater and/or sewerage from the project location would be collected and treated, and point tewater would be received by Waters of the United States.
No wastewat	er produced
Identify the local trea	tment facility that would receive wastewater from the proposed project.
	es to local treatment facility
•	leachates be produced from storage piles or waste disposal sites? Yes (describe source)
No	Tes (describe source)
Would project require	e issuance of new or modified water permits to perform project work or site development activitie
INO	Yes (describe)
Would the proposed i	project be permitted to discharge effluents into an existing body of water?
Would the proposed pr	project be permitted to discharge effluents into an existing body of water? Yes (describe discharge location)
No	
No	Yes (describe discharge location)
No Would a new or modi	Yes (describe discharge location) ified National Pollutant Discharge Elimination System (NPDES) permit be required?
No Would a new or modi	Yes (describe discharge location) ified National Pollutant Discharge Elimination System (NPDES) permit be required? Yes (describe discharge) project require issuance of an Underground Injection Control permit? See EPA's <u>Underground</u>





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No	Yes (describe discharge loc	cation)		
Solid and Hazardou	us Wastes			
as any solid, liquid, sem	ll solid and hazardous wastes that wo i-solid, or contained gaseous materia g by-product. (See EPA's <u>Land, Wast</u>	I that is discarded, has served	d its intended purpose, or is a	
		Annual C		
 Municipal solid was 	te (e.g., paper, plastic, etc.)			
□ Coal or coal by-pro	oducts			
Other Identify:				
Hazardous wasteIdentify:				
□ None				
Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform projec work activities?				
No	Yes (explain)			
Solid Waste				
How and where would	solid waste disposal be accomplished	d\$		
None generate	ed			
On-site (identif	y and describe location)			
Off-site (identif	y location and describe facility and tr	eatment)		
How would solid wastes	for disposal be transported?			
Hazardous Waste				
	istes that would be generated, treatended at EPA's Land, Waste, and Cleanu		his project. Hazardous waste	





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How would hazardous or toxic waste be collected and stored? None used or produced						
torage, and Disposal	vould require off-site disposal, have arrangements been made with a certified TSD (Treatment, I) facility?					
Not required Arrangements not yet made Arrangements made with a certified TSD facility (identify)						
					Health/Safety Fac	tors
Identify hazardous or toxic materials that would be utilized in the proposed project.						
No	Hazardous or toxic materials that would be utilized (identify)					
	al impacts of this project's hazardous or toxic materials on human health and the environment.					
None						
Vould there be any special physical hazards or health risks associated with the project?						
No	Yes (describe)					
Does a worker safety	program exist at the location of the proposed project?					
No	Yes (describe)					
Vould additional safe	ety training be necessary for any new laboratory, equipment, or processes involved with the project?					
Vould additional safe No	ety training be necessary for any new laboratory, equipment, or processes involved with the project? Yes (describe)					
	Not required Arrangement Arrangement Arrangement Health/Safety Fact dentify hazardous or No Describe the potentic None					





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,	Describe any increases in ambient noise levels to the public from construction and operational activities. None Increase in ambient level (describe)					
	Would hearing protect	ion be required for workers?				
	No	Yes (describe)				
١.	Would project construc	Would project construction result in the removal of natural or other barriers that act as noise screens?				
	No constructio	n planned	No	Yes (describe)		
0.	Environmental Mor	nitoring, Restoration and	Waste Storage			
•	Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?					
	No	Yes (identify)				
) .	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)				
	Would the proposed project involve operations of environmental monitoring and control systems?					
	No	Yes (describe)				
•		Would the proposed project involve siting, construction, operation, or decommissioning of a facility for storing packaged nazardous waste for 90 days or less?				
	No	Yes (describe)				



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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

comprehensive Environme	ntal Response, Compensation	, and Liability Act (<u>CERCLA</u>):	
None	New Required	Modification Required	
oxic Substance Control Act (<u>TSCA</u>):			
None	New Required	Modification Required	
lean Water Act (<u>CWA</u>):			
None	New Required	Modification Required	
nderground Storage Tank	Control Program (<u>UST</u>):		
None	New Required	Modification Required	
nderground Injection Con	atrol Program (LIIC):		
None	New Required	Modification Required	
nderground Injection Con	ntrol Program (<u>UIC</u>):		
None	New Required	Modification Required	





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h. Endangered Species Act (<u>ESA</u>):					
	None	New Required	Modification Required		
•	Floodplains and Wetlan	ds Regulations:			
	None	New Required	Modification Required		
	Fish and Wildlife Coordin	nation Act (<u>FWCA</u>):			
	None	New Required	Modification Required		
k.	National Historic Preserv	ration Act (<u>NHPA</u>):			
	None	New Required	Modification Required		
l .	Coastal Zone Managen	nent Act (<u>CZMA</u>):			
	None	New Required	Modification Required		
 m. Identify any other environmental laws and regulations (Federal, state, <u>and</u> 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 TH PROJECT.		UBLIC CONTROVERSY REGARDING THE PROPOSED			
	None				
G.	WOULD THE PROPOSED PROJECT PRODUCE ADDITIONAL DEVELOPMENT, OR ARE OTHER MAJOR DEVELOPMENTS PLANNED OR UNDERWAY, IN THE PROJECT AREA?				
	None				



Printed Name: __

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	SUMMARIZE THE SIGNIFICANT IMPACTS (ADVERSE AND BENEFICIAL) THAT WOULD RESULT FROM THE				
PR	OPOSED PROJECT. None (provide supporting detail)	Significant impacts (provide supporting detail)			
	OVIDE A DESCRIPTION OF HOW THE PROSPOSITION OF EQUIPMENT AND MATERI	OJECT WOULD BE DECOMMISSIONED, INCLUDING THE ALS.			
CERTI	FICATION BY PROPOSER				
		current, accurate, and complete as of the date shown immediately			
below.					
Signatur	e:	Date (mm/dd/yyyy):			
Printed 1	Name:				
Title:					
Organiz	ation:				
REVIE	W AND APPROVAL BY DOE FEDER	AL PROJECT MANAGER			
	certify that I have reviewed the information propriately answered, and judge the response	rovided in this questionnaire, have determined that all questions have es to be consistent with the efforts proposed.			
DOE Pro	ject Manager				
Signatur	e:	Date (mm/dd/yyyy):			





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

ENVIRONMENTAL QUESTIONNAIRE

The purpose of this form is to document 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).



