



CLEAN WATER ACTION

PENNSYLVANIA

Testimony before the Environmental Energy Committee

Brady Russell, Eastern Pennsylvania Director

April 7, 2010

Kingstown Township Municipal Building

Luzerne County

Philadelphia
1315 Walnut Street
Suite 1650
Philadelphia PA 19107
Tel: 215.545.0250

Harrisburg
115 Pine Street
First Floor
Harrisburg, PA 17101
Tel: 717.233.1801

Pittsburgh
100 Fifth Avenue
Suite 1108
Pittsburgh, PA 15222
Tel: 412.765.3053

Lehigh Valley
901 North New Street
Bethlehem, PA 18018
Tel: 610.691.7395

www.cleanwateraction.org/

Thank you to Chairman George and his staff for organizing this gathering and for including Clean Water Action in these proceedings. We believe that it is critically important that the legislature seriously consider the size and scope of Marcellus Shale Development. House Bill 2213, Rep. George's bill before the committee now, is the first credible piece of legislation to come along that would regulate the operation and conduct of natural gas drillers working the Marcellus formation. Thank you for this consideration.

Clean Water Action supports House Bill 2213. We've already sent out a message to thousands of our members across the state demonstrating that support. We also reached out to local groups in widely divergent parts of the state and sought their support as well. We've included quotes of support from these groups in an appendix to our testimony. The Marcellus Shale project is different than any other development in the state. It's different because it is many orders of magnitude times larger than any other extractive operation our state can foresee right now. It's different because each well is so much deeper and requires so much more water than other kind of operation we have under way right now. It is also different because, with it's proximity to the cold, dense and rich Northeast, there's so much more money to be made in extracting this resource here. No

1010 Vermont Avenue NW, Suite 1100, Washington, DC 20005-4918
Phone 202.895.0420 | Fax 202.895.0438 | cwa@cleanwater.org
doubt, partisans for natural gas drilling and even professionals in the state government have

www.cleanwateraction.org

told members of this committee and members of the General Assembly that there's nothing unique about the Marcellus development and no reason to update laws in light of this new industry.

We disagree.

We believe that the Marcellus development is very, very different, and that is why we applaud this committee for considering a bill that would update the laws. The most recent Oil and Gas Operators Manual we've seen dates back to 2001. It's time for everyone in environmental enforcement this state to update their thinking about safeguarding our air and water, because we are in a very different situation now than we were before deep shale development became possible.

Of the various provisions detailed in this bill, the most important one we see is the provision that requires DEP to appear on site each time a well is sited, drilled, cased, cemented, completed, altered or stimulated. The spirit of this language is taken from present regulation, which speaks to the different phases of the life of a well and suggests that an inspector visits sites at each phase, but at the end of that list it allows DEP to skip visiting any well at any or all of these moments.

The state needs eco-cops. It especially needs eco-cops on the beat in the Marcellus Shale formation. We've already found two examples of DEP's expedited permit protocol allowing gigantic projects to be approved that never should have even been considered under the state's erosion and sedimentation control rules. The next phase is to have inspectors on sight that can make sure that drillers are following their stated plans.

Make no mistake, this industry will cut corners. I will let the local people also speaking on this panel speak to some of the negligence that they have been witness to

We think it is important for HB 2213 to be passed as a mechanism to force the

Commonwealth to build an enforcement staff to scale with this development. We understand that it is hiring inspectors now as fast as we can, but nothing DEP has done or said reassures us that its ultimate goal is to build a staff that can repeatedly inspect Marcellus Shale drilling sites.

AMENDMENT

In this section, we suggest clarifying language that indicates that an inspection is a prerequisite to proceeding on a well-site. That a site cannot be, for example, cemented, until the casing is inspected.

We also strongly support the provisions around the zone of presumption. Groundwater moves very, very slowly, but it does move. It moves at the rate of no more than a few feet per day. Within a short distance, if anything unusual and new appears in a drinking water system, it's legitimate to assume that a massive drill going through the water table is responsible.

We do not, however, believe enough time has been allowed in the current provision. At a rate of flow of three feet per day, groundwater would only travel 540 feet within six months.

Further, the responsibility to check water quality before and after drilling in the zone of the presumption should not be on the landowner. Very few landowners in the Marcellus Zone have the means to pay for the sort of comprehensive water testing necessary to really assess the impact of drilling near a drinking water well. A comprehensive predrilling survey should be a required both to protect landowners and drillers.

Finally, it's important here to talk about money. There's a limited number of labs in the world that can do the sort of water testing necessary to really verify that drillers have not made a mistake. Without a firewall between drillers and water testing labs, drillers will become one of the best and most lucrative customers of this branch of the environmental

industry. Let's not naively pretend here that such considerations could not possibly have an impact on the results. In fact, it is more likely that drillers would find labs that would improperly conduct tests than labs that will not. The state should create a firewall between the drillers' money and the labs that do the work. Either the state itself or an authority it contracts to should be in charge of hiring the labs to do the testing of water samples. Finally, the setbacks from water supplies should be increased. By increasing the size of the setbacks, we'll be able to prevent problems rather than attempting the impossible in restoring a water supply after it's been contaminated.

AMENDMENTS

Increase the time frame in which the presumption of contamination of a water supply has occurred from 6 months to 24 months.

Require pre- and post-drilling testing of water sources within the zone of presumption. Use the specifications in PA Code, § 78.52. Testing should include at a minimum the following contaminants: methane, total dissolved solids, chlorides, BTEX, metals (including arsenic and manganese), and radionuclides. A test for water quantity should also be performed.

Testing should be paid for by drillers, but the state or its designee should do the hiring of labs to conduct the tests.

Increase the current required setback of 200 feet from water supply wells. The setback should be 1,000 feet for private water supplies and 2,500 feet for public water systems.

It is encouraging to see Pennsylvania do what it can to close the Halliburton loophole. I can't imagine what these drillers are hiding so carefully. I was speaking at a recent debate at the Free Library in Philadelphia. I mentioned the Halliburton Loophole. A public affairs

specialist from Chesapeake Energy, also on the panel, followed me up by saying that Chesapeake was happy to release what was in its drilling fluid. He waved a pamphlet around saying that it disclosed the recipe for Chesapeake's hydrofracking fluid. It was all there for anyone to see.

So I took a copy.

A week or so later, I scanned it and sent it to a water testing expert at the Alliance for Aquatic Resource Monitoring at Dickinson College. She took a quick glance at it and said that was not a document that would be at all helpful to someone who wanted to do a real examination of possible contamination. It was simply a listing of categories of constituents. Not the actual constituent chemicals.

It's dishonesty like this that makes the industry so untrustworthy. It's dishonesty like this that leaves me very uncomfortable with permitting the industry to expose ground and surface water to these chemicals without the same disclosures required when other kinds of contaminated water is injected underground.

We believe HB 2213 should go somewhat further and make sure that these disclosures are easy for the public to view and useful to landowners and local officials.

AMENDMENT

In addition to the general disclosure provisions, there should be a disclosure requirement for each well site, including which chemicals are being used at the site, and in what quantities. This information should be disclosed to all residents of the property where the well is located, local emergency personnel, and DEP.

On the issue of municipal authority, we applaud Rep. George for reaffirming the authority of municipalities to make rules about the location and broad operation of well sites. For example, I was recently reviewing some of the authorities townships do have over well

drilling and noticed, for example, that they can make rules about development in the floodplain that would apply to gas drillers. I hadn't known that townships had that sort of power. How many of them realize that they can make rules like that under current law? And how much money are drillers spending trying to convince them that they don't?

Regulations

In closing, I wish to also draw this committee's consideration to two different sets of regulations currently under consideration by DEP. Chapter 95, on Wastewater and Chapter 78, regulating the actual sites of oil and gas wells.

We hope that Committee members will work with us to make sure that these new regulations are promulgated and improved in ways that will protect our Commonwealth for years to come. Of course, these regulations will come before the committee as a part of the normal regulatory process, but we also know that members have a great deal of informal influence on the Department. Please use it on behalf of protecting all Pennsylvanians (not just the industry or leaseholders).

I will give two quick examples to illustrate how important these rules could be. Right now, DEP is issuing statements that the amount of flowback water is no more than 20% of the water that's actually injected into wells. Is this really accurate? Have they verified this with eye-witness measurements on site?

They are simply citing the testimony of the industry itself. This is the same industry that is publicly claiming that many operators are recycling 100% of flowback water; however, in informal conversation with workers from sites by members of the Campaign for Clean Water, they describe this as only happening at best a portion of the time.

Furthermore, flowback water is only part of the story. Wells can produce wastewater for years. What happens to that water?

And even when the industry claims that there is no need for wastewater regulation because flowback water is so widely recycled, it raises the question: then why resist stronger regulations on wastewater disposal so strenuously?

Further, it's disingenuous to site facts about flowback water when produced water is such an important part of the Marcellus wastewater story. It's disingenuousness like this that indicts the responsibility of this industry. It underscores the need for strong laws, rules and staffs that can enforce them.

On Chapter 78, I will simply draw your attention to the requirements on cementing off the well bore from the water table. New York state's requirements are considerably more robust. Our proposed regulations would only go 50 feet below the water table. In New York State it's 100 feet or down to bedrock, whichever is further. Why is New York's drinking water so much more important to protect than Pennsylvania's?

There are many more aspects of these regulations that are worth amending, strengthening and clarifying. That said, we are, on balance, happy that the Department of Environmental Protection is working to update its rules in this new and very different context. The context of an unprecedented Marcellus Shale development. The Department is under tremendous pressure to do less. We hope this body will do what it can to counter-balance that pressure so that DEP might do what it thinks it can do. So that it might do even more.

The scope of Marcellus Shale Development makes it unique in this generation. Perhaps unique for several generations. It could be as destructive as timber was, once upon a time. It certainly will be vastly more destructive than it has to be if we don't have good rules and we don't have eco-cops watching to make sure the rules are followed.

We are all counting on this committee to make sure we have those sorts of rules and the kind of enforcement that will make the rules work.