LOCAL OPTIONS: What can local governments do?

Local government officials concerned about the impact of Marcellus Shale development on their community are advised to greatly expand and upgrade their comprehensive community planning efforts. The fast pace of gas drilling—and all of its related activities—means that planning must be done on a continuous, daily basis. Every new well that is drilled causes small changes in the community. Although drilling is regulated by the state, the New York State Constitution does grant local governments home rule power to adopt local laws. The Constitution and the Municipal Home Rule Law give local governments the authority to utilize the “police powers” in regards to its “property, affairs or government” and other powers granted in statute (New York State Commission). This section will outline some of the major points of intervention for local governments to mitigate the impacts this document has reviewed thus far.

Roads

As discussed in the regulatory section, local governments have jurisdiction over roads. According to Article 23, Title 3 of the Environmental Conservation Law, under Section 1660 of Vehicle Traffic Laws, local governments may employ the following strategies:

- Establish truck routes for through traffic;
- Post roads and establish weight limits;
- Issue hauling permits for local roads (this may be as simple as adopting the NYS DOT hauling permit as the local permit);
- Control curb cuts through highway work permits;
- Establish a Road Preservation Local Law that requires haulers to establish bonds—providing a security to ensure payment for any road repairs;
- Adopt a highway work permit with special permit conditions that apply to seismic testing;
- Adopt a Noise Ordinance to regulate temporary noise sources (drill rigs), portable noise sources (portable generators and compressors), permanent non-portable noise sources (large generators and compressors at well heads and on transmission lines), mobile equipment (earth moving equipment, vibraseis trucks), etc.

Municipalities have the ability to develop laws that address issues relating to managing vehicular traffic over county roads and driveway access for vehicles. This allows some control over how the gas drilling industry impacts the community. In order to leverage this control, it is important to reevaluate codes that govern roads, establish weight limit laws for local roads, and review existing traffic rules and regulations. This may include instituting a system to monitor truck routes and identifying which authority—town, county or state— is responsible for the road. (UNH Cooperative Extension, 2007).

Bonding

Bonding is a temporary insurance against long-term damages to infrastructure, and is used by municipalities to protect the public interest. As it relates to gas drilling, bonds are financed by companies to pay for any road repairs due to damage done by gas drilling-related truck traffic. However, because there are no criteria or standards for determining the amount, bonds are often inadequate to cover the entire cost of the road damages. One way to establish a sufficient bond is to calculate mileage to well sites and multiply it by the cost per mile to repair and maintain
those roads. Negotiating a road repair agreement with natural gas companies may be an alternative approach.

This security is usually in the form of a performance bond, a letter of credit, or a certified bank check. The local government handbook prepared by Penn State (2008) suggests that the regulations specify the amount of security for unpaved roads at $6,000 per linear mile and paved roads at $12,500 per linear mile, in cases in which the hauler agrees not to downgrade the road. When the local government and the hauler agree that the road type can be downgraded during hauling and restored after hauling ceases, the amount of security required is $50,000 per linear mile. If the hauler uses several roads for only a short time or makes relatively few trips, the rates per mile may be replaced with a flat rate of $10,000. By establishing and following such rules, taxpayers will not have to borne road repair damages done by haulers.

Posting and monitoring
Local governments can regulate vehicular weight limits, thereby confining all vehicles having a total gross weight in excess of ten thousand pounds to specific truck routes through their jurisdiction. According to New York State Vehicle and Traffic Law Section 1683, a road must be posted with a sign denoting the weight limit prior to the limit becoming effective.

After posting a weight limit, the local government enters into an excess maintenance agreement with each hauler. This agreement allows the local government to shift responsibility for repairing road damages proportionally to the haulers who damage the road. Haulers are only responsible for damage if they cause excessive wear and tear on the road.

Before hauling begins, local governments should inspect roads to record their existing condition. After hauling begins, the local government should continue to monitor the condition of the road and notify haulers of any necessary repairs. If the local government makes the repairs under the excess maintenance agreement, the local government then bills the hauler for the costs.

Zoning
The Environmental Conservation Law restricts the ability of local governments to zone or permit drilling. The Mined Land Reclamation Law confers upon towns the power to enact zoning that prohibits mining as a permissible use, but it does not cover gas drilling. However, zoning and subdivision ordinances are important tools for regulating potential secondary effects and support activities of the drilling process. As discussed in the section on socio-economic impacts, much of the opportunities and challenges will be these secondary effects that can be regulated through zoning. Local governments should consider regulating the land uses of the many gas industry support services, such as industrial yards, staging areas, office development, and quarries among others. One example is the use of site development guidelines to require setback, such as minimum distance siting of wells from public structures/areas or private properties.

Communities that see an influx of new workers will likely face affordable housing shortages. Local governments can prepare for a potential housing crisis by zoning for residential development, increasing allowable densities of existing residential zoning, or by allowing for mobile home development, which can be controversial. As discussed in the socio-economic impacts section, the demand for permanent housing also will likely increase, so local governments should prepare for increased demands made on the building permit process. Finally, housing shortages may also lead industry workers to take up residence in other communities that have a lower cost of living but require significant commuting times to the site. These spillover effects will impact communities that may not otherwise be directly affected by the drilling.

Permitting
Driving a heavy vehicle on a posted road generally requires a permit (Sullivan County, 2009). The permitting process requires that gas companies obtain permission to do so by registering their vehicles if
the weight or dimensions exceed posted limitations. Companies must also confirm the specific routes used. The type of permit depends on the number of vehicles, the number of posted roads in use, and the amount of use. Permits are issued only after an excess maintenance agreement has been signed.

**Driveway Permits**
Under General Municipal Law and Section 239-k and Section 136 of the Highway Law, driveway permits are required when constructing a new driveway, modifying an existing driveway, or installing a temporary construction entrance within a public right-of-way (County of Cayuga). The location and boundaries of the property in question and the location, size, and type of all existing and proposed driveways are required for issuing a permit. Once the application is submitted, the municipal building inspector, County Highway Department, and Director of Public Works usually review the application. After the local municipality approves of the development, a driveway permit is issued. The Director of Public Works should reserve the right to revoke the permit any time. Local governments can further influence the gas drilling process by distinguishing between residential driveways and intensive-use driveways. If there are any special conditions, they should be described and accepted as conditions of granting the permit.

**Wastewater Disposal Permits**
Towns can institute new permit requirements that oblige companies to dispose of water more safely, such as by digging deep wells as opposed to holding ponds to store wastewater. Existing municipal wastewater treatment plants are ill-equipped to deal with wastewater containing fracking fluid, and should not be used for that purpose. Several towns in Pennsylvania (Williamsport and Pittsburg) have applied to the DEP for National Pollution Discharge Elimination System (NPDES) permits to build plants that treat wastewater before it is returned to the environment (Thompson, 2009). In order for the DEP to review such a permit application, the plant must first receive local zoning approval (Rea, 2008). Local governments in New York may also find themselves addressing proposals for treatment plants and will need to be aware of the local zoning procedures of the plant. Once approved, the DEP publishes a draft permit with a 30-day comment period during which public meetings and hearings may be held if there is significant interest.

**Public Safety and Services**
Local governments should be prepared for increased demands placed on emergency services and first responders. Emergency personnel, especially EMS staff and medical doctors, should be equipped and trained to respond to the potential health hazards brought on by gas drilling, including potential chemical spills. Pennsylvania, which has been dealing with drilling in the Marcellus Shale for longer than New York, has several resources available to local governments, including the Pennsylvania Emergency Management Agency, which offers support regarding administrative planning, preparation, response to, and recovery from human health-threatening disasters that may occur as a result of drilling activity (Rogers et al. 2008).

**Local Comprehensive Planning**
A comprehensive plan serves as a useful tool for municipal management by providing a broad, general framework for common development issues projected ten to twenty years into the future. Unfortunately, few comprehensive plans were prepared with major natural gas development in mind, so they are not adequately prepared to address the potential impacts of the Marcellus Shale gas industry. According to the Penn State local government guidebook, comprehensive planning undertaken by municipalities and counties should have four components:

1. Taxation and municipal finance: a component to examine tax revenues and expenditures related to gas exploration and project future financial resources needed for municipal and county operations. By planning future expenditure needs for infrastructure and other capital expenses, such as road maintenance and repair, trucks, and equipment, capital budgets allow local governments to ensure they have the funds to pay for upcoming needs.
2. Public investment: for examining and developing a plan on how municipalities, counties, and school districts can use their assets and facilities to generate revenues from drilling, transmission, water, and wastewater activities related to gas exploration.

3. Comprehensive land use: a plan to incorporate natural gas development as a new and distinctive land use and provide for economic development, new commercial and residential activity, and improvements to the local transportation system.

4. Municipal management: a component to provide personnel that will keep track of mining activities, carry out inspections, anticipate production changes, and encourage workforce development to supply skilled workers. Since gas exploration is regional in scope, the management process needs to be carried out jointly by affected municipalities, counties, and school districts, as well as the private sector.

**Intergovernmental Task Forces**

In addition to comprehensive planning, local governments are advised to establish intergovernmental task forces in order to comprehensively prepare for natural gas drilling. By incorporating local businesses, schools, nonprofit organizations, volunteer organizations, government officials, healthcare professionals, and citizens into a cohesive group, local governments can have a greater chance of understanding the risks and benefits of natural gas drilling in their communities from many different perspectives. In addition to information-gathering, such a task force can help guide community discussions and decision-making, and ensure that regular communication occurs between adjacent communities to monitor spillover impacts. A task force can also create a sense of common purpose and strengthen community bonds. Many issues raised in this document concerning the environment, health and safety, infrastructure, and land use, can, and should, be considered by such a diverse task force.

Tioga County has initiated a steering committee to respond to natural gas drilling in their area and may serve as a model for other communities. Tioga Investigates Natural Gas (http://www.tiogacountyny.com/ting/) aspires to streamline currently fragmented activities related to the impacts and opportunities surrounding natural gas drilling in the Marcellus Shale. For more information about organizing a local strategy, please see the Penn State publication on organizing a community task force: http://pubs.cas.psu.edu/FreePubs/pdfs/ua451.pdf