



Risk Assessment Task Force

Technical Group Meeting

Edmonton, Alberta, Canada

19 May 2011

George Guthrie (USA)



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**



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”*



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*”
 - Current draft to be re-circulated to Task Force by chair (23 May)
 - Comments back from Task Force to France (D. Bonijoly) (17 June)
 - Revisions back to chair and circulated to Technical Group for review (1 July)
 - Comments back from Technical Group to chair (15 July)
 - Integrated with final phase II reported and submitted to Secretariat (1 August)



Proposed Path for Completion of Task Force Phase II Activities

- ***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)
 - Draft developed by chair with input from Canada (Bachu) and France (Bonijoly); circulated to Task Force (17 June)
 - Comments received back from Task Force (13 July)
 - Draft circulated to Technical Group for review (15 July)
 - Comments received back from Technical Group (29 July)
 - Integrated with final phase II reported and submitted to Secretariat (1 August)



Proposed Path for Completion of Task Force Phase II Activities

- ***A gap assessment to identify CCS-specific tools and methodologies that will be needed to support risk assessment.***
 - Develop short overview of potential gaps relative to CO₂ storage relative to EOR operation
 - Draft developed by chair with input from Australia (Foster), Canada (Bachu), France (Bonijoly), Saudi Arabia (Abuleif), and GCCSI (Hill); circulated to Task Force (17 June)
 - Comments received back from Task Force (13 July)
 - Draft circulated to Technical Group for review (15 July)
 - Comments received back from Technical Group (29 July)
 - Integrated with final phase II reported and submitted to Secretariat (1 August)