

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: **CyManII**

STATE: **TX**

PROJECT TITLE : **Cybersecurity Manufacturing Innovation Institute (CYMANII)**

Notice of Funding Opportunity Number
DE-FOA-0001960

Procurement Instrument Number
DE-EE0009046

NEPA Control Number
GFO-0009046-BP4

CID Number
GO9046

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A9 Information gathering, analysis, and dissemination

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

A11 Technical advice and assistance to organizations

Technical advice and planning assistance to international, national, state, and local organizations.

B3.6 Small-scale research and development, laboratory operations, and pilot projects

Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Cybersecurity Manufacturing Innovation Institute (CyManII) to be DOE's sixth Manufacturing Innovation Institute. CyManII's proposed activities would include developing innovative cybersecurity technologies and strategies to minimize risk and accelerate energy efficiency across manufacturing supply chains. CyManII is funded under a Cooperative Agreement with the DOE and, with participation from numerous sub-recipients on the award, would develop an enhanced understanding of evolving cybersecurity threats to manufacturing, develop new cybersecurity technologies and methods, and share information and knowledge with U.S. manufacturers. The Institute would also address the need for education, training, and workforce development in advanced manufacturing and cybersecurity. This project has five budget periods (BPs). BP1 through BP4 were previously reviewed (GFO-0009046-BP1, 11/2/2020, CXs A9, A11, B1.31; GFO-0009046-BP2, 2/14/2022, CXs A9, A11, B1.31, and B3.6; and GFO-0009046-BP3, 3/17/2023, CXs A9, A11, and B3.6). This NEPA Determination is specific to BP4 only. Further NEPA review would be required for BP5 once those activities have been defined and negotiated.

Some of the activities from BP3 would continue into BP4 which include design, development, and deployment of next-generation cyber defense architectures for U.S. manufacturers. The institute has added three additional tasks in BP4 organized around cybersecurity training and research to address common sources of hardware and software flaws. In BP4, CyManII would focus on continuing to expand CyManII's intellectual property base and demonstrate, evaluate, pilot, and experiment with all CyManII innovations in many industry-relevant contexts with direct industry involvement.

The locations of the facilities and descriptions of proposed activities for the prime recipient and each sub-recipient are detailed in the uploaded file "Updated NEPA Summary - Bp4 plus RFP IUC Projects started BP3 final." While much of the proposed activities are limited to computer work, there would be some physical activities taking place to evaluate developed innovations. Proof of concept and data collection would occur in existing laboratories or test bed operations to gather data and test the frameworks/approaches. All physical work is at the bench or laboratory scale which is indicative of the expected work going forward and would include demonstration of industrial controller operations, integration of heat sensors to the composite curing line, metal 3D printing, and installation of energy monitoring systems on industrial manufacturing equipment. Task 13 includes executing master sponsored research agreements

that would include awarding requests for proposals (RFPs) to conduct research in common hardware and software flaws. The current NEPA determination does not apply to Task 13 efforts, as the work locations under these two new RFPs have not been finalized and awarded.

Proposed activities do not involve field tests, land-disturbance, construction, or similar activities. None of the activities occurring at any of the facilities would require new permits, licenses, or authorizations for BP4 activities and all facilities would conduct activities consistent with current operations. All equipment installation would be completed without any building modifications or construction. No changes in the operation of existing facilities and no installation of equipment outdoors would occur for project activities. No new waste streams or effluents would be produced as a result of the proposed activities in BP4.

Additional entries in the EQ-1, question 2b may be incorporated as new partners are brought into the CyManII Institute and specific sites are identified as long as these additional entries conform to the rationale and CXs applied in this NEPA Determination. Any new partners that do not fit the above would be required to submit separate EQ1s for further review.

Manufacturing activities at some locations would require the use of machinery and various hazardous materials, including metals and industrial solvents. All handling of such materials would occur in a laboratory setting and all health and safety procedures would be followed at each facility. All hazardous materials would be disposed of in accordance with local, state, and federal regulations.

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

- Budget Period 4; Task 0 through Task 12

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

- Budget Period 4, Task 13
- Budget Period 5

Notes:

Advanced Materials and Manufacturing Technologies Office
NEPA review completed by Chris Akios, 12/6/2024

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) 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 listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

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

The proposed action 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.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Andrew Montano

NEPA Compliance Officer

Date: 12/6/2024

FIELD OFFICE MANAGER DETERMINATION

- ☒ Field Office Manager review not required
- ☐ Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____

Field Office Manager

Date: _____