

*Office of the Broome County Executive*  
*Barbara J. Fiala, County Executive*



December 21, 2009

Mr. Pete Grannis, Commissioner  
Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-1011

Mr. Peter Iwanowicz, Assistant Secretary for the Environment  
New York State Capitol  
Executive Chamber, Room 245  
Albany, New York 12224

Re: Draft Supplemental Generic Environmental Impact Statement

Mr. Grannis and Mr. Iwanowicz:

**PURPOSE**

New York State Department of Environmental Conservation (DEC) is taking a hard look at horizontal drilling in the Marcellus Shale. This review is being conducted pursuant to the State Environmental Quality Review Act (SEQRA). On September 30, 2009, DEC released its Draft Supplemental Generic Environmental Impact Statement (DSGEIS). Obviously, the DSGEIS examines many of the environmental issues surrounding potential development of horizontal drilling in the Marcellus Shale.

DEC has requested comments to its draft document.

This letter contains the response of the Broome County Administration.

**INTRODUCTION**

News about potential horizontal drilling in the Marcellus Shale exploded in 2008. At that time, the New York State Governor's Office ordered that DEC would not issue any horizontal drilling permits in the Marcellus Shale until a new SGEIS was completed. While that order is, still pending, other jurisdictions have experienced extensive horizontal drilling into unconventional shale formations. This activity gives DEC a great opportunity to learn from the experiences, positive and negative, in other natural gas plays.

We believe that the DSGEIS has thoroughly examined environmental issues, immediate and cumulative, surrounding horizontal drilling. Although the supplemental SEQRA process has not been completed, it is evident that DEC is taking a “hard look” at all environmental impact.

Broome County requests that the following adjustments be made in the DSGEIS

## **RECOMMENDATIONS**

### Mitigation of surface contamination.

Broome County has unfortunately experienced historical examples of surface contamination. As a result, we have various Brownfield sites and many homes located over a chemical plume. Most of these problems were caused by surface spills and accidents. Together spills and accidents represent the largest risk factor in horizontal drilling.

Previously, Broome County had recommended that horizontal drilling permits require the use of a closed-loop system in the drilling process. The primary advantage is that waste products are captured in steel tanks instead of earthen pits. This is a drilling technique developed by the industry that reduces the environmental impact of a drill site, mitigates the possibility of surface contamination, and helps control air emissions.

The DSGEIS certainly references closed-loop drilling. It indicates that a closed-loop tank system will be required in flood plains. *“Because of the length of time that activity may continue at a multi-well pad, a closed-loop tank system will be required instead of a reserve pit for managing fluids and cuttings.” DSGEIS § 7.2*

Broome County supports that requirement, but we believe it must go further. The topography of Broome County and much of the Southern Tier is very hilly. In addition, the area is subject to occasional flash floods. This combination enhances the environmental risks posed by earthen pits.

On June 25 - 26, 2006, a stalled weather system brought eight plus inches of rain to Broome County. Not only did these cause problems in flood prone areas, it also caused substantial flash flooding in other areas. A similar weather occurrence would overwhelm earthen pits.

Broome County recommends that permit applicants be required to address the issue of flash flooding whether or not the site is located in a flood plain. Wherever the topography, vegetation, and watercourses indicate the possibility that a major flooding event would overcome an earthen pit, it is requested that DEC require by permit condition a closed-loop drilling system and frac flow back tank containment.

Of course, well site surface contamination can also occur from tank leakage, equipment failure, worker error, etc. The DSGEIS recognizes this possibility and indicates that appropriate permit conditions will be imposed. For example, secondary containment systems must be utilized for tanks with capacities greater than 10,000 gallons and tank-filling operations must be manned at both the tank and truck. *DSGEIS § 7.1.3.1.*

Broome County recommends that secondary containment be required for all on site fuel, hazardous /toxic materials, and brine tanks. There should not be a threshold that allows permit holders to avoid secondary containment systems.

### Air Emissions During Drilling and Production Phases.

The DSGEIS takes a hard look at the potential for Hazardous Air Pollutants (HAP) and Greenhouse Gas Emissions (GHG) at natural gas development facilities. DEC has identified multiple potential sources for both types of emissions, and it has employed extensive scientific modeling. Broome County requests that this analysis be supplemented by additional required record keeping.

There is limited hard data of air emissions during drilling or production in the Marcellus. Even in a more mature play like the Barnett Shale, officials are only now receiving results of sustained air emission testing. Some of the initial results indicate high levels of HAPs. The DSGEIS indicates that there will be extensive testing of water wells. We think this a very positive approach, and a similar testing regimen should be required for air emissions.

Broome County recommends that permit applications include as part of mitigation planning a requirement that the applicant conduct baseline and monitor tests for air emissions during all drilling and production stages. Copies of the tests should be submitted periodically to DEC, NYS Department of Health (DOH) and the local County Health Department. Any tests that exceed federal or state thresholds should be immediately reported to the appropriate agencies; corrective actions should then be taken.

### Pipelines.

Broome County recognizes that DEC does not regulate pipelines. Instead, NYS Public Service Commission (PSC) regulates pipelines by diameter, pressure, and distance. There is the possibility, however, that some pipelines will escape these regulatory thresholds. This is especially possible with gathering lines. While the industry indicates that geological pressures from the Marcellus make low pressure lines unlikely, there are currently areas in upstate NY that are struggling with unregulated gathering lines connecting vertical wells. The issue needs to be addressed in the SDGEIS.

Although DEC does not regulate the use of local roads, it addresses the issue in the DSGEIS. Mitigation planning requires that any drilling company that has not reached a road use agreement with the local government to submit a trucking plan as part of its application process.

Broome County requests DEC that follow the same process for gathering pipelines. As part of mitigation planning, the applicant should do one of two things. It should either certify in writing that all gathering lines from the well bore will be regulated by PSC or local ordinance, or it should include a gathering line plan. The plan should address the location, depth, composition, diameter, pressure, and surface restoration of gathering lines that will be used to transport gas from the wellhead to a regulated compressor station or a regulated transmission line.

### Naturally Occurring Radioactive Material (NORM).

DEC has recognized and discussed that NORM is typically found in and around fractured well sites. The DSGEIS then recites the NORM regulations in the following jurisdictions; federal government, NYS, Louisiana, and Texas. Finally, DEC states that more testing must be done to assess and develop necessary mitigation measures. *During the initial Marcellus development efforts, sampling and analysis will be undertaken in order to assess this variability. These data will be used to determine whether additional mitigation is necessary to adequately protect the public health and environment of the State of New York. DSGEIS § 7-8.*

Broome County requests that DEC identify specifically the level of necessary testing, who will do the testing, the frequency of reporting, the agencies that receive the reports, the required record keeping and what will trigger an event that requires immediate shut down of natural gas facilities.

### NOISE from drilling and production.

The DSGEIS addresses the potential impacts from noise during natural gas production activities. It indicates that permit applicants should address the issue of noise mitigation. *Since noise control is most effectively addressed at the siting and design phase it is important that the pad be properly located and planned, and horizontal drilling provides the flexibility to accommodate this. New York State DEC guidance document “DEP-00-01 Assessing and Mitigating Noise Impacts” along with a site plan should be utilized for this purpose. Additionally, the applicant is encouraged to review any applicable local land use policy documents with the understanding that DEC retains authority to regulate gas development. . DSGEIS §7.10.4.*

While this approach recognizes and addresses a potential problem, the DSGEIS skirts the issue of whether localities may enforce local sound ordinances at drill sites. Applicants are encouraged to review *local land use policy with the understanding that DEC retains authority to regulate gas development. DSGEIS § 7.10.4.* This is not clear.

Broome County requests that DEC state explicitly whether it believes that localities are pre-empted from regulating noise at drill sites. If it takes that position, then DEC should adopt express decibel and frequency thresholds above ambient measurements that may not be exceeded. Presently DEP-00-01 speaks in turns guidelines and general mitigation.

### Agency Memorandums of Understanding (MOU).

One of the market dynamics of any new industry, like that expected in upstate NY Marcellus fields, is uncertainty. Stakeholders do not know what is going to happen. How will government permits be handled? How quickly will they be processed? Whom do I call if there is a problem? Obviously, the DSGEIS is designed to address these unanswered questions. However, some uncertainty remains. The issue of water well testing best illustrates this.

The DSGEIS is replete with examples of apparent or possible agency regulatory overlap. For example, *under the proposed protocols, county health departments will receive the results of baseline testing and ongoing monitoring that occurs until a year after the last hydraulic fracturing operations on a well pad. Therefore, they remain in the best position to investigate initial water well complaints from residential well users. DSGEIS § 7.1.4.1*

Local Health Departments do not answer to DEC; instead, they answer to DOH. Therefore, questions remain. Will local health departments be primarily responsible for responding to nuisance complaints? Will DEC respond when requested by local agencies? How long will it take DEC to respond?

Chapter 8 of the DSGEIS is entitled “Interagency Coordination.” While this chapter identifies responsibilities of various state agencies like DEC, DOH and PSC, it does not address overlap issues. The questions evoked by overlaps can be answered with Interagency MOUs. For example, there should be and MOU between DEC and DOH on the issues of water well testing, record keeping, and water well complaint responsibilities, etc.

A similar issue may arise regarding NORM. DOH is responsible for licensing the transfer, receipt, and possession of radioactive material. DEC is responsible for regulating the release of NORM into the environment. It seems apparent that drillers may need to comply with the regulations of both state agencies. Will the agencies work together? Will there be a common application form? What about required record keeping?

DEC needs to develop a MOUs with DOH and other relevant agencies on these and similar overlap issues.

#### Cumulative Impacts.

Various stakeholders have criticized the DSGEIS for an alleged failure to take a “hard look” at cumulative impacts from hydraulic fracturing. Broome County does not agree with that position. DEC has taken a critical look at possible cumulative impacts. As just one example, DEC solicited comments from various states that already have significant experience with hydraulic fracturing. Information and data from established fields can be used to help analyze long-term effects.

The comments in this letter repeatedly request that the DEC enhance recordkeeping requirements. We believe if these suggestions were adopted, the resulting records would better position DEC to address future cumulative impacts, if any.

### **CONCLUSION**

Before ending this letter, I would like to make a direct plea to NYS elected officials. DEC needs sufficient staff to facilitate a reasonable pace of natural gas development in the Marcellus and to monitor field operations. Unless sufficient funding is provided, NY will lose more economic development opportunities and it will struggle with regulatory and permit condition compliance.

In NYS, we have seen the results of underfunding. Recently the State Law Review Commission issued its report on another underfunded state agency—the State Liquor Authority. The report concluded, “The SLA’s current backlog of license applications . . . exacerbates the economic crisis currently plaguing New York.” A similar backlog by DEC will be even more serious.

DEC will also need staff to monitor regulatory and condition compliance in the gas fields. Otherwise, shortcuts will be too commonplace. For example, the Broome County Health Department believes that faulty grouting in well casings poses a potential threat of groundwater contamination. There is a much greater likelihood that grouting requirements will be strictly followed if drillers believe that DEC staff personnel are right around the corner.

We request that funding levels for DEC be increased to address these issues. If that does not happen, then we will all lose.

I request that this letter be added to the transcript delivered on my behalf at the public hearing held in Broome County on November 12, 2009. A copy is attached.

Thank you.

Very truly yours,

A handwritten signature in cursive script that reads "Barbara J. Fiala".

Barbara J. Fiala  
Broome County Executive

cc dSGEIS Comments, Bureau of Oil & Gas Regulation, NYSDEC Division of Mineral Resources,

Senator Thomas W. Libous,  
Assemblywoman Donna A. Lupardo,  
Assemblyman Clifford W. Crouch,  
Assemblyman Gary D. Finch,  
Broome County Legislators,  
Broome County Municipalities