Testimony Submitted to the Delaware River Basin Commission. September 11, 2013 By Elisabeth N. Radow, Esq. enradow@radowlaw.com; www.radowlaw.com

My name is Elisabeth Radow. I am grateful for the opportunity to submit testimony to Executive Director Carol Collier on behalf of the Delaware River Basin Commission (DRBC). I am a lifelong New Yorker, the managing attorney of Radow Law PLLC and a mother. I chair the Committee on Energy Agriculture and the Environment for the League of Women Voters of New York. The League of Women Voters of New York, New Jersey, Pennsylvania and Delaware have submitted joint testimony to the DRBC previously. Today I submit testimony on my own behalf. My work has been sourced and cited in national publications such as the New York Times, Huffington Post and MORE Magazine and has been published in several law journals. My law practice includes real estate development, real estate finance and increasingly, the effects of gas drilling operations on property ownership.

The basis for my testimony today comes from my research identifying the impacts of unconventional shale gas drilling on property value, risk allocation between the gas drilling company and the homeowner and the increasing inability of homeowners to obtain and maintain a mortgage and homeowners insurance in the presence of gas drilling.

The majestic Delaware River provides drinking water to 15 million people. The responsibility of the DRBC as stewards of this water supply for so many Americans is an awesome one. What I wish to stress is that how the DRBC discharges that obligation will also profoundly and permanently affect the ability of all citizens living in the Delaware River Basin states to have a safe place to call home. Across America, in shale rich-states, property ownership is being revolutionized by the proliferation of the multi-step, heavy industrial drilling operations on the land surface and subsurface of private homes and farms.

Home represents a family's most valuable asset, financially, spiritually and otherwise. From a property value standpoint, think of home as a bundle of rights: the right to construct, obtain a mortgage loan, lease and sell the property; the right to clean running water, electricity, a roof over ones' head; a safe place to raise children, crops or cattle, or all of the above. Americans pay for these rights when we purchase our property, and expect these rights to continue until we sell. We want the property value to increase. So does the state. Our tax base depends upon it. Now there is mounting evidence that banks will not extend mortgage loans and insurance companies will not renew homeowners' insurance policies for homeowners with gas leases and in some cases their neighbors without gas leases. These trends have potentially grave implications for community vitality and personal wealth in areas with fracking and must be examined and clearly understood by policy makers such as the DRBC.

What about unconventional shale gas drilling is producing these threats to homeowner and community wealth and security? Up to now, home has represented the one place people have control of the destiny of their economic assets. Standard gas leases grab homeowner control of property use by giving the gas company the right to establish surface operations, create perpetual, unfunded, road and utility easements, and the right to store gas underground from any source. The standard leases do not require the gas company to fund or perform the maintenance, repair and ultimate restoration of the easements and other surface uses. So that expense stays

with the property owner. They give the gas company the free right to sell the lease or take in investors without homeowner consent. This means the homeowner has no control over who comes onto their private property to drill, or the quality of the work they perform.

Gas drilling introduces hazardous activity and hazardous substances, practices which are expressly prohibited by standard mortgages. Consider that while the mortgage lender expects the home to retain its value for the 30 year life of the loan, a gas driller, and by extension its investors, on that very same property, cares more about extracting the most gas for the least expense and least regulation.

Publicly traded gas company 10-K's filed with the Securities and Exchange Commission characterize the drilling lifecycle as subject to many risks. The list of hazards includes: blowouts, explosions, pipe failures and uncontrollable flows of natural gas, or well fluids. The same public disclosure documents report that the gas drillers are not fully insured for their operations and fail to state that they have available cash reserves to pay for uninsured casualties, property damage and environmental pollution resulting from their operations.

Well-water contamination can occur at one or more points in the drilling process, including from leaks, spills and cracked well casings and the inappropriate road spreading, disposal and treatment of the toxic, radioactive hydraulic fracturing waste. A recently released EPA power point presentation of its Dimock PA water analysis reflects an apparent nexus between gas drilling operations and contaminated water. http://desmogblog.com/2013/08/05/censored-epa-pennsylvania-fracking-water-contamination-presentation-published-first-time. As is currently happening, properties without potable water will lose substantial value and farms without potable water will fail causing personal economic catastrophe. If this impact continues, it could have major ripple effects on the tax base.

While water contamination from gas drilling operations is the most discussed and most obvious adverse impact to a home's use and value, structural damage to the residence represents another cause for concern. Gas drilling operations involve seismic testing which causes vibrations, moving earth, use of explosives, drilling wells and fracturing shale using extreme high pressure and deep well injection of the toxic waste, where permitted. For example, the Youngstown, Ohio region logged more than 100 earthquakes in 2011 which have been linked to deep well injection of hydraulic fracturing waste. http://www.nbcnews.com/science/fracking-practices-blame-ohio-earthquakes-8C11073601?ocid=msnhp&pos=4 According to the US Geological Survey, "the number of earthquakes has increased dramatically over the past few years within the central and eastern United States. More than 300 earthquakes above a magnitude 3.0 occurred in the three years from 2010-2012, compared with an average rate of 21 events per year observed from 1967-2000. USGS scientists have found that at some locations the increase in seismicity coincides with the injection of wastewater in deep disposal wells."

http://www.usgs.gov/blogs/features/usgs_top_story/man-made-earthquakes/

Any of these invasive gas drilling operations can cause a home's foundation to falter and walls to crack making the residence unsafe to inhabit. For example, recently, two couples in Johnson County, Texas filed a lawsuit for property damage allegedly resulting from fracking-related earthquakes.

While there is no government sponsored registry of gas drilling related impacts to homeowners, these accounts abound. Many are reflected on the FrackTracker Internet database. I am providing the link so the DRBC can review and confirm the mounting accounts. http://www.fractracker.org/2013/03/pacwas-list-of-the-harmed-now-mapped-by-fractracker/

Standard gas leases fail to mention insurance. Homeowners remain potentially liable for the activity that occurs on their property, if it is not effectively delegated to the gas company in the lease or effectively addressed by the gas driller. Homeowners insurance excludes from coverage industrial activity and leaves homeowners vulnerable to losing their insurance coverage. This was confirmed in a July 2012 press release by Nationwide Mutual Insurance Company stating that:

Nationwide's personal and commercial lines insurance policies were not designed to provide coverage for any fracking-related risks..... From an underwriting standpoint, we do not have a comfort level with the unique risks associated with the fracking process to provide coverage at a reasonable price. Insurance is a contract and it is designed to cover certain risks. Risks like natural gas and oil drilling are not part of our contracts, and this is common across the industry.

(http://www.nationwide.com/newsroom/071312-FrackingStatement.jsp).

This fact was reconfirmed in a March 2013 news report which stated: Fracking-related damage, insurance industry insiders say, is not covered under a standard homeowner's insurance policy. Neither is damage caused by floods, earthquakes or earth movement, which insurers call exclusions. "(Fracking is) deemed an exclusion in the same way earthquake or earth movement is," according to the Insurance Information Institute, a nonprofit institute funded by the insurance industry. According to State Farm Insurance, the insurance underwriter does not have a fracking endorsement for private residences. While State Farm does have earthquake, earth-movement and sinkhole endorsements available in most areas, the endorsement may not cover fracking related impacts. http://m.shalereporter.com/industry/article_2cbf4e02-4f96-52cb-9264e169b706b05a.html

In August 2013, Lebanon, New York's town supervisor Jim Goldstein disclosed in an open letter that a constituent had their homeowner's insurance renewal for their home and farm in Lebanon denied because there is a gas well on their property. Mr. Goldstein confirmed through the insurance agent, who writes a lot of policies in southern Madison County, that this is a new trend and will come up as property owners fill out renewal applications. The property owner reported no history of payment problems or incidents on the property.

90% of all mortgage loans are sold into the secondary mortgage market. The standard mortgage used in the secondary mortgage market prohibits the transfer of an interest in the real property (which includes entering into a gas lease) without lender consent; and the presence of hazardous materials and hazardous activity consistent with the practices characterized by unconventional gas drilling operations. People with mortgage loans who signed gas leases without lender consent violated their mortgage; yet, as long as the borrower pays the loan, the lender may not become aware of the default. However, a mortgaged residence without homeowner's insurance constitutes an incurable mortgage default. If the homeowner/borrower cannot obtain replacement coverage in the marketplace, he or she would have to pay the substantially more expensive

"forced insurance" premiums arranged through the originating bank or loan servicer (which coverage inures only to the benefit of the bank, not the homeowner), or risk losing the mortgage loan altogether and face foreclosure.

What if a homeowner doesn't have a mortgage yet, but wants one? Because most loans are sold by the originating lender into the secondary mortgage market, mortgage loans are underwritten based upon guidelines issued by the secondary mortgage market. These guidelines have restrictions which could put the originating bank on the hook for buying back the loan if a homeowner allows gas drilling after obtaining a mortgage and the gas drilling results in well water contamination, structural damage or other property damage, or the home becomes uninsured. In recognition of the risks, some national banks are taking precautions when asked to loan on properties with gas leases; others are just saying "no" to residential mortgage loans with residential fracking. Because the property's conformity to secondary market standards will be questioned, an originating lender who elects to make a mortgage loan is more likely to keep the loan in its private loan portfolio and not sell it into the secondary mortgage market. With finite reserves, originating banks can make only a limited number of portfolio loans.

One national bank is taking charge of borrowers who sign a gas lease while also having an outstanding mortgage: Sovereign Bank, N.A., now requires borrowers to sign and record a mineral, oil and gas rights rider to the mortgage which stays in effect for the duration of the mortgage. It prohibits leasing the surface and subsurface of the property for minerals, oil or gas extraction; and requires the borrower to take affirmative steps to prevent renewal or expansion of rights under any existing lease or similar prior grant. The covenant restricting this use entitles the bank to bring the property back into conformity and requires the borrower to pay all bank and attorneys' fees incurred as a result.

Key Bank's Mortgage Group has lending guidelines which provide:

No mortgages will be written on properties that have a gas well.

Key Bank can deny a mortgage to homeowners whose properties are within 600 feet of a gas well.

No mortgages will be written on properties with a gas lease.

Property owners with gas leases and gas companies can be held liable for damages. http://neogap.org/neogap/

In another case, JPMorgan Chase refused to amend the terms of an existing borrower's refinancing agreement to permit a gas lease with BP. Chase's spokeswoman stated: "It's becoming wide-spread across the industry. Servicers and lenders are becoming more unwilling to approve a loan on these properties," "At the end of the day, we may not even own the loan." http://www.vindy.com/news/2013/mar/10/banks-build-roadblocks-to-riches-from-dr/?print

If a person cannot obtain a mortgage loan or keep a mortgage loan because of the risks associated with gas drilling operations, the house will be difficult to hold onto or sell. Where does that leave the homeowner? Either vulnerable to foreclosure, trapped in the home or forced to abandon it. If current trends continue, homeowners living in gas drilling regions, even those who elect not to sign a gas lease but who are compelled through compulsory integration or forced pooling to join a spacing unit; or other people living in close proximity to homeowners

with gas drilling on their property, may find themselves swept into the same net facing bankers and insurance underwriters electing not to loan or renew homeowners insurance because of the migrating risks, such as water contamination and seismic activity, associated unconventional gas drilling. What effect would this have on the home value of people who do not even support the gas drilling? Does the DRBC or a DRBC State open itself up to litigation for forcing a property owner against their will into a spacing unit if that homeowner is subsequently turned down for a mortgage loan or homeowners' insurance? How will the ripple effects of this affect the tax base?

New concerns regarding the ability to mortgage and insure a home are also arising out of the proliferation of retooled older pipelines and newer ones crisscrossing under residences throughout the Country. For example, on May 29, 2013 Exxon owned Pegasus pipeline burst open spilling at least hundreds of thousands of gallons of tar sands crude oil into the residential neighborhood of Mayflower, Arkansas requiring dozens of families to evacuate. In August, 2013 two unrelated pipeline explosions occurred in Illinois, one in Erie which required 80 families to temporarily evacuate their homes, another in Van Buren County which killed a man, destroyed his home and caused the temporary evacuation of 25 homes, affecting 35-40 people. What would such spills do to the Delaware River Basin and its residents? Time will tell whether mortgage lenders and insurance underwriters will revise their underwriting standards to exclude coverage for homes located in close proximity to high pressure pipelines.

http://www.bloomberg.com/news/print/2013-09-02/decades-of-ruptures-from-defect-show-perils-of-old-pipe.html

http://www.arktimes.com/arkansas/ArticleArchives?tag=Pegasus%20pipeline%7C%7CExxonMobil

http://thinkprogress.org/climate/2013/08/13/2457691/cornfield-explosion-in-western-illinois http://thesouthern.com/news/local/natural-gas-caused-deadly-house-explosion/article_06a3d02e-06bc-11e3-969a-0019bb2963f4.

Because of the connection to water contamination from the multi-phase drilling and fracking process and the vulnerability of homes to structural damage, what will happen to the property investment of families living across the Delaware River Basin if the DRBC elects to proceed with drilling in this water rich region? Where will these people go if their property is harmed? Who will buy the affected homes? For what price? Again, what will happen to the tax base?

The assertion by the oil and gas industry that unconventional shale gas drilling using current technology can be performed safely lacks credibility. Industry public disclosure documents, risk assessment by the insurance industry and regular reports of property damage and environmental impacts affecting homes across the nation support a contrary conclusion. Indeed, the growing reluctance of the mortgage and insurance industries to handle fracking affected properties, a reluctance driven by the long tradition of objective calculation of risk in both of these industries, presents an irrefutable answer to the claims of the oil and gas industry that unconventional gas drilling can be performed safely.

I urge the Delaware River Basin Commission not to endorse unconventional gas drilling in light of the expensive, uninsured risks it poses to homeowners and the potential it has for inflicting enormous economic losses, potentially in the many millions of dollars on homeowners and communities in the Delaware River Basin. The oil and gas industry asks that we consider the

benefits of unconventional shale gas drilling. I ask that you consider the costs, including the potential financial devastation of hundreds, if not thousands or more, of innocent homeowners and just say "No" to fracking. Thank you.