Carbon Capture and Sequestration: The Evolving Regulatory Framework In New York State

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Robert Singer, PhD
George A. Rusk, Esq
Ernesto Del Rio, Esq
Richard Morse

ecology and environment, inc.
International Specialists in the Environment

Presentation Outline

- Project Background
- Overview of Report Content
  - CCS Goals and Regulatory Challenges
  - Federal Regulatory Procedures
  - Lessons from other States
  - Common Law Precedents
  - Regulatory Framework in New York
  - Policy Issues in New York
- CCS Project Status in New York

CCS Feasibility Study
NYSERDA Project No. 10498

- Task 1: Carbon Sequestration Permit Strategy—Selection of Preferred Site

- Task 2: Selection of Sequestration Strategy

- Task 3: Evaluation of Costs and Potential Benefits

- Task 4: Assessment of Regulatory and Permitting Issues

- Task 5: Insurance and Indemnification Issues

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- "White Paper on CCS"
  - Task 3: Evaluation of Costs and Potential Benefits
  - Task 4: Assessment of Regulatory and Permitting Issues
  - Task 5: Insurance and Indemnification Issues

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Carbon Dioxide Capture and Sequestration: Developing a Regulatory Strategy for New York State

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Prepared for:

John P. Martin, Ph.D.
Senior Project Manager

NEW YORK STATE ENERGY RESEARCH
AND DEVELOPMENT AUTHORITY (NYSERDA)

Prepared by:

ECOLOGY AND ENVIRONMENT, INC.
368 Pleasant View Drive
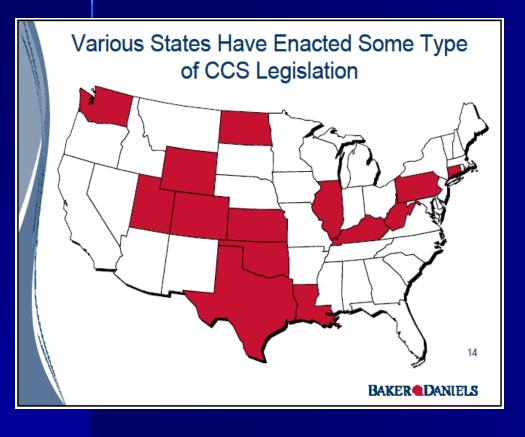Lancaster, New York 14086

Agreement Number: 10498

1. Introduction
2. Developing CCS and Common Law Precedents
3. Regulatory Framework for CCS in NY State
4. Policy Issues Affecting CCS Implementation in NY State
5. Conclusions

Highlights: The Devil's in the Details

- Federal Permitting: UIC Class VI proposed

- Detail: Trace contaminants in the CO_2 stream could trigger RCRA or CERCLA, or the Supreme Court definition of CO_2 as a "pollutant" could trigger CERCLA liability.

Highlights: The Devil's in the Details

Various States Have Enacted Some Type of CCS Legislation

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However, these laws are either:

- Project specific;

- Don't address liability;

- Fail to consider pore space ownership (except WY)

IOGCC Guidelines are more complete but have not been adopted anywhere.

Highlights: The Devil's in the Details

- Common Law Precedents
  - American Rule
  - Trespass
  - Nuisance Claim
  - Abnormally Dangerous Activity
  - Negligence
  - The Negative Rule of Capture
  - The English Rule
  - Etc.

Highlights: The Devil's in the Details

- Existing Laws and Regulations
  - National Environmental Policy Act
  - State Environmental Quality Review Act
  - Air Permit (19 ECL)
  - Regional Greenhouse Gas Initiative
  - Federal Clean Air Act

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Air Permit (19 ECL)

- ## NYS DRAFT CO2 Regulations

Source	NY CO2 Limit
Electric Generating Units (boiler, turbines, IGCC)	925 lb/MWh
Simple Cycle Turbines (<100 MW)	1450 lb/MWh
Very Large Boilers	125 lb/MMBTU
Gasification	125 lb/MMBTU

For Comparison, California Chapter 11/SB1368 limit is 1100 lbCO2/MWh for local publicly owned electric utility procuring electricity

Highlights: The Devil's in the Details

- Existing Laws and Regulations that Require Modification to Apply to CO2
  - Oil, Gas, and Solution Mining Law (23 ECL)
  - Public Service Law
  - Federal Energy Regulatory Commission

Key Policy Recommendations

- Develop a comprehensive CCS program consistent with existing regulations.

- Develop ownership regulations that clarify pore space ownership, vesting ownership with surface owner unless mineral rights have been severed.

- Create regulations that parallel regulations from the waste disposal, oil and gas industries.

- Build on existing Oil and Gas Law to authorization unitization of reservoirs, fair compensation, review, etc.

- Create incentives, particularly for "early movers."

Questions?

Stratigraphic Test Well, NY
Ecology and Environment, Inc.

CO2 Injection Well, MI
Courtesy Batttelle

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