

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



RECIPIENT: Biological Innovations and Optimization Systems, LLC

STATE: CA

PROJECT TITLE: High-Efficacy Luminaire Platform Combining Visual and Wellness Application Efficiency

Notice of Funding Opportunity Number
DE-FOA-0003158

Procurement Instrument Number
DE-EE0011598

NEPA Control Number
GFO-0011598-001

CID Number
GO11598

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.)

A11 Technical advice and assistance to organizations

Technical advice and planning assistance to international, national, state, and local organizations.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Biological Innovation and Optimization Systems, LLC (BIOS) for design and development of a high-efficacy luminaire platform, combining visual and wellness application efficiency.

Award activities would occur over two budget periods (BP). BP1 would include spectral and optical analysis and optimization, and LED development. BP2 would include luminaire design, prototyping, fabrication, application efficiency validation, project management, and reporting.

Award activities would occur at BIOS Lighting in Carlsbad, CA; Lumileds, LLC in San Jose, CA and Germany.

Award activities would be intellectual, academic, or analytical in nature and would occur entirely within existing facilities that are purpose-built for the type and scale of activities being proposed. No change in the use, mission, or operation of existing facilities would arise out of this effort.

Award activities would involve handling and use of various hazardous materials including organic solvents. Project activities involving hazardous materials would pose no risk to the public. Hazardous materials would be utilized, managed, stored, and disposed of in accordance with applicable federal, state, and local environmental regulations. Existing laboratory and governmental health and safety policies and procedures would be followed, including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments.

DOE has considered the scale, duration, and nature of the proposed activities to determine potential impacts on sensitive resources, including those of an ecological, historical, cultural, and socioeconomic nature, and found no effects that would be expected to result from the proposed project activities.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Building Technologies Office (BTO)
NEPA review completed by Dustin Hill, 11/5/2024

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.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Matthew Blevins

NEPA Compliance Officer

Date: 11/6/2024

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: _____