Comments on NYS DEC's Draft HVHF Regulations

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Statements contained in the DEC's draft HVHF regulations (Regulations) are starkly inconsistent with results found in recently published peer reviewed economic literature. In addition, there are numerous omissions and errors in the Regulations.

It appears that the DEC considered neither comments submitted by independent economists nor readily available independent peer reviewed research prior to drafting the Regulations. Public comments by independent economists were submitted in response to both the 2009 and 2011 DEC SGEIS documents, but the majority of comments appear to have been ignored.

Shockingly, on page 3 of "Revised Regulatory Flexibility Analysis for Small Business and Local Governments", it is stated, "The 2011 rdSGEIS contains a detailed analysis of the socioeconomic impacts associated with approval to utilize HVHF." This statement could not be further from the truth. I, along with others, have testified in the past and have submitted written comments that list many of the flaws in the socioeconomic impact assessment done for the rdSGEIS. That assessment contains extensive errors and omissions, causing the results to be highly inaccurate and unacceptable, and certainly not detailed. The benefits, including estimates of job creation, are grossly exaggerated and significant costs are ignored. (My comments submitted in response to the rdSGEIS economic assessment are attached to this testimony, along with a letter signed by three economists that was sent to Governor Cuomo, Commissioner Martens and others.)

Failure to include conclusions of relevant peer reviewed research may indicate ignorance, carelessness, and possibly even bias on the part of the DEC. Many citations and even copies of relevant peer reviewed research were provided to the DEC, as indicated by my attached comments on the rdSGEIS. Additional peer reviewed research has since been published and should be acknowledged by the DEC, if the Department is attempting to make a comprehensive, unbiased assessment of economic impacts to the State and our communities.

In the section of the Regulations titled "Revised Rural Area Flexibility Analysis", it is stated, "According to the Census figures, all of the nearly 30 counties in the Marcellus and Utica Shales in New York State would be considered rural areas and that "the Department does not expect public or private sector interests in rural areas to be adversely affected." Important research on rural areas has clearly been

ignored. For example, Freudenberg and Wilson [1] studied non-metropolitan regions and concluded, "the areas of the United States having the highest levels of long-term poverty tend to be found in the very places that were once the site of thriving extractive industries."

Page 3 of "Revised Job Impact Statement" states, "There are no regions of the State expected to be negatively impacted from the proposed revised rules." And "the proposed revised rules are not expected to have an adverse impact on jobs and employment." This ignores much research that has been submitted in the past to the DEC, including research by Headwaters Economics [2] that shows that "counties that were not focused on fossil fuel extraction as an economic development strategy experienced higher growth rates, more diverse economies, better educated populations, a smaller gap between high and low income households and more retirement and investment income." The number of jobs in certain industries that are currently vital to the Upstate New York economy but incompatible with an industrial landscape and/or with the real or perceived risk of water, land and air contamination are likely to decline. These industries include tourism, agriculture, organic farming, wine- and beermaking, hunting, fishing, and other outdoor recreation. Both the Regulations and the rdSGEIS fail to even try to estimate the number of these offsetting job losses. Kinnaman [3] has concluded that job growth projections in the gas industry-sponsored studies are likely overstated. So, contrary to the statement in the Regulations, there may in fact be a net adverse impact on jobs and employment in the Marcellus region as a result of increased shale gas extraction.

I have been testifying and writing for several years now that costs are being ignored by the DEC. Finally, the DEC is admitting in the Regulations that there will be costs to state and local governments.

On page 34 of "Revised Regulatory Impact Statement," it is stated, "the adoption of these revised regulations will create additional costs for several state agencies. It can be expected that the most significant costs would be incurred by the Departments of Environmental Conservation (DEC), Health (DOH), Transportation (DOT), Public Services (DPS) and Agriculture and Markets." Then, it summarizes some of the expected categories of costs to each of the Departments and states that the costs cannot be estimated at this time. How can a Department of New York State tasked with evaluating costs and benefits of the Regulations fail to even make an educated estimate of such additional costs to other New York State agencies and call it an adequate job?

On page 2 of the "Revised Regulatory Flexibility Analysis for Small Business and Local Governments," it is stated, "These proposed revised rules will not have substantial adverse effects on small businesses and local governments." And yet on Pages 5 and 6 of the same section, the DEC lists (without estimates) some of the costs that will be incurred by local governments, including "additional paperwork requirements for waste tracking; additional paperwork, permitting, testing and

other costs associated with operation of a wastewater treatment plant when such small business or local government plans to treat wastewater from an HVHF well; emergency response activities; and impacts to county health departments who respond to complaints about water quality. Local governments may (!) also incur costs associated with road maintenance." (Exclamation point added for emphasis.)

On page 5 of "Revised Rural Area Flexibility Analysis," it is stated, "approval of HVHF is expected to increase local traffic and in some areas, local population" and "as a result, local governments may experience increased demand on local services, such as emergency response and local road maintenance." It is also stated, "local governments may want to proactively retain professional services to assist with emergency response and traffic control." On Page 3 it is stated, "Results of water well testing may increase complaints to the county health department ….these costs are speculative and cannot be quantified." This is unacceptable! Of course, it is difficult to estimate these costs, but does that mean they should be ignored? We know the percentage of well casings that fail in other shale areas, and data on spills, blowouts and accidents can be compiled. The DEC should obtain data from other shale regions to estimate the number of water quality complaints to county health departments. The DEC should not be lazy when our taxpayer dollars and our drinking water may be threatened.

The DEC is finally admitting that there will be a number of costs to state and local governments, but there is no effort to estimate the costs and there continue to be potentially significant costs that the DEC completely ignores. Such ignored costs include declines in other industries (as mentioned above) that are not compatible with an industrial landscape or the real or perceived risk of water, land and air contamination. In addition, there will be losses during the short-term boom due to crowding out of local businesses that are important to our small upstate communities. Crowding out occurs when small existing businesses cannot afford to pay the same wages as the gas industry. Extractive industries are known for their long-term busts and there is no mention of the costs associated with deserted apartments and other buildings, and the creation of severely economically depressed communities, typical of areas that once had a short-term extractive industry.

The costs to the State and communities as a result of declines in property values continue to be utterly ignored by the DEC. Prior writings and testimony have emphasized negative impacts on property values, and research by Muehlenbachs, Spiller and Timmins [4], published in 2012, demonstrates that the risk of ground water contamination from natural gas extraction leads to a "large and significant reduction in house prices" and that "these reductions offset any gains to the owners of groundwater-dependent properties from lease payments or improved local economic conditions and may even lead to a net drop in prices … To the extent that the net effect of drilling on groundwater-dependent houses might even be negative, we could see an increase in the likelihood of foreclosure in areas experiencing rapid growth of hydraulic fracturing." This recent research supports earlier findings that

several experts have shared in prior testimony. Equally instructive and similarly ignored is the statement by Nationwide Insurance, "from an underwriting standpoint, we do not have a comfort level with the unique risks associated with the fracking process to provide coverage at a reasonable price." All of these negative impacts on property values and property tax revenue have been inexplicably disregarded by the DEC.

And, nowhere is it mentioned that future development in the Marcellus region will be impossible after mazes of gathering lines, transmission lines and pipelines are built. Future building is not possible on or near gas pipelines, and this may be a huge opportunity cost going forward.

It is stated in the Regulations that while expenditure of funds by local governments is not mandated by the regulations, "a primary responsibility placed on local governments through this proposal will be to monitor requirements the proposal imposes on operators and owners in the HVHF process, to ensure the health, safety and the environment are adequately protected." So, it appears that local governments are expected to undertake substantial oversight of human and environmental safety. This will be very expensive for local communities, but no estimate of the costs has been provided.

The DEC regulations state, "It is projected that HVHF activities would result in a substantial increase in economic activity in the affected areas and also result in a substantial increase in tax revenues to the state and to localities. These revenues are expected to compensate for the types of responsibilities on local governments which may result from approval to utilize HVHF." And on page 6 of "Revised Rural Flexibility Analysis," it is stated, "public entities may be able to use increased tax and other revenue generated through HVHF activities to offset any increased burden on services it provides." How can the DEC make these statements when they have failed to estimate the additional costs to localities and made only questionable assumptions about additional tax revenues? How do they know? Without such estimates, the DEC's statements are little more than speculation. These statements also indicate that the DEC is ignoring informative research. Kelsey and Ward [5] surveyed municipalities in Pennsylvania's Marcellus region and concluded that "Most local governments being affected by shale gas development are not seeing more tax revenue as a result, while 26% of the local governments indicated that related costs had increased." And recently published research shows that revenue is unlikely to offset burdens to state and local governments. Dutzik, Ridlington and Rumpler [6] have listed many of the economic costs and show that communities and states will bear many of the costs. Recent research by Peach and Starbuck found only **small** positive impacts on income, employment and population as a result of oil and gas extraction in New Mexico. And Weber [7] focused on the short-term impact of a natural gas boom in Colorado, Texas and Wyoming and found only **modest** increases in employment, wage and salary income, and median household income. Modest increases in employment, income and tax revenue are not likely to cover the large costs to state and local governments.

A more recent report from West Virginia shows that the expected “game changing” gas boom has not materialized there. In four years of shale gas drilling, only 916 jobs were created in West Virginia. “And the severance tax that was expected to produce tens of millions of dollars in new revenue has grown not at all.” The unemployment rate in the four core drilling counties has risen from 4.4% to 6.9% since drilling began and their workforces have declined in size. [8]

Taxpayers in New York State and especially in small communities will be burdened with the many increased costs listed in the Regulations and additional costs not mentioned by the DEC. While the people of New York are burdened with costs and potential ill health effects, the gas industry will profit. The DEC, which has ignored valid research, suggests otherwise, and is misleading the public and our leaders.

The Regulations were written carelessly and without consideration of science and independent research. While I normally would not mention typographical errors, in this case there are egregious typographical errors. For example, several statements on page 32 of “Revised Regulatory Impact Statement” exemplify carelessness on the part of the DEC:

"DEC proposes these regulations as a means to ***maximize*** *environmental impacts and costs to the public and to maximize the benefits of natural gas extraction."*

Then, in the next paragraph*, "Greater environmental protection includes minimizing the probability and risk of* ***uncontaminated*** *aquifers and drinking water wells, streams and surface waters…."*

The obvious question is whether such carelessness has extended to other aspects of the Regulations that are not so apparent on their face. One of my early writings on shale gas development is titled “Unanswered Questions About the Economic Impact of Gas Drilling in the Marcellus Shale: Don’t Jump to Conclusions,” March 27, 2010. And one of my recent writings is titled “Unanswered Questions About the Economic Impact of Shale Gas Exports: Don’t Jump to Conclusions,” December 11, 2012. I continue to have many questions to ask our leaders in Albany.

On page 6 of “Revised Rural Area Flexibility Analysis,” in reference to cost of compliance, it is stated, “The Department conducted its own limited cost assessment, and found that, with respect to at least two categories of cost estimates, IOGA’s estimates were excessive. Unfortunately, despite repeated requests by the Department to industry to provide additional cost of compliance information, industry has refused to provide the Department with any additional cost information.” This lack of response by the gas industry should raise an enormous red flag. So, my first question is: What happens when the industry stonewalls on other important information, such as information on chemicals, accidents, leaks, spills, or health impacts of its workers?

Why is my state DEC blindly accepting data provided by the gas industry?
Why is my state DEC blatantly ignoring informed and properly submitted comments made by concerned and knowledgeable experts?
Why is my state DEC ignoring peer-reviewed research?
Why is New York State not pursuing thorough research on economic impacts?
Why does our Governor refuse to meet with experts who are very knowledgeable on the subject of shale gas development?

The Regulations mention transportation costs (which were ignored in the rdSGEIS) and that a transportation plan is recommended to assist localities in planning for HVHF to allocate resources for road repair. Perhaps even more important would be an economic development plan to mitigate the long-term bust in store for the region. Why is this not recommended?

The Regulations state, "There should be no economic feasibility issues created by the proposed rules." They also state, "Approval to utilize HVHF will provide significant economic benefit to the State" and they once again refer the reader to the highly flawed economic assessment in the rdSGEIS, without mention of the many public comments that pointed out significant flaws in the assessment. Yet, there is no mention of the negative impacts on other industries. Why not? Why is there no mention of the long-term economic bust associated with gas exploration and development?

The DEC has not thoroughly reviewed the economic impacts resulting from recent gas drilling in other states, including Pennsylvania and West Virginia. The DEC has ignored informative comments submitted by independent economists who do not have a financial interest in shale gas development. Rather, the Regulations as well as the rdsGEIS show that the DEC has cherry-picked its research and findings from pro-drilling sources, in derogation of completeness, accuracy and the public interest.

It is far from clear that shale gas development will result in a net positive economic impact for the economy of New York State or for communities in the Marcellus region. It is premature for the DEC to be issuing regulations, draft or otherwise, at this time. The DEC should be waiting and insisting on comprehensive, unbiased research before reaching any conclusions. Our leaders in Albany must not accept any final regulations or make any approvals regarding HVHF unless and until such research is completed and carefully considered.

Respectfully Submitted,
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NOTES:

[1] W.R. Freudenburg and L.J. Wilson, "Mining the Data: Analyzing the Economic Implications of Mining for Nonmetropolitan Regions," *Sociological Inquiry* 72 (4) (2002): 549:575.

[2] Headwaters Economics, "Fossil Fuel Extraction as a County Economic Development Strategy: Are Energy-focusing Counties Benefiting?" *Energy and the West Series*, Bozeman, MT (September 2008, revised 7/11/09).

[3] T. Kinnaman, "The Economic Impact of Shale Gas Extraction: A Review of Existing Studies," *Ecological Economics* 70 (2011):1243-1249.

[4] L. Muehlenbachs, E. Spiller and C. Timmins, "Shale Gas Development and Property Values: Differences Across Drinking Water Sources," Discussion Paper, Resources for the Future, July 2012.

[5] T.W. Kelsey and M. W. Ward, "Natural Gas Drilling Effects on Municipal Governments Throughout Pennsylvania's Marcellus Shale Region, 2010," Penn State Cooperative Extension.

[6] T. Dutzik, E. Ridlington, J. Rumpler, "The Costs of Fracking: The Price Tag of Dirty Drilling's Environmental Damage," Penn Environment Research & Policy Center, Fall 2012.

[7] J.G. Weber, "The Effects of a Natural Gas Boom on Employment and Income in Colorado, Texas and Wyoming," *Energy Economics* 34(2012) 1580-1588.

[8] S. O'Leary, "The Emperor has No Natural Gas Boom," Thursday, December 13, 2012, [http://www.the-state-of-my-state.com/2012/12/the-emperor-has-no-natural -gas-boom-pub.html](http://www.the-state-of-my-state.com/2012/12/the-emperor-has-no-natural-gas-boom-pub.html)