

Environmental Questionnaire

The purpose of the Environmental Questionnaire is to assist the National Institute of Standards and Technology (NIST) CHIPS Program Office (CPO) in determining the appropriate level of environmental review required under the National Environmental Policy Act (NEPA) and related laws, such as the Endangered Species Act and the National Historic Preservation Act (NHPA). The applicant should submit a single Environmental Questionnaire for its entire application, with responses to questions A through Z for each project included in its application.

Please provide CPO with a sufficient level of documentation and analysis to inform CPO's assessment of the appropriate level of NEPA review, which should include as much detail and information as is currently available, and may, in some cases, necessitate working with environmental experts or consultants to develop additional information. Documentation may include background research, results of record searches, field investigations, field surveys, and any past planning or studies.

The Applicant is responsible for providing all necessary analysis and documentation to enable NIST to comply with NEPA and its implementing regulations. Submission of this Questionnaire by itself does not satisfy NIST's NEPA obligations. The Questionnaire is not the Environmental Assessment or Environmental Impact Statement. CPO may request additional information or documentation from the applicant to assist CPO in its environmental review. For questions regarding CPO's NEPA requirements, please contact CPO at apply@chips.gov.

Applicants must provide information on the following items in the Environmental Questionnaire. For any question in which the Applicant asserts that an item is not applicable to a project, provide a brief supporting explanation.

A. Project Description

Please provide a brief summary of the proposed project(s) and each of the activities included in the proposed project(s), including the project schedule and a summary of any manufacturing process that will take place at the facility associated with the project. For each activity included in the project(s), describe both how that activity would benefit from the other project activities, and any value or utility that the activity will have independent of other activities. If the applicant anticipates that Federal funds will only be used for certain activities, identify specifically the activities the applicant plans to conduct using Federal funds.

If the proposed project(s) is part of a larger application or a project cluster, describe both how the project(s) would benefit from the other projects included in the application or project cluster, and any value or utility that the project will have independent of other projects.

B. Project Site/Affected Environment

Describe the location's address or coordinates, and the names of facilities. Provide a topographical map of the project area and a site map (with legend and north arrow) displaying the project location and boundaries, limits of disturbance, and existing and proposed project activities. *(A GIS shapefile is preferable, if available. If the specific locations of facilities and associated infrastructure are*

unknown, the applicant may provide a conceptual layout that describes the relative scale and proximity of project elements.)

Describe the following for the location where the project would take place:

1. The nature of the site (e.g., urban, industrial, suburban, agricultural, university campus, manufacturing facility) and the current condition and/or use of the site;
2. The ownership or administration of the site and the surrounding lands, including whether any of the lands within or adjacent to the site are owned by any entity other than the applicant; if any of the lands are owned by a governmental entity, describe the management status of the lands (e.g., conservation lands, multiple-use lands, industrial lands);
3. Any existing facilities or buildings on the site, and whether those buildings would be demolished, modified, or reused without substantial external modification;
4. Any new facilities or buildings proposed for the site, including utilities, roads, or other infrastructure or supporting facilities; and
5. Whether work on the activity has already begun, or will begin before a funding decision is made.

C. Resource Consumption Rates and Effluent Emissions Streams and Impacts

Describe all material inputs and outputs, including, for example, but not limited to, material resources, water consumption, electricity use.

D. Tribal, Historic, and Cultural Resources

Indicate whether the project site, or any adjoining lands, are owned by or held in trust for any federally recognized Indian Tribes, or are located within the exterior boundaries of a reservation. Describe any known resources of Tribal interest, or any known concerns raised by any federally recognized Indian Tribes related to the project.

Identify any known historic, archeological, or cultural resources within or adjacent to the project site, including historic properties that are listed on or eligible for listing on the National Register of Historic Places, or considered to be of local or state significance. (In many states, the State Historic Preservation Office (SHPO) maintains GIS databases of historic properties and cultural resources.) Discuss the potential impacts of the project on any such resources within or adjacent to the project site, and any measures that you have identified that might mitigate these impacts.

E. Project Setting

Describe the general proposed project area.

F. Vegetation and Wildlife Resources.

Identify native vegetation and wildlife found in the project area or its immediate vicinity.

G. Conservation Areas

Identify any designated or formally proposed conservation areas located near the project site, including federally designated areas such as national parks, national wildlife refuges, national conservation areas, national historic sites, or wilderness areas, or similar areas designated by state, Tribal, or local governments. Provide information about any impacts to these areas, and any measures that you have identified that might mitigate these impacts.

H. Coastal Zones and Navigable Waters

Indicate whether the project is located within a designated coastal zone subject to the Coastal Zone Management Act. (Information on coastal zone boundaries is available on the National Oceanic and Atmospheric Administration's (NOAA) website.) Identify any shorelines, beaches, dunes, or estuaries within or adjacent to the project site(s). Indicate if there are any proposed overwater structures that could impact navigable waters. Identify any measures that you have identified that might mitigate these impacts.

I. Wetlands

Identify any wetlands within or adjacent to the proposed project location. If available, provide an on-site wetland/waters delineation performed in accordance with the 1987 (or current version) U.S. Army Corps of Engineers Wetland Delineation Manual, as amended. Provide any correspondence from the U.S. Army Corps of Engineers (USACE), including any jurisdictional determination or permit documents. If the proposed project may impact wetlands, streams, or navigable waters, the applicant should contact USACE concerning any jurisdictional waters resources. Identify any measures that you have identified that might mitigate these impacts.

J. Floodplains

State whether the proposed project is located within a mapped 100- or 500-year floodplain. Provide a FEMA floodplain map (with the map number and effective date) displaying the project location and boundaries, and existing and proposed project activities. Floodplain maps can be viewed and printed from FEMA's website. If FEMA floodplain maps do not exist in the project area, provide a letter from a professional engineer regarding the presence or absence of a 100-year floodplain.

K. Endangered Species

Identify any threatened, endangered, and candidate species located in or near the proposed project location, and any potential or existing habitat, including critical habitat designations in the project area. Identify the potential for direct or indirect impacts on these species, and any measures that you have identified that might mitigate these impacts. If an Effect Determination or Biological Assessment has been completed for any of the species listed, or if you have had any correspondence with the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) related to the proposed project, please provide.

Critical habitat designations, lists of protected species by county, and information on effect determinations are available on the FWS website. The FWS's web-based Information, Planning, and Conservation System (IPaC) may also be useful for the early planning stage of a project. For

proposed projects with possible impacts to fisheries and marine/coastal species, NMFS provides relevant information.

L. Land Use and Zoning

Describe the present formal zoning designation and current land use of the proposed project site and adjacent land parcels. Identify any agricultural land parcels designated as “prime/unique agriculture lands” by the U.S. Department of Agriculture (USDA) under the Federal Farmlands Protection Act or a local equivalent. (Additional information may be found at the USDA’s Natural Resources Conservation Service website.)

M. Solid Waste Management

Indicate the types and quantities of solid wastes the project facilities would produce.

N. Hazardous or Toxic Substances

Describe any toxic, hazardous, or radioactive substances that will be used or produced by the proposed project facilities.

O. Impacts to Water Quality/Water Resources

Describe surface and underground water resources at or near the project site; any impacts of the proposed project to these resources; and any measures that you have identified that might mitigate these impacts.

P. Water Supply and Distribution System

Indicate the source, quality, and supply capacity of local domestic and industrial/commercial water resources, and the amount of water that project facilities are expected to utilize. Note whether the water that is being supplied is in compliance with the Safe Drinking Water Act, and if not, what steps are being taken to ensure compliance.

Q. Wastewater Collection and Treatment Facilities

Describe the wastewater treatment facilities available for processing the additional effluent from the project.

R. Environmental Justice & Socioeconomics

Identify whether the proposed project would be in or near disadvantaged communities that are overburdened or underserved.¹ Describe whether the proposed project may result in disproportionate and adverse human health or environmental impacts to overburdened and underserved communities, including minority, Tribal, or low-income populations. In describing potential impacts, consider whether the proposed project will result in any changes in local socioeconomic conditions, including

¹ Such communities can be identified using various tools for environmental justice analysis, including the Council on Environmental Quality’s Climate and Economic Justice Screening Tool, <https://screeningtool.geoplatform.gov/en/about#3/33.47/-97.5>, and the Environmental Protection Agency’s EJScreen, <https://www.epa.gov/ejscreen>.

population, employment rates, cost of housing, and other relevant conditions. Identify any measures that you have identified that might mitigate these impacts.

S. Transportation (Streets, Traffic and Parking)

Briefly describe the local street/road system serving the project site(s) and describe any new traffic patterns that may arise because of the project. Indicate if land use in the vicinity, such as residential, hospital, school, or recreational, will be affected by these new traffic patterns. Indicate if any existing capacities of these transportation facilities will be exceeded as a direct or indirect result of this project implementation, particularly in terms of car and truck traffic, and what the new Level of Service designation will be.

T. Air Quality

Indicate types and quantities of air emissions (including odors or nanoscale materials) that would be produced by the project facilities, and any measures you have identified that might mitigate these impacts. Is the proposed project site classified as a “non-attainment” area for any criteria pollutants? If so, for which pollutants? Indicate any local topographical or meteorological conditions that may hinder the dispersal of air emissions.

U. Greenhouse Gases and their Environmental Effects

Indicate the impact that the project would have on greenhouse gas emissions, and describe sustainability efforts to be incorporated into the project (i.e., renewable energy use) as well as any efforts to improve energy efficiency and to reduce emissions.

Also describe how climate resilience will be addressed; that is, how will the project adapt to impacts from climate change?

V. Noise

Will operation of project facilities increase local ambient noise levels? If yes, indicate the estimated levels of increase, and the areas impacted including any sensitive receptors (e.g., hospitals, schools, daycare facilities, housing for seniors, other residences) that may be affected. Indicate any measures that you have identified that might mitigate these impacts.

W. Health and Safety

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.

X. Permits and other Government Agency Involvement

Is any Federal agency other than NIST involved in any aspect of this project (e.g., funding, permitting, technical assistance, project located on federally administered land)? Identify any Federal, Tribal, State, or local environmental permits, plans or reviews needed for the project (e.g.,

Clean Water Act 404 permits, stormwater management plans, coastal zone management/shoreline management plan, Clean Air Act permits Clean Water Act National Pollutant Discharge Elimination System (NPDES), etc.) and the status of any such permits. Attach copies of any such permits or permit applications.

Y. Public Notification/Controversy

Provide evidence of the community's awareness of the project, such as newspaper articles or public notification and/or public meetings, as applicable. Identify State, Tribal, or local government agencies that will have oversight or interest in the project, as well as any nongovernmental organizations that have expressed opposition or support for the project. Attach any project related correspondence with these agencies, Tribes, and organizations. If a formal public hearing has been held by any government agency, attach any available minutes or notes from such hearings. Fully describe any public controversy or objections which have been made concerning this proposed project and discuss steps taken to resolve such objections.

Z. Environmental Experience and Approach

Describe any experience in addressing and resolving environmental concerns during the performance of past projects of similar size and complexity including the obtaining of necessary permits. Describe any existing written environmental policies, procedures, or plans currently in place and considered essential to the conduct of the applicant's commercial business operation. Discuss any directly related education/experience of key project members (e.g., air quality management; surface water and ground water management; solid waste management; ecological resources; cultural resources; environmental permit applications).