

Draft SGEIS comments from Michael Koplinka-Loehr for Ithaca TCCoG Hearing, 12/1/11

Please accept my thanks for the vision of the Tompkins County Council of Governments in holding this hearing, to allow residents of the Finger Lakes region more convenient access to the NYS DEC public comment process relating to proposed impacts and regulations relating to High Volume Slick Water Hydraulic Fracturing processes in our region.

I am Michael Koplinka-Loehr, and reside at 118 Ross Road in Lansing, NY, a community that has a many-decade history of mining (Cargill salt) as well as one that is experiencing the potential closing of our coal-fired power plant due to the high cost of coal extraction and transportation relative to growing demand across world markets. Both of those mining industries have important experience to offer relating to NYS opportunity & challenges and should be consulted for their expertise by NYS DEC before permitting and regulation processes are finalized.

Additionally, all NYS lands are the ancestral domain of First Nations peoples and as such existing tribal councils must be proactively consulted and sought for their advice regarding historical and cultural asset impacts for any draft SGEIS to be complete. *(Even our Lansing Market, a small grocery store that just opened in Lansing had to conduct a cultural and historical assessment of proposed development impacts.)*

To place this dSGEIS process in context, since the founding of our country, our government established a social contract to balance private self-interest with the needs of the public good, which led to the need for environmental regulations to achieve this balance. Thankfully, at the national level, the Environmental Protection Agency wisely created an additional element to their processes and deliberations, called the Science Advisory Board (SAB) to avoid political influence when recommending policies grounded in the most sound, transparent and verifiable science available at the time, for the health of the environment and the US population, including impacts on future generations.

The NYS DEC's dSGEIS process essentially assesses and balances relative & comparative risks. Relevant to that goal, in Sept. 1990 the SAB published a report at the request of EPA Administrator William Reilly, titled **Reducing Risk: Setting Priorities and Strategies for Environmental Protection** (SAB-EC-90-021, based on the work of the Relative Risk Reduction Strategies Committee, 39 nationally-recognized scientists, engineers, economists, policy-makers and managers with broad experience in addressing environmental and health issues,) which included recommendations on approaches to risk management and on the future direction of national environmental policy. *(My father, Ray Loehr, an environmental scientist at Cornell University for 17 years, chaired the SAB during this period.)*

I am submitting a full copy of that report and all Appendices for the NYS DEC staff to consider **before** completing its findings (electronic copies are available on the EPA website), but allow me to summarize the 10 major recommendations, all of which are relevant to the NYS DEC priority setting processes.

1. **EPA(NYSDEC) should target its environmental protection efforts on the basis of opportunities for the greatest risk reduction.** *Since this country already has taken the most obvious actions to address the most obvious environmental problems, EPA needs to set priorities for future actions so the Agency takes advantage of the best opportunities for reducing the most serious remaining risks.*
2. **EPA(NYSDEC) should attach as much importance to reducing ecological risk as it does to reducing human health risk.** *Because productive natural ecosystems are essential to human health and to sustainable, long-term economic growth, and because they are intrinsically valuable in their own right, EPA should be as concerned about protecting ecosystems as it is about protecting human health.*
3. **EPA(NYSDEC) should improve the data and analytical methodologies that support the assessment, comparison, and reduction of different environmental risks.** *Although setting priorities for national environmental protection efforts always will involve subjective judgments and uncertainty, EPA should work continually to improve the scientific data and analytical methodologies that underpin those*

judgments and help reduce their uncertainty.

4. **EPA(NYSDEC) should reflect risk-based priorities in its strategic planning processes.** *The Agency's long-range plans should be driven not so much by past risk reduction efforts, or by existing programmatic structures, but by ongoing assessments of remaining environmental risks, the explicit comparison of those risks, and the analysis of opportunities available for reducing risks.*
5. **EPA(NYSDEC) should reflect risk-based priorities in its budget process.** *Although EPA's budget priorities are determined to a large extent by the different environmental laws that the Agency implements, it should use whatever discretion it has to focus budget resources at those environmental problems that pose the most serious risks.*
6. **EPA(NYSDEC)--and the nation (state) as a whole--should make greater use of all the tools available to reduce risk.** *Although the nation has had substantial success in reducing environmental risks through the use of government-mandated end-of-pipe controls, the extent and complexity of future risks will necessitate the use of a much broader array of tools, including market incentives and information.*
7. **EPA(NYSDEC) should emphasize pollution prevention as the preferred option for reducing risk.** *By encouraging actions that prevent pollution from being generated in the first place, EPA will help reduce the costs, intermedia transfers of pollution, and residual risks so often associated with end-of-pipe controls.*
8. **EPA(NYSDEC) should increase its efforts to integrate environmental considerations into broader aspects of public policy in as fundamental a manner as are economic concerns.** *Other Federal agencies often affect the quality of the environment, e.g., through the implementation of tax, energy, agricultural, and international policy, and EPA should work to ensure that environmental considerations are integrated, where appropriate, into the policy deliberations of such agencies.*
9. **EPA(NYSDEC) should work to improve public understanding of environmental risks and train a professional workforce to help reduce them.** *The improved environmental literacy of the general public, together with an expanded and better-trained technical workforce, will be essential to the nation's success at reducing environmental risks in the future.*
10. **EPA(NYSDEC) should develop improved analytical methods to value natural resources and to account for long-term environmental effects in its economic analyses.** *Because traditional methods of economic analysis tend to undervalue ecological resources and fail to treat adequately questions of intergenerational equity, EPA should develop and implement innovative approaches to economic analysis that will address these shortcomings.*

Additionally, the NYS DEC dSGEIS is presently inadequate in analyzing comparative risk in relation to alternatives such as investing comparable state resources in existing and known technologies for building energy efficiency measures, many of which have a 100% payback per dollar invested within the 1st year. The NYSERDA has existing programs to promote such investments and these should be dramatically expanded – as our own Southern Tier Regional Economic Development plan, presented this week in Albany, essentially emphasized wholeheartedly.

Finally, initial research results from the EPA study on the “Potential Impacts of Hydraulic Fracturing on Drinking Water Resources” are expected by the end of 2012. I respectfully ask the DEC to include these findings in its analysis **before** promulgating final permitting and drilling regulations.

Thank you again for organizing this important venue.

Respectfully submitted,

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Citizens can obtain all the reducing risk reports electronically on the EPA Website at www.epa.gov/sab . Once on the SAB Homepage, look at the left-hand column and select "Advisory Reports." Select "Fiscal Year of Report," and then scroll down to the 1990 Fiscal Year reports. Once on the 1990 Fiscal Year reports, click on the report title. The hotlinks are as follows:

Reducing Risk: Setting Priorities and Strategies for Environmental Protection (Executive Summary Report), SAB-EC-90-021, September 1990:
[http://yosemite.epa.gov/sab/sabproduct.nsf/28704D9C420FCBC1852573360053C692/\\$File/REDUCING+RISK++++++EC-90-021_90021_5-11-1995_204.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/28704D9C420FCBC1852573360053C692/$File/REDUCING+RISK++++++EC-90-021_90021_5-11-1995_204.pdf)

The Report of the Ecology and Welfare Subcommittee; Relative Risk Reduction Project Appendix A, EPA-SAB-EC-90-021A, September 1990:
[http://yosemite.epa.gov/sab/sabproduct.nsf/8B81098392151858852571BF00496983/\\$File/ECOLOGY+SUBCOMM++++++EC-90-021A_90021_5-11-1995_205.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/8B81098392151858852571BF00496983/$File/ECOLOGY+SUBCOMM++++++EC-90-021A_90021_5-11-1995_205.pdf)

The Report of the Human Health Subcommittee: Relative Risk Reduction Project Appendix B, EPA-SAB-EC-90-021B, September 1990:
[http://yosemite.epa.gov/sab/sabproduct.nsf/3536D36EE01CA1DE852571BF0049D46A/\\$File/Reducing+Risk+Appen+B+EPA-SAB-EC-90-021B.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/3536D36EE01CA1DE852571BF0049D46A/$File/Reducing+Risk+Appen+B+EPA-SAB-EC-90-021B.pdf)

The Report of The Strategic Options Subcommittee: Relative Risk Reduction Project Appendix C, EPA-SAB-EC-90-021C, September 1990:
[http://yosemite.epa.gov/sab/sabproduct.nsf/AEE0C90214419F8885257330004C0AD4/\\$File/REDUCING+RISK+APPENDIX+C++++++EC-90-021C.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/AEE0C90214419F8885257330004C0AD4/$File/REDUCING+RISK+APPENDIX+C++++++EC-90-021C.pdf)

The Report of the Risk Reduction Subcommittee of The Environmental Engineering Committee in review if the ORD Risk Reduction Core Research Strategy, EPA-SAB-EEC-90-022, Sept 1990:
[http://yosemite.epa.gov/sab/sabproduct.nsf/AA825847F778162A8525732500657C8C/\\$File/RISK+REDUCTION++++++EEC-90-022_90022_5-11-1995_207.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/AA825847F778162A8525732500657C8C/$File/RISK+REDUCTION++++++EEC-90-022_90022_5-11-1995_207.pdf)

Of Note:

The SAB Report on the draft Hydraulic Fracturing Study Plan was finalized on August 4, 2011: See <http://yosemite.epa.gov/sab/sabproduct.nsf/0/D3483AB445AE61418525775900603E79?OpenDocument>

The SAB also reviewed an earlier EPA draft hydraulic fracturing scoping document in spring/summer 2010. The SAB report for the April 2010 SAB review of the scoping document for the Hydraulic Fracturing Study is available at the following web address:
[http://yosemite.epa.gov/sab/sabproduct.nsf/0/CC09DE2B8B4755718525774D0044F929/\\$File/EPA-SAB-10-009-unsigned.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/0/CC09DE2B8B4755718525774D0044F929/$File/EPA-SAB-10-009-unsigned.pdf)

EPA's main website for hydraulic fracturing is at the following web address:
<http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/index.cfm>

EPA's outline of activities for future HF research was noted in their powerpoint presentation at the March 7-8, 2011 meeting. See <http://yosemite.epa.gov/sab/sabproduct.nsf/MeetingCal/153AC7DF8D2626F98525781000648075?OpenDocument>

And the ppt at:
[http://yosemite.epa.gov/sab/sabproduct.nsf/3921FA72106793A1852578490073FE35/\\$File/EPA+Presentation-March+7,+2011+SAB+Meeting-Hydraulic+Fracturing+Study+Plan.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/3921FA72106793A1852578490073FE35/$File/EPA+Presentation-March+7,+2011+SAB+Meeting-Hydraulic+Fracturing+Study+Plan.pdf)

Slides 15 and 16 discuss what EPA plans to include in its 2012 and 2014 reports that will be sent to Congress.