U.S. Department of Energy

Categorical Exclusion Determination Form

Fropused Action Title: Offsite Lease Extension and Continued Operation of the Joint Bioenergy Institute and the Advanced Biofuels Process Development Unit LB-CX-15-05

Program or Field Office: Berkeley Site Office

Location(s) (City/County/State): Berkeley and Emeryville California

Proposed Action Description:

The Department of Energy (DOE) proposes to extend the existing lease of approximately 81,000 square feet of space located at 5885 Hollis St Emeryville, CA for the continued operation of the Advanced Biofuels Process Development Unit (ABPDU) and the Joint Bio Energy Institute (JBEI).

ABPDU is a user facility for scaling-up and demonstrating (at a small-scale) newly developed processes and technologies. The facility is made available to the three Bioenergy Research Centers - the BioEnergy Science Center, JBEI, and the Great Lakes Bioenergy Research Center; as well as, University researchers, non-profit research organizations, and to companies involved in biofuels production. The facility has capabilities for testing a range of biomass types (grasses, woody biomass), using current and newly emerging pretreatment methods. Facilities for production of lignocellulolytic enzymes enable deconstruction of biomass at a scale sufficient to obtain data for design of commercial plants. The fermentation capacity also permits simultaneous saccharification and fermentation and consolidated bioprocessing to be examined, using enzymes produced in the ABPDU facility. These enzymes can be produced from both pretreated biomass or from monosaccharide substrates. Biofuels generated at the ABPDU are transferred to the Combustion Research Facility at Sandia National Lab (SNL) in Livermore, CA. Engine testing will occur at the SNL site, which has all of the permits necessary for safe operation and testing of these fuels.

JBEI is a partnership between Lawrence Berkeley National Laboratory, Sandia, and Lawrence Livermore National Laboratories; UC Berkeley; UC Davis; and Stanford University. It promotes multidisciplinary research, involving genomics, various biological disciplines, engineering, and computational sciences. Its central purpose is to develop cost-effective, energy efficient, and carbonneutral processes to convert cellulose from plant biomass into liquid fuels. This work includes conventional wet and dry lab biological, genetic, and chemical research, as well as technology development and training programs.

Categorical Exclusion(s) Applied:

B1.24 - Property transfers

B3.6 - Small-scale research and development, laboratory operations, and pilot projects

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of 10 CFR Part 1021.

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal 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 proposal that may affect the significance of the environmental effects of the proposal.

The proposal 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.
I concur that the above description accurately describes the proposed action. BSO Project Manager: Rick Chapman Date Determined: 3/24/2015
The above description accurately describes the proposed action, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation. Berkeley Program of Contact: Kim Abbott Date Determined: Click here to enter a date.
Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review. NEPA Compliance Officer: James L. Elmore Date Determined: 3/24/2015