High-Volume Hydraulic Fracturing: The Regulatory and Policy Debate

NYSERDA 2011 EMEP CONFERENCE

ENVIRONMENTAL MONITORING, EVALUATION, AND PROTECTION IN NEW YORK: LINKING SCIENCE AND POLICY

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Introduction

- Executive Deputy Commissioner (2007 2010)New York State Department of Environmental Conservation (DEC)
 - Supervised DEC activities as New York determined how to address permit applications for high-volume hydraulic fracturing (HVHF)
 - Conducted statewide hearings on first draft SGEIS
 - Worked extensively with industry, landowners, environmental groups, local governments, other state agencies
- Presentation today will focus on NYS regulatory considerations and decision-making, and the policy debate in NYS

Fundamental Choice ...

- Decision made in 2008 to carefully study impacts of HVHF on a generic basis before issuing permits, to satisfy legal requirement for environmental review
 - DEC going through a formal administrative process
 - Initial context for decisions was State Environmental Quality Review Act (ECL Article 8)
 - Regulations now part of the mix
 - Current status revised draft SGEIS and draft regs issued, subject to public comment period expiring mid-December
 - Issuance of permits waiting for conclusion of generic environmental impact review and issuance of formal regulations

What Were We Thinking?

- There were significant impacts outside existing 1992 GEIS for gas drilling environmental review legally required
- Must address environmental impacts <u>before</u> drilling started
- Need for a transparent and inclusive process, but not a public referendum on allowing drilling
- DEC mission: objectively evaluate and address impacts to best protect the environment
 - Energy and economic development not the issue for environmental regulator
 - Regulatory neutrality, not "for" or "against" -- responsible to all interests, including landowners and industry
 - Inevitable legal challenges looming
- Generic review = administrative efficiency and consistency
- Ultimately, must justify public confidence that there will not be environmental harm in NYS should permits be issued

DEC's Mission – ECL 1-0101

- "The quality of our environment is fundamental to our concern for the quality of life. It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well being."
- Unlike many other states, DEC is both environmental quality and natural resource agency

Statutory Policy – ECL Article 23

"It is hereby declared to be in the public interest to regulate the development, production and utilization of natural resources of oil and gas in this state in such a manner as will prevent waste; to authorize and to provide for the operation and development of oil and gas properties in such a manner that a greater ultimate recovery of oil and gas may be had, and that the correlative rights of all owners and the rights of all persons including landowners and the general public may be fully protected, and to provide in similar fashion for the underground storage of gas, the solution mining of salt and geothermal, stratigraphic and brine disposal wells."

State Legal Authority

- New York State Environmental Conservation Law Article 23
- Regulations 6NYCRR Parts 550-559
- State Environmental Quality Review Act
- Guidance and special permit conditions
- DEC jurisdictions in addition to Mineral Resources
 - Air Resources
 - Water
 - Solid and Hazardous Materials (Materials Management)
 - Fish, Wildlife & Marine Resources
 - Lands & Forests
- NYS jurisdiction and oversight not dependent upon status of federal interest in this industry

State Environmental Quality Review Act (SEQRA)

- Purpose of ECL Article 8 is to protect the environment
- All discretionary approvals (permits) from a NYS agency or unit of local government require an environmental impact assessment.
- If assessment results in finding of *significance*, SEQR requires the sponsoring or approving governmental body to identify and mitigate the significant environmental impacts of the activity it is proposing or permitting.
- Goal: Avoid or minimize adverse environmental impacts to the maximum extent practicable.

Use of a Generic EIS

- Evaluates separate actions having common impacts
- Individual EIS for proposed action not needed if GEIS adequately addresses all potential impacts
- Gas well drilling in NYS was reviewed in a 1992 GEIS
 - included both horizontal drilling and use of hydraulic fracturing, but did not contemplate combining the technologies or the scale of the proposed operations
- http://www.dec.ny.gov/energy/45912.html

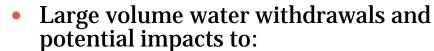
The Draft SGEIS

- High-volume hydraulic fracturing
 - O What's new and generic?
 - **▼** i.e., Which topics not sufficiently addressed by 1992 GEIS involve:
 - Common activities,
 - Common impacts, and
 - Common mitigation measures?
 - O What's new and not generic?
 - **▼ i.e., What aspects of HVHF will require site-specific environmental assessments and SEQR determinations?**
 - ★ April, 2010 decision (now superseded) to remove unfiltered surface water supplies in NYC and Syracuse from "generic" review
 - Extraordinarily comprehensive document can be found at www.dec.ny.gov

Potential Impacts Outside 1992 GEIS Include:







- Stream flow
- Public water supply
- Fish and wildlife

Hydraulic fracturing:

- Well site facilities
- Fracturing fluid composition
- Fluid handling, storage and transportation
- Fluid reuse potential
- Fluid treatment options, disposal issues
- Multiple wells at single site
- Air, climate change, cumulative impacts, invasive species, landscape fragmentation, etc.
- Don't forget about intangible impacts on communities not environmental issues but very important!

Who's Involved



- Minerals
- Water
- Air
- Solid & Hazardous Materials
- Fish, Wildlife & Marine Resources
- Environmental Permits
- Climate Change Office
- Lands & Forests

DOH

- Water Supply Protection
- Toxic Substance Assessment

Consultants

- Alpha Environmental
- NTC Consultants
- ICF International
- URS Corporation
- E & E
- NYS Museum
 - State Geologist
- PSC (re: pipelines)

Next Steps

- Public comment period through middle of December
 - Hearings starting
 - Will include formal regulations as well as 2011 dSGEIS
- Publish final SGEIS and complete regulatory process
 - Responsive summary to cover comments to both 2009 and 2011 drafts
- SEQRA Findings Statement
- Issue Permits to Drill
- Potential for litigation delays?
 - Procedural issues SEQRA and regulatory process
 - Disputed role of local governments cases pending
 - Substantive Article 78 and constitutional challenges
- Advisory Committee recommendations

Evolution of SGEIS

- DEC has benefited from:
 - experience in other states
 - consideration of comprehensive public comments on first draft
 - continuing research, analysis, discussion, review as technology develops
- No change from underlying "think first, drill later" philosophy
- DEC has responded to concerns, e.g.:
 - Formal regulations combined with SEQRA
 - Absolute prohibition in FAD areas and surface of state lands
 - Deference to local governments
 - Revised buffer zones, best practices, SPDES permit, etc.
- No significant new environmental safety issues have emerged since original scope published in 2008



Public Policy Debate



- Driven by stakeholders:
 - Environmental Absolutists no drilling ever
 - Environmental Pragmatists recognize energy and economic benefits, but want assurance technology is safe and that state has done a comprehensive and complete job
 - Responsible Drilling Advocates landowners and local officials in favor of drilling provided strong, objective environmental safeguards are in place
 - Economic Development Activists we've missed the boat and should have started issuing permits in 2008
 - Industry need to make business decisions involving billions of dollars based upon regulatory climate

Advocacy v. Education ...

- Fierce anti-drilling advocacy
 - Industry just starting to catch up
- Use of social media
- Films and TV shows
- Demonstrations
- Celebrity involvement
- Has discussion become too divisive?
 - Philosophical battle instead of objective, science based discussion
 - Lots of misinformation endlessly repeated, now accepted as true
 - Industry challenge: persuasively present information and gain public trust
 - Regulatory challenge: gain public confidence



Can The Debate Be Objective?

Is it possible for science to drive the discussion?

- "Dread to Risk Ratio"
 - The greater the dread, the less objective the perception of risk
- "Motivated Reasoning"
 - Preferring beliefs we are already invested in, and actively arguing against or ignoring new contradictory information
- Both sides equally at fault
- So what do we do?
 - Regain perspective
 - Insist upon intellectual honesty not everything is black and white or simple
 - o Engage in critical thinking, avoid generalizations and exaggerations
 - Trust objectivity and expertise of regulatory professional staff

BOTTOM LINE: Science must drive the decisions

Will the NY Approach be Successful?

Insight: N.Y. gas drillers' victory soured by tough new rules





By Edward McAllister
NEW YORK | Fri Oct 21, 2011 2:44pm EDT

(Reuters) - The end of a drilling ban in New York was meant to be a new dawn for energy companies. After years of waiting, they would finally be able to exploit the richest deposit of natural gas in the country.

But as companies delve into new regulations for drilling in New York, they're discovering a bitter reality: half the land they had leased for drilling



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- Still a work in process ... DEC has a duty to consider all comments, focus should be on <u>substance</u> of environmental requirements, not for or against drilling
- Resources still needed ...
- Difference between SEQRA process and regulations
- Objective review must trump politics for process to succeed
- Ultimately, will public have confidence?



Questions?







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