

# **Public Comment Highlights**

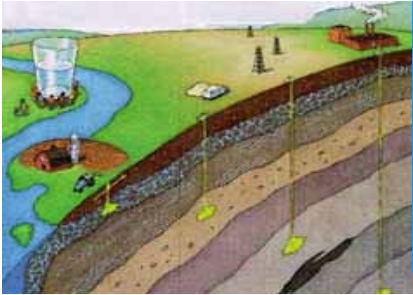
## ***EPA's Geologic Sequestration Rulemaking***



**Stephen Heare**

**Office of Ground Water and Drinking Water**

**March 5, 2009**



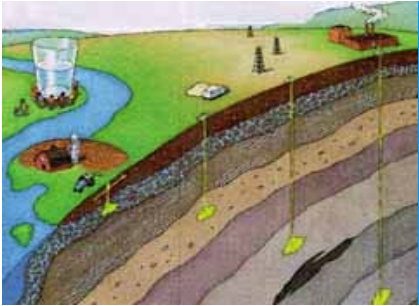
# Comment Schedule Review

- Proposal Published: July 25, 2008
- Two Public Hearings:
  - September 30, 2008: Chicago, IL
  - October 2, 2008: Denver, CO
- Comment Period End Date: November 24, 2008
- Comment Period Extension: December 24, 2008
  
- 365 public submissions
- 151 unique comments



# Comment Topics

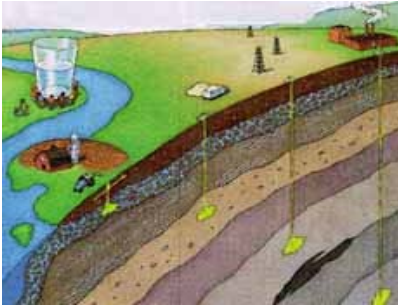
- Conversion from Class II (Oil and Gas) to Class VI
- Primacy, State Funding, and Expertise
- Injection Depth and Related Topics
- Post-Injection Site Care Timeframe and Closure
- CO<sub>2</sub> Stream Characterization
- Financial Responsibility and Liability Requirements
- Public Participation, Involvement, and Perception
- EPA Statutory Authority Coverage



# Comment Synopsis

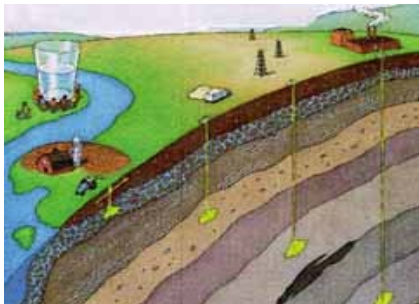
- **Conversion from Class II (Oil and Gas) to Class VI**
  - New requirements are not necessary
  - By regulation clarify the distinction between Class II and Class VI operations
- **Primacy**
  - Allow separate primacy for Class VI wells
  - Provide flexibility to permitting authorities
- **State Funding**
  - UIC programs are not adequately funded to support current well classes
  - Class VI wells will need more funding
- **State and Federal Expertise**
  - There is insufficient technical capacity, experience, or funding to address GS projects, ensure USDW protection and GS success





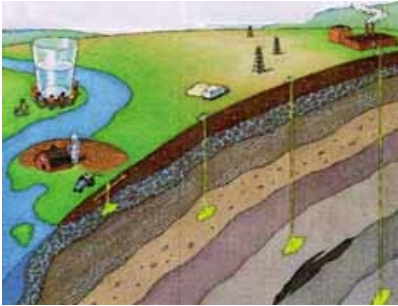
# Comment Synopsis

- Injection Depth and Related Topics
  - Do not allow injection above the lowermost USDW *vs.* Allow injection above the lowermost USDW either universally or under specific geologic circumstances
  - Do not establish a minimum injection depth *vs.* Establishing a minimum injection depth based on site specific criteria
  - Do not allow aquifer exemptions for Class VI wells *vs.* Allow aquifer exemptions for Class VI wells either under current or modified criteria
  - Prohibit injection into coal seams, basalts, salt domes *vs.* Allow injection into all formations regardless of type/depth



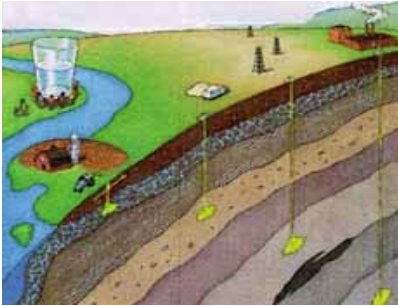
# Comment Synopsis

- Post-Injection Site Care Timeframe and Closure
  - The timeframe should be more than 50 years
  - There should not be a fixed timeframe
  - 50 years is “arbitrary” and excessive
  - 50 years with flexibility is supported (by multiple organizations) and is a good “default”
  - The Agency should develop a performance standard to replace a fixed timeframe



# Comment Synopsis

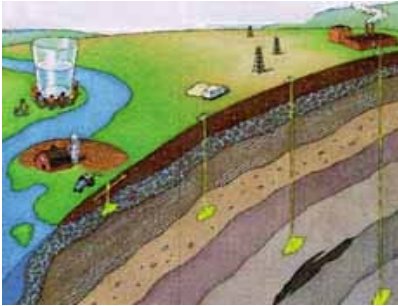
- CO<sub>2</sub> Stream Characterization
  - EPA should not allow injection of hazardous constituents (e.g., CO<sub>2</sub> impurities) through Class VI wells
  - Specificity is requested regarding the purity of CO<sub>2</sub>
  - More clarity is needed about *when* the determination is made about whether the CO<sub>2</sub> is a RCRA hazardous waste or not (How do you make this determination?)
  - Carbon dioxide should not be classified as a hazardous waste and does not warrant treatment more stringent than Class I Hazardous wells receive
  - Class VI wells should be given a RCRA exemption/the rule needs more clarity regarding RCRA requirements



# Comment Synopsis

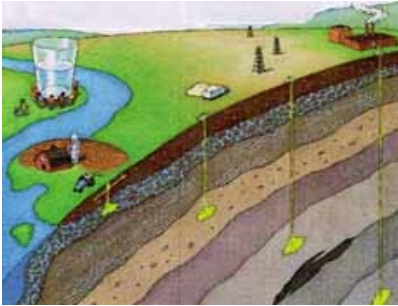
- Financial Responsibility and Liability Requirements
  - Include specific language for FR requirements in the rule
  - Self-insurance should be an option vs. self-insurance should not be an option
  - A Federal/Industry partnership may be useful in addressing liability (rather than it resting with the owner/operator)
  - EPA should consider the fact that the final rule will “send a message” to the financial world about CCS (e.g., the benefits and risks)
  - EPA should address compensation for degradation of private water supplies
  - What will EPA do after 50 years/site closure if there is groundwater contamination?
  - Limit CERCLA liability (in permit)





# Comment Synopsis

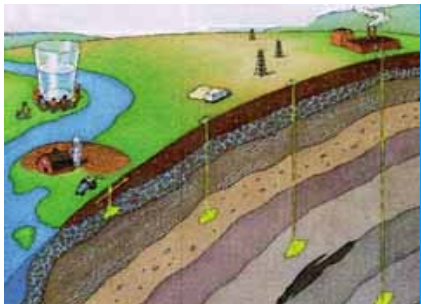
- Public Participation, Involvement, and Perception
  - Need to engage the public early in the GS project development process (e.g., during discussions about siting; permitting; etc.)
  - Need to engage *specific parties* in the GS project development process (e.g., local governments, utilities, citizens and property owners, private well owners)
  - Need to raise national awareness about GS technology, what it is, and what role it would play in climate change mitigation
  - Need to be aware of public perception of GS and ensure that the requirements do not stigmatize GS and “undermine public confidence in the UIC program”



# Comment Synopsis

- EPA Statutory Authorities Coverage
  - RCRA/CERCLA Authorities
  - Clean Air Act Authority
  - In conjunction with State Laws (e.g., pore space issues)
- Climate Change
  - EPA should have a comprehensive approach to Climate Change and not a “piecemeal approach” through various program offices, statutes, agencies and departments
  - This issue is too important to ignore, EPA should act quickly to finalize the rule





# Anticipated Next Steps for GS Rulemaking

Activity	Milestone
Workgroup Kickoff	January 2009
Workgroup Conference Calls	Monthly (Jan – Sept 2009)
Determine Need for NODA	February 2009
OMB Review of NODA	June 2009
Signature and Publication of NODA	November 2009
Public Comment Period for NODA	November – January 2010
OMB Review of Final Rule (without NODA)	Fall 2010
Final Rule Publication (without NODA)	Late 2010
Final Rule Publication (with NODA)	Early 2011

