

The sustainable development of the shale gas industry in Quebec

Submitted by:

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Développement durable de l'industrie des gaz de schiste au Québec

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My husband and I have operated a 400 acre commercial dairy for 33 years in North Central Pennsylvania. We leased our oil/gas rights in 2004 and have operating Marcellus Shale well on our property. There are 17 well pads in the township operated as a joint venture between Talisman Energy and Royal Dutch Shell.

Natural gas is a clean, abundant energy source with the potential to reduce our dependence on dirty coal and foreign oil. Whether it is the United States or our Canadian neighbors, we need to encourage the responsible development of this resource. It is critical that regulatory decisions be based on the facts surrounding the shale gas extraction process.

Since March 2008 there have been twenty eight horizontal Marcellus shale wells drilled in our township of forty square miles. One of the well sites is located on our 400 acre farm; we are involved personally on a day to day basis in the process and can offer insight into the impacts. Shale exploration, production and transportation is an industrial process that causes varying levels of disturbance that companies constantly strive to minimize. Pennsylvania has a long history of regulating the oil and gas industry but shale has created the need for new improved guidelines, a delicate balancing act between encouraging production and ensuring its safety.

While other areas of the country suffer from job loss, housing foreclosures and difficult economic times local governments within the Marcellus shale play look for ways to cope with a shortage of workers and housing, as well as traffic delays due to increased commerce. As expected a portion of the workforce needs to be skilled and comes from outside the area however, OG companies are training and hiring local people for the long haul. A large number of township residents have secured industry jobs including office staff, well tenders, rig hands and truck drivers. The local service industry has also seen a dramatic increase in business supporting their local employees.

The actual operations are impacting individual properties and local infrastructure. Well sites, typically 6-12 acres during the drilling process, have undergone dramatic technical improvements since the process began two short years ago. Initially pads were constructed with a stable base to support the heavy equipment, erosion controls to minimize runoff and space to allow for safe operations. Currently we are seeing containment structures installed around all facilities holding any type of fluid, entire pads lined to prevent contamination from spills and the elimination of lined holding ponds for any fluid other than fresh water. Hydraulic fracturing operations that started out looking a bit frantic have evolved into a more orderly system that reduces truck traffic on public roads as well as within the well site itself. It is clear that OG companies are focused on preventing negative environmental impacts.

Local roads in North Central PA were never constructed to endure the type of traffic created by shale development. Our township and others around the play have successfully reached agreements with the OG companies to repair roads often prior to development. Both gravel and macadam roads are currently being rebuilt at the OG Company's expense, not just repaired but rebuilt to exceed previous standards. This arrangement is working to the benefit of local taxpayers who at times are enduring some difficult conditions temporarily.

There is a lot of press regarding water issues in the Marcellus shale play but I believe most of it is misinformation. I have already discussed the level of activity in our township and I am aware of only one complaint regarding operations. The complaint involved a lined pond that contained flow back fluid which had leaked. The leaked material was cleaned up and as I mentioned the practice of using lined ponds to contain flow back has been discontinued.

Development of this vast resource will take us into a future with cleaner energy and move our respective countries toward energy independence. Shale gas can and is being extracted in a manner that is environmentally responsible. Regulation of the industry needs to be based on science and companies need to develop best management practices to deal with surface owner issues including regular communication regarding operations. The economic impact of developing shale gas should not be underestimated and the benefits will reach all sectors of the community.