

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



RECIPIENT: Milwaukee Metropolitan Sewerage District

STATE: WI

PROJECT TITLE: Primary Filtration as Replacement for Conventional State-of-the-Art Primary Clarification for Improved Carbon Diversion & Biogas Production, Downstream Energy Efficiency & Plant GHG Emissions Reduct

| Funding Opportunity Announcement Number | Procurement Instrument Number | NEPA Control Number | CID Number |
|---|-------------------------------|---------------------|------------|
| DE-FOA-002855                           | DE-EE0010995                  | GFO-0010995-001     | GO10995    |

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:

|   |  |
|---|--|
| <b>A9 Information gathering, analysis, and dissemination</b>                                | 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.)   |
| <b>B3.6 Small-scale research and development, laboratory operations, and pilot projects</b> | 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 Milwaukee Metropolitan Sewerage District (MMSD) to design and construct a demonstration facility and perform comparative testing on Proteus and AquaPrime primary filters against current state-of-the-art filters with the goal of reducing chemical consumption and improving contaminant removal during wastewater purification. Biomethane testing would occur at Marquette University in Milwaukee, Wisconsin; lifecycle filter analysis would occur at Argonne National Laboratory in Lemont, Illinois, document preparation and reporting would occur at The Water Research Foundation in Alexandria, Virginia; design, modeling, and analysis would occur at Black and Veatch in Milwaukee, Wisconsin; lab analysis, project management, and quality assurance would occur at MMSD headquarters in Milwaukee, Wisconsin; and construction and operation of the demonstration facility would occur at the MMSD water reclamation facility in Oak Creek, Wisconsin.

DOE funding would be added to an existing Environmental Protection Agency earmarked grant of \$1,200,000.

Award activities would require construction of a new testing facility. This facility would be located at (42.885516, -87.845864) and would be within the grounds of an existing wastewater treatment plant. DOE has considered the scale, nature, and duration 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.

Per Flood Insurance Rate Map (FIRM) community map and panel number 55079C0188E effective 09/26/2008, the test site is located outside of all Special Flood Hazard Areas (SFHA), i.e., the site is in Zone X.

Per U.S. Fish and Wildlife National Wetlands Inventory, Wetlands Mapper, located at <http://www.fws.gov/wetlands/Data/Mapper.html>, accessed on 03/05/2024; the test site is neither located in nor would it affect mapped wetlands.

Potential hazards include the exposure to municipal wastewater. Existing health, safety, and environmental policies and procedures would be followed at all facilities, including personnel training, proper personal protective equipment, engineering controls, monitoring, and internal assessments.

If during project activities the recipient or their contractors encounter any cultural materials (i.e. historic or prehistoric),

all activities must cease in the vicinity of the discovery immediately. The recipient must inform the DOE Project Officer of the discovery so that an evaluation of the discovery can be completed prior to continuing work.

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:

Industrial Efficiency and Decarbonization Office (IEDO)  
NEPA review completed by Jason Spencer, 05/02/2024

## 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:



NEPA Compliance Officer

Date: 5/2/2024

## 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: