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The United States is in the midst of a natural gas boom, lowering prices and causing a supply glut. One of the main reasons for this surge is the role of hydraulic fracturing, or fracking, in expanding energy drilling. In fracking, companies inject water and other chemicals into a well, releasing the gas from trapped layers of rock. The problem is that fracking chemicals and gas may seep from improperly installed wells, potentially contaminating aquifers or releasing to the air. Natural gas, when released, is a potent greenhouse gas. Other problems arise from the technique. The wells and pipelines are unsightly. Moreover, the wells are serviced by fleets of trucks, jamming local roads.

The federal role in fracking is fragmented. The Department of Energy has invested hundreds of millions of dollars in developing the technique over several decades, and other agencies, such as EPA and Interior, have a role too. However, federal regulation is hobbled by numerous exceptions in environmental laws.

Meanwhile, state agencies have been promoting and regulating the practice, just as they have regulated oil and gas production for over a century. Here we have a sampling of state, county, and town leaders, plus the industry and a citizens organization, debating the roles of the respective stakeholders, including whether a federal presence is necessary or desirable.
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Michael Smith
Executive Director
Interstate Oil and Gas Compact Commission
Self-Governance, Wise Regulation Can Lead to Win

Amy Farrell

Natural gas is a positive story for our nation. This clean, abundant, affordable American fuel represents an opportunity to become more energy self-sufficient, to help clean our air, and to spur our economy in part through a return of manufacturing jobs. It also has helped to revitalize communities that have seen their jobs sent overseas.

We now have massive supplies of clean, affordable, abundant natural gas right here in America that we can use in power generation, for industrial operations, and in transportation, providing cleaner energy and reducing greenhouse gas emissions.

Ceres, an environmental investment network, examined emissions from a broad spectrum of pollutants. They found that, among the top 100 U.S. power producers, emissions of sulfur dioxide and smog-forming nitrogen oxide were both 68 percent lower than they were in 1990. The U.S. Energy Information Administration reported earlier this year that we have reached 1992 levels of greenhouse gas emissions. Natural gas has contributed to these positive statistics.

The success of natural gas depends largely on our ability to safely and responsibly extract the resource. Industry operators and our government regulators share a role in ensuring the continued success in this arena. State regulators are at the helm when it comes to regulating energy development. Administrations in both parties have emphasized their critical role. President Obama acknowledged the lead role of states in an executive order issued in April coordinating the work of the multitude of federal agencies currently examining hydraulic fracturing and looking to ensure federal actions are not duplicative.

States have the on-the-ground experience and technical expertise, including knowledge of the geological and hydrogeological formations that exist in the states. Geological conditions vary greatly in different parts of the country. As a result, so do natural gas development techniques.

The placement of each well and the manner in which production takes place requires basin-specific, and even field-specific, knowledge and approaches. For example, in the Northeast, water typically returns to the surface in the hydraulic fracturing process, allowing companies to recycle it for use in future fracturing jobs. In some basins in the South, however, far less water returns to the surface, and companies and state regulators are very focused on water conservation.

That’s not to say the federal government plays no role. Natural gas producers must comply with requirements of the Safe Drinking Water Act, the Clean Air Act, the Clean Water Act, and the Occupational Safety and Health Act.

From a corporate self-governance standpoint, the companies of America’s Natural Gas Alliance have undertaken a number of operational and transparency initiatives, from employing best safety practices for producing the resource, to disclosing the contents of the chemicals we use during the hydraulic fracturing process through the state-run FracFocus.org web site. In just over the year that the website has been in existence, 367 companies have reported the contents of hydraulic fracturing fluids for nearly 28,000 wells.

The story of natural gas development is also a story of constant innovation. The natural gas boom in recent years has been driven primarily by advancements in technology that allow us to safely and responsibly access this abundant domestic resource. Natural gas producers are committed to pursuing innovations that continue this progress, from technologies that allow for reduced surface footprint, to greater water conservation and recycling, to enhanced protections for local air, land, and water. We are acutely aware of the responsibility to be good citizens in communities where we operate.

The rise of American shale gas is a profoundly positive energy story for our nation. In 2009, the United States surpassed Russia as the world’s largest single producer of natural gas. We went from a situation in 2005 where Congress approved legislation that would have opened import terminals all along the U.S. coastline, to now producing virtually all of the natural gas we use in North America.

If you are concerned about energy security, air quality, economic advancement, or jobs, the opportunities North American natural gas offers are too good to ignore. State primacy is the right approach to making sure this resource is developed safely and responsibly. And the natural gas community stands ready to work with regulators to ensure that the rules they set up are aligned with science and protective of the air, land, and water in communities where we operate. This commitment means we do not have to trade protection of our environment for the many benefits natural gas offers our nation.

Amy Farrell is Vice President, Regulatory Affairs, at America’s Natural Gas Alliance.
Our Local Governments Last Line of Defense

DOMINIC FRONGILLO

Given corporate, federal, and state failures to regulate fracking, local government is the only venue left to protect citizens. However, state and federal protections are sorely needed to ensure all citizens are safe.

Corporate self-regulation of fracking doesn’t work. Industry data show six percent of well casings fail immediately. Companies have failed to disclose chemical additives used in fracking fluid. Diesel fuel has been illegally injected in 19 different states.

The United States prides itself on first-world environmental protections. However, fracking is exempt from key federal regulations, including provisions of the Safe Drinking Water Act, Clean Air Act, and Clean Water Act. This leaves civil society to rely on the states for protections. However, many states fail to offer adequate protection. Local governments are the last line of defense.

States vary in their home rule laws. In New York State, the regulatory tool box of local government is limited. Municipalities are using zoning, site plan review, light, noise, and air quality regulations geared towards secondary impacts, such as storage areas and ancillary businesses. Municipalities are also creating truck routes, road use agreements, permits, or bonds to protect local roads, as well as permit and inspection processes for road crossings and co-location of pipelines in road rights-of-way for pipelines not regulated by other levels of government.

Municipalities lack authority and technical ability to directly mitigate the effects of the gas industry. Fracking involves complex technology; thousands of heavy truck trips; transportation of hazardous waste; risks to first responders from hazardous chemicals; radioactive radon; air pollution; venting methane; earthquakes; surface spills, blowouts, and well casing failures; and risks for contamination of drinking water. In addition, it involves an influx of transient out-of-state workers; increasing crime rates and rental prices; housing price destabilization and homeowner mortgage problems; a boom-bust economy which impacts local businesses, farms, and tourism; local inflation; fragmentation of rural landscapes with pipelines, roads, staging sites, and compressor stations; and introduction of a 24-hour industry in rural areas.

I represent the town of Caroline, in New York’s rural Southern Tier, on the divide of the St. Lawrence and Susquehanna watersheds. Fifty-five percent of Caroline’s land is leased for drilling, and over the last three years, our citizens have grown concerned about fracking’s impacts. In an unprecedented democratic outpouring, fully half of our citizens petitioned our council to ban hydraulic fracturing, and in a historic election defeated incumbents who said drilling is not a town issue, and elected by a 2-to-1 margin council members who would enact a ban.

Over 135 municipalities in New York have taken the position that temporarily or permanently prohibiting fracking is a reasonable and prudent use of police powers under the home rule statute. In May 2012, Caroline adopted a moratorium to develop policies for roads, site plan review, critical environmental area, aquifer protection, and pipelines, as well as investigate a ban. Recognizing that fracking is inconsistent with our comprehensive plan and state regulations fail to mitigate impacts, the Town of Caroline banned fracking in September.

Home rule authority in New York means some municipalities will prohibit fracking and others will not. Municipalities which adopt bans are still vulnerable to drilling impacts in neighboring municipalities. Impacts of fracking do not respect municipal boundaries. In addition to impacts described above, fracking will threaten local sustainable economies. In Caroline, farms like Cayuga Pure Organics grow beans and grains to sell directly to restaurants. Fracking anywhere in our region will ruin consumer confidence in their brand of “pure and organic.”

Municipalities across the state are relying on the state to regulate fracking, yet the current draft regulations fail to address the impacts. We need consistent protection. If fracking is not safe in one municipality, it’s not safe anywhere. Impacts of fracking don’t change from one municipality to the next, neither should state policy.

A growing movement of elected officials has become educated on and concerned about the potential impacts of fracking and related drilling operations on the communities we represent. Over 440 officials from 52 counties in New York are calling on the governor to address these concerns before fracking commences anywhere in the state, starting by comprehensively studying socioeconomic, health, and cumulative impacts. No drilling should proceed anywhere in New York until fracking is proven safe — with the burden of proof on the industry.

The state and federal governments are failing to protect citizens. In New York, local municipalities have a set of tools, but small rural towns have insufficient resources to regulate a powerful and complex industry. Moreover, we need robust, consistent regulation — free of industry influence — to ensure all our communities are safe from fracking.

Dominic Frongillo is Deputy Town Supervisor and Councilmember in Caroline, New York, and a founder of Elected Officials to Protect New York.
The Answer to “Whose Role?” Is “All of the Above”

Kit Kennedy

Nearly all onshore oil and gas extraction in the United States today involves a technique called hydraulic fracturing, or fracking, in which chemicals are mixed with large quantities of water and sand and injected into wells at extremely high pressure. In power plants, natural gas burns cleaner than coal, with lower emission rates for key air pollutants such as mercury. But the rush to use fracking to extract oil and gas has too often come at the expense of clean air and water and the well-being of many communities. The Natural Resources Defense Council is opposed to expanded fracking without effective safeguards in place.

NRDC takes an “all of the above” approach to the regulation of fracking. The federal government must fix the loopholes in U.S. environmental laws that exempt the oil and gas industry from key protections. States must enact stronger regulatory safeguards for fracking and provide the wherewithal to implement and enforce protective laws and regulations. And communities should be allowed to exercise traditional zoning, land use and other powers to regulate how, where and if fracking takes place. Of course, industry should also identify and achieve best practices across the board, but not as a substitute for enforceable and transparent federal and state regulations.

Federal Regulation. The oil and gas industry’s political heft has led to significant exemptions in the Clean Air Act, Clean Water Act, Superfund statute, Resource Conservation and Recovery Act, and Safe Drinking Water Act, among others. Many have called for closing these loopholes for years. Recently, even George P. Mitchell, the Texas billionaire oil and gas magnate known as the “grandfather of fracking,” has recognized the need for stronger federal regulation of the practice. This is consistent with forty years of American environmental regulation. Starting with the enactment of the Clean Air Act and the Clean Water Act in the 1970s, the federal government’s role has been to establish uniform baseline environmental standards for pollution emissions, working with the states to implement these standards.

This system of environmental regulation is called cooperative federalism. It recognizes that federal regulation is necessary to avoid interstate pollution, where (for instance) a spill of fracking fluid in one state can contaminate the waters of another. It prevents a race to the bottom by states who may wish to attract industry at the expense of environmental protection. And it reflects the fundamental concept that all Americans have a right to the same basic environmental protections. Congress must take action to close the loopholes in cornerstone federal environmental laws that have shielded the oil and gas industry for too long.

State Regulation. Under cooperative federalism, states play an important role in implementing federal environmental statutes and can play the lead role in the permitting process. States have both the flexibility to experiment with different regulatory approaches, as long as they meet federal minimum requirements, and the ability to adopt stronger standards as they see fit.

But with the rapid expansion of fracking, many states are unprepared or unwilling to exercise their authority to protect the environment in the face of this powerful industry. As a result, there is a patchwork of differing state fracking standards, some weaker and some stronger. For instance, a recent NRDC study found that of the 29 states where fracking is taking place, only 14 have enacted state requirements for disclosure of chemicals used in fracking, and these laws fail to require full disclosure. And, for a range of reasons, including budget cuts for state environmental agencies, many states fail to enforce their own rules regarding oil and gas development. All citizens deserve the protection of federal standards as well as more robust state regulations.

Local Regulation. For almost a century, courts have recognized municipalities’ rights to regulate land use using traditional zoning and land use powers. But some states attempt to restrict the right of local governments to regulate where, how, and if fracking takes place in their community. As a result, litigation is proceeding in New York, Pennsylvania, and Colorado in which municipalities are defending their use of traditional land use rights to address the threat of under-regulated fracking. In the last year, state courts in New York and Pennsylvania have upheld municipal rights to use these longstanding powers to regulate fracking. NRDC has launched a community defense initiative to assist local governments on this issue and to empower them to have a voice in their own future when it comes to this risky and under-regulated industry.

Kit Kennedy is Clean Energy Counsel at the Natural Resources Defense Council.
States Are Best Level for Oil and Gas Regulation

Mike Paque

The shale gas boom continues to be nothing short of a revolution. One can hardly escape reading about the vast amount of oil and gas resources throughout the world that were considered unavailable until horizontal drilling was refined and came into widespread use. Along with the advent of horizontal drilling came the technology to drill multiple wells from a single well pad. These unconventional gas reserves have the potential to be what some have called a game changer. More than just a bridge fuel until renewable energy sources become economically competitive, some believe that these resources could change national economic indicators. However, none of this occurs without tangible local impacts, concern, and too often, controversy.

One part of a well-completion cycle is hydraulic fracturing, which is the process of fracturing the gas or oil bearing shale with water, sand, and a fraction of chemicals. Of interest here is that fracturing has become synonymous with modern drilling and production. Drilling is occurring in areas of the country where there has been minimal activity in the past and it is not difficult to understand a landowner’s concern when new roads and pipelines are built, trucks and equipment intrude, and we read and hear on national TV, talk radio, and even the daily comics about the alleged dangers. Understandable concern over the potential effects of oil and gas production on surface and ground water quality and quantity exist in many areas but most intensely in areas unaccustomed to modern oil and gas production techniques. Drilling in some urban areas has also increased concern.

These concerns continue to be addressed by state oil and gas and water regulatory agencies. The oil and gas industry, whose social license to operate is at risk in some areas, has increased its efforts to work directly with concerned stakeholders on drilling and related impacts and safeguards. Most industries going into a new area with new technology would expect to do marketing and education. The stakeholder groups most interested in shale gas production didn’t do as well as they could have early on.

In reaction and response to these concerns some are calling for a new one-size-fits-all federal regulation of the oil and gas industry. This is not the answer. Not only would this not work well, it couldn’t succeed by any comparison to the states’ record to date. States have regulated oil and gas production for nearly a century (more in a few), without the widespread degradation of surface and ground water that some suggest will, or is, occurring. The facts do not support such claims nor warrant new federal intervention in these longstanding state programs.

During the 1960s national environmental interests believed that broader regulation of environmental issues was needed but recognized the necessity of having states lead as to the specifics. Subsequently the Clean Air Act, Clean Water Act, Safe Drinking Water Act and Resource Conservation and Recovery Act were enacted to address specific sectors of the environment. These laws became the framework for modern environmental protection. However, while EPA had a mandate to enforce the laws, it lacked a coherent implementation plan and the physical means to compel compliance. As a result, a system was devised for delegation of authority for these federal programs to state regulatory agencies that had technical knowledge and experience as well as trained personnel, and long established field organizations and presence.

This arrangement made sense then, and still does, because it provides for the most efficient implementation of environmental laws. It allows the states to design and administer programs within the framework of their unique knowledge and understanding of local conditions.

Under primacy agreements state agencies have the authority to enforce federal laws. This allows the state to bring its considerable technical understanding and personnel resources to the regulatory process. Although primacy agreements are legally binding delegations of authority, they can be modified, updated, or even abrogated by either party. Consequently, they remain a dynamic means of ensuring the goals of environmental protection are being met. These programs are in place today and provide for the protection of air, land, and water.

States have been doing their regulatory jobs well for many decades and have changed rules and procedures, albeit not quick enough for critics, as conditions and technology also change. As of this writing many state hydraulic fracturing–related rules are undergoing a natural administrative and political evolution to reflect the continuously changing technology in horizontal drilling, as well as in water withdrawal, reuse, and disposal. They are adapting to the new reality of shale gas and citizen concerns in a way that best protects local water supplies, using their knowledge of local and regional geology. These assets cannot be easily duplicated by the federal government. There will always be inevitable accidents and compliance violations, but this is why states have promulgated rules and continue to enforce them.

Albert Einstein once noted that “things should be made as simple as possible but no simpler.” Likewise regulation should be administered at the most effective level but no lower and in this instance that means the states.

Mike Paque, CAE, has served as Executive Director of the Ground Water Protection Council for 28 years.
Counties Have Skin in the Game Too

Martha Robertson

Shale oil and gas development is a national issue, so the federal government — with its resources and professional expertise — should analyze the environmental impact and set minimum standards that states and localities can build upon.

Can industry self-regulate? Clearly not. The industry fought to have fracking exempted from EPA oversight under the Safe Drinking Water Act and Clean Water Act, which they achieved in 2005. Among other beneficial loopholes, industry can legally hide the composition of fracking fluids, so liability is difficult to prove. The real risks never see the light of day, because non-disclosure agreements are the price of compensation for a family whose drinking water has been permanently fouled.

Even EPA has run into this roadblock: “Researchers . . . were unable to investigate many suspected cases of drinking water contamination because their details were sealed from the public when energy companies settled lawsuits with landowners,” according to the New York Times. “Officials say this practice continues to prevent them from fully assessing the risks of certain types of gas drilling.” In the face of federal inaction, state and local governments are largely on their own. What can a county government do?

County governments in New York State have very little authority but considerable responsibility — and risk — when it comes to extractive industries. We don’t have land use authority, which resides at the most local level, with villages, cities, and towns. Counties may have resources to advise, but we cannot direct local boards in their land use or how to deal with other impacts of drilling.

However, counties bear considerable responsibility for the public welfare that’s directly and indirectly impacted by shale exploitation. County health departments are on the line to monitor public and private drinking water supplies. Most of the drilling jobs go to non-local workers; we have to spend more on services to accommodate the influx. Permanent residents are pushed out of housing they could previously afford, and counties must address the resulting rise in homelessness and social disruption. Compared to communities without extractive industries, income disparity increases after the boom-and-bust cycle inherent to drilling.

According to the New York State Department of Environmental Conservation, each fracking well generates almost 7,000 truck trips, an impossible burden on infrastructure designed for local traffic. Using the one legal tool we have, Tompkins County passed a road preservation law to hold drilling companies accountable for damage they do to roads and bridges.

However, these trucks threaten property values even if the infrastructure is eventually repaired. A house on a high traffic road is worth less than the same home on a quiet street, and the fracking trucks impact even the most rural landscape. Additionally, there are documented financial risks to homeowners. Local banks are increasingly absolving themselves of risk on mortgages, and homeowner’s and title insurance industries are protecting themselves by not covering damages related to drilling. The resulting collapse of property values that often accompanies hydrofracking puts every homeowner’s life investment at risk, and hurts the tax base that funds all local government.

A responsible accounting must also recognize the costs of climate change. The Tompkins County Planning Department estimates that one eight-well drilling pad may release more greenhouse gas emissions over its lifetime than do all 100,000 county residents in one year. Peer-reviewed research at Cornell University documents that shale gas is more damaging to the planet than coal. This is due to the global warming power of methane, which is 100 times greater than that of carbon dioxide over a 20-year timescale. Fracking undermines actions to lower our carbon footprint.

Additionally, costs increase for emergency services, and there are often losses to existing businesses. Aren’t these costs covered by promised tax revenues? Too little, too late. Because they are based on production at the end of the drilling process, taxes aren’t paid to local governments until years after the costs have been incurred. And there is considerable evidence from areas with long-standing extractive industries that the revenues never fully cover the costs.

County governments have a lot of skin in the game. What should our role be?

Educate ourselves. In New York, our residents have led the way, bringing to light the many damaging consequences of fracking. The Department of Environmental Conservation received 80,000 comments on its draft regulations on fracking; the previous record was 1,000.

Organize. Share resources among municipalities. Counties tend to have more resources than smaller municipalities, so they can support others in coordinated action.

Finally, we must educate our state and federal lawmakers. Common sense dictates that until we fully recognize and mitigate the costs, the gas and oil should stay in the ground. Fracking has been banned in Bulgaria, France, and regions of Canada, Germany, Netherlands, Austria, and New Zealand. What do they know that we don’t?

Martha Robertson is Chairperson of the Tompkins County Legislature and the Tompkins County Industrial Development Agency. She helped to found Elected Officials to Protect New York and has lobbied on the issue of shale gas development in Albany, New York, and Washington, D.C.
States Have Priority in Oil and Gas Regulation

Carl Michael Smith

States have been the responsible and proper regulating authority since oil and natural gas production began more than one hundred years ago. States are able to adopt and amend rules more quickly than federal agencies, making them better equipped to adapt and respond to changing circumstances and local needs.

As President Clinton’s Executive Order 12866 reads, “The American people deserve a regulatory system that works for them, not against them: a regulatory system that protects and improves their health, safety, environment, and well-being and improves the performance of the economy without imposing unacceptable or unreasonable costs on society; regulatory policies that recognize that the private sector and private markets are the best engine for economic growth; regulatory approaches that respect the role of state, local, and tribal governments; and regulations that are effective, consistent, sensible, and understandable.”

The Interstate Oil and Gas Compact Commission, formed in 1935, was an early recognition of President Clinton’s words. The public demands a regulatory mechanism which requires accountability and protects their property rights, including their right to produce their minerals, while protecting health, safety, and the environment.

Historically, states have enacted and adjusted regulations to growing populations and ever-changing technology. The recent boom in the oil and gas industry with hydraulic fracturing and horizontal drilling is not new but presents new challenges that need to be addressed. States have methodically conducted research and studied issues that could arise with the new technologies and capabilities in the industry to create effective and functional rules for the exploration and production of shale oil and gas resources.

Each state’s oil and gas regulatory agency, with its local experts, exercises its jurisdiction in each state capitol. State and local authorities respond in a more time sensitive and cost efficient manner to serve their community’s needs and concerns. Citizens want that local response.

No one knows the geography or geology surrounding their state like their own. The Eagle Ford in Texas, the Bakken Formation in the Dakotas, or the Marcellus Shale in the Northeast, all have their own unique terrain and all lie under distinct areas. One size does not fit all, especially when it comes to producing oil and natural gas.

State regulators and inspectors live in the area where they work. The close proximity of work and home means that they are more invested in the area and have a greater interest in the welfare of their neighbors as it coincides with their own.

“The federal government has taken on functions it was never intended to perform and which it does not perform well,” in the words of Ronald Reagan. “There should be a planned, orderly transfer of such functions to states and communities and a transfer with them of the sources of taxation to pay for them.”

Federal oversight of the oil and gas industry habitually duplicates existing state regulations and often hinders efficient recovery of natural resources. Federal regulations tend to delay the production of shale oil and gas, thus adding to the costs of drilling and impacting job creation. The redundancy of federal regulations and production delays are unduly burdensome to the taxpayers in terms of added time and expense.

In many areas of environmental law, there is no clear line dividing who will regulate. In many areas both state and federal agencies have apparent jurisdiction, complicating the issue of who will regulate and to what extent. The issue is further complicated by the fact that in many areas state agencies administer regulations enacted by the U.S. Environmental Protection Agency.

The regulatory philosophy of the White House, as expressed in Executive Order 12866, is that federal regulatory authorities should seek to harmonize their actions with those of the states, local, and tribal authorities. The federal government should not obstruct the states from regulating and providing for their own people and commerce.

Carl Michael Smith is Executive Director of the Interstate Oil and Gas Compact Commission.