Sampling of Resources on Carbon Capture and Storage Wellbore Integrity

This document was prepared by the U.S. Department of Energy's (DOE) Office of Fossil Energy and Carbon Management to assist stakeholder understanding of geologic storage, specifically carbon capture and storage wellbore integrity.

FECM has funded research and development focused on the integrity of carbon capture and storage wellbores over the last 15 years. Multiple studies led by various research and development organizations, including DOE National Labs, have examined various aspects of carbon capture and storage wellbore integrity, including cement degradation and corrosion. The results of these studies have been published through peer-reviewed journal articles.

The resources listed below were chosen by FECM staff based on their credibility, relevance, and potential applicability to interested parties. However, the list is not an exhaustive or comprehensive representation of the literature in this subject area. Some articles may remain behind journal subscription paywalls indefinitely, with access only feasible through payment directly to the publisher with whom DOE does not have any relationship.

Section 1 provides resources from the National Risk Assessment Partnership. Section 2 lists resources that offer additional information on carbon capture and storage wellbore integrity, which were not funded by DOE.

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Section 1: National Risk Assessment Partnership Research

The National Risk Assessment Partnership is a multi-national laboratory collaborative research effort that leverages DOE's capabilities to quantitatively assess and manage long-term environmental risks of geologic carbon storage amidst uncertainty. National Risk Assessment Partnership involves five DOE national laboratories: NETL, Los Alamos National Laboratory (LANL), Lawrence Berkeley National Laboratory (LBNL), Lawrence Livermore National Laboratory (LLNL), and Pacific Northwest National Laboratory (PNNL).

To learn more about the National Risk Assessment Partnership and see a full list of their publications visit their website: https://edx.netl.doe.gov/sites/nrap/

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Section 2: Additional Resources

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