Climate Change and Oil & Gas Regulation

Professor Tracy Hester
Environmental Law in Oil & Gas

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Looking back – Environmental Impact Assessments and Oil & Gas

• Primary federal law: National Environmental Policy Act
  – States laws can be stronger: California, NY

• NEPA: procedural, not substantive

• “Major federal action” “that significantly affects” “quality of the human environment”
  – “affects” includes context + intensity
  – Look to direct, indirect, and cumulative effects

• Process: Environmental Assessment, Finding of No Significant Impact, Categorical Exclusions, Environmental Impact Statements

• Section 390 Cat-X; Executive Order 13,807; presidential memos
Start with the physical realities

- Two keys questions:
  - How do oil & gas operations affect climate change?
  - And how does climate change affect oil & gas operations?
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Beyond emissions from drilling and processing?

- Flares
- Produced waters and flowback
- On-site engines
- Pipeline leaks
- Tank storage
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- Greenhouse gas pollution is different
  - Ubiquitous sources
  - Quick mixing; global impact with little local effect
  - Long residence time
  - Suite of different gases to consider, and black carbon
Given these realities, what federal laws might apply?

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- Applicable federal environmental statutes could include:
  - Clean Air Act
  - Clean Water Act
  - RCRA and CERCLA
  - Endangered Species Act
  - NEPA
  - Injection wells and Safe Drinking Water Act
Federal Clean Air Act, Oil & Gas Operations, and Climate Change

- Endangerment Finding; *Massachusetts v EPA*

- **Title I**: air quality permits from stationary sources
  - Prevention of Significant Deterioration (PSD) permits
    - Tailoring Rule; *UARG v. EPA*
    - “PSD Anyway” sources
      - New Source Performance Standards (NSPS) – methane NSPS

- **Title II**: fuels and mobile sources

- **Title V**: Permits

- **Title VI**: Ozone protection
Other federal environmental statutes – the Clean Water Act

- Heat is a pollutant – so is acidity
  - Ocean acidification
  - Thermal discharge limits

- Point source permits under NPDES or state programs
  - Look to receiving water

- Impaired Waters Under Section 303
  - Total Maximum Daily Loads

- Wetlands permits (remember Rapanos)
Other federal statutes

• Endangered Species Act
  – Multiplier effect – e.g., dune sagebrush lizard,
  – Limits on greenhouse gas emissions?

• NEPA
  – When do you consider climate change effects in an environmental impact assessment?
  – CEQ Guidance
  – Revocation by Trump Administration
Other federal environmental laws, E&P, and climate

- Underground injection and Safe Drinking Water Act
  - Carbon capture and sequestration
  - Enhanced oil recovery
  - Class VI wells v. Class II wells

- CERCLA and RCRA
  - Status of discarded CO2
  - Exemptions

Figure (1): Oil Recovery using liquified Co2 Injection Method
Source: Dakota Gasification Company, 2015
Other challenges

• How does climate change affect oil & gas production?
  – Climate adaptation – spill planning and prevention
    \textit{(Conservation Law Foundation v. Exxon)}
  – Peak oil and stranded carbon

• Climate false statements

• Climate tort liability
Questions?

Professor Tracy Hester
University of Houston Law Center

tdheste2@central.uh.edu
713-743-1152 (office)