

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



**RECIPIENT:** Global Algae Innovations

**STATE:** CA

**PROJECT TITLE :** Scale-up of Novel Algae Drying and Extraction Unit Operations

|  |  |   |                   |
|--|--|---|-------------------|
| <b>Funding Opportunity Announcement Number</b><br>DE-FOA-0002203 | <b>Procurement Instrument Number</b><br>DE-EE0009259 | <b>NEPA Control Number</b><br>GFO-0009259-002 | <b>CID Number</b> |
|--|--|---|-------------------|

**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 Global Algae Innovations (GAI) to scale their algae processing (drying and extraction) technology for field testing.

DOE previously completed one NEPA Determination (ND) (GFO-0009259-001; A9, B3.6, B5.15; 8/18/2021) for this award, which applied to all award activities. Since that time, GAI has proposed to change the location for algae production and processing activities. This ND (GFO-0009259-002) applies to the proposed changes for this award.

Originally, algae production and processing activities were to be completed at GAI's existing Kauai Algae Facility (KAF) (Lihue, HI). GAI now proposes to conduct these activities at their prospective facility, Shandon Algae Farm (SAF), near Shandon, CA. While SAF has yet to be built, building activities for SAF have been proposed as part of GAI award DE-EE0009758. An ND for that award (GFO-0009758-001), which applies to the building of raceways and supporting infrastructure, was signed on 06/28/2022.

To accommodate the change in location for this award, GAI would build two additional concrete pads (~20' x 40' each) at SAF to support the installation and operation of processing equipment. The building of concrete pads for this award was reviewed during informal consultation with U.S. Fish and Wildlife (FWS) for GAI award DE-EE0009758 (ND GFO-0009758-001). FWS confirmed that the letter of concurrence issued on 06/24/2022 for award DE-EE0009758 is applicable to the building of additional concrete pads as proposed under award DE-EE0009259. As such, DOE has determined that no further consultation is required.

Award activities would involve the handling and operation of heavy equipment and vehicles. The building of concrete pads at SAF would involve relatively shallow excavation (no more than four feet) and grading activities. Existing

corporate and health, safety, and environmental policies and procedures would be followed at all facilities, including: personnel training, proper personal protective equipment (PPE), engineering controls, monitoring, and internal assessments. All necessary permits would be acquired before performing any relevant activities.

DOE has considered potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate adverse impacts on these resources.

## NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Bioenergy Technologies Office (BETO)  
NEPA review completed by Dan Cahill, 06/27/2022.

## 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.

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: Casey Strickland  
NEPA Compliance Officer

Date: 6/28/2022

## 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: