

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



RECIPIENT: Coppin State University, Baltimore, MD

STATE: MD

PROJECT TITLE : The Center for Nanotechnology

Notice of Funding Opportunity Number	Procurement Instrument Number	NEPA Control Number	CID Number
N/A	DE-EE0011437	GFO-0011437-001	GO11437

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:

B1.31 Installation or relocation of machinery and equipment

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

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.

B3.15 Small-scale indoor research and development projects using nanoscale materials

Siting, construction, modification, operation, and decommissioning of facilities for indoor small-scale research and development projects and small-scale pilot projects using nanoscale materials in accordance with applicable requirements (such as engineering, worker safety, procedural, and administrative regulations) necessary to ensure the containment of any hazardous materials. Construction and modification activities would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible).

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Coppin State University (CSU) to advance renewable energy technologies through the development of scalable nanomaterials engineered to significantly improve the energy conversion efficiency of commercial solar cells and the storage capacity of next-generation batteries.

Project activities including design, synthesis, fabrication, material characterization, and solar cell performance testing and would occur at CSU's Center for Nanotechnology in Baltimore, MD. Specialized equipment would be designed, fabricated and installed to conduct solar cell research at the Universities at Shady Grove's Biomedical Science and Engineering Education Facility in Rockville, MD.

The project would involve the controlled use and handling of certain hazardous materials, including metals and organic solvents. All such activities would be conducted exclusively within laboratory environments designed for safe research operations. Existing institutional health and safety policies, including mandatory employee training, use of appropriate personal protective equipment, engineering controls and adherence to standard safety procedures would be followed. Compliance with federal, state, and local health and safety regulations would be maintained throughout the project to ensure the safety of all personnel. Additional policies and procedures would be implemented as new health and safety risks are identified.

To support the fabrication and testing activities required for the project, physical modifications to existing facilities would be necessary, including room expansion and the installation of high vacuum thermal evaporators and battery cycler/test systems. The expansion would occur entirely within the existing building footprint and would not involve any ground-disturbing activities. No environmental permits would be necessary as part of the project. Any and all

permits such as building permits, required for the execution of the project at the above-referenced locations would be the responsibility of the recipient.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

For Categorical Exclusion Determinations:

- The proposal fits within a class of actions that is listed in Appendix B to 10 CFR Part 1021 or Appendix B and C of DOE's NEPA Implementing Procedures (June 30, 2025). To fit within the classes of actions listed in Appendix B to 10 CFR Part 1021, or Appendix B of DOE's NEPA Implementing Procedures, a proposal must satisfy the conditions that are integral elements of the classes of actions in Appendix B of both 10 CFR Part 1021 and DOE's NEPA Implementing Procedures.
- 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.
- The proposed action is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Advanced Materials and Manufacturing Technologies
NEPA review completed by Chris Akios, 12/12/2025

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

 Electronically
Signed By: Nicole Serio

Date: 12/12/2025

NEPA Compliance Officer

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: