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WASHINGTON, July 12 (TNSrep) -- The National Risk Assessment Partnership issued the following 124-page report on May 31, 2022, entitled "Rules and Tools Crosswalk: A Compendium of Computational Tools to Support Geologic Carbon Storage Environmentally Protective UIC Class VI Permitting."

The report was written by Greg Lackey, Brian R. Strazisar, Bruce Kobelski, Molly McEvoy, Diana H. Bacon, Abdullah Cihan, Jaisree Iyer, Amanda Livers-Douglas, Rajesh Pawar, Joel Sminchak, Benjamin Wernette and Robert M. Dilmore.

Here are excerpts:

* * *

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An electronic version of this report can be found at:

<https://netl.doe.gov/energy-analysis/search>

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* * *

EXECUTIVE SUMMARY

National Risk Assessment Partnership Issues Report Entitled 'Compendium of Computational Tools to Support Geologic Carbon Storage Environmentally Protective UIC....

This report identifies computational tools useful for addressing aspects of the dedicated carbon storage (Class VI) well permit application under the U. S. Environmental Protection Agency's (EPA) Underground Injection Control (UIC) Program.

The survey was conducted by researchers of the National Energy Technology Laboratory's (NETL) Research and Innovation Center in collaboration with representatives of the U.S. EPA, Lawrence Berkeley National Laboratory (LBNL), Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), Pacific Northwest National Laboratory (PNNL), and the four Regional Initiatives to Accelerate Carbon Capture, Utilization, and Storage: Carbon Utilization and Storage Partnership of the Western United States (CUSP), Plains CO2 Reduction Partnership Initiative to Accelerate Carbon Capture, Utilization, and Storage Deployment (PCOR Partnership), Midwest Regional Carbon Initiative (MRCI), and the Southeast Regional Carbon Utilization and Storage Partnership (SECARB-USA).

Experts from each of these institutions used their knowledge of, and experience with, the UIC Class VI permit application to identify valuable computational tools. Information was collected by compiling individual fact sheets for each tool completed by the various contributing organizations. A total of 59 tools were identified through the elicitation for this report. The fact sheets for each tool are included in the Appendix. The body of this report provides a brief summary of UIC Class VI permit application elements and tables that cross-reference the computational tools with their general application (Table 2) and their relevance to elements of the Class VI permit application (Table 3). The report concludes by identifying gaps and possible areas for future investigation.

This report is intended to serve as a reference that can be used by geologic carbon storage stakeholders to identify computational tools that may be used to develop Class VI permit applications. The list of computational tools compiled herein is not intended to be exhaustive. References to any computational tool, service, and/or company are not intended to be endorsements of those tools, services, and/or companies. Furthermore, failure to reference a computational tool, service, and/or company is not intended as a repudiation of that computational tool, service, or company. In addition to this report, information contained herein will also be made available online through NETL's Energy Data Exchange (EDX) and updated periodically as new information on relevant computational tools becomes available.

* * *

The report is posted at: https://www.netl.doe.gov/projects/VueConnection/download.aspx?id=465c349c-2791-4d7b-a4e3-9fec31073b1b&filename=RulesandToolsCrosswalkCompendiumCompToolSupportGeoCarbonStoragEnvProtectUICClassVIPermit_053122.pdf

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