

U. S. DEPARTMENT OF ENERGY  
OFFICE OF SCIENCE -- CHICAGO OFFICE

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)  
ENVIRONMENTAL EVALUATION NOTIFICATION FORM

To be completed by "Applicant," i.e., organization receiving funds and/or implementing Federal Actions as defined by 40 CFR § 1508.18. For assistance, refer to "Instructions for Preparing SC-CH F-560, Environmental Evaluation Notification Form."

Solicitation/Award No. (if applicable): NA

Organization Name: Office of Science (SC)-Chicago Office, Office of Acquisition and Assistance

Title of Proposed Project/Research: Generic Categorical Exclusion (CX) Determination for Financial Assistance Awards

Total DOE Funding/Total Project Funding: NA

I. Project Description (use explanation page if additional space is required):

A. Proposed Project/Action (if applicable, delineate Federally funded/Non-Federally funded portions)

See Explanation Pages.

B. Would the project proceed without Federal funding?

Yes  No

If "yes," use explanation page.

II. Description of Affected Environment:

Actions are predominantly those that have been determined to take place in existing facilities, and therefore the affected environment is limited to the indoor laboratory/research area and potentially an already disturbed area immediately adjacent to the existing facility. Regulated environmental aspects (e.g., air emissions, discharges to surface water, waste generation, use of natural resources) exist, but are minimal and in all cases managed consistent with applicable laws, regulations, and other requirements. In rare cases the affected environment is a controlled outdoor test area not involving any excavation or construction.

III. Preliminary Questions:

- A.
- Is the DOE-funded work routinely administrative or *entirely* advisory or a "paper study?"

Yes  No ***If "Yes", ensure that the description in Section I reflects this and go directly to Section V.***

- B.
- Is there any potential whatsoever for:

***Provide an explanation for each "Yes" response.***

- |  | Yes                                 | No                                  |
|--|-------------------------------------|-------------------------------------|
| 1. Work to be performed outdoors?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Excavation in area not previously disturbed or major modification of a building interior or facade?                         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Threat of violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health?        | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Siting, construction or major expansion of waste treatment, storage, or disposal facilities?                                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Disturbance to hazardous substances, pollutants, or contaminants preexisting in the environment?                            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 6. The presence of any environmentally-sensitive resources?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 7. High consequence impacts to human health or the environment possible?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 8. The work being connected to another existing/proposed activity that could potentially create a significant impact?          | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 9. Nearby past, present, and/or reasonably foreseeable future actions such that collectively significant impacts could result? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10. Scientific or public controversy over whether impacts could be significant?  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

***If "No" to ALL Section III.B. questions, go directly to Section V.***IV. Potential Environmental Effects:***Provide an explanation for each "Yes" response.***

- A.
- Sensitive Resources: Could the proposed action potentially result in changes and/or disturbances to any of the following resources?

- |  | Yes                      | No                                  |
|--|--------------------------|-------------------------------------|
| 1. Threatened/Endangered Species and/or Critical Habitats                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Other Protected Species (e.g., Burros, Migratory Birds)                         | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Sensitive Environments (e.g., Tundra/Coral Reefs/Rain Forests)                  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Cultural or Historic Resources  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Important Farmland  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Non-Attainment Areas for Ambient Air Quality Standards                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Class I Air Quality Control Region  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Special Sources of Groundwater (e.g. Sole Source Aquifer)                       | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9. Navigable Air Space   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Coastal Zones  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. Areas with Special National Designation (e.g. National Forests, Parks, Trails) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Floodplains and/or Wetlands  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

B. Regulated Substances/Activities: Would the proposed action involve any of the following regulated Items or activities?

	Yes	No
13. Natural Resource Damage Assessments	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14. Invasive Species or Exotic Organisms	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Noxious Weeds	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Clearing or Excavation (indicate if greater than one acre)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17. Dredge or Fill (under Clean Water Act, Section 404, greater than one acre)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Noise (in excess of regulations)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19. Asbestos Removal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Polychlorinated biphenyls (PCBs)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21. Import, Manufacture, or Processing of Toxic Substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22. Chemical Storage/Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23. Pesticide Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24. Hazardous, Toxic, or Criteria Pollutant Air Emissions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25. Liquid Effluents	<input checked="" type="checkbox"/>	<input type="checkbox"/>
26. Spill Prevention/Surface Water Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27. Underground Injection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28. Hazardous Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>
29. Underground Storage Tanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30. Radioactive or Radioactive Mixed Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>
31. Radiation Exposure	<input checked="" type="checkbox"/>	<input type="checkbox"/>
32. Nanoscale Materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>
33. Genetically Engineered Microorganisms/Plants or Synthetic Biology?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
34. Ozone Depleting Substances	<input checked="" type="checkbox"/>	<input type="checkbox"/>
35. Greenhouse Gas Generation/Sustainability	<input checked="" type="checkbox"/>	<input type="checkbox"/>
36. Off-Road Vehicles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
37. Biosafety Level 3-4 Laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>

C. Other Relevant Information: Would the proposed action involve the following?

	Yes	No
38. Existing, Modified, or New Federal/State Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>
39. Disproportionate Nearby Presence of Minority and/or Low Income Populations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
40. Action/Involvement of Another Federal Agency (e.g. license/permit, funding, approval)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
41. Action of a State Agency in a State with NEPA-type law	<input type="checkbox"/>	<input checked="" type="checkbox"/>
42. Public Utilities/Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>
43. Depletion of a Non-Renewable Resource	<input type="checkbox"/>	<input checked="" type="checkbox"/>
44. Other Pertinent Information Which Could Impact Human Health or the Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. Applicant Certification that to the best of their knowledge all information provided on this form is accurate:

Does this disclosure contain classified, confidential, or other exempt information that DOE would not be obligated to disclose pursuant to the Freedom of Information Act? Yes  No

A. Organization Official (Name and Title): NA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

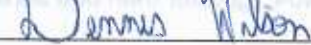
B. Optional Secondary Approval (Name and Title): NA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

**Remainder to be completed by DOE**VI. DOE Concurrence/Recommendation/Determination:

## A. DOE Project Director/Program Manager or Contract/Grant Specialist:

Name and Title: Dennis L. Wilson, Director, Support Division, Office of Acquisition and AssistanceSignature:  Date: 7/16/13B. DOE NEPA Team Review:Is the class of action identified in the DOE NEPA Regulations (Appendices A-D to Subpart D (10 CFR § 1021))? Yes  No If yes, identify specific class(es) of action: Various, see Section 1, Item A

Name and Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

C. DOE Counsel (if requested):Name and Title: Michelle R. McKownSignature:  Date: 7/16/13D. DOE NEPA Compliance Officer:

The preceding pages are a record of documentation required under DOE Final NEPA Regulation, 10 CFR § 1021.400.

- Action may be categorically excluded from further NEPA review. I have determined that the proposed action meets the requirements for Categorical Exclusion referenced above.
- Action requires approval by Head of the Field Organization. Recommend preparation of an Environmental Assessment.
- Action requires approval by Head of the Field Organization or a Secretarial Officer. Recommend preparation of an Environmental Impact Statement.

Comments/limitations if any: Application of this generic CX is based largely upon negative declarations by the applicant to Items 4.a. and 5 on the "RESEARCH & RELATED Other Project Information" attachment to the SF 424 (R&R), "Application for Federal Assistance." If, based on documentation provided by the financial assistance award recipient or other interactions with the applicant, the Contracting Officer or Specialist believes that significant impacts to human health or the environment may result, a request should be made for the applicant to fill out this form for the specific research program or project proposed.

NEPA Compliance Officer:Name: Peter R. SiebachSignature:  Date: 7/16/2013

Optional Additional Narrative: (add additional detail to description to Sections I and II or explanations to responses in Sections III and IV.

## Section I

### Item A. Proposed Project/Research:

Pursuant to the 10 CFR Parts 600 and 605 and the Small Business Research and Development Enhancement Act of 1992, the Department of Energy (DOE) Office of Science (SC) routinely funds financial assistance awards for theoretical and fundamental research as well as for non-research projects. Certain of these activities have been consistently determined to fall under one or more of the categories of actions that DOE has determined have no significant impact on the human environment, i.e., DOE's Categorical Exclusions (CXs) from NEPA (10 CFR 1021, Subpart D, Appendices A and B).

Awards are in the following program areas:

#### 1. Advanced Scientific Computing Research (ASCR)

- (a) Applied Mathematics
- (b) Computer Science
- (c) Computational Partnerships
- (d) Research and Evaluation Prototypes
- (e) Network Environment Research

#### 2. Basic Energy Sciences (BES)

- (a) Materials Chemistry
- (b) Biomolecular Materials
- (c) Synthesis and Processing Science
- (d) Experimental Condensed Matter Physics
- (e) Theoretical Condensed Matter Physics
- (f) Physical Behavior of Materials
- (g) Mechanical Behavior and Radiation Effects
- (h) X-ray Scattering
- (i) Neutron Scattering
- (j) Electron and Scanning Probe Microscopies
- (k) Atomic, Molecular, and Optical Sciences (AMOS)
- (l) Gas Phase Chemical Physics
- (m) Computation and Theoretical Chemistry
- (n) Condensed Phase and Interfacial Molecular Science (CPIMS)
- (o) Catalysis Science
- (p) Separations and Analysis
- (q) Heavy Element Chemistry
- (r) Geosciences Research
- (s) Solar Photochemistry
- (t) Photosynthetic Systems
- (u) Physical Biosciences
- (v) BES Accelerator and Detector Research

#### 3. Biological and Environmental Research (BER)

- (a) Biological Systems Science
- (b) Climate and Environmental Sciences

#### 4. Fusion Energy Sciences (FES)

- (a) Magnetic Fusion Energy Science: ITER & Advanced Tokamak Optimization
- (b) Magnetic Fusion Energy Science: Theory and Simulation
- (c) Magnetic Fusion Energy Science: Targeted Validation Platforms
- (d) High-Energy-Density Plasma Science
- (e) General Plasma Science: Experiment and Theory
- (f) Materials Science and Enabling Technologies for Fusion
- (g) Diagnostic Development for Fusion and Plasma Science

## 5. High Energy Physics (HEP)

- (a) High Energy Physics Experimental Research at the Energy Frontier
- (b) High Energy Physics Experimental Research at the Intensity Frontier
- (c) High Energy Physics Experimental Research at the Cosmic Frontier
- (d) Theoretical High Energy Physics Research
- (e) Accelerator Science and Technology Research and Development for High Energy Physics
- (f) High Energy Physics Particle Detector Research and Development

## 6. Nuclear Physics (NP)

- (a) Medium Energy Nuclear Physics
- (b) Heavy Ion Nuclear Physics
- (c) Low Energy Nuclear Physics
- (d) Nuclear Theory
- (e) Nuclear Data and Nuclear Theory Computing
- (f) Isotope Development and Production for Research and Applications
- (g) Accelerator Research and Development for Current and Future Nuclear Physics Facilities

## 7. Workforce Development for Teachers and Scientists (WDTs)

Based on Department of Energy Chicago Office historical experience, certain of the resulting financial assistance awards consistently fall under one or more of the DOE categories of actions from 10 CFR 1021, Subpart D, that have been determined to have no significant effect on the environment. These include:

### APPENDIX A TO SUBPART D OF PART 1021—CATEGORICAL EXCLUSIONS APPLICABLE TO GENERAL AGENCY ACTIONS

- A1 Routine DOE business actions
- A2 Clarifying or administrative contract actions
- A3 Certain actions by Office of Hearings and Appeals
- A4 Interpretations and rulings for existing regulations
- A5 Interpretive rulemakings with no change in environmental effect
- A6 Procedural rulemakings
- A8 Awards of certain contracts
- A9 Information gathering, analysis, and dissemination
- A10 Reports and recommendations on non-DOE legislation
- A11 Technical advice and assistance to organizations
- A12 Emergency preparedness planning
- A13 Procedural Documents
- A14 Approval of technical exchange arrangements
- A15 International agreements for energy research and development

### APPENDIX B TO SUBPART D OF PART 1021—CATEGORICAL EXCLUSIONS APPLICABLE TO SPECIFIC AGENCY ACTIONS

#### B1. Categorical Exclusions Applicable to Facility Operation

- B1.2 Training exercises and simulations
- B1.3 Routine maintenance
- B1.4 Air conditioning systems for existing equipment
- B1.5 Existing steam plants and cooling water systems
- B1.6 Tanks and equipment to control runoff and spills
- B1.7 Electronic equipment
- B1.8 Screened water intake and outflow structures
- B1.9 Airway safety markings and painting
- B1.11 Fencing
- B1.13 Pathways, short access roads, and rail lines
- B1.15 Support buildings
- B1.16 Asbestos removal
- B1.20 Protection of cultural resources, fish and wildlife habitat

- B1.21 Noise abatement
- B1.22 Relocation of buildings
- B1.25 Real property transfers for cultural resources protection, habitat preservation, and wildlife management
- B1.27 Disconnection of utilities
- B1.28 Placing a facility in an environmentally safe condition
- B1.31 Installation or relocation of machinery and equipment
- B1.33 Stormwater runoff control
- B1.34 Lead-based paint containment, removal, and disposal
- B1.35 Drop-off, collection, and transfer facilities for recyclable materials

B2. Categorical Exclusions Applicable to Safety and Health

- B2.1 Workplace enhancements
- B2.2 Building and equipment instrumentation
- B2.3 Personnel safety and health equipment
- B2.4 Equipment qualification

B3. Categorical Exclusions Applicable to Site Characterization, Monitoring, and General Research

- B3.1 Site characterization and environmental monitoring
- B3.3 Research related to conservation of fish, wildlife, and cultural resources
- B3.6 Small-scale research and development, laboratory operations, and pilot projects
- B3.8 Outdoor terrestrial ecological and environmental research
- B3.14 Small-scale educational facilities
- B3.15 Small-scale indoor research and development projects using nanoscale materials
- B3.16 Research activities in aquatic environments

B5. Categorical Exclusions Applicable to Conservation, Fossil, and Renewable Energy Activities

- B5.1 Actions to conserve energy or water
- B5.15 Small-scale renewable energy research and development and pilot projects

This generic CX covers those financial assistance awards identified above only if the following three conditions are met:

- The project was selected by an SC-Headquarters Program Office or the award was mandated by Congress;
- The financial assistance instrument is awarded and administered by SC-CH; and
- Item 4.a. of the "RESEARCH & RELATED Other Project Information" attachment to the SF 424 (R&R), "Application for Federal Assistance," for the project is checked "No." (The Chicago Office interprets "No" to refer to the absence of impacts as described below)

To be covered by this generic CX, these actions would largely occur indoors, and in no case involve the Conditions that are Integral Elements of the Classes of Action in APPENDIX B TO SUBPART D OF 10 CFR PART 1021:

- (1) Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health;
- (2) Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators);
- (3) Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment;
- (4) Have the potential to cause significant impacts on environmentally sensitive resources. Environmentally sensitive resources include, but are not limited to:
  - (i) Property (such as sites, buildings, structures, and objects) of historic, archeological, or architectural significance designated by a Federal, state, or local government, Federally recognized Indian tribe, or Native Hawaiian organization, or property determined to be eligible for listing on the National Register of Historic Places;
  - (ii) Federally-listed threatened or endangered species or their habitat (including critical habitat) or Federally-proposed or candidate species or their habitat (Endangered Species Act); state-listed or state-proposed endangered or threatened species or their habitat; Federally-protected marine mammals and Essential Fish Habitat (Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act); and otherwise Federally-protected species (such as the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act);
  - (iii) Floodplains and wetlands (as defined in 10 CFR 1022.4, "Compliance with Floodplain and Wetland Environmental Review Requirements: Definitions," or its successor);

- (iv) Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, scenic areas (such as National Scenic and Historic Trails or National Scenic Areas), and marine sanctuaries;
  - (v) Prime or unique farmland, or other farmland of statewide or local importance, as defined at 7 CFR 658.2(a), "Farmland Protection Policy Act: Definitions," or its successor;
  - (vi) Special sources of water (such as sole source aquifers, wellhead protection areas, and other water sources that are vital in a region); and
  - (vii) Tundra, coral reefs, or rain forests; or
- (5) Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species.

Additionally, any actions which could have any other high consequence impacts to the environment or have any possibility for high consequence impacts to human health (e.g., use of human subjects, Biosafety Level 3-4 laboratory construction/operation, and activities involving transuranic or high level radioactive or radioactive mixed waste or exposure to any radioactive materials beyond de minimis levels), are not covered by this generic CX.

Lastly, if there would be 1) extraordinary circumstances (i.e., scientific or public controversy) related to the significance of environmental effects, 2) if the work is connected to other actions with potentially significant impacts, or 3) if the work is related to other nearby actions with cumulatively significant impacts (10 CFR 1021.410 (b)(2) and (b)(3)), the action would not be covered by this CX.

### Section III

Item A, Actions include funding conference or workshop participation, but are not limited to them.

Item B.1, Work to be performed outdoors: See Section II, Affected Environment, for limitations.

### Section IV

Based on past DOE environmental evaluations of these types of projects, DOE has concluded that certain "Yes" responses do not necessarily individually or cumulatively create significant effects on the human environment.

Items B.19, Asbestos Removal, B.20, Polychlorinated biphenyls (PCBs), B.22, Chemical Storage/Use, B.24, Hazardous, Toxic, or Criteria Pollutant Air Emissions, B.25, Liquid Effluents, B.26, Spill Prevention/Surface Water Protection, B.28, Hazardous Waste, B30, Radioactive or Radioactive Mixed Waste: Actions would be covered by all necessary permits and/or approvals.

Item B30, Radioactive or Radioactive Mixed Waste: Limited to low-level or low-level mixed waste.

Item 31, Radiation Exposure: De minimis exposure only.

Item B.34, Ozone Depleting Substances: Ozone depleting substance use would be consistent with applicable requirements and guidelines.

Item B.35, Greenhouse Gas Generation/Sustainability: Actions would not make use of sulfur hexafluoride. Action would not adversely impact applicant's Environmental Management System or sustainability goals.

Item B.36, Off-Road Vehicles: Actions may make use of off-road vehicles to the extent that the sensitive resources identified in Section IV.A. are not impacted.

Item C.38, Existing, Modified, or New Federal/State Permits: Actions may require new or modified permits.

Item C.42, Public Utilities/Services: Actions would not lead to the need for additional capacity to be developed.