



## **Testimony on the Draft Supplemental Environmental Impact Statement**

**Loch Sheldrake, New York**

**October 28, 2009**

My name is Bruce Ferguson and I am a member of Catskill Citizens for Safe Energy. I suppose I should consider myself fortunate. I only had to drive twenty-five miles to get here. Because the DEC is holding only four public hearings throughout the state, some New Yorkers will have to travel for three hours, and over one hundred and fifty miles in each direction, in order to attend a hearing.<sup>1</sup>

And because I have high speed internet access, I've had four weeks to study the 809 page Draft. The millions of New Yorkers without high-speed access<sup>2</sup> had to wait for weeks to read a printed copy that only recently became available, in limited quantities, at sixty-one locations throughout the state.<sup>3</sup> For them the ostensible sixty day comment period is actually more like a forty-five day one.

If the DEC truly intends to permit informed public comment on the Draft, it must provide better access to the document, a reasonable amount of time to study it, and many, many more public hearings.

That said the Draft is, in some ways, a step forward – at least for the DEC, if not for the general public. Just last year the DEC still maintained that drilling in the Marcellus Shale would be essentially the same as any other gas drilling operation in New York, and it was blandly telling the public that fracking fluid contained only “fresh water, sand, nitrogen and a diluted soapy solution”.<sup>4</sup> Now, with the publication of the Draft, the Department is tacitly acknowledging what many of us have known all along – extracting natural gas from shale, using high-volume hydraulic fracturing and gigantic horizontal wells, is unlike anything this state has ever seen before. And the Draft also is more candid about fracking fluids – it lists hundreds of toxic chemicals, including benzene, toluene and xylene – chemicals that the DEC had specifically assured us were not used in New York State.<sup>5</sup> So the Draft corrects some of the misinformation that the DEC itself has been disseminating to the public, but beyond that it fails offer any real assurance that the Department is up to the job of protecting public health and the environment. Frankly there is little indication that the DEC has any real interest in doing so.



To give just a few examples:

First, as Attorney Deborah Goldberg has pointed out, the Draft does not propose a single new regulation or enforceable rule. All the proposed environmental ‘protections’ in the Draft are merely changes in the permitting process and procedures.<sup>6</sup> These can be easily undone, at the behest of the gas industry, once the press and public are no longer paying close attention.

Second, even when the Draft does propose modest steps to protect the public, the DEC abdicates its responsibility to provide oversight. For example the Draft requires baseline testing of water wells in the vicinity of gas wells, but suggests that the administration of well-testing programs should be the responsibility of county health departments.<sup>7</sup> However, Article 23 of the Environmental Conservation Law expressly strips municipalities of the ability to regulate any aspect of gas drilling not related to road use or tax law<sup>8</sup> so it does not appear that a county or municipality could require testing as a precondition for drilling. How can counties be expected to administer well-testing in connection with drilling, when they have no authority over drilling itself? And where is the money to pay for this administration supposed to come from? As far as I can tell, the local taxpayer will be stuck with the bill.

Furthermore, baseline testing is not adequate to protect our water – there must be monitoring wells around gas wells to detect contamination *before* it gets into our drinking water, and there must be post-drilling testing to detect contamination when it does occur. The Draft does not require post-drilling testing, it only “proposes” it<sup>9</sup>; and it does not even propose the construction of monitor wells.

Ever since it admitted that fracking fluid contains hundreds of toxic chemicals, the DEC has been proclaiming that it will require disclosure of all these chemicals, yet in fact it will make no effort to verify that the information it receives from industry sources is true. DEC Commissioner Grannis recently told a NYS Assembly Committee that the Department will “rely on the disclosures in the permit applications.”<sup>10</sup> In other words, if a driller doesn’t admit using a particular chemical, the DEC won’t know a thing about it. This is particularly disturbing in the light of the testimony that Dr. Antony G. Hay gave at the same hearing. He said that the Draft SGEIS described flowback samples from West



Virginia and Pennsylvania that contained high concentrations of cancer-causing chemicals that were not even included in the list of fracking chemicals compiled by the DEC. In some instances the concentration of a single one of these chemicals - 4 nitroquinoline-N-oxide exceeded 0.5% of the fluid – and that is purported to be the total concentration of *all* chemicals in fracking fluid.<sup>11</sup> (Incidentally 4-nitroquinoline-N-oxide is a chemical used to induce cancers in laboratory animals.) Dr. Hay calls for banning the use of 4-nitroquinoline-N-oxide and another carcinogen – benzene; the Draft does not.

Third the Draft makes it clear that the DEC does not intend to hold the gas industry to the standards that would minimize health and environmental risks – it doesn't require the use of either 'best management practices' or 'best available technologies. For example the DEC press release, that accompanied the publication of the Draft, states that "Operators choosing to store flowback on-site must use steel tanks to protect the environment."<sup>12</sup> This regulation addresses a core concern of many of us, and it appeared to be very good news indeed. Until you read the next sentence. The press release goes on to say that "If an operator proposes using a centralized impoundment ... to serve multiple sites, it must use a double-liner system..."<sup>13</sup> According to the Draft "centralized impoundments" may be pits up to five acres in size, holding up to sixteen million gallons of toxic fluids connected by pipes to well pads as far as four miles away.<sup>14</sup> This makes no sense at all. If small waste pits are prohibited in order to protect the environment, what possible justification can there be for permitting sixteen million gallons of toxic fluid to sit in our fields separated from our land and water by just two sheets of plastic? To my mind this is further evidence, if any were needed, that the DEC is willing to greenlight drilling on the cheap, at the expense of public safety and the environment.

Fourth, there is no doubt that the use of toxic hydraulic fracking fluid is one of the most troubling aspects of shale gas extraction, and only a single fleeting reference in the Draft suggests its use might be avoided altogether. It mentions "a new and alternative hydraulic fracturing technology" already used in Canada that relies on liquefied petroleum gas in place of water-based hydraulic fracturing fluids. "Using propane...eliminates the need to source water for hydraulic fracturing, recover flowback fluids to the surface and dispose of the flowback fluids."<sup>15</sup>



This brief reference raises far more questions than it answers. If an alternative to fracking fluids is just around the corner, or in fact, here already, why isn't it fully explored in the Draft? I doubt that there are many people in this room today who wouldn't be willing to hold off for a year or two on drilling in the Marcellus if we knew that we could avoid all the problems and hazards associated with fracking fluid.

Finally, although the Marcellus Shale and other tight shale formations cover an enormous portion of the State, the Draft rejects outright any analysis of the cumulative environmental impact that thousands, or perhaps tens of thousands, of gas wells would have on our health, our water, our wildlife and our economy. To say that "the rate of development cannot be predicted with any certainty"<sup>16</sup> is simply unacceptable. It is also unacceptable for the Department to claim that it's not "possible to define the threshold at which development results in unacceptable adverse noise, visual and community impacts"<sup>17</sup>. The DEC is legally required to assess these impacts, and its failure to do so is conclusive evidence that the Draft is hopelessly incomplete, and the DEC is ill-prepared to safely regulate shale gas extraction in New York State.

1. For example someone living in the city of Dunkirk which sits atop the Utica and Marcellus shale formations( both drilling targets addressed by the Draft) would have to travel 154 miles to attend the nearest hearing, in Corning. Mapquest estimates that this trip takes 2 hours and 54 minutes in either direction. <http://www.mapquest.com/maps?1c=Dunkirk&1s=ny&2c=Corning+&2s=ny>

2. According to a press release issued by Governor Paterson's office "only 52 percent of homes have personal computers. Forty-eight percent of households with computers still have not subscribed to high-speed broadband service. While seventy-eight percent of households with computers use some type of dial up service, this remains below the national average."  
[http://www.state.ny.us/governor/press/press\\_bold\\_steps.html](http://www.state.ny.us/governor/press/press_bold_steps.html) GOV SITE - GOVERNOR PATERSON OUTLINES VISION TO MAKE NEW YORK ...

3. As of October 20, 2009 the DEC website listed just sixty-one locations throughout the state where printed copies of the Draft were available. That's one location for every 320,000 New Yorkers. It should be noted that some of these locations have just a single copy of the Draft.

4. In a email message dated 5/28/2008 2:50:28 P.M. Eastern Daylight Time, [dmnog@gw.dec.state.ny.us](mailto:dmnog@gw.dec.state.ny.us) writes:  
 DEC's Division of Mineral Resources has received numerous calls lately about Marcellus shale activity and based on the number of calls, it appears that many companies are actively seeking to lease land for gas exploration in and Sullivan and Delaware Counties. You can access a great deal of information about the leasing process on our website—please go to: <http://www.dec.ny.gov/energy/205.html> and click on the landowner links on the left side of the page. Mineral Resources has not received any Marcellus drilling



permit applications for Sullivan County.

Oil and gas development has been taking place in our state since the 1800s. Laws and regulations have been in place to regulate the industry so that property and ground water resources are protected. Casing programs are designed to isolate the shallow drinking water zones from the deeper formations that may be fraced. The Marcellus shale is approximately 6,000' deep in Sullivan County, over one mile deeper than drinking water zones. Industry has used horizontal well drilling in New York since the late 1980s. Hydraulic fracturing has been commonly and safely used in New York State for decades. **Marcellus shale fracing operations in New York State use fresh water, sand, nitrogen and a diluted soapy solution to fracture the shale. These frac fluids do not contain benzene, toluene or xylene.**

Mineral Resources staff perform pre-site, drilling and post-site inspections to make certain that all conditions on a drilling permit are followed. DEC inspectors go to the drill site to verify that all fluids are properly contained. Our staff consists of experienced geologists and petroleum engineers who are very knowledgeable about oil and gas drilling operations. The industry is regulated and the lack of contamination events is evidence that the laws and rules are effectively protecting the environment. Please write again if you have any questions.DMN

5. Ibid. and Draft SGEIS pp 5.34–5.66.

6. “In New York, DEC's Division of Mineral Resources officials say that their proposals will adequately protect drinking water and other natural resources of this state. They are saying this even though they have not proposed a single new regulation to prevent serious environmental problems. They say we should trust them to place protective conditions in drilling permits and should not ask for enforceable rules.” “Why the big rush toward gas drilling?” By Deborah Goldberg, Albany Times Union, October 20, 2009.

7. Draft SGEIS, page 7-38 and 7-42

8. “The provisions of this article shall supersede all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries; but shall not supersede local government jurisdiction over local roads or the rights of local governments under the real property tax law.” ECL § 23-0303(2)Article 23 Title 3

9. Draft SGEIS, page 7-39

10. DEC Commissioner Pete Grannis testifying before the New York State Assembly Committee on Environmental Conservation, October 15, 2009 Albany, NY.

11. Dr. Antony G. Hay testifying before the New York State Assembly Committee on Environmental Conservation, October 15, 2009 Albany, NY.

12. DEC Proposes New Safety Measures, Mitigation Strategies to Govern Potential Marcellus Shale Drilling, September 30, 2009.



13. Ibid.

14. Draft SGEIS, page 5-115

15. Draft SGEIS 9/30/2009 Page 5-140 To combat formation damage during hydraulic fracturing with conventional fluids, a new and alternative hydraulic fracturing technology recently entered the Canadian market and was also used in Pennsylvania in September 2009. It uses liquefied petroleum gas (LPG), consisting mostly of propane in place of water-based hydraulic fracturing fluids. Using propane not only minimizes formation damage, but also eliminates the need to source water for hydraulic fracturing, recover flowback fluids to the surface and dispose of the flowback fluids.<sup>120</sup> While it's unknown if and when LPG hydraulic fracturing will be proposed in New York, having gathering infrastructure in place, would allow the propane to be recovered during flowback directly to a pipeline along with the produced natural gas.

16. Draft SGEIS page 7-111 quoting an NTC study for NYSERA.

17. Ibid.