

New York State Academy of Family Physicians

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Comments on the Supplemental Generic Environmental Impact Statement

New York State Academy of Family Physicians

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We have previously been in contact with your office expressing our concerns for the public's health regarding high volume, slick water hydrofracking. We write you now to further comment on the latest sGEIS which your department has released. We applaud your efforts to garner public input and to build on the lessons and mistakes other states have learned and made.

However, the current dsGEIS has shortcomings that we would like to detail for you, and our support for hydrofracking would certainly increase if these concerns were addressed.

1) On-going Studies to Monitor the Impact of Hydrofracking on Public Health. The Academy believes it essential that we institute an on-going monitoring process to occur in conjunction with the issuance of permits. The NYSDOH and Local Health Departments (LHDs) should be tasked and funded to conduct human health studies that continuously monitor the impact of hydrofracking on individual and community health. Their findings would be forwarded to NYSDEC. We have NEW and expanded comments on this subject below to share with you.

As many other health care professionals have pointed out the sdGEIS does not adequately address human health impacts, we concur.

Our positions are predicated on a few important points about human health

- Given the chemicals and processes involved, *current* knowledge is not adequate to know if the proposed well-intentioned mitigation measures are sufficient to protect the public's health.
- Only well designed studies and appropriate monitoring can gather information confirming mitigation is working.
- Costs for monitoring activities by agencies need to be recognized *through bonding, fees, and efficiencies in monitoring achieved through partnering with the*

- health care system.*
- **Current methods of monitoring and reporting are not adequate** (*e.g. reportable disease registries, worker's compensation, OSHA, among others*).
 - *There are no data available from Worker's Compensation or OSHA experience nor are there adequate studies of community health experience. A different monitoring system is necessary*

Such studies should rise to the level of achieving statistical significance and the determination of cause and effect. They should determine a baseline profile of health broken down into geographic regions sufficiently small to evaluate impacts caused by variations in chemicals and techniques by different companies and drill pads, and caused by spills, blow outs, and other events associated with hydrofracking. Once a baseline profile is completed studies must continue during drilling, and for several decades after drilling.

Such studies should be designed and funded to control bias. Their data should be shared with the public in an ongoing manner to promote peer review.

Although such studies are not inexpensive they are essential. In addition, as a cost of doing business, they should be funded by monies supplied by the industry but collected by the State of New York in such a manner that the studies' scope, methods, and results are free of industry influence.

Such studies are necessary. NYSDEC seeks to achieve effective mitigation of the risks. As mentioned above, current knowledge is not adequate to know if the proposed mitigation measures are sufficient to fully protect human health. Nothing is known about the effects of many of the chemicals to be used, but enough is known about the dangers to human health of the few of them which, so far, have been studied to warrant our proposal.

Only by real time studies designed as we propose can knowledge be advanced and, when the data indicates and action is warranted, can a dangerous chemical be stopped or a process be changed.

It is very difficult to mitigate the effects of air pollution on human health. Emissions are capable of traveling up to 200 miles and thus may affect people at significant distances from the source. The release of NOX can generate ozone. Other states' experiences show that operations expose the state's citizens to smog exceeding even that in urban centers. Many air pollutants cause asthma and chronic lung disease. It is not clear that you have fully mitigated this risk.

We also believe that additional regulations are needed to address the potential public health impacts from all interconnected gas drilling activities that are initiated by hydrofracking before permits are issued in the Marcellus Shale or other low-permeability formations. Some of the interconnected network of compressor stations, pipelines, and other facilities needed to support natural gas drilling operations are regulated by the

Public Services Commission (PSC), and are not addressed in the draft SGEIS. Yet, this network is predicted to be extensive and can affect human health (e.g. through air emissions, noise levels, and explosions), and is a significant factor to be understood and properly regulated.

Radioactivity – Recent concerns about radium and radon gas traveling with the flowback waters, and with the generated gas warrant additional comment, study, and planning. Materials such as piping contaminated by radioactivity will need to be handled and tracked in such a way as to prevent disease. Given the half life of the materials said to be generated, disposal of them will pose problems akin to those we as a society have found to be challenging in the field of nuclear energy. The dsGEIS needs to envision protecting the public for the 1,500 years or so that these isotopes remain a concern.

We also believe that NYSDEC should require a water quality monitoring program that is not complaint based, as currently proposed, but instead requires the applicant to submit electronic versions of the analytical results to a repository agency and the local health department and requires the applicant to submit a determination to the local health department that evaluates if there have been any significant increases in chemical or physical concentrations. A complaint based system is not adequate to protect the public's health. It relies too heavily on the general public knowing to generate a complaint, may require them to already have symptoms, is not proactive, and lacks the comprehensive, systematic methodology required to protect the public.

2) Advisory Role of LHD. We believe local health departments will be challenged by hydrofracking. Prior to permitting, representatives from local health departments should be directly involved in advising on procedures, processes, and funding requirements for those aspects of gas drilling oversight that affect them. The Hydraulic Fracturing Advisory Council should obtain input directly from county health departments. Financial resources to cover the entire cost of public health oversight and a contract or other mechanism to transfer needed funds to county health departments are necessary to ensure an effective program and avoid unfunded mandates.

3) Adequate Resources for State Oversight. The Governor must make sure that the five State agencies responsible for overseeing fracking in our State – DEC, Health, Transportation, Agriculture and Markets, and Public Service – have adequate resources to perform their respective duties. Thus, no permits should be issued until the amounts needed are determined and approved in the State Budget. Otherwise, these agencies cannot properly regulate the industry and protect the public's health.

4) Financial Liability. DEC should increase the financial security that drillers must provide to pay for the cost of unforeseen cleanups. The State should levy a surcharge on drilling permits or require companies to post a bond at a meaningful amount. Currently, a well owner must post only a \$5,000 bond, an amount that has not changed in years. The taxpayer should not get stuck with clean up and disposal issues.

Should the regulations proposed by the DEC fail to mitigate public health impacts there will be costs to be borne by the public and private sectors. NYS is already struggling to deal with its share of the cost of caring for poor people (Medicaid), its health insurance costs for its public sector employees, and the programs for low-income adults, children and families (Child Health Care Plus, and Family Health Plus). Companies in the private sector find health insurance premiums to be a significant part of their overhead. If mitigation of the effects of fracking falls short of what is needed, then bringing an industrial scale operation to vast regions of our state without the benefit of appropriate containment will increase costs to the public and private sector through an increase in disease rates and health care utilization.

5) Emerging Technologies. We are starting to see promising new technologies, such as Liquefied Propane Gas Fracturing and better re-cycling of wastewater. A new technology may someday minimize many of our concerns today. Thus, the State should track emerging technologies and once a particular technology is proven safe then the State should ensure its widespread use. The regulations permitting drilling should ensure that NYS can require drillers to adopt safer technologies for existing and new wells.

6) Public Disclosure. Public disclosure of all fracking chemicals is essential for proper studies to be done of the process and the public's health to be protected. Researchers need to know this information in order to determine cause and effect. This information cannot be limited to government officials. A robust inquiry into the safety of chemicals used requires researchers in all walks of life to have this information. We believe the DEC should require that this information be made public and freely available.

Other states have taken steps to require greater public disclosure. Texas, Colorado, Arkansas, and Wyoming have adopted disclosure rules. New York should require the disclosure of the specific chemicals employed, and their concentration specific to each well fracked (since different wells may use different chemicals). The loophole of claiming a trade secret to avoid disclosure should be closed in New York State. Our citizens are already deprived of the protection of the Clean Water Act and Air Act. NYS should take the needed step to protect its people by putting all chemicals under close scrutiny - an essential step of which can only be done by naming all chemicals publicly. Colorado stopped short of this by requiring only the class of chemical be named in cases where a trade secret is claimed. New York State should do better because human disease is often specific to the exact structure of a chemical. The substitution of a methyl group, the use of an isomer can make the difference between innocuous and dangerous.

7) Going Slowly. We believe it prudent that as permitting does go forward in NYS that it initially be done on a limited, "go slow" basis. We make this recommendation for the following reasons:

- It will provide experience to fine tune regulations based on actual experience
- The adequacy of funding and resources for local, regional, and state agencies affected by fracking can be assessed
- The study model that we suggest above can be fine tuned.

- It will allow more accurate quantification of the effects of the fracking process.
- The cause of adverse health effects can be identified, corrected, and confined within a relatively small area, thereby avoiding the need to undertake massive corrective actions covering large regions of the State and the disease burden created will be lessened.

8) Protecting All Public Water Supplies. We find the argument for the protection of the Syracuse and New York City water supplies to be understandable given their unique exception from filtration. However, we do not see this as implying that any other water supplies in the state are protected because they use filtration. As you know filtration and other conventional methods of water treatment used by our state's water suppliers do not remove chemicals, and radioactivity from the water. Only by ensuring that the source water supply is free from these pollutants can the public have safe water. It is uncertain whether the DEC's proposed regulations will mitigate this source of risk for the public.

9) Improvements in the 2011 Draft SGEIS. And finally, the significant improvements in the 2011 draft sGEIS should be included in the final sGEIS and regulations. These improvements include, but are not limited to, stringent requirements for waste disposal that prohibit discharges to traditional Publicly Owned Treatment Plants, prohibiting the use of surface impoundments for storage of flowback water without site specific review, banning drilling in areas close to waters supplies, requiring strengthened well casings, and requiring mandatory disclosure of hydraulic fracture additives.

We recognize that you are under considerable pressure. We applaud your efforts to date.

Respectfully submitted,

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Chair
Commission on Public Health