

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



RECIPIENT: RAPID Manufacturing Institute

STATE: NY

PROJECT TITLE : Rapid Advancement in Process Intensification Deployment (RAPID)

Notice of Funding Opportunity Number

Procurement Instrument Number

DE-EE0011122

NEPA Control Number

GFO-0011122-002

CID Number

NT11122

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:

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 funding to The Rapid Advancement in Process Intensification Deployment Manufacturing Institute (RAPID) to coordinate, organize, and support activities related to education and workforce development and future technological development projects; however, the current effort is limited to project and portfolio management for the technological development program.

A previous NEPA Determination (ND) was written for this award (GFO-0011122-001; 6/14/2024; CXs: A9, A11, B3.6) covering Tasks 1 through 5, including Subtask 5.1, and Subtasks 6.1 and 6.2. This ND would cover Subtasks 5.2.2.1 and 5.2.2.2.

Activities under the current review would be limited to institute management, project management, techno-economic analysis/life cycle assessment, and laboratory-scale activities. The American Institute of Chemical Engineers (New York, NY) would provide institute and project management, as well as other office-based work. Texas A&M University (College, TX) would develop processes, control strategies, AI-powered modeling and software prototypes, and would carry out experimental validation on a modular testbed including Proton Exchange Membrane water electrolysis. West Virginia University (WVU; Morgantown, WV) and the University of South Carolina (Columbia, SC) would synthesize and characterize catalysts, and would conduct microwave reactor test chemical conversions of natural gas to ethylene. WVU would also develop computational models.

Subtask 5.2.3 and Subtask 6.3 of this project are not yet fully defined. Subrecipients are expected as part of this award that would be added in subsequent budget periods, which may include laboratory and/or computational research. The individuals, organizations, and locations for these projects are not yet determined. Therefore, these tasks are not included in this NEPA Determination and would be subject to further NEPA review once sufficient details are known.

All project activities would be completed in existing, purpose-built facilities. These facilities already carry out similar development, testing, and prototyping activities. Minimal modifications would be carried out, including the installation of additional piping, safe storage space for gases, and additional exhaust ducts. All modifications would occur within the existing facility footprint.

As currently defined, the project would not include any release of emissions and would not pose any potential hazards to the public. Project workers may be exposed to hazardous materials such as metals, metal salts, and various solvents. All award activities would occur in existing, well-ventilated laboratory spaces. Existing corporate health and safety policies and procedures would be followed, including employee training, proper protective equipment, monitoring, and internal assessments. All hazards would be managed in accordance with federal, state, and local environmental regulations. All test systems would be reviewed for hazard analysis, job safety analysis, and appropriate standard operating procedures.

There would be no ground disturbing activities and no change in the use, mission, or operation of existing facilities.

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.

NEPA PROVISION

DOE has made a conditional NEPA determination.

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

[Subtasks 5.2.2.1 and 5.2.2.2](#)

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

[Subtask 5.2.3](#)

[Subtask 6.3](#)

Notes:

[Industrial Efficiency & Decarbonization Office](#)
[NEPA review completed by Alex Colling on 06/05/2026.](#)

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 10CFR 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.

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: _____

 Electronically Signed By: [Nicole Serio](#)

NEPA Compliance Officer

Date: [6/9/2026](#)

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: _____