

EPA Workshop on Risk Assessment for Geologic Carbon Dioxide Storage September 28-29, 2005, Portland, Oregon

The U.S. EPA Office of Air and Office of Water conducted a Workshop on Risk Assessment for Geologic Carbon Dioxide Storage on September 28-29, 2005 in Portland, Oregon. The objective of this workshop was to discuss the development of a risk assessment framework using participant expertise to identify potential risks and consider relevant field experience that could be applicable to underground injection and long-term storage of CO₂. The workshop focused on risk assessment and management. Some of the key topics of the workshop were abandoned wells, faults, and groundwater displacement. The workshop participants also helped identify next steps, including research needs, for evaluating the key parameters. This workshop was intended to create a dialogue among experts in CO₂ geologic storage, groundwater and underground injection, and health and environmental effects of CO₂ exposure to improve the understanding of risks and mitigation related to underground injection of CO₂. The workshop format was designed to provide opportunities for questions and comments from all participants following presentations by experts. It also included a session in which the participants were divided into three breakout groups to encourage a lively discussion on key issues in conducting a risk assessment of geologic carbon storage. The outcomes of this workshop will help inform the research community on the practical application and implications of their work, as well as research and data needs, for conducting ongoing risk assessment efforts.

The workshop had six sessions:

1. Exposure characterization
2. Effects characterization
3. Breakout groups
4. Risk management
5. State, industry, and nongovernmental organization (NGO) perspectives
6. Next steps for risk assessment.