



House Environmental Resources and Energy Committee

Chairman Camille "Bud" George's February 2010 Update: Marcellus Shale, Electricity, Sewage Sludge



This update reports on the recent public hearings on Marcellus Shale (HB 2213), establishing a state power procurement and development agency (HB 1909) and on sewage sludge.

1. **Marcellus Shale updates and the public hearing on HB 2213**

The Committee held a public hearing on HB 2213 and issues related to hydraulic fracturing on February 18 in Clearfield County. The hearing included testifiers representing DEP, the natural gas industry, PennFuture, and the Susquehanna River Basin Commission. Most of the testifiers supported the bill and suggested ways to improve it. Despite the natural gas industry's attempt to assuage the public apprehension and fears about the drilling practices and their impact on water and land, troubling developments continue to surface:

***Expedited review for Erosion & Sediment Controls permits for natural gas activities***

Although the Permit-By-Rule provision in the Department of Environmental Protection's (DEP) proposed regulations related to the National Pollutants Discharge Elimination System permit program under the Clean Water Act may be dropped, DEP continues to issue Erosion & Sediment permits to natural gas operators without conducting any technical review. The Chesapeake Bay Foundation, which discovered in August 2009 two permits without any technical review issued to operators who failed to disclose the existence of protected watersheds in or near the areas where the proposed activities were to occur, found that drilling activities were occurring in floodplains or, even more serious, floodways. DEP justifies the existence of the "no technical review" or "expedited" permit process as enabling it to focus more on field compliance rather than paperwork, but the fact that a non-profit agency is discovering these flaws, and not DEP, suggests that DEP may be abdicating a part of its role as the top environmental watchdog.

HB 2213 will soon be amended to include a provision prohibiting such permitting practices and a House resolution will be introduced containing the same language. According to an official at the Board of Professional and Occupational Affairs, no disciplinary action has ever been brought to a licensed professional for filing a faulty permit application, and the statutory penalty is a meager fine of \$1,000. Until May 2009, county conservation districts had been conducting technical reviews of the E&S permit applications, but DEP rescinded the delegation of the permit review authority, citing inefficiency.

***Use of diesel in frac chemicals in violation with the agreement with EPA***

Currently the Environmental Protection Agency (EPA) does not regulate hydraulic fracturing chemicals under the Safe Drinking Water Act (SDWA), as a result of a 2003

agreement in which frac fluid companies agreed to prohibit the use of diesel in their products for coalbed methane drilling activities. But Halliburton and BJ Services, who provide services in PA, admitted that they used diesel from 2005 and 2007 in violation of the agreement. Further, they declared that the prohibition of diesel does not extend to drilling activities in formations like Marcellus Shale. Both the House and the Senate in Congress introduced legislation, called the Fracturing Responsibility and Awareness of Chemicals (FRAC) Act, to eliminate the exemption of frac chemicals under the SDWA.

***DEP does not have the Chemical Abstract Service numbers for some frac chemicals***

At the hearing, a DEP representative admitted that the department does not have the Chemical Abstract Service (CAS) numbers for several frac chemicals and assured that it would get them as soon as possible. The CAS number is the unique identifier of a chemical compound's molecular structure, which is necessary for any testing for contaminations or illnesses.

***Texans call for a moratorium on new drill permits due to high levels of air pollution***

A local air pollution study in a town near Fort Worth, Texas stated that it found the levels of benzene and some other volatile organic compounds to be much higher than the state maximum and attributed the high levels to the compressor plants that process the natural gas from the Barnett Shale. Although the state's top oil and gas regulator, the Texas Railroad Commission, called for more studies, some are calling for a moratorium on new drilling permits. The Texas Railroad Commission has been known to issue a drilling permit on the same day the permit application is submitted.

**2. Correcting the record on HB 1909 (Energy Procurement and Development Agency)**

On January 20, 2010, the Committee held a hearing on HB 1909 which would establish a state power agency to mitigate some of the flaws of the wholesale energy market. The PA Consumer Advocate, the Vice Chair of the Public Utility Commission (PUC), an AARP representative, and an executive from AK Steel testified on the necessity of such an agency and the problems in the wholesale market. Shortly thereafter, the Republican Policy Committee held a hearing, with the head of the Electric Power Generation Association, a PUC Commissioner, and a consultant testifying. Troublingly, several misstatements were made regarding HB 1909:

***MYTH: HB 1909 is a re-regulation bill.***

Plainly, HB 1909 does nothing to re-regulate the electric market, and it does not impinge on retail competition. Rather, it is a means to provide lower-priced power to residential customers and our manufacturers. It remains irrefutable that the average prices in deregulated states are more than 50 percent higher than in regulated states. 28 states remain regulated, providing low rates and luring manufacturers from the more expensive deregulated states. Eight states have suspended restructuring.

***MYTH: Taxpayers would be liable for Agency-issued debts.***

PUC Commissioner Powelson testified that the Agency's debt would be covered by the full faith and credit of the Commonwealth. This is plainly false, however, because the Agency can only issue revenue bonds (limited obligation bonds) and the taxpayers are not liable for any Agency-issued debts. See Section 2806-D(a)(4). The Agency would buy power mainly from plants that are built, financed and operated by the private sector. Only in exceptional circumstances would the Agency finance or issue debt.

***MYTH: Risk would shift from private developers to taxpayers.***

The main purpose of the Agency would be to facilitate the financing of new power plants by the private sector through the issuance of competitive solicitations for long-term contracts to buy power. By entering into such performance-based contracts, all of the risks of ownership and operation would be assumed by the private developer.

***MYTH: There is "more than enough capacity" to meet demand.***

This is contrary to PUC's finding of capacity shortage by 2013, despite billions of dollars extracted from ratepayers that were supposed to incentivize more private generation. The Electricity Generation and Customer Choice Competition Act of 1996 has not delivered any new solid-fuel baseload generation, which is what is needed to provide stable and affordable power. Instead, only a modicum of expensive peaking gas plants and heavily subsidized wind turbines has been built.

Given these misperceptions, it would be good to recall PUC Chairman Cawley's advice: "I urge you to ignore those naysayers who are too lazy or biased to get the facts straight."

**3. Sewage Sludge, and the Attorney General of Pennsylvania**

On December 17, 2009, the Committee held a public hearing on problems associated with sewage sludge, and safe and environmentally sustainable ways to treat it:

- A farmer from Georgia testified about his dairy farm and row crops that were totally destroyed by land-applied sewage sludge and the lack of protection afforded by federal regulation. He described that, although hazardous wastes are regulated while they are in industrial pipelines, they are no longer considered hazardous wastes the moment they enter municipal sewer pipelines. Legal remedies under federal law are difficult to obtain because the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) exempts liability for federally permitted releases.
- A waste management expert from Cornell University, testified that land application of sewage sludge is the cheapest disposal option for Publicly-Owned Treatment Works (POTWs), and that, apart from eight heavy metals—arsenic, cadmium, copper, lead, mercury, nickel, selenium, and zinc—neither federal nor Pennsylvania regulation requires removal of, or testing for, other toxic pollutants from sewage sludge.

In Pennsylvania, residents have reported illnesses related to land-applied sewage sludge, but it has been difficult to prove causation and expensive for residents or municipalities to test the sludge for toxic pollutants. These residents report that DEP sees no causal link between their illnesses and sewage sludge and is unwilling to test for other pollutants.

### ***Current Treatment***

Most sewage sludge falls into the more toxic Class B category rather than the Class A category (lawn-fertilizer grade), requiring restrictions on public contact, animal grazing and crop harvesting, but it is uncertain whether these restrictions are being strictly observed.

Other than the eight metals mentioned, EPA and DEP currently do not test for other toxic pollutants, including carcinogenic pesticides, virulent pathogens, pharmaceutical compounds, steroids, hormones, and other synthetic chemicals such as polybrominated diphenyl ethers (PBDEs) used in flame retardants. Yet most POTWs accept pharmaceutical and other industrial wastes without adequately removing toxic pollutants. EPA is considering testing dozens of additional pollutants such as molybdenum, PBDEs, pharmaceutical chemicals including antihistamines, antibiotics, steroids and hormones, but it has yet to take any concrete steps to regulate these pollutants; DEP follows EPA guidelines.

The treatment of sludge also involves raising it to a high level of alkalinity (pH) that can cause rashes and burns on humans; also, sludge has an extremely offensive odor—often compared to the smell of a herd of dead deer—due to the toxic gases such as dimethyl sulfide, ammonia, and trimethylamine.

### ***Legal Remedies***

Relevant state statutes—the Clean Streams Law, Hazardous Sites Cleanup Act, and Solid Waste Management Act—offer no specific legal remedies to a person whose health and well-being is adversely affected by sewage sludge, as long as the entities involved in the land application of sewage sludge obtain the required permits from DEP. DEP would be shielded by sovereign immunity from any claims alleging negligence based on its lax permit scheme. Tort claims under common law may be available against companies or individuals who haul, apply or receive sewage sludge, but such claims may be subject to the defense of state-permitted practices.

Given the lack of state response, local governments have attempted to regulate land-applied sewage sludge through ordinances and enactments, but Attorney General Tom Corbett has been vigorously blocking such efforts by suing to overturn such ordinances under Act 38 of 2005, commonly known as the "Agricultural, Communities, and Rural Environment (ACRE) Act, which prohibits municipalities from adopting an "unauthorized local ordinance" that would restrict "normal agricultural operations." 3 Pa.C.S. § 311.

**House Environmental Resources and Energy Committee**  
**38B East Wing, P.O. Box 202074, Harrisburg, PA 17120-2074 | (717) 787-7316**