

# Measurement, Monitoring, and Verification to Secure Safety of CCS

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## Abstract

Monitoring is essential for ensuring that geological sequestration projects are safe and effective. Consequently, there is an enormous amount of interest and investment in the identification and development of techniques for monitoring geological storage projects. This presentation will address a number of issues, including: detection levels needed to assure that the project is meeting performance standards, technologies available for monitoring, and recent advances the use of pressure transient measurements and surface monitoring for leakage detection. A comparison of the strengths and weakness of each approach will be provided. Examples of established and innovative monitoring approaches from a number of projects will be provided to illustrate these topics. Outstanding issues and recommendations for future development will also be discussed.