



National Nuclear Security Administration Categorical Exclusion Determination Form



NEPA ID#: NA-19-0002

Proposed Action Title: Financial Assistance for the Consortium for Monitoring, Technology, and Verification

Program or Field Office: NNSA/Office of Defense Nuclear Nonproliferation Research & Development (DNN R&D), NA-22

Location(s) (City/County/State): University of Michigan, Ann Arbor, MI

Proposed Action Description:

The U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA) Office of Defense Nuclear Nonproliferation Research & Development proposes to provide financial assistance, over a period of 5 years, to the University of Michigan to establish a consortium for Monitoring, Technology, and Verification (MTV). The consortium would consist of 14 leading universities from around the country. Research would focus on three technical thrust areas: (1) fundamentals of nuclear and particle physics, (2) signals and source terms for nuclear nonproliferation, and (3) nuclear explosion monitoring. Cross-cutting areas of MTV would include modeling and simulation, nuclear policy, and education and outreach.

The financial assistance would be used for travel, fringe and indirect costs, supplies and materials, equipment, user fees, publication costs, tuition, stipends and salaries to support staff, undergraduate, graduate, postdoctoral students, research professors, their principle investigator(s) and other universities' support (collaborators). Funded research would be conducted in existing research facilities using existing scientific equipment at the University of Michigan, at thirteen collaborating National Laboratories (and the Y-12 National Security Complex), and at the 13 collaborating U.S Universities. Awards may be used to cover costs associated with minor equipment modifications, upgrades, and/or purchases.

Outdoor work would include field deployment of sensor systems, environmental sampling, and environmental monitoring. Researchers in microbiology would generally be focused on microbial communities and using these communities as biosensors to detect the presence of nuclear fuel cycle activity.

Categorical Exclusion(s) Applied:

- B 3.1 Site characterization and environmental monitoring
 - B 3.6 Small-scale research and development, laboratory operations, and pilot projects
 - B3.11 Outdoor tests and experiments on materials and equipment components
 - B3.12 Microbiological and biomedical facilities
-

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions including the full text of each categorical exclusion, see Subpart D of 10 CFR 1021.

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species) unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as authorized under NNSA NAP 451.1 and DOE P 451.1), I have determined that the proposed action fits within the specified class(es) of action and that other-regulatory requirements set forth above are met. Therefore, the application of a categorical exclusion is appropriate.

NEPA Compliance Officer: Amy Miller

Date Determined: 2/14/2019