



## National Environmental Policy Act (NEPA) Determination

### Categorical Exclusion

**Recipient:** RTI International

**State:** Mississippi

**Project Title:** Carbon Capture Pilot at Vicksburg Containerboard Mill – Phase 1

**Funding Opportunity Announcement Number:** DE-FOA-0002963

**Award Number:** CD-0000051

**OCED NEPA Control Number:** OCED-0000051-CX-001

**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:**

#### **CATEGORICAL EXCLUSION APPENDIX, NUMBER, AND 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) Cultural resources (archaeological and historic) identification in compliance with 36 CFR part 800 and 43 CFR part 7.

**Rationale for Determination:** OCED is proposing to provide funding to RTI International in support of the Carbon Capture Pilot at Vicksburg Containerboard Mill project. During the proposed project, a large pilot carbon dioxide capture plant would be designed, built, and operated at International Paper's (IP) pulp and paper mill in Vicksburg, Mississippi. The pilot plant would initially be used for testing and evaluating the non-aqueous solvent (NAS) capture process to provide data for process scale-up and optimization. This determination applies to Phase 1 of the project. Proposed Phase 1 activities include project management, techno-economic and lifecycle analyses, initiation of a community benefits plan, and a front-end engineering design (FEED) study of the large pilot CO<sub>2</sub> capture plant. Additional activities would include stack testing at the Vicksburg power boiler and recovery boiler; installing and testing a particulate filter at the Cemex cement plant in Victorville, CA; and geotechnical and soil analysis at the construction location at IP's Vicksburg Mill.

**Consultations (Section 106 NHPA, Section 7 ESA, etc):**

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 1501.9(e)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.1(g)(3)) 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.

A portion of the proposed action is categorically excluded from further NEPA review.

**Notes:** If the Recipient proposes to add to or modify the activities or locations described in this CX determination, those new activities/locations or modified activities/locations will be subject to additional NEPA review.

All cultural resource identification activities (e.g., archaeological, historic above ground, historic visual assessments) must be completed in accordance with applicable guidelines and standards provided by the State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO) and the Secretary of the Interior's Identification Standards. Coordination with DOE is required to establish an Area of Potential Effects (APE) and scope of effort (i.e., research design) prior to geotechnical surveys and cultural resource field investigations. DOE will initiate Section 106 consultation prior to geotechnical surveys and cultural resource field investigations in order to support coordination with SHPO/THPO, Tribes, and other Section 106 consulting parties.

All project partners will refrain from disturbing the soil around the project area until the Section 106 evaluation is completed.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

OCED NEPA Compliance Officer Signature:

Date: