

DOE F 540 (04-2017) OMB Number 1910-5175 Exp. 11/30/2020

# OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

# ENVIRONMENTAL QUESTIONNAIRE

(To be completed <u>on-line only</u> at: <u>https://www.eere-pmc.energy.gov/NEPA.aspx</u> unless you are instructed otherwise by EERE.)

SECTION I. PROJECT SUMMARY			
NEPA Control Number:			
Project Title:			
Recipient:			
Other Participants (Subrecipients,			
Contractors, etc.):			
FOA Number:			
FOA Title:			
Award Number:			
DOE Technology Office Point of			
Contact:			
DOE Grants Management Specialist:			

## SECTION II. BACKGROUND AND INSTRUCTIONS

Pursuant to the U.S. Department of Energy's National Environmental Policy Act (NEPA) implementing regulations (10 C.F.R. Part 1021), the Office of Energy Efficiency and Renewable Energy (EERE) is required to evaluate the potential environmental impact of projects that it is considering for funding. EERE must determine at the earliest possible time whether any proposed project qualifies for a categorical exclusion under 10 C.F.R.§ 1021.410 or will require further environmental review within an environmental assessment or an environmental impact statement.

You are required to answer the questions below for the <u>project as a whole</u>, including all work to be performed by the Recipient, its subrecipients and contractors, including any work outside of the United States. You may <u>not</u> limit your responses to work performed by the Recipient only unless instructed to do so by EERE. In completing this questionnaire, you must provide specific information regarding the nature of your proposed project, including information on its size, operations, and the types and quantities of air emissions, wastewater discharges, solid wastes, land disturbances, etc. You should identify the location(s) of the proposed project and describe the activities that would occur at <u>each</u> location.

The form should be completed and signed by the Principal Investigator for the project or another member of your organization who has sufficient knowledge of the project to answer the questions truthfully and accurately.

Failure to fully and adequately complete this form will delay EERE's environmental review of your proposed project. Please note that false statements or misrepresentations may result in civil and/or criminal penalties under 18 U.S.C. § 1001.

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## BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2-GTN, Paperwork Reduction Project (1910-1800), U.S. Department of Energy, 1000 Independence Avenue S.W., Washington, D.C. 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-1800), Washington, D.C. 20503.

# SECTION III. PROJECT EVALUATION

1a. In the box below, please provide a brief summary of the proposed project activities. Describe physical activities, <u>not</u> goals and objectives. Specify if this project is part of a larger project or connected to another project.

Example: The proposed project activities include the design, development, fabrication, and field testing of advanced biomass harvesting equipment. Design, development, and fabrication activities would occur at our research and development facility adjacent to our manufacturing plant in Dearborn, Michigan. Equipment testing would occur in various agricultural fields in the surrounding area over a two-year period.

						g., fundiı
		Yes	□   No □			
		agency, descri	be the nature o	f its involvement	, and provide a poir	nt of conta
1	ing, technica	ing, technical assistance, pi	Yes the cked "Yes," please list the agency, descri	ting, technical assistance, project located on Federally a  Yes   No    the cked "Yes," please list the agency, describe the nature of	Yes   No   hecked "Yes," please list the agency, describe the nature of its involvement,	hecked "Yes," please list the agency, describe the nature of its involvement, and provide a poin

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Exp	lanation:
ls the	proposed project limited exclusively to intellectual, academic, or analytical activities?
ntelle	ectual, academic, and analytical activities include, but are not limited to:
L	iterature searches and information gathering
	ata analysis
	omputer modeling
	nalytical reviews
	onceptual design
	easibility studies
	ocument preparation
	ata dissemination
• Pa	aper studies
eveloj	ust answer "No" to this question if the proposed project involves any laboratory research and/or pment, physical experiments, pilot-scale projects, demonstration projects, field tests, land-disturbanc activities.
	Yes
Exp	lanation:

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Is the project fully defined at this point (i.e., all sites and activities are known)?		
	Yes	
	No," please describe those sites and/or activities/tasks that are yet to be defined and comple the questionnaire to the best of your knowledge.	
Explanation:		

2b. In the chart below, please describe the following four types of identifying information concerning project activities to be performed:

- (1) each location where work would be performed, including address or coordinates, names of facilities, and whether this is a Recipient, Subrecipient, or Contractor location;
- (2) the nature of the location (e.g., urban, industrial, suburban, agricultural, university campus, manufacturing facility) and the current condition and/or use of the site;
- (3) the types of activities to be conducted at that location;
- (4) land administration (e.g., BLM, USFWS, DOD, state, private).

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(1) List all Locations Where Project Activities Would	(2) Nature of Location and Current Condition/Use	(3) Activities to be Performed at Each Location	(4) Land Administration
Occur (Facility Name and Address or Coordinates) and Indicate Recipient, Subrecipient, or Contractor			
Example 1: Smith Laboratory (recipient) 1234 College Lane Baltimore, MD  XYZ Corporation (subrecipient) 1232 Industrial Drive Golden, CO	Smith Laboratory – Dedicated University Laboratory Facility  XYZ Corporation – Manufacturing Facility in Industrial Park	Activities would include design and fabrication of a gallium-nitrate battery at XYZ Corporation's battery manufacturing facility using existing equipment. The battery would then undergo testing including battery charge/discharge cycling at Smith Laboratory. Data analysis would also occur at Smith Laboratory.	Smith Laboratory – State property  XYZ Corporation – Private property
Example 2: Capital High School (recipient) 1234 Eagle Lane Golden, CO Lat. 39.7405, Long105.167	High school property in a suburban environment that has been previously disturbed and is owned by the City.	Activities would include the installation of a 50 kW wind turbine adjacent to the football stadium. The final height for the turbine would not exceed 140 feet (hub height) or 170.6 feet (maximum blade height) with a blade radius of 31.5 feet. There is an airport 15 miles away from project site location.	City
Example 3: Coastal University (recipient) 555 Study Drive Bay Harbor, SC  Bay Harbor Pier Bay Harbor, SC	Coastal University – Dedicated University Laboratory Facility  Bay Harbor Pier – Existing boat launch/dock area of pier—currently utilized by Coastal University for marine studies.	Bird and bat environmental monitoring and data analysis. A model XYZ anabat passive recording device would be installed at the Bay Harbor Pier on an existing platform. This would be used for 12 months and data would be remotely downloaded monthly. The University has a current access and use agreement from Bay Harbor City to conduct research at this location. Data would be analyzed at the Coastal University Laboratory Facility.	City owned and operated pier.
Example 4: Recipient's geothermal leases in Buffalo Valley, Pershing and Lander Counties Nevada NAD 83 Lat. 40.36 N Long117.38 W	Federal leases located on BLM-managed lands and private leases held by the recipient.	Magnetotelluric (MT) survey, 2 meter soil probe survey, seismic survey, temperature gradient (TG) well drilling program (~10 wells) followed by slim well confirmation drilling (~2 wells). Maps showing the locations of the MT, 2 meter soil probe, and seismic surveys have been uploaded into the Project Management Center. Locations of TG and slim wells will be provided once locations have been determined based on the results of the survey work.	BLM (Battle Mountain and Winnemucca District Offices) and private

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2c. In the box below, please identify and describe: (1) any known or potential health and safety hazards to the public or project workers that may result from or are associated with your proposed project; and (2) any efforts that would be taken to mitigate these hazards. <u>Describe individually for each site discussed in Question 2b.</u>

Example (Hazards): The project would involve the use and handling of various hazardous materials, including metals and industrial solvents. All such handling would occur in-lab, and our organization is dedicated to proper hazardous material handling and disposal practices, so the project activities that involve these materials would pose no risk to the public. All hazardous materials would be managed in accordance with Federal, state, and local environmental regulations.

Example (Mitigation): Existing corporate health and safety policies and procedures would be followed, including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. Additional policies and procedures would be implemented as necessary as new health and safety risks are identified. This would help ensure compliance with applicable health and safety regulations, and minimize health and safety risks to employees and the public.

Explanation:		

- 2d. In the box below, please identify and describe any of the following that would be associated with the proposed project. Describe individually for each site discussed in Question 2b.
  - (1) any physical modification of existing facilities or construction of new facilities (this does NOT include modification to equipment, only facilities);
  - (2) ground disturbing activities;
  - (3) any change in the use, mission, or operation of existing facilities;
  - (4) installation or deployment of equipment outdoors including the area of disturbance, what currently exists at the site, the dimensions of the installation, any associated infrastructure, etc.

Example 1: Physical modification of existing facilities and ground disturbing activities -To accommodate testing facilities necessary for the project, the current testing facility would have to be expanded by approximately 4,500 square feet.

Example 2: Change in use of existing facility - A room within our facility that has served as a dedicated wind tunnel would be modified to serve as an environmental test chamber. This would require the adaptation of the chamber's construction to partition off part of the room and seal it to allow generated environmental fluctuations within.

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Example 3: Installation of equipment outdoors and ground disturbing activities - The proposed turbine location is on school property located in a previously disturbed area south of the existing school building and near the high school athletic facilities and fields. East of the school are two golf courses; south and north are single family residential neighborhoods; and to the west are two public park properties. There are wooded areas located on the school property to the south and west. The foundation of the wind turbine would be approximately 25 square feet with an additional 5 square feet of disturbance during construction. The foundation would be approximately 10-15 feet in depth. There would be a minor, temporary land disturbance adjacent to the proposed site for crane work and the tower staging area. Existing roads would be used to access the project location.

Explanation:	
authorizations that would be required t	scribe any existing, modifications to, or new permits, licenses, or operform project activities (such as environmental permits, Describe individually for each site discussed in Question 2b.
1 1 0	mall amounts of effluent waste which will be discharged into the it to secure the requisite discharge permit pursuant to state and Federal
1 1 0	be conducted for the next three years. We would be required to replace than updated permit that may alter the nature of what and how we are

2e.

U.S. Coast Guard and the U.S. Army Corps of Engineers.

Example 3: The project activities would take place in marine navigable waters and would require permits from the

Explanation:	

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In the box below, please list the estimated quantities of materials to be used (e.g., feedstock, chemicals, water) and produced by the project (e.g., biofuel). <u>Describe individually for each site discussed in Question 2b.</u>
Explanation:
In the box below, please quantify, to the extent possible, all emissions into the ambient air resulting from project activities. Indicate if the project site is within an attainment or non-attainment area. Describe air emissions individually for each site discussed in Question 2b.  Note: Potential emissions include, but are not limited to, greenhouse gas emissions, particulate matter, and airborne pollutants. Sources of emissions can include stationary sources, such as boilers, process heaters, generators, and/or solvent usage, or mobile sources such as vehicles. It is presumed that every project would resin some emissions being released into the ambient air, so applicants answering "none" must explain why no emissions would be released. Non-attainment areas are designated parts of the country where air pollution level persistently exceed the national ambient air quality standards. See 42 U.S.C. 7501(2).
Explanation:

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	cled materials, and (2) the me	ous wastes that would be generated by the proposed thod of their disposal. <u>Describe individually for each site</u>				
why no waste would be treatment plant, water so including solid, liquid, s	generated. Non-hazardous was apply treatment plant, or air pol	solid wastes, so applicants answering "none" must explain te is any garbage, refuse or trash, sludge from a wastewater lution control facility and other discarded material, s material resulting from industrial, commercial, mining, ties. See 40 C.F.R. § 261.2.				
Explanation:						
3. Is the proposed projec	t near, or does it involve, any	of the following resources?				
	Yes	No				
	If yes, please indicate below any and all resources that could be affected by any project activities. (See Attachment 1 to the Environmental Questionnaire for resource definitions.)					
(includes listed ar	logical, or cultural resources and eligible resources over 50 ltural significance)	<ul><li>☐ g. Land resources (e.g., tundra, rainforests)</li><li>☐ h. Coastal zones</li></ul>				
proposed or listed	angered species (whether by state or Federal cluding their habitat	<ul><li>i. Migratory birds, or Golden or Bald Eagles</li><li>j. Areas having a special designation (e.g., Federal and state designated wilderness areas,</li></ul>				
☐ c. Marine mammals ☐ d. Floodplains or we	or essential fish habitat tlands	national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries)				

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k. Prime farmland, unique farmland, or other

farmland of statewide or local importance

1. Special sources of water (e.g., sole source aquifers)

e. Tribal lands or resources of Tribal

f. Ocean resources (e.g., coral reefs)

interest/sensitivity

Does the proposed project involve any of the following activities or areas  Yes  \[ \sum \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	of concern?
Yes □   No □ f yes, please indicate below any and all activities or areas of concern that	of concern?
Yes	of concern?
Yes   No     No	or concern.
f yes, please indicate below any and all activities or areas of concern that	
<b>project, are required for your project, or could affect your project.</b> (See A ctivity or area of concern.)	
a. Clearing or excavation	·
□ g. Navigable a □ b. Dredge and/or fill □ b. Undergroup	ar space
c. Pre-existing contamination	d extraction/injection
d. Pesticide use	•
☐ e. Asbestos or lead-based paint ☐ j. Use of a nor	renewable resource
f. Polychlorinated biphenyls (PCBs)	Aircraft Systems (e.g., drones)
f you checked any boxes above, provide a detailed description of: (1) each ac effects of each activity or area of concern on your project and/or the surround	

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5.	5. Would the proposed project have the potential to result in impacts to the surrounding community?				
	Yes				
	If yes, please indicate below all areas of concern that exist in the vicinity of your project, are required for your project, or could affect your project.				
	a. Visual impacts				
	☐ b. Populations of low income or minorities (Environmental Justice)				
	☐ c. Changes in local employment				
	☐ d. Changes in local traffic patterns or density				
	e. New transportation access				
	f. New utility lines or right-of-ways				
	g. Other impacts				
	If you checked any boxes above, please provide a detailed description of: (1) the communities affected, and (2) who effects the project would have.	at			
	Explanation:				

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	Vould the proposed project use, result in, or require the management, storage, transport, or disposal of adioactive, toxic, or hazardous chemicals, waste, or other materials that require special handling?
C	Note: Hazardous chemicals and materials include those which, because of their quantity, concentration, or physical hemical, or infectious characteristics, may increase the risk of mortality or pose a substantial threat to human ealth or the environment when improperly stored, transported, disposed of, or otherwise managed.
	Yes
	If you checked "Yes," please provide a detailed description of: (1) the materials; (2) approximate quantity of each; (3) their role in the project; and (4) storage, transport, and disposal procedures for each material.
	Explanation:
	Would the proposed project involve the use or development of recombinant DNA or genetically engineered microorganisms, plants, animals, or similar technologies?
	Yes
n p	ou checked "Yes," please provide a detailed description of: (1) the genetic modifications, (2) the safety procedure lace for their handling and use over the course of the project, and (3) how they would be disposed of at the ect's conclusion.
E.	xplanation:

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8.	Does the project involve the use or engineering of any nanoscale materials or nanotechnology? If yes, please identify and describe: (1) the nanoscale materials that would be used and the processes in which they would be used; (2) any known or potential exposure risks along with control measures that would be taken to mitigate these workplace hazards; and (3) applicable requirements (such as engineering, worker saftey, procedural, and administrative regulations) necessary to ensure the containment of any nanoscale materials.		
	Note: Nanotechnology is defined as research and technology development at the atomic, molecular, or macromolecular levels using a length scale of approximately one to one hundred nanometers in any dimension; the creation and use of structures, devices and systems that have novel properties and functions because of their small size; or the ability to control or manipulate matter on an atomic scale.		
	Yes		
	If you checked "Yes," please describe: (1) the nanoscale materials used, (2) potential risks those materials may pose, and (3) how they would be disposed of.		
9	Explanation:  Is there any public opposition concerning any of the project activities?		
9.	Yes     No		
	vou checked "Yes," please describe the nature of the opposition and any actions you may have taken or plan to take address it.		
	Explanation:		

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Yes				
If you checked "Yes," please provide a detailed description of: (1) the proposed activities or deployment, (2) where and when these activities would occur, and (3) what permit/authorizations have been or would be acquired for this activity.				
Explanation:				
1. Would the proposed project result in a discharge of any type of wastewater, pollutant, or contaminant, including thermal discharges, to a sewer system, stormwater system, soils, retention ponds, or any water resources (e.g., surface water, including lakes, rivers, creeks, and wetlands; and ground water)?  Note: Under Federal law, the term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into w				
See 33 U.S.C. § 1362(6). The term "contaminant" means any physical, chemical, biological, or radiological substance or matter in water. See 42 U.S.C. § 300f(6).				
Yes				
If you checked "Yes", please quantify and characterize the wastewater or pollutants and provide a detailed description of the: (1) wastewater, pollutants, or contaminants to be released; and (2) the water resources that be affected.				
Explanation:				

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	Yes 🗌   No 🔲			
If you checked "Yes", please provide a description of: (1) the receptors that may be impacted and their estimat distance from the project activities, (2) the level of noise generated (in A-weighted decibels (dbA)) to each receptor, and (3) anticipated duration.				
Explanation:				
Please provide a detailed descrof equipment and materials.	ription of how the project would be decommissioned, including	g the disposi		
Explanation:				

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# I hereby certify that I am authorized to submit, and I do so hereby submit, the information in this questionnaire on behalf of the Recipient named below. I certify that the information provided herein is accurate and complete as of the date shown below. I understand that false statements or misrepresentations may result in civil and/or criminal penalties under 18 U.S.C. § 1001. If I receive any information that would indicate that any of the above-referenced answers are no longer correct or complete, I agree to notify EERE immediately. If it is necessary for EERE to modify the information I provide, EERE will request that I recertify the revised form. Name Title Recipient

Date

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# EERE ENVIRONMENTAL QUESTIONNAIRE ATTACHMENT 1

# **Definitions for Question 3 – Resources\***

Historical, Archeological, or Cultural Resources. The National Historic Preservation Act; the Historic Sites, Buildings and Antiquities Act; the American Indian Religious Freedom Act; and the Archeological Recovery Act provide for the preservation of sites, buildings, structures, or objects of historic, archeological, or architectural significance designated by Indian, Federal, state, or local governments or listed or eligible for listing on the National Register of Historic Places. The Archeological Resources Protection Act, Antiquities Act, and Native American Graves Protection and Repatriation Act also apply if the proposed project is on Federal and tribal land. This item should be checked "yes" if a proposed project is in an area that meets any of the above, or if an archeological survey has not been performed. Provide documentation of any consultation or State Historic Preservation Officer determination letters if available. If this information is not available or a survey has not been conducted recently, DOE may require such a survey to be conducted prior to any proposed project implementation.

Threatened/Endangered (T/E) Species and/or Critical Habitat. The Endangered Species Act provides for protection of animals, birds, fish, plants, and other living organisms that are in danger of extinction. A list of T/E species is provided in 50 C.F.R. Part 17. Consultations with the U.S. Department of Interior Fish and Wildlife Service (FWS), National Marine Fisheries Services (NMFS), and the corresponding state agency should be documented. This item should be checked "yes" if any state- or Federally-listed or proposed threatened or endangered species or critical habitat is located in the proposed project area, or could be indirectly affected by the proposed project. If the status of T/E species at the proposed project location is unknown, please contact the local or state office of the FWS or NMFS to obtain a listing of potential species and habitats found in the area.

<u>Floodplains</u>. Floodplains are lowlands adjoining inland and coastal waters with a 1 percent or greater chance of inundation in any given year. Indicate "yes" if the proposed project location is in or adjacent to a floodplain area. If documentation is available noting the floodplain boundaries, please provide a copy. Appropriate documentation of the 100 year floodplain [or 500 year floodplain for critical actions\*\*] boundaries include: Flood Insurance Rate Maps or Flood Hazard Boundary Maps prepared by the Federal Emergency Management Agency (FEMA) of the U.S. Department of Homeland Security. <u>Executive Order 11988 Floodplain Management</u> requires Federal agencies to avoid incompatible development in floodplains, and consider the conformance of the proposed project to floodplain standards, potential effects of the proposed projects on floodplains, and potential effects of floodplain modifications on other local properties and improvements.

\*\* Critical actions as defined in the Implementing Guidelines to <u>Executive Order 11988</u> are activities for which chance of flooding is too great.

Wetlands. Wetlands are areas inundated by surface or groundwater with a frequency sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction, [10 C.F.R. 1022.4]. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflow, mudflats, and natural ponds. Man-made ponds can qualify as wetlands if invasion of appropriate flora or fauna has occurred. Appropriate documentation of presence or absence of wetlands within the area of project effect includes: FWS National Wetlands Inventory; U.S. Department of Agriculture Soil Conservation Service Local Identification Maps; U.S. Geological Service (USGS) Local Identification Maps; USGS Topographic Maps; state wetland inventories; and regional or local government sponsored wetland and land use inventories. Executive Order 11990 Protection of Wetlands requires Federal agencies to consider the effects of proposed projects on wetlands, and to avoid, to the extent possible, destruction and modification of wetlands. If the status of land in or around the proposed project location is unknown, please contact the state or local U.S. Army Corps of Engineer's office.

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Coastal Zones. Coastal zones are the coastal waters and adjacent shore lands of the Great Lakes, and the Atlantic, Pacific, and Arctic Oceans, Gulf of Mexico, and Long Island Sound. The term "coastal state" includes the states bordering on those bodies, plus Puerto Rico, the Virgin Islands, Guam, the Commonwealth of Northern Mariana Islands, and the Trust Territories of the Pacific Islands and American Samoa. Coastal states have authority regarding actions, which directly affect coastal zones, in accordance with the Department of Commerce regulations promulgated under the Coastal Zone Management Act. Federal activities and Federal development projects must be consistent with state coastal zone management (CZM) programs to the maximum extent possible. Federal activities are those performed by or on behalf of a Federal agency in the exercise of its statutory responsibilities. Indicate "yes" if the proposed project is located in a coastal zone State or is in the vicinity of a coastal zone State. If a consistency determination has been obtained, or a written "negative determination" (indicating that a consistency determination is not required) please provide a copy. See 15 C.F.R. 930.

Migratory Birds, Golden or Bald Eagles. Other Federal and state laws that protect wildlife species include the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Examples of protected migratory birds include Canadian geese and great blue herons. This item should be checked "yes" if the proposed project may directly or indirectly impact any of these species or their habitats. If the status of other protected species is unknown in the proposed project location, please contact the local or state office of the FWS to obtain a listing of potential species and habitats found in the area.

Areas Having a Special Designation. Various Federal laws restrict the ability of Federal agencies to aid developments affecting national wilderness areas, national memorial parks, national parks, national monuments, national primitive areas, national preserves, national recreational areas, national wild and scenic rivers, national grasslands, national wildlife refuges, national forests, national lakeshore or seashore, and national trails. Indicate "yes" if any of these areas of special environmental or natural significance is located in close proximity to the proposed project location and describe the specific special designation.

Prime Farmland, Unique Farmland, or Other Farmland of Statewide or Local Importance. The Farmland Protection Policy Act requires Federal agencies to consider ways to lessen the effects of proposed projects that convert or adversely affect prime farmland which is not currently classified or designated for future urban development or water storage. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime farmland also includes land that possesses the above characteristics, but is being used currently to produce livestock and timber. Prime farmland does not include lands designated for future urban development, such as land that has been identified for commercial, industrial, or residential development by zoning code, ordinance, or a comprehensive land use plan [7 U.S.C. 4201(c)(1)]. The U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) field office serving the area can provide assistance in determining whether a proposed location or site meets the definition of prime farmland. Form AD 1006, the Farmland Conversion Impact Rating Form, available at NRCS offices, should be used for this purpose.

Special Sources of Water. Through the Safe Drinking Water Act, EPA and states designate Critical Aquifer Protection Areas and Sole or Principal Source Aquifers, and State-Designated Wellhead Protection Areas in accordance with 42 U.S.C. 300h-6(b), 42 U.S.C. 300h-3(e), and 42 U.S.C. 300h-7(e), respectively. Such areas are accorded special protection to assure the quality and availability of public water supplies. Indicate "yes" if the proposed project is located in an area designated for protection (e.g., is included in an area wide groundwater quality protection plan), or would constitute a potential source of contamination within an existing or expected wellhead protection area serving a public water supply. If aquifer designations are not known for the proposed project area, contact the environmental protection office for the State.

\* Definitions and requirements are subject to regulatory changes.

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## Definitions for Question 4 - Activities or Areas of Concern\*

<u>Clearing or Excavation.</u> Clearing or excavation refers to the removal of vegetation, soil, sediments, or disturbance of land surfaces and subsurface including cutting, burning, digging, grading, filling, or blasting. Provide the estimated area to be affected, the quantity of material to be added or removed, and the planned disposition of spoils. Describe the potential for runoff or erosion, any control techniques to be employed, and the distance to nearby surface water bodies, including wetlands.

<u>Dredge and/or Fill.</u> Dredge and/or fill are the excavation of material from waters of the United States. Filling is the discharge of material into waters of the United States to change the bottom elevation. Waters of the United States are all interstate waters, and intrastate lakes, rivers, streams, mudflats, wetlands, sloughs, plays, or natural ponds. These activities include "ocean dumping" as regulated <u>under Sections 102 and 103 of the Clean Water Act</u>, construction of dams, dikes, piers, or others that could alter the course of waters of the United States. Also included is any shore activity with the potential for runoff to waters of the United States. If available, include documentation of appropriate consultation(s), e.g., with the U.S. Army Corps of Engineers under <u>Section 404 of the Clean Water Act</u> or <u>Sections 9 and 10 of the Rivers and Harbors Act</u>; and with EPA [40 C.F.R. Parts 220-233].

<u>Pre-Existing Contamination.</u> Indicate if the proposed project will disturb hazardous substances, pollutants, contaminants, or <u>Comprehensive Environmental Response and Liability Act (CERCLA</u>)-excluded petroleum and natural gas products that pre-exist in the environment. Quantify and characterize such pre-existing substances, including whether they are present above background or regulatory levels. Also quantify the volume of contaminated materials (e.g. soil, sediment, groundwater, debris, etc.) which would require transport to a properly permitted treatment, storage, or disposal facility as the result of the proposed project.

<u>Pesticide Use.</u> A pesticide is a substance intended for preventing, destroying, repelling, or mitigating any type of pest including insects, rodent, nematode, fungus, or weed, and any substance intended for use as a plant regulator, defoliant, or desiccant. While the <u>Federal Insecticide</u>, <u>Fungicide</u>, and <u>Rodenticide Act (FIFRA)</u> imposes no requirements on private applicators, commercial pesticide applicators must be certified by the state or U.S. EPA. Additionally, FIFRA requires that certain pesticides known as "restricted use pesticides" (listed in <u>40 C.F.R. 152.175</u>) to only be applied by certified applicators. If either commercial or private pesticide application or the utilization of restricted use pesticides is anticipated, indicate "yes". If a private application is anticipated, document measures to be undertaken to assure safe storage, use, and disposal.

Asbestos. If the proposed project includes demolition or renovation of an existing building, you must determine if asbestos is present. Common asbestos-containing building materials may include but are not limited to floor tile, mastics, wall board, joint compound, acoustic ceiling tiles, thermal insulation, spray-on fire proofing, glazing, caulking, roof flashing, and felts. Demolition and renovation activities that may impact asbestos containing building materials are regulated by the U.S. Occupational Health and Safety Administration (OSHA) through the Asbestos in Construction Standard and asbestos air emissions from asbestos abatements are regulated by the EPA as a hazardous air pollutant under the Clean Air Act (CAA). Include a description of measures to be undertaken to comply with asbestos removal requirements of 29 C.F.R. 1926.1100 and 40 C.F.R. 61 (Subpart M).

Polychlorinated Biphenyls (PCBs). PCBs are a family of man-made organic chemicals that were domestically manufactured from 1929 until banned in 1979 due to their toxicity and persistence in the environment. Given their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were largely used as dielectric and coolant fluids in transformers, capacitors, electric motors, etc. Manufacture, processing, transport, use, marking, storage, and disposal of PCBs are regulated by EPA [40 C.F.R. Part 761] in accordance with the Toxic Substances Control Act. Some states also regulate PCBs as hazardous waste. If the proposed project involves replacement or removal of capacitors, transformers, voltage regulators, circuit breakers, switches, cables, electromagnets, or other electrical equipment, presence or absence of PCBs should be ascertained. A "yes" indication should be supported with information on the anticipated concentration and quantity of PCB oil, and the intended method/location of disposal.

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Navigable Air Space. The U.S. Department of Transportation Federal Aviation Administration (FAA) regulates objects which invade navigable air space or otherwise constitute an obstruction to air navigation, and determines whether such activities constitute a navigation hazard. Indicate "yes" if the proposed project involves construction or alteration more than 200 feet above ground level, any construction or alteration in instrument approach areas, and other construction or alteration identified in 14 C.F.R. 77.13. Document notification of the appropriate Manager, Air Traffic Division, of the FAA Regional Office for the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 Notice of Proposed Construction or Alteration may be obtained from the regional FAA office or electronically through FAA's website.

<u>Underground Storage Tanks</u>. Indicate "yes" if 10 percent or more of tank volume (including the volume of underground pipes) will be beneath surface of the ground. Indicate if installation, use, or removal of underground storage tanks is anticipated, and whether tank use is/was for storage/collection of hazardous waste, heating oil, other petroleum or petroleum-based substances, stormwater, or wastewater. Describe any leak detection/monitoring methods to be used for storage of hazardous waste or regulated petroleum products like gasoline or diesel.

<u>Underground Extraction/Injection.</u> Underground extraction/injection is the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well where the depth of the well is greater than the largest surface dimension. If the proposed project involves construction or use of an injection well, indicate "yes," and describe the class of the well as defined in <u>40 C.F.R. 146.5</u>, the type and quantity of contaminants (e.g., waste disposal, hydrocarbon or mineral extraction) and whether the injection involves an exempt aquifer as defined in <u>40 C.F.R. 146.4</u>.

<u>Use of a Non-Renewable Resource.</u> Non-renewable resources are naturally occurring substances (e.g., metals, minerals, fossil fuels) that are in limited supply and cannot be replaced or regenerated. The exhaustion or threatened exhaustion of such resources could have significant ramifications. Indicate "yes" if the proposed project would involve a resource that is in limited supply.

<u>Unmanned Aircraft System (UAS).</u> An unmanned aircraft system is an unmanned aircraft and the equipment necessary for the safe and efficient operation of that aircraft. An unmanned aircraft is a component of a *UAS*. It is defined by statute as an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft (Public Law 112-95, Section 331(8)). *There are many terms for UAS technology such as Drone, Unmanned Aerial Vehicle (UAV), Unmanned Aircraft (UA), Unmanned Aircraft System (UAS) and small Unmanned Aircraft System (sUAS). These terms are often used interchangeably. Operation solely for recreation or hobby purposes is governed by 14 Code of Federal Regulation (CFR) part 101, subpart E, Special Rule for Model Aircraft. Operation of sUAS weighing less than 55 pounds, for other than recreation or hobby purposes, is governed by 14 CFR part 107. Operation of a UAS weighing 55 pounds or more requires an exemption under Section 333 of the <i>FAA Modernization and Reform act of 2012 or Section 2210 of the FAA Extension, Safety, and Security Act of 2016.* This item should be checked "yes" if project activities will include the use of any UAS.

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<sup>\*</sup> Definitions and requirements are subject to regulatory changes.