

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



RECIPIENT: Corteva Agriscience

STATE: IA

PROJECT TITLE : Feedstocks for Advanced Biofuels from Perennial Ground Cover Systems: FAB-PGCs

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002910	DE-EE0011053	GFO-0011053-001	GO11053

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 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.

B5.15 Small-scale renewable energy research and development and pilot projects

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Corteva Agriscience to study feedstocks for advanced biofuels from perennial ground cover systems. These activities would include modeling, establishment and management of corn and soybean crops, fertilization, plant and soil sampling, greenhouse gas sampling, and harvesting of crops and corn stover.

Activities would take place at seven small plot research farms: Corteva Agriscience Dallas Center Research Farm in Dallas Center, Iowa; Iowa State University in Boon, Iowa; Nebraska University in Lincoln, Nebraska; The Land Institute Research Plots in Salina, Kansas; University of Wisconsin in Arlington Wisconsin; University of Missouri in Columbia, Missouri; and Marc Peter's Farm in Hampton, Nebraska.

Award activities would take place over five budget periods (BPs). BP1 would consist of planning and initial modeling. BP2 could consist of modeling refinement and first year of small plot experimentation. BP3 would consist of model validation, continued field experimentation, and preparation for validation at scale. BP4 would consist of validation at scale through on-farm trials at five test sites. BP5 would consist of final modeling, information synthesis, and outreach. At this time, the five on-farm test sites have not been identified and there is insufficient information to review tasks under BP4. As such, this NEPA determination applies only to BPs 1-3 (all tasks) and BP5 (all tasks). An additional NEPA review would be required for activities listed under BP4 (all tasks).

Project activities would involve the use and handling of hazardous materials such as pesticides. Handling, storage, application, and disposal of hazardous materials would occur within controlled settings and would follow existing policies and procedures, including employee training, proper protective equipment, signage, monitoring, and internal assessments. Additional policies and procedures would be implemented as necessary as new health and safety risks are identified. All hazardous materials would be managed in accordance with applicable federal, state, and local health, safety, and environmental regulations.

Pesticide application rates and frequencies would vary depending on site-specific conditions. To the extent possible, non-point source pollution resulting from pesticide use would be controlled by following established application guidelines and manufacturer recommendations.

Proposed activities would occur entirely within existing research development facilities and pre-established farm sites that are purpose-built for the type and scale of activities being proposed; therefore, no adverse impacts to sensitive resources are expected as a result of the proposed activities at any location. No change in the use, mission, or operation of existing facilities would arise out of this effort.

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:

[BPs 1-3 \(all tasks\) and BP5 \(all tasks\)](#)

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

[BP4 \(all tasks\)](#)

Notes:

[Bioenergy Technologies Office \(BETO\)](#)
[NEPA review completed by Jason Spencer, 06/17/2024.](#)

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: 6/18/2024

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: _____