

U.S. DEPARTMENT OF ENERGY - NETL

## CATEGORICAL EXCLUSION (CX) DESIGNATION FORM

Project No.: DE-FE0032467 Recipient Name: The Ohio State Univers Project Location: Gillette, WY; Columbus, O

Sub-recipient(s) and Locations:

Zenith Purification LLC: Missouri City, Tx; Wyoming Integrated Test Center: Gillette, Wy; Trimeric: Buda, Tx

NETL Sponsoring Org.: FECM/TDC/CM/Point Source Carbon C NETL Contact: Dylan Leary

Brief Title of Proposed Action: Eng.-Scale Design & Testing of Transformational Membrane Technology for NGCC

Brief Description of Activities:

OSU will perform engineering-scale testing of their CO2 capture membrane at the Wyoming ITC. OSU will fabricate membrane modules and install them in a re-purposed skid.

**THE PROPOSED ACTION FALLS WITHIN THE FOLLOWING CATEGORICAL EXCLUSION(S) FROM APPENDICES A AND B TO SUBPART D OF DOE NEPA IMPLEMENTING PROCEDURES (10 CFR 1021):**

General Administration/Management

- ☐ A1 – Routine business actions  
☒ A9 – Info gathering, analysis, documentation, dissemination, and training  
☐ A11 – Technical advice and planning assistance

Facility Operations

- ☐ B1.3 – Routine maintenance and custodial services  
☐ B1.7 – Communication system and data processing equipment acquisition, installation, operation, removal  
☐ B1.15 – Support building or structure, non-waste storage, construction/operation

Safety and Health

- ☐ B2.1 – Modifications to enhance workplace habitability  
☐ B2.2 – Installation/improvement of building/equipment instrumentation  
☐ B2.3 – Installation of equipment for personnel safety and health

General Research

- ☐ B3.1 – Site characterization/environmental monitoring  
☒ B3.6 – R&D or pilot facility construction/operation/decommissioning  
☐ B3.7 – New infill exploratory, experimental oil/gas/geothermal well construction and/or operation  
☐ B3.9 – Certain CCT demonstration activities, emissions unchanged  
☐ B3.11 – Outdoor tests, experiments on materials and equipment components

Electrical Power and Transmission

- ☐ B4.4 – Power management activities (storage, load shaping, and balancing)  
☐ B4.6 – Transmission support addition/modifications at developed facility site  
☐ B4.11 – Construction of power substations and interconnection facilities  
☐ B4.13 – Upgrading and rebuilding existing power lines (< 20 miles)

Conservation, Fossil, and Renewable Energy Activities

- ☐ B5.1 – Actions to conserve energy, no indoor air quality degradation  
☐ B5.3 – Modification/abandonment of wells  
☐ B5.5 – Short crude oil/gas/steam/geothermal/carbon dioxide pipeline const/oper within an existing right-of-way (< 20 miles) between existing facilities  
☐ B5.13 – Experimental wells for injection of small quantities of carbon dioxide (< 500,000 tons)  
☐ B5.15 – Small scale renewable energy research/development/pilot projects  
☐ B5.22 – Alternative fuel vehicle fueling stations  
☐ B5.23 – Electric vehicle charging stations

Other

☐ Specify category:

☐ Specify category:

☐ Specify category:

This action (1) would not present any extraordinary circumstances such that the action might have a significant impact upon the human environment; (2) is not connected to other actions with potentially significant impacts; (3) is not related to other actions with cumulatively significant impacts; and (4) is not inconsistent with 10 CFR 1021.211 - Interim Actions or 40 CFR 1506.1 - Limitations during the NEPA process.

**SELECT ONE OF THE FOLLOWING:**

- ☒ This Categorical Exclusion includes all tasks and phases in the Statement of Work or Statement of Project Objectives for this project.  
☐ This Categorical Exclusion is only valid for the following tasks/phases . The DOE initiator acknowledges the responsibility to obtain a NEPA determination prior to initiating any activities outside the scope of this Categorical Exclusion.

**SELECT ONE OF THE FOLLOWING:**

- ☒ This Categorical Exclusion includes all locations and activities for this project.  
☐ Additional sites, sub-recipients, or activities cannot be identified at this time. The DOE initiator acknowledges the responsibility to obtain a NEPA determination prior to initiating any activities outside the scope of this Categorical Exclusion.

**NOTE: ANY CHANGE(S) TO THE PROJECT SCOPE OR LOCATIONS MAY REQUIRE A NEW NEPA DETERMINATION.**

DOE Initiator Signature: DYLAN LEARY

Digitally signed by DYLAN LEARY  
Date: 2024.01.19 11:01:18 -0500

Date: 01 / 19 / 2024

month day year

NEPA Compliance Officer: MARK LUSK

Digitally signed by MARK LUSK  
Date: 2024.01.29 14:07:44 -0500

Date: 01 / 29 / 2024

month day year

The following special condition is provided for the consideration of the Contracting Officer: