

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



RECIPIENT: West Biofuels, LLC

STATE: CA

PROJECT TITLE : Agricultural and Woody Biomass to Diesel with FT Intermediate

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001926	DE-EE0008510	GFO-0008510-002	GO8510

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 West Biofuels, LLC (West) to demonstrate production of biofuel via Fischer-Tropsch (FT) synthesis. The resulting biofuel would be processed into diesel fuel.

DOE previously completed one (final) NEPA Determination (ND) for this award (GFO-0008510-001; CX: A9, B3.6, B5.15; 06/28/2019), however West has now proposal changes including the method of biofuel production, changes the type of biofuel produced, and an additional project site location. This ND will serve as a review of the proposed changes to the project scope and locations.

DOE previously proposed to provide funding to West to demonstrate the production of biofuel via catalytic fast pyrolysis (CFP) at the West Facility located in Woodland, CA. The resulting biofuel, a bio-oil, would then be transported to the National Renewable Energy Laboratory (NREL) in Golden, CO to be upgraded to diesel fuel. The revised proposal of project activities would still include the production of biofuel at the West facility to be transported to NREL, but the biofuel would be produced by a different method (i.e. FT synthesis) which would produce a different type of biofuel (i.e. FT liquids and FT waxes instead of a bio-oil). With the exception of changes related to the method of biofuel production, the project activities are fundamentally the same compared to previous proposal.

The revised proposal adds the Bioenergy and Sustainable Technologies (BEST), GmbH research facility in Vienna, Austria as an additional project location. Activities at the BEST site would include biofuel production similar to biofuel production that would be performed at the West facility, with the exception that BEST would use a slurry-bed reactor while West would use a fixed-bed reactor.

The West and BEST facilities would each use approximately 25 tons of dry biomass to produce approximately 50

gallons of biofuel (approximately 50% FT liquids and 50% FT waxes, i.e. 25 gallons of each). Biomass used by West would be obtained from stockpiles supplied by preexisting and independent forest thinning and almond production operations. Biomass used by BEST would be obtained from stockpiles supplied by preexisting forest operations in Austria managed by the Austrian National Forest Management Organization. The FT wax produced at both facilities would be transported to NREL to be processed into diesel fuel, with a goal of producing approximately 100 gallons of diesel fuel. After processing the biofuel produced at each facility into bio-diesel, NREL would analyze the bio-diesel to determine which type of reactor produced a more favorable biofuel product for diesel fuel production.

The West, BEST, and NREL research and development facilities are preexisting purpose-built facilities for the type of work to be conducted for this project. Modifications would not be required for any facility. All facilities operate under pre-existing permits and no new permits would be required. Project activities would involve the handling of hazardous materials, including hydrocarbon products and industrial solvents. All such handling would occur within the facilities and would follow existing policies and procedures for handling and disposal of these products. Handling of hazardous materials at the West and NREL facilities would be done in accordance with existing federal, state, and local laws and regulations. Existing government and corporate health, safety, and environmental policies and procedures consistent with industry-standard best practices would be followed at all facilities, including: employee training, proper personal protective equipment (PPE), engineering controls, monitoring, and internal assessments.

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 final NEPA determination.

Notes:

Bioenergy Technologies Office
This NEPA determination does not require a tailored NEPA Provision.
NEPA review completed by Dan Cahill, 10/25/2021.

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.

DOE has determined that work to be carried out outside of the United States, its territories and possessions is exempt from further review pursuant to Section 5.1.1 of the DOE Final Guidelines for Implementation of Executive Order 12114; "Environmental Effects Abroad of Major Federal Actions."

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: Roak Parker

Date: 10/25/2021

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: _____