Carbon Sequestration leadership forum



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## **MEETING SUMMARY** Risk Assessment Task Force Meeting

Warsaw, Poland 06 October 2010

### Prepared by the CSLF Secretariat

## LIST OF PARTICIPANTS

Australia:	Clinton Foster, Lila Gurba, Aleksandra Kalinowski	
France:	Didier Bonijoly	
Germany:	Jürgen-Friedrich Hake	
Netherlands:	Harry Schreurs	
Norway:	Trygve Riis	
Poland:	Jarosław Chećko, Aleksandra Koteras, Elżbieta Wróblewska,	
South Africa:	Fred Goede, Tony Surridge	
United States:	Joseph Giove, George Guthrie (Chair)	
Global CCS Institute: Bill Koppe		
IEA GHG:	Tim Dixon	
CSLF Secretariat:	Chris Babel, Rich Lynch	

#### 1. Welcome and Review of Task Force Activities

Chairman George Guthrie of the United States welcomed the attendees to the 6<sup>th</sup> meeting of the Risk Assessment Task Force (RATF) and provided a brief progress report on RATF activities. The mission of the RATF is to examine risk assessment standards and procedures that are unique to carbon capture and storage (CCS), i.e., those risks associated with the long-term storage of  $CO_2$  as a reactive, mobile, and buoyant fluid in geologic reservoirs. Dr. Guthrie stated that the RATF has completed its Phase I activities, which centered on examination of risk-assessment standards, procedures, and research activities relevant to unique risks associated with the injection and long-term storage of  $CO_2$ . Risks associated with  $CO_2$  near-term injection processes include predicting the stress state of the reservoir, while risks associated with long-term processes related to impacts of  $CO_2$  storage include health, safety, and environmental risks, potential impact on natural resources (such as groundwater, mineral resources, etc.), and return of  $CO_2$  to the atmosphere. The RATF's Phase I Report is online at the CSLF website.

Dr. Guthrie stated that the Phase I Report contained three main recommendations:

- The link between risk assessment and liability should be recognized and considered.
- Storage integrity goals (e.g., acceptable risk levels) for sites should be discussed.
- Risk assessment should be considered in the context of stakeholder outreach and communication.

With regards to the third recommendation, the CSLF Policy Group's Communications Task Force has set up a working group focused on risk assessment, and that working group has prepared a set of five "inFocus Carbon Capture and Storage" outreach documents, which have been posted at the CSLF website, that provide information about the safety of CCS to a non-technical audience. These five documents were reviewed and approved by the RATF prior to their publication. The RATF also suggested that the Communications Task Force consider preparing an additional "inFocus" document to clarify the distinction between geologic storage and natural CO<sub>2</sub> leakage scenarios, including Lake Nyos in Cameroon; in response, the Communications Task Force has indicated it will develop this document at a later date, if needed.

Dr. Guthrie stated that RATF Phase II activities, now underway, include a gaps assessment to identify CCS-specific tools and methodologies that will be needed to support risk assessment, and a feasibility assessment of developing general technical guidelines for risk assessment that could be adapted to specific sites and local needs. Dr. Guthrie mentioned that the RATF intends to leverage its activities with those of the IEA Greenhouse Gas R&D Programme (IEA GHG) Risk Assessment Network to facilitate the completion of these two assessments.

#### 2. Review of Storage Gaps Checklist and Scope of RATF Phase II Activities

Dr. Guthrie mentioned that the new CSLF Technical Group Task Force to Assess Progress in Closing the Gaps is preparing revised gaps checklists in several areas, including CO<sub>2</sub> Storage. (Secretariat note: This new Task Force was subsequently renamed as the Task Force to Assess Progress on Advancing Technical Issues for CCS.) The existing storage gaps checklist is being revised by a working group chaired by Stefan Bachu of Canada. Dr. Guthrie inquired if the RATF had any suggestions for additions to the storage gaps checklist, but there were none.

Bill Koppe of the Global CCS Institute inquired if the RATF, in its Phase II activities, should consider risks associated only with  $CO_2$  leakage or should the scope be broadened to include storage risks (such as groundwater issues) that are occur even if there is no leakage. After a short discussion, there was consensus that all technical risks associated with  $CO_2$  storage should be within the scope of the RATF.

## 3. Coordination of RATF Activities with the IEA GHG Risk Assessment Network

Tim Dixon of the IEA GHG provided a brief update on the May 2010 meeting of the IEA GHG Risk Assessment Network. The focus of the Network is mostly on sub-surface issues involving  $CO_2$  storage, but it does examine related issues. The May 2010 meeting of the network included a session on risk communication issues, specifically on how to define reasonable levels of risk. Defining and ensuring consistency in terminology is also needed, and Mr. Dixon stated that it was the IEA GHG's hope that there will be an ISO standard for  $CO_2$  storage at some point in the future.

## 4. Next Steps

Dr. Guthrie stated that the near-term goal of the RATF is to finalize its Phase II Report in time for the 2011 CSLF Ministerial Meeting in China, and to do so the RATF needed to start making progress on the feasibility assessment of developing general technical guidelines for

risk assessment. Clinton Foster of Australia noted that a prime role for the RATF would be to gather information on what other organizations are doing in the area of technical risk assessment for CCS and there was consensus for the RATF to do so. Dr. Foster and Dr. Guthrie agreed to compile a list of contacts in these organizations, and the CSLF Secretariat will request information concerning any CCS risk assessment activities they may be doing.

In the area of performance-based standards, Didier Bonijoly of France noted that RATF working group in that area had produced a draft report that was previously out to RATF members for comment, but no comments had resulted. There was consensus that the Secretariat would re-send the report to attendees of this and previous RATF meetings with a request for them to provide updates (if needed) for the information in the report.

#### 5. New Business / Adjourn

Poland was added as an official member of the RATF.

The next meeting of the Task Force will be at the CSLF Technical Group meeting, in Alberta Canada in May 2011.

Dr. Guthrie thanked the meeting participants for their involvement in the Task Force and adjourned the meeting.

Item	Lead	Action
1	George Guthrie and Clinton Foster	Provide Secretariat with contacts from other organizations that have CCS risk assessment activities.
2	CSLF Secretariat	Obtain information from other organizations involved with risk assessment on their activities in this area.
3	CSLF Secretariat	Send draft report of RATF Working Group on Performance-Based Standards to attendees of current and recent RATF meetings for their comments.

## **Action Items**