

Sent: Friday, January 22, 2010 11:10 PM
To: White, Senator Mary Jo
Subject: January 27, 2010 Public Hearing

Greater Wyoming Valley Audubon Society
P.O. Box 535
Dallas, PA 18612
January 22, 2010

The Honorable Mary Jo White
Senate Box 203021
Room 169
Capitol Building
Harrisburg, PA 17120-3021

Dear Senator White:

On behalf of the Officers and Directors of the Greater Wyoming Valley Audubon Society (Luzerne and Wyoming Counties), I am submitting the following for inclusion as part of the official record of the January 27, 2010 public hearing regarding natural gas exploration and production in Pennsylvania. The essay copied below was published in the January/February, 2010 issue of *Valley Views*, the Newsletter of the Greater Wyoming Valley Audubon Society. I believe that this essay adequately expresses my concerns surrounding natural gas exploration in the Marcellus Shale in Pennsylvania. Although I appreciate the Pennsylvania Legislature's, as well as individual landowners', attempts to balance budgets via leases for, and royalties from, gas drilling in the Commonwealth, I am concerned that drilling is proceeding without its potential impacts having been thoroughly investigated. Since other areas of the Nation have witnessed gas exploration, and hence, have also experienced drilling's downside, I believe that we in Pennsylvania can learn from the experiences of others. Therefore, I hope that you, as Chairperson of the Senate Environmental Resources and Energy Committee, will bring these issues to the attention of your Committee, as well as to the attention of the full Senate and State House of Representatives.

Thank you for considering my comments.

Sincerely,
Robert Wasilewski, President
Greater Wyoming Valley
Audubon Society

*"Come and listen to a story about a man named Jed,
A poor mountaineer, barely kept his family fed.*

*Then one day he was shootin' at some food,
And up through the ground come a bubblin' crude.
Oil, that is. Black gold. Texas tea."*

Paul Henning

Drill Here, Drill Now

Bob Wasilewski

If the dreams that are born of natural gas speculation in Pennsylvania become reality, many of the Commonwealth's residents might think that they soon will be following old Jed Clampett to Beverly ... Hills, that is, in search of swimming pools and movie stars. Ever since representatives of the gas exploration and extraction industry began hunting for profits from the now famous Marcellus Shale, a rock formation that lies some five thousand feet beneath the earth's surface and that stretches from New York State to West Virginia, land owners from the potentially most productive region in northeast Pennsylvania have been bartering away their properties for a chance at the easy life that they believe can be had from their shares of the financial spoils that gas companies expect to realize. To secure the necessary leases to those lands, gas industry representatives have courted rural property owners with tempting tidbits of economic prosperity in a manner reminiscent of the tactics employed two decades ago by landfill owners who targeted economically distressed Native American communities and chemical industry bigwigs who found similarly little resistance from communities comprised mainly of poor, and poorly educated, people of color. Not only have private property owners succumbed to those tactics, so too have the guardians of our public lands, the Commonwealth's legislators, been convinced that financial independence awaits beneath the drilling rigs that soon will take up residence in our state forests. As those drilling rigs become ubiquitous components of our landscape, however, what will become of our now verdant hills and our cold, clear swimming holes, and will we still be able to see the stars through the drillers' exhaust?

A somewhat exhaustive discourse concerning the benefits and drawbacks of natural gas drilling has occurred in recent months, a discourse that can largely be attributed to examples of drilling's downside. In a May 27, 2009 National Public Radio story, correspondent, Jeff Brady, reported that residents near Dallas, Texas, which overlies the Barnett Shale gas deposits, began to experience water pressure problems after a new gas well had been drilled nearby. According to one resident, flushing the toilet caused water to shoot out from the bowl. The same resident also noted a foul odor when showering, and he and his grandson developed skin rashes that he attributed to the water. Even his horses noticed changes in the water and stopped drinking from their trough after an oily residue appeared on the water's surface. Add to these water issues new concerns, as reported last June by NPR's Wade Goodwyn, that gas drilling operations might be responsible for an unusually high (six in one month) number of earth tremors in the town of Cleburne, Texas, and while most of the documented problems that have been attributed to natural gas drilling have occurred in Texas, where drilling has been underway for several years, the problems have not been restricted to the Barnett Shale.

The Barnett Shale's northeast counterpart, the Marcellus Shale formation, has garnered some infamy of its own in recent months. In one case, as reported by NPR's Brady, an Ohio couple's home exploded when methane from the couple's water well filled their basement. In an eerily similar case in northeast Pennsylvania, a Susquehanna County resident's water well exploded after methane that most likely was released from the ground by nearby gas drilling infiltrated the resident's source of drinking water. In another case, the same company spilled drilling contaminants into a wetland and nearby creek. Such reports highlight the oft-stated claim that gas drilling can pollute ground and surface water since hydraulic fracturing (a.k.a., "fracking"), the method of shattering the gas-bearing rock in order to release the coveted prize, employs a toxic liquid brew that includes ethylene glycol and the potential carcinogen, benzene, both of which, according to the Wilderness Society, can cause birth defects and blood and neurological disorders in people who drink water that has been contaminated with these substances. The presence of toxins has led to concerns about the treatment and disposal of contaminated "fracking water." Although several proposals, which would return treated water either directly to the Susquehanna River or to one of its high quality, cold water trout fishery tributaries, have been aired, no specific proposal had been adopted or permitted as of this writing. The fact that such toxic substances are used in the drilling process, and that these substances can leach into groundwater, might lead some to wonder why the federal government does not more stringently regulate their use. For that, we can thank Mr. George W. Bush.

During the Bush era, when the hydraulic fracturing process became more common, the natural gas industry successfully lobbied the federal government for an exemption to the Safe Drinking Water Act. That exemption is known as the "Halliburton Loophole" because, according to the non-profit, public interest on-line news service, ProPublica, Halliburton developed the hydraulic fracturing technique in the 1940s, the company is one of the three largest manufacturers of hydraulic fracturing fluids, and former Halliburton CEO, Dick Cheney, helped to create the Loophole. Hence, while the Environmental Protection Agency normally can regulate any substances that might affect underground drinking water supplies, the exemption removed the EPA from the regulatory mix, leaving regulation to the individual states. In Pennsylvania, where hydraulic fracturing was virtually unknown until relatively recently, the DEP not only lacks policies that could specifically address the chemicals used in fracking, chemicals that the industry is not forced disclose because they are considered a trade secret, but it also lacks adequate funding.

The funding dilemma was addressed during the state budget talks that dominated the legislature's attention during much of last summer; however, our state legislators' solution left much to be desired. Rather than impose a severance tax on profits from natural gas extraction, as most other gas producing states do and as conservationists implored our lawmakers to do, the legislature elected instead, in a move that was praised by Pennsylvania Oil and Gas Association President, Stephen Rhoads, to sell gas drilling leases in the Commonwealth's state forests, lands that are held in trust for the common good and that serve as home for many common, and not-so-common, critters. In so doing, our elected officials let pass an opportunity to raise revenue in a fair and environmentally responsible way, and instead, opened the door to some 150,000 acres of public forest lands to the private drilling rigs and accompanying access roads and

pipelines that will fragment wildlife habitat with barriers that are all-but-untraversable to crawling critters, that will invite nest parasites to victimize even more interior forest birds, that will create additional access for poachers and others who would use these lands illegally, and all while supplanting the placid sounds of nature with the roar of industry.

As the gas extraction industry roars into our forests and onto our farms, some would argue that the development of natural gas reserves is a necessary part of our quest for energy independence and less polluting fuels. According to Wilderness Society senior analyst, Dave Alberswerth, burning natural gas does produce fewer greenhouse gasses than burning coal or oil produces, some 25% less carbon dioxide than does coal, as reported by NPR's Tom Gjelten. However, Alberswerth tempered his statement by noting that the environmental problems associated with extracting gas make the energy source "much less attractive." Along with the ground and surface water contamination issues, petroleum-fueled equipment that is used in gas extracting operations pollutes the air. In yet another NPR report, correspondent John Burnett reported the conclusions of Southern Methodist University environmental engineer, Al Armendariz, that "gas production, processing, and transmission in the Barnett Shale region produces nearly as much air pollution as all the region's vehicle traffic." Burnett added that Texas state regulators had validated Armendariz's results. In the town of Dish, Texas, residents' complaints about smell, noise, and health problems, and state regulators' failure to act, led Mayor Calvin Tillman to commission his own air quality study, the results of which "showed extremely high levels of both carcinogens and neurotoxins." In addition, residents living near compressing operations have reported suffering from headaches, dizziness, and blackouts, and others have reported illness in animals. One resident reported having to euthanize a mare that he was boarding after the horse developed neurological defects that caused blindness in both eyes. A stallion in the same stall simply died outright. Mayor Tillman offered this advice: "If you don't learn from what has happened here, by the time that the odor gets bad enough for you to not want it there, by the time that the noise gets loud enough that it's disturbing you, it's already too late."

Perhaps it is not too late for Pennsylvania to avoid the problems that have been associated with natural gas extraction in other parts of the country. Some local municipalities have instituted their own drilling regulations, while others are revising zoning laws to be better able to regulate the siting of gas wells, a move that prompted PA Oil and Gas Association President Rhoads to utter the "t word," as in "taking," a now-seldom-heard term from the 1990s that became the battle cry of the anti-environmental "wise use movement." At the state level, the DEP hopes to update its wastewater discharge standards in part to better address the disposal of gas drilling wastes, while in Washington, DC, Senators Robert Casey of Pennsylvania and Charles Schumer of New York have introduced S. 1215, the Fracturing Responsibility and Awareness of Chemicals (FRAC) Act, which would amend the Safe Drinking Water Act to repeal the Halliburton Loophole and to require oil and gas companies to disclose the chemicals that are used in fracking operations. Companion legislation (H.R. 2766) has been introduced in the U.S. House by Representatives Diana DeGette and Jared Polis of Colorado and Maurice Hinchey of New York. Both bills are supported by some 160 national, state, and local organizations, including the National Audubon Society and Juniata (PA) Audubon. As might be expected, the oil and gas industry has mounted opposition to the "FRAC

Act.” As of this writing, commissioners from nine Colorado counties have voted to oppose the Act. Perhaps equally expected is “FRAC Act” opponents’ (Surprisingly, Senator Mark Udall; less surprisingly, oil man, T. Boone Pickens) argument that defeating the safeguards that the legislation would restore is a matter of national security, citing the need to reduce our nation’s dependence on foreign sources of oil as a reason to oppose the legislation.

While reducing our dependence on foreign sources of energy and curbing the emission of gases that contribute to global warming are goals that are embraced by conservationists across the nation, we also realize that green energy must be truly green before it receives our stamp of approval. Natural gas so far seems to fall short of receiving our overwhelming and enthusiastic endorsement. Moreover, proponents of drilling should take care to avoid wrapping themselves in the stars and stripes when arguing their case, for fighting to preserve our purple mountains majesty seems no less patriotic a pursuit. I suspect that on balance, patriotism is a force less potent than greed behind the push to drill deep beneath our Commonwealth to extract what profits we can, a postulate that our coal mining heritage would seem to support. Indeed, it is perhaps even fitting that a nation that defines greed as capitalism should also couch its avarice in the guise of patriotism.

Be it from supposed patriotism or actual necessity, a majority of our state legislators have already chosen to invite industry’s mechanized beasts into our Commonwealth’s forests, thus balancing the state budget on the backs of the gentle beasts that call those forests home. In like manner, many of our neighbors have chosen to trade peace and serenity, and possibly also good health, for profits, and though legally their land is theirs to use as they please, higher laws, I believe, would assign ownership of the air and water and birdsong and scenic vistas and starry nighttime skies to no one. Now we must wait to see how many more of our neighbors will be persuaded by Clampettesque dreams of swimming pools and movie stars to partner with those who will leave behind the reality of polluted streams and landscape scars, to see how willing we are to sacrifice our amber waves of grain for personal financial gain, to see if national security lies at the end of a path bulldozed through a landscape that belongs to no one, and to see if energy independence can be sucked from a shattered earth that supports everyone.

Time will tell.