



Texas Regulatory Environment for CCS

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- Jurisdiction over CO₂
 - RRC
 - Sequestration with enhanced recovery
 - Sequestration in saline formations
 - In reservoirs productive of oil, gas or geothermal resources in the past or potentially in the future
 - In saline formations directly above or below such reservoirs
 - Extraction of sequestered CO₂
 - TCEQ
 - Saline sequestration in other formations



- CO2 Ownership and Stewardship
 - Stored CO2 is property of the storage operator or his heirs, successors, or assigns
 - Unless found to be abandoned, CO2 not the property of owner of surface or mineral estate
 - Allows the owner to extract anthropogenic CO2



- Other requirements:
 - RRC/TCEQ must amend/adopt MOU
 - RRC rules must be consistent with EPA's
 - State must seek primacy
 - Joint reports (consolidated)
 - RRC and TCEQ in consultation with BEG
 - GLO in consultation with RRC/TCEQ/BEG

RRC CCS Activities



- Activities to Date:
 - December 2010 Rules for GS not associated with EOR
 - December 2010 Joint Report
 - January 2011 EPA regulations effective
 - July 2011 Rules for GS associated with EOR



- Joint Report – December 2010
 - Jurisdiction
 - Option #1 – RRC jurisdiction over all CO2 storage, with TCEQ retaining responsibility for advisory letter
 - Option #2 - Retain split jurisdiction but clarify and supplement
 - Criteria for TCEQ permitting
 - TCEQ access to trust fund

RRC Regulations



- RRC CO2 GS regulations
 - Subchapter , Chapter 5
 - All elements required by EPA regulations
 - Geologic site characterization
 - AoR and corrective action
 - Well construction
 - Operation
 - Mechanical integrity testing
 - Monitoring
 - Well plugging and post-injection site care
 - Site closure and long-term stewardship
 - Financial assurance
 - Fees

RRC Regulations



- RRC may issue permit if:
 - No endangerment/injury to oil, gas, other minerals
 - No endangerment of water
 - No endangerment/injury to human health and safety
 - Reservoir suitable for protecting against the escape/migration of CO₂
 - Applicant meets statutory and regulatory requirements

RRC Regulations



- Used existing RRC rules where appropriate:
 - SWR 1 – Notice of bankruptcy
 - SWR 13 - Well completion
 - SWR 14 - Well plugging
 - SWR 46 – Enhanced recovery
 - SWR 78 - Financial assurance for wells

RRC Regulations



- Differences between RRC and EPA regulations:
 - Minimum of one confining zone
 - No down-hole shut-off valve onshore
 - External MI testing once every 5 years
 - No default (10-, 30-, 50- year) post-injection monitoring period
 - No tracer or soil-gas monitoring
 - More flexibility



- Delegation of Class VI primacy:
 - Benefits:
 - Knowledge
 - “Director” makes determination regarding transition from Class II to Class VI
 - Timeliness
 - Potential issues:
 - Split jurisdiction
 - Differences in EPA/RRC regulations

Commissioner Contact Information



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