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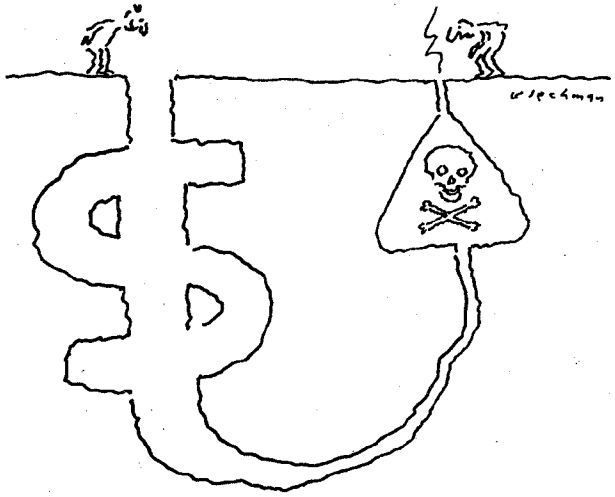
Natural gas rush: It's time for the Feds to step up

by Stanley Scoble, Ph.D.



Though New York has 13,000 active oil and gas wells, until last year only a small group of insiders knew that the state sits atop a huge natural gas field locked in the Marcellus shale, a geological formation beneath four states (New York, Ohio, West Virginia and Pennsylvania). Now, natural gas development is poised to begin at an intensive level never contemplated by state regulators.

While the Department of Environmental Conservation has begun to review its regulations governing natural gas extraction, it is clear from the dismal experience of Western gas-producing states, and the interstate nature of the resource, that the industry also should be subject to federal regulation. Drillers, for example, cross state lines to dispose of production waste fluids. Air pollution from drilling operations and massive withdrawals of water from rivers (used in production) show no respect for state boundaries.

One would suppose that an industry that began in the 19th Century would be well regulated by now. But during the early years of the Bush administration, the oil and gas (O&G) industry won two major victories which rolled back environmental protection.

First, the Environmental Protection Agency determined that the hydrofracturing technology used to capture natural gas from tight shale formations poses no environmental or health problems, despite the use of toxic substances injected underground. It now appears the EPA's conclusion in 2004 was shortsighted, premature, and possibly inappropriately influenced by O&G interests.

Second, then-Vice President Dick Cheney's Energy Policy Act of 2005 exempted the O&G industry from federal clean air, clean water, and safe drinking water laws. The energy legislation suggested that individual states could impose replacement regulation. This has not worked out, and now, almost four years later, individual states are struggling with the problem in a very clumsy and mostly unsuccessful manner.

This leaves the southern half of New York vulnerable — including the watersheds of New York City (the Catskills) and the Southern Tier. Unless federal standards are re-established, far less competent regional bodies will continue to struggle with the core technical issues, distracted by the recession, stymied by political corruption, and out-gunned by a legion of well-financed O&G lobbyists armed with junk science.

The O&G industry has consistently claimed that the chemicals and processes used in hydrofracturing are safe; yet it consistently refuses to disclose just what chemicals it uses. The logic is twisted. If the "frack" fluids are safe, why not disclose them, and why fight for exemptions that *no other industry* enjoys?

Most industrial activities are strongly controlled and physically segregated. We can usually choose to live nearby or not — usually not. However, O&G companies are not bound by zoning regulations or other "home rule" controls; they can set up operations wherever someone sells them a lease, including residential neighborhoods or the downtown area of a major city, as they are now doing in Fort Worth, Texas. Thus, the right-to-know principle becomes critically important. By this reasoning there is little or no basis for exemptions from clean air, clean water, or safe drinking water regulations, nor for any allowable secrecy regarding toxic or potentially toxic substances injected under residences and their water wells.

Right to know

To sharpen this point, consider that chemical disclosure requests by the DEC have, so far, produced woefully inadequate information from the gas companies. A typical response lists a variety of very generic terms, with no specific chemical names nor the amounts stored and used on site. While the DEC's recent scoping document suggests that the agency will require chemical disclosure, it is silent on whether the information it obtains will be available to the public. Without such transparency, it will be very expensive and extremely difficult for homeowners and municipalities to test and monitor their drinking water.

The industry claims that the chemicals it uses and the hazardous/toxic substances in "produced" fluids it brings to the surface (brine, heavy metals and some radioactivity) are so diluted that they couldn't possibly be harmful. However, there is absolutely no grounded, coherent science that supports this assertion, in part due to the industry's secrecy.

Anti-drilling activists target much of their criticism on the injection of hazardous chemicals deep underground during hydrofracturing. However, before workers start huge, noisy, smoke-belching diesel engines that power the injection process, the chemicals are stored on drilling sites and diesel fuel is trucked in and transferred to tanks. Spills and accidents happen. Even best practices can't prevent all of them. Reasonable regulations and enforcement, not blanket exemptions, provide incentives for better practice.

Cumulative impacts

Current state regulation treats each well as a separate entity, and up to 16 wells on one five-acre pad are allowed in a 640-acre unit. It simply makes no sense to ignore the cumulative impact of this process, but that is what the DEC does by assuming that if one well poses an acceptable risk, then it makes no real difference if a site contains 16 wells. In fact, exploiting the Marcellus shale is going to be a fairly major industrial activity, with air pollution from large diesel engines, dust from equipment moving over bare ground, methane gas releases, etc., over a three-year period and probably much longer — at each multi-well site. And there will be thousands (or possibly tens of thousands of wells) in the Southern Tier and the NYC watershed. This sort of development is not the quick-and-then-quiet activity often por-

continued on page 5

Support Chapter's volunteers with annual March Appeal

Sierra Club volunteers across New York state regularly do the work of three with little or no resources. They are helping to protect clean drinking water from contamination and holding polluters accountable for their actions. They are teaching the value of energy efficiency and opposing new coal-powered plants. They are reading environmental impact statements, press releases, newspaper articles, and e-mails — and that's just before breakfast! They do all of this, and then pay to photocopy educational material out of their own pockets, because they know that our funds are limited and precious. They would love to be able to expand their efforts, but lack the resources.

This March, the Atlantic Chapter is asking for your support — please give it, because it will be returned to you a hundred-fold, often in ways you will never hear of because our volunteers are there before a festering problem becomes bad news.

Look for the Appeal letter in the mail. To support the work we are doing in New York, you could use the reply envelope and tear-off enclosed in the mailing or simply send a donation today to:

Sierra Club Atlantic Chapter
PO Box 886
Syosset, NY 11791-0886

You may write a check payable to Sierra Club Atlantic Chapter in any amount, or donate by Visa or MasterCard by supplying your account number and expiration date. Contributions, gifts and dues to the Sierra Club are not tax-deductible; they support our effective, citizen-based advocacy and lobbying efforts. Thank you.

Natural Gas: Feds should step up

continued from page 1

trayed by industry sources. We need a planned regional approach that acknowledges the profound impact that such development will have on the landscape and community life.

Recommendations

• The exemptions for the O&G producers in the 2005 Energy Act should all be removed. Congressman Maurice Hinchey (D-NY) and Congresswoman Diana DeGette (D-CO) are working on this with H.R. 7231, but the Senate has no comparable bill at this time.

• The exemptions for O&G prior to 2005 (such as those in the Clean Air Act and in EPA regs under the Resource Conservation Recovery Act) should also be removed. The free pass for O&G should end. There are no plausible reasons for the industry not to bear the full real cost of production.

• The EPA has been foot-dragging since 2002 on implementing new requirements for spill prevention, control, and countermeasure (SPCC). Spills of dangerous, hazardous, and toxic substances are a major source of environmental contamination. Revised requirements should be implemented now.

• The Kid-Safe Chemical Act (H.R. 6100, and parallel bill in the Senate) is being sponsored by Senator Schumer, Congressman Hinchey and others. It could be invoked to control gas drilling, which is likely to impair water and air quality near schools, daycare centers, playgrounds, and parks. The burden needs to be placed squarely on industry to prove safety. The public cannot be expected to prove danger when industry is concealing the toxic chemicals it is using.

• Build wastewater infrastructure now. One of the very clear needs in New York, and likely in other states, is for an order-of-magnitude improvement in the facilities for handling the extremely large volumes (millions of gallons per well) of the hazardous/toxic waste fluid produced by natural gas production. For example, Pittsburgh-area authorities had to stop disposal of drilling wastewater in the Monongahela River, a source of drinking water, after they discovered very serious contamination of the river. New York, too, lacks a coherent plan for disposal of large-scale gas drilling waste. Because there are no authorized treatment facilities, the current options include: (1) spreading on dirt roads, (2) trucking waste out of state, and (3) injection wells (to store the waste deep in the ground in perpetuity). None is a good option. The federal government should not allow gas drilling without proof of access to appropriate disposal facilities, preferably built by entrepreneurs or the O&G industry.

Stanley Scobie, Ph.D., is a landowner in Binghamton, where he retired as a professor of psychology at Binghamton University. *Roger Downs, Wes Gillingham, Deborah Goldberg, and Michael Lebron helped with development of this article.*