

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



RECIPIENT: Aquarium of Niagara

STATE: NY

PROJECT TITLE : Geothermal Heating and Cooling System

Notice of Funding Opportunity Number

Procurement Instrument Number
DE-EE0010791

NEPA Control Number
GFO-0010791-001

CID Number

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.)

B3.1 Site characterization and environmental monitoring

Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to administer Congressionally Directed Spending to the Aquarium of Niagara (Aquarium; Niagara, NY) to design, build, and install a geothermal heating and cooling system that would replace the facility's outdated HVAC system.

The proposed project would consist of three primary Tasks, or phases, occurring over an approximate yearlong project duration. Task 1 would be the design and budgeting phase. Task 2 would involve field work and landscaping to address all necessary outdoor site preparation for the geothermal borehole field. Task 3 would be the final phase of the project and include demolition of the existing natural gas system, asbestos removal, and installation of the new geothermal system.

DOE reviewed publicly available information on the National Register of Historic Places and New York State's Cultural Resource Information System (CRIS) and found no listed properties or districts in the project area. A previously conducted Phase IA Cultural Resources Investigation of the Niagara area determined that the Aquarium, built in 1963, meets National Register eligibility criteria. Pursuant to Section 106 of the National Historic Preservation Act, DOE submitted a request for review to the NY State Historic Preservation Office.

DOE has determined that the first phase of project work would not have the potential to cause effects to historic

properties. Therefore, this NEPA determination applies to Task 1 only. Tasks 2 and 3 would remain restricted pending completion of both Section 106 consultation and further NEPA review.

The types of activities associated with Task 1 would be limited to data analysis, computer modeling, document preparation, project planning, and site characterization. Design engineering would rely in part on data collected from a temporary borehole installed for short-term heat transfer conductivity tests to determine what the local geology can provide. Site characterization activities would occur on a lawn area north of the Aquarium that is regularly mowed and would not require additional clearing. Vehicle and equipment access would be on existing roads leading to the site. Minor ground disturbance would be restored after test hole completion. No excavation would be conducted and no permanent alterations to the appearance, use, or operation of the property would arise out of this effort.

DOE has considered the scale, duration, and nature of the proposed Task 1 activities to determine potential impacts on sensitive resources, including those of a biological, ecological, 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.

NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

Task 1/phase 1

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

Tasks 2 and 3/phases 2 and 3

Include the following condition in the financial assistance agreement:

The second and third/final project phases (Tasks 2 and 3) shall remain prohibited until such time as the Section 106 consultation process has concluded. The recipient will be notified by the cognizant DOE Project Officer and required to electronically submit a new EQ1 in the PMC for further NEPA review of activities and locations associated with Tasks 2 and 3.

Notes:

Geothermal Technologies Office (GTO)

This NEPA determination requires legal review of the tailored NEPA provision.

Review completed by Whitney Donoghue on 10/9/2024

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.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Andrew Montano

NEPA Compliance Officer

Date: 12/4/2024

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: _____