

Risk Assessment Task Force Technical Group Meeting (18 May 2011)

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Task Force Phase I Complete

Phase I Charter (Initiated CSLF London 2006)

- ➤ Examine risk-assessment standards, procedures, and research activities relevant to unique risks associated with the injection and long-term storage of CO₂
 - Risks associated with CO₂ near-term (injection) processes (including fracturing, fault re-activation, induced seismicity)
 - Risk associated with long-term processes related to impacts of CO₂ storage, including:
 - health, safety, and environmental risks
 - potential impact on natural resources (such as groundwater, mineral resources, etc.)
 - return to the atmosphere

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Phase I Summary

- Initiated at London (Nov 2006)
- Recommendations finalized at Oslo (Apr 2009)
- Final draft to Secretariat (May 2009);
 circulated to TG for review/comments (summer 2009)
- Phase I report complete (fall 2009) (CSLF-T-2009-04)
 - Overview of risk assessment methodologies for engineered geologic systems
 - ➤ Literature review of risk assessment for CO₂ storage
 - Identification of key potential risks
 - Overview of monitoring & mitigation options that support risk assessment
 - Summary of ongoing and emerging activities in CSLF countries
 - > Proposed next steps



Recommendations from the Phase I Report

(section 4.1)

- Risk assessment should be considered in the context of stakeholder outreach and communication.
 - Recommendation passed to PG;
 Communication Task Force produced 5 outreach documents
- The link between risk assessment and liability should be recognized and considered.
 - Recommendation passed to PG; Joint task force formed at Warsaw meeting
- Storage integrity goals (e.g., acceptable risk levels) for sites should be discussed
 - Draft white paper prepared on "Performance based standard site safety and integrity"

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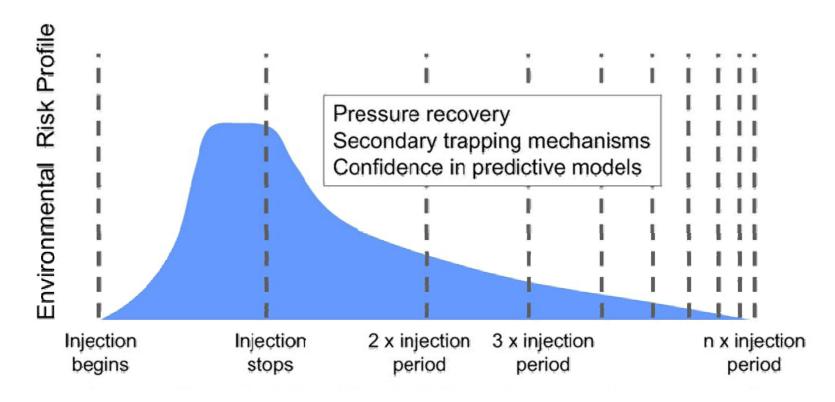
Proposed Path for Completion of Task Force Phase II Activities

- Assessing the feasibility of developing general technical guidelines for risk assessment practices that could be adapted to specific sites and local needs
 - Complete reviews of white paper on "Performance based standard site safety and integrity"
- A gap assessment to identify CCS-specific tools and methodologies that will be needed to support risk assessment.
 - Develop short overview of technical risk-assessment considerations related to various phases of a project (development, injection, post-injection, long-term)
 - ➤ Develop short overview of potential gaps relative to CO₂ storage relative to EOR operation





Proposed Path for Completion of Task Force Phase II Activities



after Benson (2007)