

May 22, 2015

Comments of Walter L. T. Hang

Regarding the Final Supplemental Generic Environmental Impact Statement
on the Oil, Gas and Solution Mining Regulatory Program

Adopted by the New York State Department of Environmental Conservation

Thank you for the opportunity to comment respectfully on the Department of Environmental Conservation's (DEC) Final Supplemental Generic Environmental Impact Statement (SGEIS) on the Oil, Gas and Solution Mining Regulatory Program.

As a resident of Ithaca, I live directly over the Marcellus Shale formation where extensive High-Volume Hydraulic Fracturing (HVHF) activities were proposed circa 2008. Since then, I have been intensely involved with organized efforts to prevent adoption of an inadequate and incomplete Final SGEIS that would permit shale fracking to begin in my home state.

As I will explain below, the Final SGEIS is fatally flawed and must never be used to permit shale fracking anywhere in New York. With the exception of a total reversal regarding the original action alternatives proposed in the 2011 Revised Draft SGEIS, it is hard to discern adoption of any other major policy revisions or crucial policy reforms advocated by concerned citizens.

My Final SGEIS concerns also apply to the long-standing insufficiency of New York's regulation of gas and oil extraction activities that began nearly two centuries ago. Even if the Final SGEIS is not implemented, on-going fossil fuel production hazards will continue to threaten New York's public health and environment. I will propose how DEC should resolve that problem.

I trust that my comments are self-explanatory, but please do not hesitate to contact me if I might be able to clarify my requests or answer questions about this important matter.

Landmark Public Health Review Leads to Final SGEIS Adoption

At a governor's cabinet meeting on December 17, 2014, then-acting Department of Health (DOH) Commissioner, Dr. Howard A. Zucker, M. D., released: [A Public Health Review of High Volume Hydraulic Fracturing for Shale Gas Development](#).

It concluded:

"the overall weight of the evidence from the cumulative body of information contained in this Public Health Review demonstrates that there are significant uncertainties about the kinds of adverse health outcomes that may be associated with HVHF, the likelihood of the occurrence of adverse health outcomes, and the effectiveness of some of the mitigation measures in reducing or preventing environmental impacts which could adversely affect public health."

The Public Health Review's key recommendation was:

"Until the science provides sufficient information to determine the level of risk to public health from HVHF to all New Yorkers and whether the risks can be adequately managed, DOH recommends that HVHF should not proceed in New York State (emphasis added)."

At that time, Governor Cuomo commented to Commissioner Zucker:

"I'll tell you the truth what I found most powerful in your presentation is when you said that you wouldn't let your family live in an area with high volume fracturing because you're right. You know these things can sometimes be very complicated or they can be very simple. And I thought that was very powerful and poignant when you said you wouldn't let your children live there. And if you don't believe your children should live there then I agree your duty (emphasis added) is to suggest that no child should live there. "

DEC Commissioner, Joe Martens, stated: "I have directed my staff to complete the SEQRA [State Environmental Quality Review Act] process early next year by publishing a Final SGEIS. I will then issue a legally binding Findings Statement prohibiting HVHF in New York State at this time (emphasis added)."

About a month later, however, Commissioner Martens testified at a joint legislative budget hearing on 1/28/15 that the administration's shale fracking prohibition decision could be "**revisited at any time** (emphasis added) when new or significant information comes to light."

See: <http://polhudson.lohudblogs.com/2015/01/28/dec-chief-state-can-revisit-fracking-ban-but-wont-in-near-term>

Final SGEIS Adopted

On May 13, 2015, DEC adopted its Final SGEIS on the Oil, Gas and Solution Mining Regulatory Program. While I recognize the magnitude of this nearly seven-year-long permit guideline proceeding, I respectfully write today to provide comments on the numerous unacceptable shortcomings of the Final SGEIS.

The document states DEC "would use the 1992 GEIS (Generic Environmental Impact Statement) and the Final SGEIS in reviewing applications to conduct high-volume hydraulic fracturing shale fracking operations in New York State if high-volume hydraulic fracturing were authorized."

First, it is inconceivable that DEC would continue to review gas and oil extraction permit applications using a 23-year-old GEIS that has long proven ineffective. The U. S. Environmental Protection Agency (EPA) recommended in 2009 that DEC adopt a new GEIS instead of supplementing its 1992 GEIS.

http://www.toxictargeting.com/sites/default/files/Marcellus_dSGEIS_Comment_Letter_plus_Enclosure.pdf

Until that happens, I request that all gas and oil permit applications be subject to "site-specific," individual Environmental Impact Assessments pursuant to SEQRA.

Second, I will document that the Final SGEIS is equally unacceptable for reviewing gas and oil permit applications because it is rife with factually incorrect statements, based on outdated and incomplete information nearly seven years old and mischaracterizes DEC's on-going inability to prevent, mitigate and clean up hundreds of well-documented pollution hazards caused by improper regulation of gas and oil extraction activities in New York.

Most importantly, the Final SGEIS fails to resolve a broad array of regulatory shortcomings that were repeatedly brought to DEC's attention during the comment period for the original Draft SGEIS and the Revised Draft SGEIS.

With the exception of 180-degree change in the revisions to the action alternatives proposed in the 2011 Revised Draft SGEIS, I am hard-pressed to note any major policy changes adopted in the Final SGEIS in response to the public comments.

The Final SGEIS proposes ineffective safeguards essentially limited to: a) improving the structural integrity of production wells that are sure to fail over time, b) establishing meager buffer zones around proposed drilling activities, c) undertaking emergency preparedness responses after pollution hazards occur, d) requiring before-and-after water testing that proved ineffective in resolving an earlier incident, e) relying on local County Health Departments as regulatory first responders to reported extraction hazards even though these agencies are insufficiently equipped and staffed and f) relying on GEIS protections known to be ineffective.

The Final SGEIS is unacceptable in too many ways to recount in detail given the mere ten days allowed to review the approximately 2,000-page document.

Nevertheless, for all the reasons that I will describe in my comments below, the Final SGEIS clearly fails to: "determine the level of risk to public health from HVHF to all New Yorkers and whether the risks can be adequately managed..."

Since DEC states in the Final SGEIS that it "concur[s] with DOH," regarding this finding, I request that the Final SGEIS proceeding be concluded by issuing a Findings Statement which would:

A. Implement the No - Action Alternative in the Final SGEIS: "The denial of permits to develop the Marcellus Shale and other low-permeability gas reservoirs by horizontal drilling and high-volume hydraulic fracturing."

B. Implement DOH's key policy recommendation in its Public Health Review of High Volume Hydraulic Fracturing for Shale Gas Development:

"Until the science provides sufficient information to determine the level of risk to public health from HVHF to all New Yorkers and whether the risks can be adequately managed, DOH recommends that HVHF should not proceed in New York State."

C. Require that DEC's final decision in the SGEIS matter cannot be revisited without conducting a new Environmental Impact Assessment pursuant to the State Environmental Quality Review Act.

D. Require any shale fracking prohibition to apply equally to permit applications reviewed pursuant to "Generic" as well as "Site-Specific" Individual SEQRA Environmental Impact Assessments.

I believe these requests would effectively make sure that the Final SGEIS can never be used to regulate shale fracking anywhere in New York State.

Even if that occurs, however, DEC's unwillingness to recognize and remedy regulatory shortcomings documented by its own data and annual reports over literally decades would continue to be a problem in the years ahead barring a major change in agency management.

See: <http://www.toxicstargeting.com/MarcellusShale/letters/2012/09/26/cuomo-dmr-oil-gas-problems>

This reality calls in to question DEC's ability to enforce the law and warrants urgent attention given that conventional gas and oil production wells continue to cause hazards across New York, more than 5,000 abandoned and unplugged production wells scar our state's landscape and untold numbers of gas extraction wastewater pits, ponds and lagoons pollute the waters of New York.

Against that backdrop, I believe the Cuomo administration has a "duty" to safeguard families and children living near existing gas and oil extraction hazards as well as "all New Yorkers" threatened by future HVHF activities.

Three Proposed Final SGEIS Action Alternatives

According to the Final SGEIS:

"The following alternatives to issuance of permits for high-volume hydraulic fracturing to develop the Marcellus Shale and other low-permeability gas reservoirs have been reviewed for the purpose of this SGEIS:

- 1) The denial of permits to develop the Marcellus Shale and other low-permeability gas reservoirs by horizontal drilling and high-volume hydraulic fracturing (No - action alternative);
- 2) The use of a phased-permitting approach to developing the Marcellus Shale and other low-permeability gas reservoirs, including consideration of limiting and/or restricting resource development in designated areas; and
- 3) The required use of "green" or non-chemical fracturing technologies and additives."

See page 5: http://www.dec.ny.gov/docs/materials_minerals_pdf/fsgeis2015ch9.pdf

Request Number One: I request that DEC implement the no-action alternative referenced above when it issues its Findings Statement and renders a final decision in this matter.

Request Number Two: I believe the "phased-permitting" approach is fundamentally unfair and improper. Generally speaking, I believe that shale fracking must not be permitted anywhere in

New York until it is permitted everywhere in the state. I concur with the proposed Public Health Report policy that all New Yorkers deserve equal protection from shale fracking hazards.

That is why I request that the "phased-permitting approach" alternative be rejected.

Request Number Three: I believe it is beyond dispute that the hydraulic fracturing phase of shale gas extraction is but one aspect of a broad spectrum of environmental and public health impacts that cannot be avoided at that time according to the DOH Public Health Review.

As a result, I request that the proposed alternative of "requiring the use of 'green' or non-chemical fracturing technologies and additives" be rejected.

Future SEQRA Compliance

Three scenarios are spelled out regarding future SEQRA compliance under Section 3.2.1 of the Final SGEIS. I believe the Findings Statement must clarify concerns about all of those scenarios.

Under the first scenario, DEC would receive permit applications that conform with the 1992 GEIS and the Final SGEIS.

If the no-action alternative in the Final SGEIS is implemented by its accompanying Findings Statement the result would be:

"The denial of permits to develop the Marcellus Shale and other low-permeability gas reservoirs by horizontal drilling and high-volume hydraulic fracturing (No - action alternative)."

A Supplemental Findings Statement Must Not Be Used to Revisit Any Shale Fracking Prohibition Decision

Under the second scenario, DEC could issue a Supplemental Findings Statement if:

"Proposed action is adequately addressed in the 1992 GEIS or the SGEIS but not in respective Findings Statement. A supplemental findings statement must be prepared if the proposed action and impacts are adequately addressed in the 1992 GEIS and the SGEIS but are not addressed in the previously adopted 1992 GEIS Findings Statement or the SGEIS Findings Statement."

If the no-action alternative is not implemented by the Findings Statement, it is possible that issuing a Supplemental Findings Statement could allow any shale fracking prohibition decision to be revisited without requiring a new SEQRA proceeding. That would be clearly improper given the outdated, incomplete and nearly seven year old information used to prepare the Final SGEIS.

Request Number Four: I request that the Findings Statement implement the requirement that DEC's final decision in the SGEIS matter cannot be revisited without conducting a **new** Environmental Impact Assessment pursuant to SEQRA.

Any HVHF Prohibition Adopted Pursuant to the Final Supplemental Generic Impact Statement Must Apply Equally to "Site-Specific" Individual EIS Permit Application Reviews

The Final SGEIS requires that: "If the proposed action and its impacts are not addressed in the 1992 GEIS or SGEIS, then additional information would be required to determine whether the project may result in one or more additional significant adverse environmental impacts not assessed in the 1992 GEIS or the SGEIS. The projects that categorically fall into this category are listed in Section 3.2.3. Depending on the nature of the action, the additional information would include an environmental assessment form or EAF; topographic, geologic or hydrogeologic information; air impact analysis; chemical information or other information deemed necessary by the Department to determine the potential for a significant adverse environmental impact. A project-specific SEQRA determination will either result in 1) a negative declaration (determination of no potentially significant impact), or 2) a positive declaration (requiring the preparation of a site-specific (emphasis added) SEIS for the drilling application)."

Even if the no-action alternative is implemented by a Findings Statement, firms could still apply for shale fracking permits by requesting "site-specific" individual EIS reviews. Gas extraction firms pledged circa 2008 not to pursue "site-specific" individual EIS reviews until a Final SGEIS was adopted. Now that this has occurred, it is possible that this alternative to Generic EIS permit application review could be pursued. The Final SGEIS also could face legal challenge that might thwart its implementation.

Moreover, the Final SGEIS specifically requires "site-specific" individual EIS reviews for sites in critical watershed areas, deep-well injection permit applications and a number of other situations. This requirement would apply unless a strict no-action alternative is implemented by the Findings Statement.

Request Number Five: I reiterate my request that the "no-action" Final SGEIS alternative be implemented by the Findings Statement and that the shale fracking prohibition apply equally to permit applications under both Generic as well as "site-specific" individual EIS proceedings.

DEC's Factually Inaccurate and Misleading Responses to Hundreds of Documented Gas and Oil Extraction Contamination Problems

Arguably the most troubling shortcoming of the Final SGEIS is DEC's factually inaccurate and misleading responses to hundreds of gas and oil extraction contamination hazards documented by the agency's own data, local health departments in Chautauqua, Cattaraugus and Allegany Counties and natural gas and oil firms that took responsibility for causing extraction hazards.

These well-documented incidents involved fires, explosions, massive uncontrolled gas/oil extraction wastewater releases, private well water pollution, brine spreading problems and improper disposal of gas/oil extraction wastewaters into pits, ponds and lagoons as well as local Publicly Owned Treatment Works (POTWs).

Most importantly, the way that DEC selected concerns to respond to and the misleading manner it did so calls into question the agency ability to safeguard New York from fossil fuel mining hazards.

Given the importance of DEC's on-going duty to enforce the law, I will respond in detail to the agency's comments. With all respect, I request that DEC's inaccurate comments referenced below be stricken from the Final SGEIS.

DEC's Comments to Reported Incidents

The Final SGEIS states:

"Commenters cited previous incidents in New York and in other states to support their concerns. Examples of incidents the Department was specifically asked to address include:

- Acceptance and discharge by a sanitary wastewater treatment plant of more than three million gallons of gas drilling wastewater, which the commenter stated occurred without a state-required headworks analysis or enforcement of local pretreatment requirements;
- Spill information released in 2009 and 2010 that identified incidents involving drill rig fires, homes evacuated due to gas drilling hazards, gas drilling wastewater spills, and concerns about pollution to water supply wells;
- Incidents in Brookfield and Freedom where gas drilling operations were said to have had an impact on water wells;
- A Chautauqua County Department of Health report indicating that three homeowners had alleged that methane contamination of private wells from gas well drilling had occurred in the Town of Poland;
- An incident of drinking water impact (turbidity) that occurred in the Spring of 2009, when a well was drilled near a home in Allegany County;
- Alleged water well contamination after a gas well was drilled 300 feet from a home near Jamestown;"

According to DEC:

"The following discussion is offered in response to the examples of specific New York incidents presented in the summary of concerns.

New York State has TDS [Total Dissolved Solids] standards for discharges to surface water, including discharges from sanitary wastewater treatment plants, and the SGEIS describes the permitting and approval process for such discharges. The Department is aware that POTWs in the State of New York have previously received wastewater from conventional wells. In December 2008, the Department sent a letter to all POTWs [Publicly Owned Treatment Works] to remind them that they cannot accept any drilling wastewater without approval from the Department. Subsequently, the Department has followed up by providing reminders to POTWs during Department inspections. Currently, the Department is not aware of any POTWs in the State of New York that are continuing to accept wastewater from conventional wells. There are no applications with the Department for any wastewater treatment facility to accept wastewater from HVHF

operations. See Response to Comment in Waste Transport and Disposal in Potential Environmental Impacts and Mitigation."

20+ Million Gallons of Gas Extraction Wastewater Discharged into the Auburn POTW

Between 2009 and 2010 approximately 20 million gallons of gas extraction wastewater was dumped into the POTW in Auburn, NY. Additional gas extraction wastewater reportedly was dumped into the POTW in earlier years.

See: <http://www.toxicstargeting.com/MarcellusShale/documents/letters/2011/04/07/cuomo-letter>

DEC states: "In December 2008, the Department sent a letter to all POTWs to remind them that they cannot accept any drilling wastewater without approval from the Department."

In the City of Auburn incident, DEC reportedly left a phone message approving disposal of gas extraction wastewater without requiring the municipality to conduct a headworks analysis to determine whether its POTW was capable of accepting that wastewater without impairing its treatment system or impacting the body of water that received its effluent discharge.

The attached documents reveal gas extraction wastewater accepted by the Auburn facility was not characterized on a comprehensive basis. Dozens of pollutant parameters were "Not Sampled," including Total Dissolved Solids subject to pretreatment restrictions.

See: http://toxicstargeting.com/sites/default/files/pdfs/AubDEC_Jan09letter-N...

On 3/31/11, the City of Auburn reportedly cited six natural gas firms for "Significant Non-Compliance With City of Auburn Sewer Use Law."

See: <http://www.toxicstargeting.com/MarcellusShale/documents/letters/2011/04/07/cuomo-letter>

When Auburn requested permission to accept additional gas extraction wastewater after rescinding a local dumping prohibition due to a change in City Council political leadership, the regional pretreatment coordinator for EPA Region II required a headworks analysis to be conducted.

In March, 2014, that headworks analysis concluded: "The Auburn WPCP [Water Pollution Control Plant, not in the original] cannot accept **any** (emphasis added) VGWWW [Vertical Gas Well Wastewater, not in the original] with concentrations of POC [Pollutants of Concern, not in the original] in excess of their local local limits, and therefore the City would need to modify their current local limits in order to allocate additional capacity for these POC to the the VGWW. This would be a major modification of the City's sewer use ordinance and current local limits, requiring USEPA approval."

Due to this finding, Auburn still has not accepted any additional gas extraction wastewater since the original local prohibition was adopted in the spring of 2011.

See: http://www.toxicstargeting.com/sites/default/files/ghd_headworks_analysis.pdf

<http://www.toxicstargeting.com/MarcellusShale/news/2014-04-25/report-auburns-sewage-treatment-plant-cannot-accept-gas-drilling-wastewater>

<http://www.toxicstargeting.com/MarcellusShale/news/2014-05-01/report-auburn%E2%80%99s-treatment-plant-unable-accept-gas-drilling-wastewater>

Gas Extraction wastewater was similarly dumped without headworks analyses into the Cayuga Heights (approximately 3.0 million gallons), Canandaigua (approximately 177,000 gallons) and Watertown POTWs.

Improperly treated gas extraction wastewaters discharged to POTWs led to high levels of Total Dissolved Solids reported in the Monongahela River in 2008 that resulted in more than 850,000 local residents being unable to drink public water supplied from that body of water.

Methane Migration, Water Well Contamination and Surface Spills or Releases

According to DEC:

"The 2009 and 2010 information described incidents of known or suspected methane migration, water well contamination and surface spills or releases, all of which are acknowledged and addressed as concerns by the Department in the SGEIS and the 1992 GEIS. Most of the reported incidents pre-date the 1992 GEIS and many of them were found to be unrelated to oil and gas drilling. Those that may have been related to drilling were investigated and addressed by the Department. The 1988 draft GEIS provided mitigation measures to address the types of incidents that had been reported prior to that time. These measures have led to fewer incidents since 1988. In this regard, the SGEIS has built upon these measures to reduce the risk of methane migration, water well contamination and surface spills or releases. However, there are two notable incidents that occurred after 1988, as described below."

The above-referenced statement is highly misleading. Many of the spills involving fires, explosions, polluted water supply wells or massive gas extraction wastewater spills were reported in 2009, 2010 and 2012. Many of those problems were never cleaned up and do not meet applicable remediation standards to this very day.

DEC asserts that "many of the [incidents] were found to be unrelated to oil and gas drilling." With all respect, this statement demonstrates a profound misunderstanding of how gas and oil extraction activities cause environmental and public health hazards.

Some of the most egregious incidents reportedly occurred while production wells were actually being drilled or hydraulically fractured, notably the Dale Fox incident referenced below and when crude oil contaminated the home of the Perkins Family in Bolivar, NY.

See: https://www.youtube.com/watch?v=9_fURJ5DCSA

Hundreds of additional serious problems occurred due to activities directly associated with drilling or hydraulically fracturing production wells, including massive spills of toxic and radioactive gas extraction wastewater up to 100,000 gallons, deliberate dumping of wastes, improper disposal

utilizing pits, ponds and lagoons as well as releases from abandoned and unplugged wells. Many of those spills directly impacted residential homes and properties, water supply wells, roadways, wetlands, agricultural fields, surface waterways and forested lands.

DEC also asserts: "Those [incidents] that may have been related to drilling were investigated and addressed by the Department."

This implies that any reported problems were cleaned up in compliance with applicable remediation standards. Many of the reported spills were reportedly "administratively closed" even though they did not meet standards. Some of the problems remain administratively active years after occurring.

See: <http://www.toxicstargeting.com/sites/default/files/pdfs/22163083-Drilling-Spills.pdf>

http://www.toxicstargeting.com/sites/default/files/pdfs/jamestown/group1_reorder2-HL.pdf

Dale Fox Incident

According to DEC:

"The event in the Town of Freedom in 1996 was an underground blowout of natural gas that affected the local community over a period of hours. The well bore became pressurized when a strong gas flow was encountered underground, causing methane migration that affected properties approximately one and a half miles away. Methane detected in the shallow subsurface for a few days after the event, including in residential water wells and a pond, resulted in the evacuation of 12 families from their homes. The well was brought under control and the homes, wells and lands have since returned to the conditions that existed before the well was drilled. In 2005, the Cattaraugus County Supreme Court awarded damages to the affected individuals. Again, the Department concedes that despite engineering control measures incidents can occur that result in significant adverse environmental impacts."

DEC asserts that: "The well was brought under control and the homes, wells and lands have since returned to the conditions that existed before the well was drilled."

I believe this is untrue. In 2009, I spoke to Ron Lewis, the resident who reported the problem. He told me that the impacted families still could not drink their well water. At that time, I also interviewed Steven Woloszyn, Jr., a farmer whose dairy herd barn was impacted by natural gas intrusion through a water well. According to these people, the families impacted by this incident have never been made whole.

The detailed documents I provided to DEC prove that the 1992 GEIS requirements failed to protect these families from oil/gas extraction hazards.

See: http://www.toxicstargeting.com/MarcellusShale/bixby_road and

http://www.toxicstargeting.com/MarcellusShale/videos/bixby_hill_road

Town of Poland Incident

According to DEC:

"Regarding methane found in three wells in the Town of Poland, Chautauqua County, the private water wells were found to contain methane, but affected landowners refused to provide the well operator with access to the water wells for sample collection in order to test the gas to determine whether the source was naturally occurring Upper Devonian Shale methane or natural gas from the GEIS-consistent hydraulically fractured (low volume treatment) Medina formation found approximately 4,500 feet below the surface. The private water wells were drilled into the gas-bearing Upper Devonian Shale. Because of this refusal of access the Department cannot determine if the methane was a result of the hydraulically fractured well."

This statement is highly misleading because there was not just "methane found in three wells in the Town of Poland..."

In reality, Chautauqua County Health Department authorities reported literally hundreds of incidents involving private water well contamination, intrusion of methane gas into residential homes and a staggering array of other uncontrolled contamination release problems.

In the vast majority of incidents, reported hazards were neither fully investigated nor remediated in strict compliance with applicable remediation standards by either DEC or local authorities.

See: http://www.toxicstargeting.com/sites/default/files/pdfs/chaut_catt_co_attachments.pdf

<http://www.toxicstargeting.com/sites/default/files/pdfs/jamestown/CCDOH-Complaint-Summary-for-FOIL-Response.pdf>

Dave Eddy Incident

According to DEC:

"The incident at the home in Allegany County involved a shallow oil well that was not stimulated by HVHF. Inspections confirmed that the water supply was cloudy on different occasions, although several tests failed to detect the presence of methane, ethane, or petroleum hydrocarbons. When a well of any type is drilled into a rock aquifer, water in the aquifer that is near the wellbore may become turbid due to the pulverization of rock by drilling. Such a disturbance of a rock aquifer was the likely cause of cloudiness in the homeowner's water."

This factually incorrect statement is truly shocking because U. S. Energy, the firm that drilled a well near Mr. Eddy's home, documented the incident, including:

"1) May 11, 2009 U.S. Energy collected water samples from Mr. Eddy's water well for analytical testing. U.S Energy contacted Culligan of Bradford to also test the water.

2) May 14, 2009 Culligan informed U.S. Energy that Mr. Eddy would not make himself available until the evening of May 18, 2009 for the testing.

- 3) May 19, 2009 Culligan contacted U.S. Energy and communicated their test indicated trace amounts of oil and recommend the installation of a carbon water treatment system. U.S Energy instructed Culligan to proceed with the installation (emphasis added).
- 4) May 19, 2009 U.S. Energy received the analytical testing from Paradigm Environmental Services, Inc [stet] of Rochester. The testing detected no petroleum in the water from the Eddys' water well.
- 5) May 20, 2009 U.S. Energy instructed Culligan to install a water system and agreed to pay for the installation and maintenance of the system (emphasis added) until periodic testing proved the water not impacted.
- 6) U.S. Energy has put Mr. Eddy and his family in a hotel several nights during the initial impact. U.S Energy has been and continues to supply the home with Culligan bottled water (emphasis added).
- 7) U.S Energy has offered Mr. Eddy compensation (emphasis added) which he has refused.

See: http://www.toxicstargeting.com/sites/default/files/pdfs/us_energy.pdf

http://www.toxicstargeting.com/sites/default/files/pdfs/allegany_county.pdf and

http://www.toxicstargeting.com/MarcellusShale/videos/andover_independence_ny

Ferrugia Family Kiantone, NY

According to DEC:

"As to the comment regarding the well in Jamestown, water sampling conducted during the Department's investigation indicated high levels of TDS, sodium and chlorides were present in the water wells surrounding the property prior to drilling of the gas well. The Department's inspections and records suggest that the gas well was constructed properly and that waste fluids were hauled off-site for disposal at a facility in Pennsylvania. The Department has concluded, based upon water test data, inspections and investigations, that the highly mineralized water produced from the water well was not related to drilling or hydraulic fracturing operations."

The Ferrugia family's matter is unusual because the family's water well had been tested before as well as after drilling was undertaken. A comparison of the Before-Drilling and After-Drilling test results and other considerations persuaded the Chautauqua County Health Department official involved with the matter to conclude: "This is a well documented case showing drinking water impacts that are seemingly related to gas well development."

DEC dismissed this concern, but a geosciences professor at SUNY Fredonia supported the local health department's assertions and called for additional investigation. A representative of the United States Geological Survey similarly called into question DEC's conclusion, but to no avail.

When I spoke to the Ferrugias circa 2011, they still could not drink their well water. Their veterinarian advised them that even their dog should not drink their well water.

See: <http://www.toxicstargeting.com/sites/default/files/pdfs/jamestown/090601-chaut-cty-doh.pdf>

<http://www.toxicstargeting.com/MarcellusShale/videos/2011/11/03/ferrugia>

Additional Final SGEIS Shortcomings

The Final SGEIS fails to resolve a variety of other concerns, including, but limited to:

- inadequate funding to plug thousands of abandoned gas and oil production wells;
- investigating, remediating and eliminating the continued use of thousands of contaminated pits, ponds and lagoons where toxic and radioactive "produced" waters from conventional production wells are dumped;
- prohibiting landspreading of contaminated "produced" water from conventional wells for dust control, de-icing and roadbed stabilization. The practice of authorizing the releasing of millions of gallons of highly polluted "produced" water makes zero sense and should have been permanently prohibited decades ago;
- mortgage lending concerns associated with gas and oil mineral rights leasing;
- prohibiting the disposal of gas and oil extraction wastewaters into POTWs equipped with "secondary" treatment systems;
- eliminating New York's hazardous waste exclusion for gas and oil extraction wastes;
- eliminating the exclusion from GA class groundwater limitations for gas and oil extraction wastewaters used for "production" purposes;
- failure to require financial surety and impose strict liability for gas and oil extraction wastes as well as provide private right of legal action for victims of gas and oil extraction pollution.

See: http://www.toxicstargeting.com/MarcellusShale/cuomo/coalition_letter/2011

Conclusion

The requests and concerns spelled out in my comments address potential future gas and oil extraction hazards, notably HVHF, as well as on-going conventional fossil fuel production hazards. I believe it is incumbent on the Cuomo administration to resolve these existing regulatory shortcomings with the same diligence employed in completing the Final SGEIS proceeding.

I would like to commend the administration's decision not to permit HVHF as proposed in the 2011 Revised Draft SGEIS. The difference between that proposal and the Final SGEIS is stark:

"If the no-action alternative were selected, none of the potential significant adverse impacts identified in this SGEIS would occur. However, at the same time, none of the substantial economic benefits identified in Chapters 2 and 6 would occur either. Furthermore, this important energy source would not be harvested, which would be contrary to New York State and national interests. It would also contravene Article 23-0301 of the ECL where it is stated:

It is hereby declared to be in the public interest to regulate the development, production and utilization of natural resources of oil and gas in this state in such a manner as will prevent waste; to authorize and to provide for the operation and development of oil and gas properties in such a manner that a greater ultimate recovery of oil and gas may be had, and that the correlative rights of all owners and the rights of all persons including landowners and the general public may be fully protected, and to provide in similar fashion for the underground storage of gas, the solution mining of salt and geothermal, stratigraphic and brine disposal wells."

"The no-action alternative is also not favored because most of the potential significant adverse impacts identified in this Supplement can be fully mitigated by the measures outlined in Chapter 7. Other significant adverse impacts can be partially mitigated, or are temporary in nature. A prohibition would also deny owners of mineral interests an opportunity to realize the benefit of mineral rights ownership. Accordingly, it is not a recommended alternative to the rational and controlled development proposed in this Supplement."

I also wish to thank the Cuomo administration for not completing the original DOH "review" of the "health impact analysis" in the final Draft SGEIS and for instead undertaking the comprehensive shale fracking "Public Health Impact Study" requested by thousands of citizens.

I also thank the Governor for balancing the enormous number of concerns voiced on both sides of this contentious debate. I believe his efforts served the public good and are worthy of high praise.

I would like to acknowledge that this proceeding has likely been very difficult for many members of the Cuomo administration, notably Commissioner Martens. I have always tried my best to be personally respectful to him and have urged all citizens involved in this matter to be mindful of the need to demonstrate the highest regard for government service. Nevertheless, I am sure citizens were not always as understanding or as polite as they should have been to these public servants.

For all of these reasons, I hope that Governor Cuomo and the members of his administration who worked on the Final SGEIS and Public Health Review will accept my very best wishes for their continued success. Thank you all very much.

Until DEC issues its Findings Statement and renders a final decision in this arduous matter, the public will not know which action alternative DEC chose or how the agency proposes to resolve this matter once and for all. With high hopes, I look forward to learning those weighty details.

Thank you, again, for the opportunity to comment on the Final SGEIS.