

DEPARTMENT OF WATER RESOURCES

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Governor's Office of Planning & Research



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STATE CLEARINGHOUSE

Mr. Keith Alvidrez
Kern County Planning and Natural Resources Department
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SCH# 2022030180 Carbon TerraVault1 by California Resources Corporation (Carbon TerraVault1) Draft Environmental Impact Report

Dear Mr. Alvidrez:

The California Department of Water Resources California Aqueduct Subsidence Program (CASP) has reviewed the Carbon TerraVault1 by California Resources Corporation (Carbon TerraVault1) draft Environmental Impact Report (DEIR) and has the following comments. These comments are the result of CASP's review, and do not reflect the current views or concerns of any other DWR programs.

Project Description

The proposed project is the approval of conditional use permits for the construction and operation of a 9,130-acre carbon capture and storage project facility with related capture facilities and pipelines for the Carbon Terra Vault I project.

Comments

Chapter 3 Project Description

3.1 Project Overview

The proposed project will inject carbon dioxide (CO₂) into an underground injection control well. The project includes approximately 13 miles of underground facilities and injection pipeline and related infrastructure to capture, transfer and store CO₂ from pre-combustion Elk Hills field gas.

The proposed project site consists of two specific sets of parcels within the Elk Hills oilfield along and north of Skyline Road. The boundaries for the project CCS surface land area and underground approved storage area (pore space) are approximately 26 miles southwest of Bakersfield, approximately 8.5 miles from the city of Taft, and approximately 4 miles from the unincorporated community of Buttonwillow. The project roughly parallels sections of the CA Aqueduct for approximately 10 miles (Mile Posts 225 to 235). At the projects closest point, the boundary is approximately 1.5 miles from the

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Aqueduct (NE corner of project Parcel # 158-040-06).

Section 4.7 Geology and Soils

4.7.2 Environmental Setting

This environmental setting section discusses Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse, but does not include a discussion of subsidence beyond the project infrastructure within project boundaries (e.g., injection-well design). The current physical conditions related to subsidence that need to be included in the environmental setting extends beyond the project boundaries. The environmental setting specifically for subsidence needs to be expanded to include regional subsidence and effects on nearby, non-project infrastructure (i.e., CA Aqueduct).

4.7.4 Impacts and Mitigation Measures

This section states the geology and soils baseline conditions are presented in Section 4.7.2, Environmental Setting, and there is no discussion of baseline for potential regional subsidence impacts in that section. We request the baseline for regional subsidence in relation to nearby, non-project infrastructure (i.e., CA Aqueduct) be included in 4.7.2 environmental settings.

Impact 4.7-6: Be Located on a Geologic Unit or Soil That Is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On or Off-Site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse

This section needs to include a subsidence impact analysis. While there may be limited geotechnical information on the relationship between subsidence and underground storage of CO₂, this does not mean there are no potential subsidence impacts. An impact analysis and mitigation measures 4.7-3 must be applied to potential subsidence impacts. DWR-CASP is willing to provide guidance for these tasks in relation to subsidence monitoring of DWR infrastructure.

Mitigation Measure MM 4.7-3.

The geology and soils mitigation measure requires future site-specific geotechnical reports, and that the owner/operator shall implement all requirements of any site-specific geotechnical report. We request that, 1) any site-specific geotechnical report include reporting on any regional impacts of subsidence associated to carbon sequestration; and 2) ground surface elevation monitoring of the area between the project AoR and the CA Aqueduct, and relevant survey points along the Aqueduct be performed periodically

DWR-CASP provides the following comments as guidance in the event the MM 4.7-3 project geotechnical report or other evidence identifies subsurface activities at or near the project location, or within one mile of the Aqueduct, are impacted by project activities. As the magnitudes of subsidence at both the project and along the Aqueduct nearby are comparable, further study into the systematic relationship between these areas and the potential-impacts to-infrastructure at the location of the Aqueduct as part of

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the geotechnical report would be required as part of the geology and soils mitigation measures.

If you have any questions, need additional information or would like to discuss our comments further, please contact David Moldoff, David.Moldoff@water.ca.gov.

Sincerely,

nancy finch

Nancy Finch
Attorney III