

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



RECIPIENT: Upper Salinas - Las Tablas Resource Conservation District

STATE: CA

PROJECT TITLE: Nutrient and Energy Recovery from Regional Wet Wastes

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002636	DE-EE0010727	GFO-0010727-001	GO10727

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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Upper Salinas – Las Tablas Resource Conservation District (US – LTRCD) to design and test a process for assessing the feasibility of implementing a regional biosolids resource recovery technology for the management of municipal wastewater treatment facility wet wastes. The award aims to also test the technology by using laboratory-scale hydrothermal liquefaction (HTL) conversion techniques to convert wastewater sludges to biofuels and investigate how HTL impacts the presence of per- and polyfluorinated substances (PFAS).

US – LTRCD would be responsible for project management activities at their office in Atascadero, CA. MicroBio Engineering, Inc. (MBE; San Luis Obispo, CA) would perform laboratory characterization of municipal wastewater sludges, fabricate the dewatering skid, and conduct life cycle assessment and techno-economic analysis studies at their dedicated laboratory facility and office space. Bench-scale laboratory operations including HTL tests of municipal wastewater sludges, continuous upgrading of HTL biocrudes, analysis and characterization of HTL and upgrades products, and tracking of PFAS destruction in HTL and upgrading would occur at the Pacific Northwest National Laboratory (Richland, WA). Approximately 30-50 Liters of dewatered biosolids and/or biosolids of 20% solids content would be collected from five (5) regional municipal wastewater treatment facilities including the San Luis Obispo Water Resource Recovery Facility (SLOWRRF; San Luis Obispo, CA), Morro Bay Water Resources Center (Morro Bay, CA), Paso Robles Wastewater Treatment Plant (Pas Robles, CA), Santa Maria Wastewater Treatment Plant (Santa Maria, CA), and Pismo Beach Wastewater Treatment Plant (Pismo Beach, CA). SLOWRRF would also be the site where all collected dewatered biosolids would be brought and mixed to prepare a representative sludge blend from the region. An external certified laboratory would be contracted to perform PFAS analysis activities. All facilities are preexisting purpose-built facilities for the type of work to be conducted for this award. Facility modifications would not be required.

Award activities would involve typical hazards associated with laboratory operations, including handling and use of hazardous materials and compressed gases as well as the operation of potentially hazardous equipment. Exposure to pathogens contained within the sludges is also a hazard associated with the award and would be mitigated through the use of personal protective equipment and secondary containment. Existing health, safety, and environmental policies and procedures would be followed to mitigate hazards to acceptable levels. Mitigated hazards would pose negligible risks to the public and environment. All activities would comply with existing federal, state, and local laws and regulations.

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.

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 (BETO)
NEPA review completed by Corrin MacLuckie, 3/18/2024.

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:  _____ Date: 3/18/2024
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager