UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

May 19, 2022 Sent by email only

Hackberry Carbon Sequestration, LLC
501 Louisiana Ave.,
Baton Rouge, LA 70802

RE: Underground Injection Control (UIC) Permit Application R06-LA-0007
Class VI Pre-Construction Permit Application
Technical Review of Application

Dear Mr. Gilbert:

Upon completing the initial phase of the technical review for the UIC Class VI permit application submitted by Hackberry Carbon Sequestration, LLC for HCS Well No. 001, EPA Region 6 has determined that the application does not meet the requirements in 40 CFR §146 Subpart H.

The review team determined that insufficient site data was used to define the geologic structure and hydrogeologic properties of the proposed storage site and overlying formations as required by 40 CFR §146.83. Site data should be based on primary sources, such as geologic cores, outcrop data, seismic surveys, well logs, and lithologic descriptions. This data should define properties including the depth, areal extent, thickness, mineralogy, porosity, permeability, and capillary pressure of the injection and confining zone(s).

The limited core data from an artificial penetration more than six miles northeast of the proposed sequestration site, though valuable, does not allow for sufficient extrapolation of injection zone heterogeneity. However, modeling based on an assumption of homogeneity may not accurately describe the disposal site characteristics and potential AOR.

The attachment accompanying this letter details the deficiencies that are a result of the lack of site-specific data. After discussions internally and with the Louisiana Department of Natural Resources, it was determined that these deficiencies can be addressed through additional clarifications and/or the drilling of one or more stratigraphic test wells closer to the site with appropriate logging, coring, and hydrologic data collection.

If you have any questions, please contact Brody Friesenhahn at (214) 665-7259.

Sincerely,

KENNETH JOHNSON

Digitally signed by KENNETH JOHNSON
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Date: 2022.05.19 22:41:29 -05'00'

Ken Johnson, PE
Ground Water / UIC Section Chief