PMC-ND

(1.08.09.13)

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



RECIPIENT: Arizona State University STATE: AZ

PROJECT TITLE: Development of Integrated Screening, Cultivar Optimization, and Verification Research (DISCOVR) -

Direct Funding ASU/AzCATI

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number

DE-EE0010411 GFO-0010411-001

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.)

B3.6 Smallscale 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 Arizona State University (ASU) to test algaculture strategies intended to improve cultivation efficiency and species productivity related to biofuel production. Activities would involve indoor and outdoor cultivation of algae and cyanobacteria.

Cultivation activities would occur at the Arizona Center for Algae Technology and Innovation (AzCATI) at ASU (Mesa, AZ). Algaculture strategies to be evaluated would involve monitoring and manipulating the growth conditions for indoor and outdoor cultivation trials. Outdoor trials would be conducted in outdoor raceway ponds which would be installed as part of this award. Installation would occur in a previously disturbed area on land that is actively used and managed by AzCATI.

Award activities would occur at existing purpose-built facilities. Ground disturbing activities would occur only where the new raceway ponds would be installed. No new permits would be needed.

Award activities would involve handling of hazardous materials, including chemicals, compressed gases, solvents, and fungicide. Fungicide would be handled, applied, and disposed of by licensed staff. All hazardous materials would be handled and disposed of in accordance with federal, state, and local environmental regulations, and would follow all existing institutional health and safety procedures.

The proposed activities would contribute to efforts of the Development of Integrated Screening, Cultivar Optimization, and Verification Research (DISCOVR) consortium of DOE National Laboratories. Other activities would be completed as part of the DISCOVR efforts, but they are not considered part of this proposed federal action. Such activities would be subject to additional NEPA review by the cognizant federal official.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Bioenergy Technologies Office (BETO) Review completed by Alex Colling on 12/07/2022.

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.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:	Electronically Signed By: Andrew Montano	Date:	12/19/2022
	NEPA Compliance Officer		
FIELD OFFICE MANAGER DETERMIN	IATION		
✓ Field Office Manager review not require☐ Field Office Manager review required	ed		
BASED ON MY REVIEW I CONCUR WI	ITH THE DETERMINATION OF THE NCO:		
Field Office Manager's Signature:		Date:	
	Field Office Manager		