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Subject: [CWN] CLWN SGEIS and Regulations comments submitted to NY DEC
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To: cwn@mail.pas.rochester.edu



CAYUGA LAKE WATERSHED NETWORK

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January 10, 2012

Commissioner Joseph Martens

Department of Environmental Conservation

625 Broadway

Albany, NY 12233-1011

RE: Comments on the Revised Draft SGEIS on Well Permit Issuance for Horizontal Drilling and High Volume Hydraulic Fracturing, and the High Volume Hydraulic Fracturing Proposed Regulations

Dear Commissioner Martens and Staff:

I am writing on behalf of the Cayuga Lake Watershed Network, a grassroots organization founded in 1998 to provide a central organization for the protection of Cayuga Lake and the 37 major creeks in its 870-square mile watershed, which spans 44 municipalities and extends into 7 counties. The 38 miles long, 435 feet deep Cayuga Lake is at the center of New York State's majestic Finger Lakes, which drain to Lake Ontario.

Our local water bodies define our region, providing clean water for drinking and bathing, as well as many recreational activities for residents and visitors, such as swimming, fishing, and boating in our lakes, ponds, and rivers, and hiking in our numerous gorges with their beautiful hanging waterfalls. Additionally, wine-making, farming and other clean-water dependent businesses thrive here. A strong sustainable development movement, locally-focused, characterizes our hopes for the future. This future depends on abundant clean water.

The Cayuga Lake Watershed Network's mission is: *to identify key threats to Cayuga Lake and its watershed, and it advocates for solutions that support a healthy environment and vibrant communities.*

The current weight of evidence about unconventional gas development (hereafter, hydraulic fracturing) being proposed for our region and state leads us to conclude that hydraulic fracturing represents an unacceptable risk to our environment with dubious positive economic or greenhouse gas benefits.

Echoing US Representative Maurice Hinchey's January 9, 2012 letter to Governor Cuomo, we call for a withdrawal of the present SGEIS and Regulations, and a re-start to the process. We support his ten points of concern about the present SGEIS, included in our specific numbered points below.

Concerns regarding the SGEIS' inadequate protections for our water resources

High-volume slick-water hydraulic fracturing represents an especially serious threat to freshwater systems (Entrekin et al. 2011). Large volumes of fresh water are injected into wells (5 million gallons per well); this fresh water is amended with hazardous chemicals to enhance rock penetration and retard microbial growth (167 tons per well); and large volumes of water contaminated with fracking chemicals and radioactive material (including an estimated 20% of fracking fluid) return to the surface from flowback and production water. New York State does not currently have the means to cleanse or dispose of wastewater.

Our concerns are heightened by the thousand-plus cases of contamination of groundwater (e.g., Lustgarten 2008), serious adverse health effects in humans and livestock (Bishop 2011, Colborn et al. 2011, Lustgarten 2008), and the emerging science indicating systematic contamination of groundwater with methane and fracking chemicals (DiGiulio et al. 2011, Osborn et al. 2011).

Questioning the wisdom of unconventional gas development

We have grave doubts about the wisdom of unconventional gas development in our region and elsewhere. Unconventional gas development is often promoted as an economic opportunity for rural areas. The evidence shows that hydraulic fracturing is an energy intensive boom-and-bust industry that transforms rural lands into heavy industrial zones at the expense of existing rural enterprises. Natural gas has also been touted as a green energy source that will curtail our greenhouse gas emissions.

But several recent studies have found that when a full accounting is made, the greenhouse gas emissions of unconventional gas are comparable to, or greater than, those of coal (Howarth et al. 2011, Hughes 2011, Wigley 2011). Recent assessments by atmospheric scientists are that immediate reductions in greenhouse gas emissions are needed to avoid uncontrolled global warming triggered by tipping-points (Hansen et al. 2007). Prominent scientists have recently spoken out on this issue (Howarth and Ingraffea 2011).

Concern that NY DEC cannot handle the regulatory and monitoring burden

A new report out of Pennsylvania describes the PA DEP's inability to keep tabs on the rogue energy industry there. It is naïve or cynical for DEC officials and others to state that they will be able to do a better job here.

The investigation, carried out in recent weeks by the *Pittsburgh Post-Gazette* as part of its gas industry coverage, found that there are 495 more wells producing gas, or ready to produce gas, than DEP has recorded as ever being drilled, and 182 of those wells don't show up on the state's Marcellus Shale permit list.

This 12 percent error rate is significant in terms of unmeasured and unregulated impacts. A major source for this error is that drilling companies self-report their actions and the type of wells they are drilling. This troubling problem is only one of many indicators of the ungovernable nature of the energy industry, and its ability to exploit any weakness in the system designed to govern it, with little regard for consequences beyond the company's bottom line (Hamill, 2012).

At present, NY DEC is in no shape to take on this major responsibility with any hope of protecting our resources and communities from significant long-term negative impacts.

Our Primary Concerns about the Revised SGEIS

1. The SGEIS does not insure the "sanctity" of the waters of our watershed by using the best information available to evaluate proposed gas development. The SGEIS relies extensively on industry information and neglects critical new scientific findings and analyses strongly suggesting systematic contamination of underground water near active wells and indicating that greenhouse gas emissions associated with gas from hydraulic fracturing are at least as large as those of coal. The SGEIS' designation of 100, 150, or 250 foot setbacks of drilling operations from water wells, aquifers, waterways, wetlands, homes, schools and communities is arbitrary, without scientific justification of adequacy of protection from environmental harm. Prior to gas development, it must be demonstrated that hydraulic fracturing poses a negligible risk to aquifers and surface waters, consistent with Governor Cuomo's 2010 statement that "all watersheds are sacrosanct."
2. The SGEIS does not consider potential impacts of hydraulic fracturing on public health, even though frack fluid contains a mixture of hazardous chemicals, hundreds of cases of ground and surface water contamination have been reported, and there is growing evidence of adverse health effects in humans and other animals from air and water pollution associated with shale gas development. This is an egregious omission because it is likely to significantly factor into judgment about whether hydraulic fracturing should proceed in New York, as well as costs associated with health care in the economic analysis.
3. The SGEIS does not include a cumulative impact analysis to understand the full impact of Marcellus gas development on our waters, air, local roads, and most importantly, local economies.
4. The SGEIS does not describe a plan for cleansing or disposing of flowback water and other drilling waste fluids.
5. The SGEIS does not outlaw the use of hazardous chemicals in drilling fluids, even though the document argues that "green" alternative to current frack fluids must await a full evaluation. The SGEIS should explicitly require that gas operations in New York are subject to all of the nation's environmental statutes. We strongly endorse Rep. Hinchey's call for banning the use of environmental toxins in drilling fluids.
6. The SGEIS does not hold companies exploiting gas resources for the marketplace accountable for the full costs of such activity. Gas companies must be held strictly financially liable for environmental monitoring and remediation.
7. The SGEIS does not unequivocally ban the spreading of flowback and production water on roadways. This is a critical omission.

8. The SGEIS does not address Home Rule and explicitly state the right of local governments to determine their own land uses, in accord with zoning ordinances and comprehensive plans developed under local democracy.

9. The SGEIS presents an inadequate analysis of the climate effects of hydraulic fracturing. Prior to gas development, it must be demonstrated that greenhouse gas emissions will be sufficiently curtailed to avoid a 1.5-2.0 degree C increase in global temperatures within the next 15-35 years.

Our position on unconventional gas development (hydraulic fracturing), SGEIS and Regulations

We oppose hydraulic fracturing in its current incarnation because it presents an unacceptable risk to the waters, lands, and livelihoods of our region and state. Furthermore, considering larger, global effects, development of shale gas would be a fool's errand, failing to address the pressing issue of climate change under what we now know is a false promise of clean energy.

The Cayuga Watershed Network recommends a thorough reevaluation be undertaken that incorporates new independent (non-industry) information, especially bearing on water contamination and climate change. Toward this end, we recommend that the NYSDEC solicit the input of leading scientists in the areas of hydraulic fracturing, sedimentary geology, environmental science, and climate change. We also urge that the State of New York await the results of a comprehensive study of hydraulic fracturing's risks to water resources by the U.S. Environmental Protection Agency (EPA) that are expected in late 2012.

In addition to requesting that you withdraw the present SGEIS and begin anew, we call for the withdrawal and rewriting of the associated Regulations, so that they reflect the analysis of an honest SGEIS and adhere to democratic principles of due process and public input.

NYSDEC's mandate to "prevent and abate water, land, and air pollution" should require due diligence in insuring that our waters are not irreparably harmed.

Respectfully submitted,

Hilary Lambert

Hilary Lambert, Steward

On behalf of our Board of Directors, our members, Cayuga Lake and its watershed.

Copy to: Governor Andrew Cuomo

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The Cayuga Lake Watershed Network's mission is to protect and improve the ecological health, economic vitality and overall beauty of our watershed through education, communication and leadership.

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