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Organic Carbon: Implications for Carbon Sequestration; Assessing the Potential for CO<sub>2</sub> Leakage, Particularly Through Wells, From Geological Storage Sites; Scoping Calculations on Leakage of CO<sub>2</sub> in Geologic Storage: The Impact of Overburden Permeability, Phase Trapping, and Dissolution; Geochemical Impacts of Sequestering Carbon Dioxide in Brine Formations

Quantification of CO<sub>2</sub> Trapping and Storage Capacity in the Subsurface: Uncertainty due to Solubility Models

Quantification of CO<sub>2</sub> Flow and Transport in the Subsurface: Uncertainty due to Equations of State

Algorithms; Section 4 Evaluation of Carbon Management Requirements;

Verification and Accreditation Schemes for Climate Change Activities: A

Review of Requirements for Verification of Greenhouse Gas Reductions

and Accreditation of Verifiers-Implications for Long-Term Carbon

Sequestration; Sociopolitical Drivers in the Development of Deliberate

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Geologic Storage of CO<sub>2</sub> Integrating Terrestrial Sequestration Into a

Greenhouse Gas Management Plan; A Conceptual Framework for

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Sommario/riassunto

Published by the American Geophysical Union as part of the

Geophysical Monograph Series, Volume 183. For carbon sequestration

the issues of monitoring, risk assessment, and verification of carbon

content and storage efficacy are perhaps the most uncertain. Yet these

issues are also the most critical challenges facing the broader context

of carbon sequestration as a means for addressing climate change. In

response to these challenges, Carbon Sequestration and Its Role in the

Global Carbon Cycle presents current perspectives and research that

combine five major areas: Th