

Cooper, Kathy

3042

From: RegComments@pa.gov
Sent: Wednesday, March 12, 2014 4:56 PM
To: Environment-Committee@pasenate.com; apankake@pasen.gov; IRRC; RegComments@pa.gov; eregop@pahousegop.com; environmentalcommittee@pahouse.net
Cc: ra-epmsdevelopment@pa.gov
Subject: Proposed Rulemaking - Environmental Protection Performance Standards at Oil and Gas Well Sites

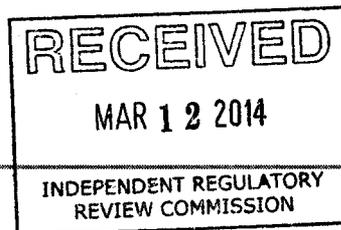


Re: Proposed Rulemaking - Environmental Protection Performance Standards at Oil and Gas Well Sites

The Environmental Quality Board (EQB) has received the following comments regarding the above-referenced proposed rulemaking.

Commentor Information:

Charlene Rush
 (Cha93Pet@hotmail.com)
 2670 Thoroughbred Ct. #835
 Allison Park, PA 15101 US



Comments entered:

Remind me again, why you have your job.

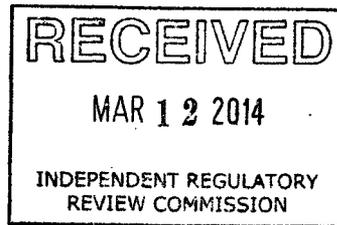
No attachments were included as part of this comment.

Please contact me if you have any questions.

Sincerely,
 Hayley Book

Hayley Book
 Director, Office of Policy
 PA Department of Environmental Protection
 Rachel Carson State Office Building
 P.O. Box 2063
 Harrisburg, PA 17105-2063
 Office: 717-783-8727
 Fax: 717-783-8926
RegComments@pa.gov

3042



Thursday, Jan. 23, 2014

To: Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477
Subject: Environmental Protection

In order to: 1) minimize the risks of damages incurred from unconventional gas and oil operations; and 2) require restitution for any mishaps be made by only those parties benefiting directly from the activity's profits, it is proposed that *both* parties to the lease agreements, lessee and lessor, be held accountable for resulting problems and remediation expenses, on a proportional basis.

Currently, only the operators are held responsible for any damages while lessors continue to be treated as mere sideline spectators with no accountability for what happens. In support of making this second party responsible for sharing in these expenses, we should recognize they are the ones:

- A) benefiting financially from the operations;
- B) enabling the operations to occur in the first place along with selecting the operator;
- C) in a position to set the contract terms for how best practices are to be implemented; and
- D) in the best position to monitor operations and report any problems or, as an alternative, permit others access to their property to do the same.

Just as established law holds certain other parties, e.g. business partners, employers, landlords, and homeowners, liable for the actions of those they have dealings with, the same principle can be put to good use here. For instance, since lessors would want to minimize their exposure to the potential risks and losses from shale gas activities, they would have a strong incentive to be more cautious and conscientious about addressing items B, C, and D shown above.

Whatever amendments the EQB recommends to DEP for improving the safety of shale gas and oil development, they will be made more effective with the active support and cooperation of those property owners.

Cordially,

A handwritten signature in cursive script, appearing to read "Thomas S. Miller".

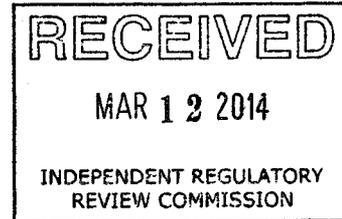
Thomas S. Miller
309 Station Avenue
Indiana, PA 15701
724 465-4631
tsmiller191@yahoo.com

3042

1934 Harding Avenue
Abington, PA 19001

January 15, 2014

Environmental Quality Board Members
RE: Environmental Protection Performance
Standards at Oil & Gas Well Sites
P.O. Box 8477
Harrisburg, PA 1710-8411



Dear Board Members:

I am writing to you regarding my concern over the safety of Pennsylvania's drinking water. As I watch the devastating effects of the chemical spill in West Virginia, I fear that a similar event could take place in Pennsylvania if we are not vigilant in protecting our natural resources.

Please consider the health and safety of our families as you propose revisions to oil and gas regulation in our state. I request that you prohibit using open air frack pits, require operators to restore contaminated water supplies to Safe Drinking Water Act standards, and extend the comment period to 120 days to give citizens time to voice their concerns.

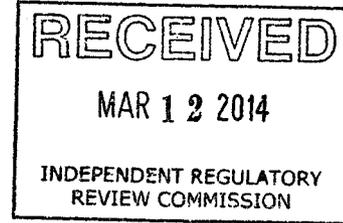
Sincerely,

A handwritten signature in cursive script that reads "Megan McPhillips".

Megan McPhillips

3042

Colleen Rath
Elkins Park, PA 19027
McKinley Elementary School
370 Cedar Road
January 16, 2014



Environmental Quality Board
RE: Environmental Protection Performance
Standards at Oil & Gas Well Sites
P.O. Box 8477, Harrisburg, PA 17105-8477

To Whom It May Concern:

Hydraulic fracturing is harmful to most organisms, and should be halted immediately to protect human and animal health. Hydraulic fracturing, or fracking, is the process of drilling a well in the ground, and then turning ninety degrees and drilling a straight tunnel. A chemical mixture involving chemicals, water, and sand is then jetted into the ground, forcing natural gas upwards, where nearly all of the gas is collected to be used as fuel. This process is hazardous and risky, and has the potential to effect human and animal life in a negative way.

First and foremost, hydraulic fracturing contaminates water quality and supply. Flammable methane, a natural gas harvested in hydraulic fracturing, sometimes leaks into drinking water, therefore causing the water to become combustible. Drilling fluids containing dangerous chemicals occasionally escape into streams and rivers, where they have been known to poison livestock and fish. In addition, several million gallons of water are needed, which rapidly depletes the water supply, as only contaminated water remains after the fracturing. To make the above evidence all the more disconcerting, EPA researchers have drilled two wells in Pavillion, Wyoming, and found much higher levels of benzene, a chemical known to cause cancer, than determined to be safe to drink. However, hydraulic fracturing is not just contaminating the water we drink, but the air we breathe, as well.

Hydraulic fracturing increases the amount of smog and toxic ground-level ozone. As a result of increased smog and ozone, more air-related health risks occur. In the process of fracturing, unconventional natural gas is extracted, which leads to air quality deficiencies. Methane, a greenhouse gas that intensifies global warming, is emitted during hydraulic fracturing. Not only methane is emitted, but other volatile organic compounds, all of which add

to poisonous ground-level ozone. Unfortunately, the flora and fauna are also at risk from the horrid practice of fracturing.

Destroying and fragmenting wildlife habitats is another drastic effect of hydraulic fracturing. Roads, drilling pads, and pipelines needed for the fracturing procedure sever rural and forested lands. When forests are demolished, many species of wild animals are threatened by loss of their homes. In a horrifying act of pure malice, the University of Tennessee is planning to lease hundreds of acres of public forested land in Cumberland, TN to a fracking company, who would destroy the forest. Key habitats for mule deer and pronghorn in Wyoming have been fragmented by hydraulic fracturing, which has caused a large disruption in the state's \$340 million hunting and wildlife watching organization. Hydraulic fracturing is a source of great concern in our nation and the world.

Ultimately, hydraulic fracturing causes multiple disastrous complications and should be put to an end immediately. The fracturing process is causing the air we breathe and the water we drink to become contaminated and untrustworthy. We are cutting through animal habitats, just to deliver the needed supplies to fracturing sites! You have the power to stop this horrifying practice, and for the sake of the world, you must! So, one question remains, will you stand for our protection, or will you neglect our health and well-being?

Sincerely,

Colleen Rath

A handwritten signature in black ink that reads "Colleen Rath". The signature is written in a cursive, flowing style.

3042

February 4, 2014

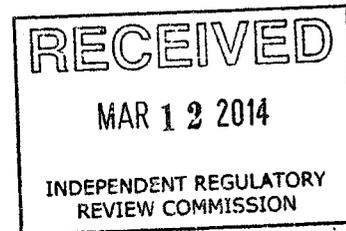
Environmental Quality Board Members
RE: Environmental Protection Performance

Dear Sir / Madam,

I am writing this letter to comment on my concerns with respect to the handling of water and chemicals used in the process of natural gas production via fracking. Specifically, open air pits used as interim holding area should be prohibited. The contaminated water should be contained in liquid tight containers prior to decontamination treatment and only after treatment should the water be allowed to reenter the ecosystem. This treatment at the point of origin is the most effective and lowest cost method to ensure the safety of the water supply. As we have recently seen in West Virginia's Elk River incident, once chemicals enter the water supply clean up at the point of use is difficult and perhaps impossible. In addition, the cost of needing to replace the entire water distribution system could be enormous and needs to be avoided by instituting a point of origin treatment standard. I would appreciate a reply addressing my concerns and recommendations.

Sincerely,

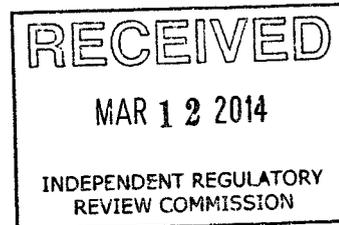

Robert Schiavone
219 Avon Road
Narberth, PA 19072



3042
449 Sharon Drive
Wayne, PA 19087

March 10, 2014

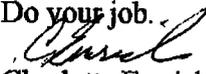
Environmental Quality Board Members
PO Box 8477
Harrisburg, PA 17105-8477



RE: Environmental Protection Performance
Standards at Oil & Gas Well Sites

Dear Board Members:

I do not believe the Clean Streams Law of 1937 has ever been re-written – so I am in no need of telling you neither what it is nor that it should be up for sale to the highest political contributors.

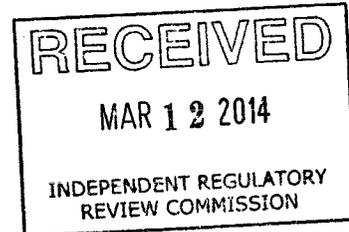
Do your job.

Charlotte Emrich

3042

1-13-14

Environmental Equality Board Members

RE: Environmental Protection Performance – Standards at Oil and Gas Well Sites



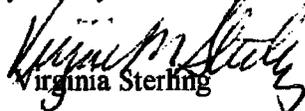
Dear board members,

It has come to my attention that the Department of Environmental Protection is taking public comments in reference to proposed changes to oil and gas standards. I agree wholeheartedly that changes need to be made. What I ask is that you consider extending the comment period to 120 days. This way more people will be able to get their comments to you within the designated period. You will be allowed more time to consider and you will have more opinions to draw upon when you make your final decisions.

My hope is that with more voices, you will see that what we need are stricter and safer regulations on fronts such as fracking which contaminate water supplies and have bad effects on the lives of people who live in areas where hydraulic fracturing and similar techniques are employed.

Please let me know what you plan to do about changing the current situation. I would greatly appreciate this. My contact information is below.

Thank you very much for your time and consideration,

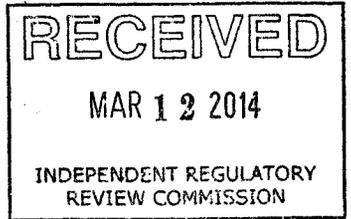

Virginia Sterling

1371 Lindbergh Avenue

Roslyn, PA, 19001

3042

Testimony to the Environmental Quality Board



Environmental Protection Performance Standards at Oil and Gas Well Sites

My name is Charlie Spano, a member of Energy Citizens and resident in Scranton.

I am testifying in reference to the Notice of Proposed Rulemaking, Proposed Amendments to Pa. Code § 78 (Relating to Oil and Gas Wells). I urge you not to enact any regulations that would hurt natural gas production in Pennsylvania.

Over the course of the last five years, Pennsylvania's natural gas production has increased dramatically. Our state has gone from an importer of natural gas to a net exporter. The natural gas industry is supporting hundreds of thousands of Pennsylvania jobs.

Not only is natural gas production helping Pennsylvania businesses and workers, but it's also helping provide revenue for public services. Since 2008, the natural gas industry has paid over \$1.7 billion in taxes. Increasing access to our energy resources, continuing to work with the industry on what can be done will increase this revenue stream in the years to come.

Through the Act 13 impact fee program, over \$400 million in revenue has been provided to local communities. Specifically, the impact fees shared with communities go toward road, bridge, water and sewer system maintenance lessening the burden on local taxpayers who, in the absence of the impact fee, would have to pay for maintenance and improvement.

With the right regulations, these benefits can continue for decades. The strong framework in place under the PADEP will be made stronger with reasonable regulations.

It is vital that regulations provide no unnecessary barriers to further growth of this resource. As Pennsylvania is on track to exceed the output of Saudi Arabia the decades long policy goal of the United States—to decrease foreign energy dependence is within reach and it can come from the state where the Declaration of Independence was written.

While some areas in the Marcellus Shale are currently in development, recent studies show increased access could create thousands of jobs and help stimulate the economy. A study by Timothy J. Considine shows increased access in the Marcellus Shale formation could create 280,000 jobs and produce over \$6 billion in government revenue. A similar study by the Manhattan Institute found that each well drilled generates about \$4 million in economic opportunities from shale gas development activity.

Marcellus Shale gas production has been a huge benefit to Pennsylvania. Our state's regulations provide a welcoming climate for energy production. For the sake of our economy and our public services, this needs to continue. Please keep this in mind as you revise the state's oil and gas regulations.

Thank you.

Charlie Spano

718 Stafford Ave.

Scranton, PA 18505

3042

Testimony by Patricia L. Miller
Environmental Quality Board Hearing
Warren, PA
February 12, 2014

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INDEPENDENT REGULATORY
REVIEW COMMISSION

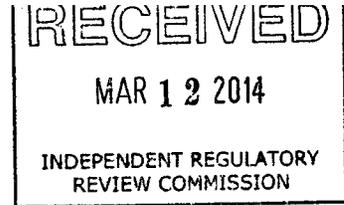
Good evening. My name is Patricia Miller and I live at 560 Route 16 South in Olean New York. I majored in Chemistry in college and moved to the area when I married. I had never even seen an oil well until I traveled to St. Bonaventure University for my initial visit and I remember thinking how cool it was to find that there were oil wells so close to where I grew up. I ended up marrying a fourth generation oil producer. After graduation one of my first jobs was in a laboratory analyzing produced water from secondary recovery wells. So here was someone who wasn't even from the area reaping the financial benefits of a viable industry for both myself and my spouse. Imagine the ties the people who have lived their whole lives in the Pennsylvania Oil Region, which includes southwestern New York, have to this industry. Generations of families have benefitted by the presence of this industry, as has, directly or indirectly, almost everyone living in the Pennsylvania shallow oil field.

My husband has worked long backbreaking hours on his oil properties (with no benefits because he is self-employed) because he loves what he does and is proud to be producing a valuable resource, and there have been some tough times. But as hard as the physical work has been it is the regulatory burden that has broken his spirit. And we live in constant fear of not knowing what will be coming next. His one-man operation does not have a tiny fraction of the impact that the deep non-conventional wells do. Each well averages only gallons of oil per day so the economics to comply with regulations is finite. Please allow him to continue to do what he loves to do.

We live in the country and appreciate more than most city dwelling bureaucrats ever could the beauty of the land we live on. We as well as our oil producing friends would do nothing to harm the environment because that is where we live and work and play and we respect the land that has in many cases been in the family for generations. Putting a 150 year old industry out of business by promulgating onerous and unnecessary regulations would have devastating effects on the economy and the people of this entire area.

Patricia L. Miller
560 Route 16 South
Olean, New York 14760

3042



Robert Esch, V.P. External Affairs, American Refining Group, Bradford, PA.

Company Clarify the fact these is only (1) Penn-Grade Refinery operating in the Commonwealth.

Tonight represents the ^{LAST} ~~7:30~~ scheduled EQB Public hearing held in the Commonwealth concerning the proposed changes to DEP Chapter 78 regulations. To date, hundreds of individuals representing both sides of the issue have testified. I have confidence, the EQB, during its final review of the documented testimony will separate the emotional testimony from the factual testimony. For the record, I would like to review and call to your attention some of key issues that have been presented in earlier testimony.

How many times during the testimony have the industries (Conventional and Unconventional) been identified as a single industry?

How many specific references have been directed at Penn-Grade Oil Shallow well production?

How many directed their remarks specifically toward the Shale Gas Production Industry?

A great deal of testimony has been presented about the economics of Conventional Oil & Gas Production. The cost of well drilling, the production technology, maintenance of oil gas production and the return on investment for the Conventional Industry has been presented over and over. How much testimony has been submitted that defines the same parameters for the Unconventional Industry?

There has been a great deal of testimony directed toward environmental impact or environmental consequences. Does that testimony reflect an adequate understanding of the (2) industries? Are the obvious differences from an "environmental footprint" and "risk assessment" clearly understood?

Much has been said during the testimony about the economic well-being of the Conventional Industry and what it means to Commonwealth's Producers and the Commonwealth's last remaining Penn-Grade Refiner. Is it clearly understood that those that represent the Penn-Grade industries...the individuals that have already addressed the EQB and those that are here tonight, ~~today~~ are **ALL**

Pennsylvanian's. Take a good look at the Producer's that are here tonight....They provide family sustains jobs, they invest in our Communities, They provide Leadership to many Boards and Charitable Organizations in our Communities and they support our Schools....and on and on. Call on the Producers to stand up.....These individual's "DO NOT" represent "Big Oil"! They are simply hard working Pennsylvanians.

It is extremely important that the EQB acknowledge and consider these important issues in the final review process of the testimony. To those that have presented testimony (on both sides of the issue), it should be clear, to all involved, the proposed changes to Chapter 78 Regulations cannot be enacted or administered to regulate the "Conventional Oil and Gas Industry" and the "Unconventional Gas Industry" alike.

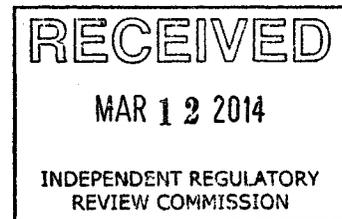
In closing....I would like to quickly identify an area of Economic Impact that has not been presented to date. We have talked about the Economic Impact of over-regulation will have on our Penn-Grade Producer's, on our Refinery and our Communities, but we have not identified the economic impact a reduction in Penn-Grade Crude will have on the market's that our Refinery supplies. We produce 60 million gallons commodity fuels (Gasoline, Diesel and Home Heating Oil) annually. We produce 25 million gallons annually of finished lubricants (Engine Oil, Hydraulic Oil, Gear Oils and other General Lubricants). We produce 80 million gallons annually of Specialty Products (Solvents, Naphtha's, Waxes and Process Oils) that are used in various manufacturing processes or upgrade by other manufacturers to consumer products. The decline in market availability of these products will certainly have a negative impact on the markets we supply.

Finally....our focus going forward (those on both sides of the issues) must be directed toward identifying and implementing reasonable solutions, not over regulation and not the indifference that currently exist.

3042

William Ferullo , 4834 Leraysville rd, Warren Center ,Pa 18851 January 27,2014

After experiencing natural gas drilling and extraction in my area of NE Bradford County ,PA. for the last four years and seeing many issues related to gas drilling go unregulated or just plain ignored by the state of Pennsylvania ,I have made it my point of concern to propose the following regulations for the extraction of natural gas in this state that uses the process of High Volume Hydro Fracing .Although natural gas drilling will never be totally safe or predictable due to the process itself possibly these proposed mandatory regulations will help improve the conditions the public involved will have to endure in the future here in Pa.# 1 Water supplies should be restored to the standards of the Safe Drinking Water Act at a minimum .With emphasise on being more concerned for the public having issues caused by the natural gas extraction process and speeding up resolving of such issues related to the drilling# 2 The DEP should establish standards to protect people in drilling areas with mandatory Pre -drilling and After Drilling regulations throughout the state of PA.....# 3 Testing of all drill cuttings and waste from NG drilling process should be made mandatory and comply to safe standards for the public# 4 Establish strict standards and regulations for silica sand dust contamination from fracing on sites near people's homes .This is not being addressed !.....#5 Establish mandatory regulations using the best technology known to eliminate pollution from all natural gas related operations and facilities# 6 Create a statewide information and response program throughout the state of PA. to inform and protect all residents from possible dangers caused by natural gas operations# 6 Increase air monitoring sites close to sources of pollution and facilities of NG extraction, protecting local residents from sources of pollution and inversion caused by local mountainous terrain.....# 7 The use of Halliburton's Clean Stim should be made mandatory for all future fracing done anywhere in the state of PA Thank you William A Ferullo



Melissa Troutman
122 Billy Lewis Road
Coudersport, PA 16915

3042



Good to see you again. Apologies for exceeding five minutes at the last hearing. I'll only be a couple tonight.

Ron Slabe from Westmoreland Co. testified at the last hearing about "shallow fracking" in his township of Upper Burrell by a small, conventional driller born and raised in Pennsylvania, Penneco. [REDACTED]

As I understand the difference between 'conventional' and 'unconventional' is not in what methods are used but in what formation is being drilled into and, in fracking's case, blasted apart. Someone please correct me if I'm wrong, but I didn't see any mention of maximum amounts of fracking pressure allowable let alone in what formation. [REDACTED] I saw no regulation of pressure at all. In the documentary I submitted at my last testimony, Jim Harkins' well water turned brown two days after fracking. The company provided water until it cleared up. The cause was [REDACTED] pressure moving through ground. Hydrogeologist Bob Haag explains the Pressure Bulb effect from fracking in the film, and I'm also submitting Haag's report which I urge you to take into consideration when you revise these proposed regulations.

is not without its own

[REDACTED] We cannot stop oil and gas production cold turkey, but we can put on the brakes. Conventional drilling [REDACTED] legacy of pollution, some of it simply unmanageable. But it is nothing like the high volume, slickwater horizontal hydraulic fracturing or "modern fracking" going on today. The industry wants to drill an estimated 100,000 fracked worm holes underneath 3/4ths of Pennsylvania. Does anyone know what the net effect of his extraction will do [REDACTED] to the bed-rock foundation of this state? 100,000 new holes, and there's an estimated 250,000 lost and abandoned wells already. Does anyone have a figure on the cumulative impact that will have on our water, climate, soil and public resources? I mentioned at the last hearing that Pennsylvania has more fresh water resources than any other state except Alaska. Meanwhile, the state hasn't denied a single stream setback - 87,000 miles of streams and there's never been an opportunity to enforce a setback? Seriously? Here we all are nitpicking at these "new regulations" and the department isn't even enforcing the old ones.

to the bed-rock

So where does that leave us, everyone else [REDACTED] ^{whom} the department is supposed to be looking out for? It leaves us right where we should be - paying attention. And all over the state, people are waking up and saying "Hell no." And what do our great protectors say in return? The DEP, PUC and Corbett administration are trying to trump the state Constitution by [REDACTED] that taking away the rights of local governments to control their own destiny [REDACTED] Shame on DEP. This is [REDACTED] America. Land of the free and home of the brave. I want to leave you with two quotes both by Pennsylvanians I greatly admire. The first is Dr. Stephen Cleghorn. I promise I'm not giving anything away when I say that Dr. Cleghorn has the last lines of the documentary *Triple Divide* I submitted at my last testimony. He says, "You do not scare me. You ought to be scared of me, and what I'm capable of, nonviolently, to resist you." [REDACTED]

The second quote is by Ralph Abele, who served many state conservation posts, including head of the Pennsylvania Fish and Boat Commissioner for fifteen years until 1987. He pretty famously said, does anyone know? "Do your duty and fear no one."



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Home · Fracking · How a Pressure Bulb Can Bring Frack Fluid to Groundwater

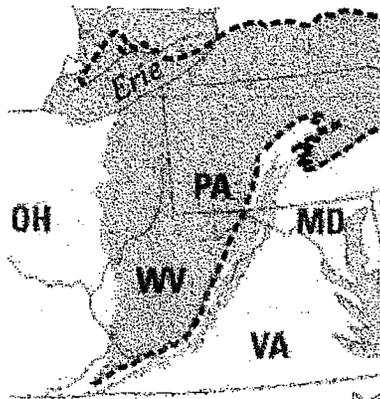
How a Pressure Bulb Can Bring Frack Fluid to Groundwater

Shared by Bob & Ruth Haag on July 1, 2011 · comment

1	3	4
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An environment vs. energy debate has been heating up over the extraction of natural gas from the Marcellus shale in Western Pennsylvania.

Eventually, we expect the debate to arrive in eastern Ohio. The debate is mostly about a practice called "hydrofracking," or just "fracking." Fracking involves injecting water ("hydro") into the shale to cause it to fracture ("frac"). This opens up pores that were previously tightly closed, and allows natural gas to migrate into wells.



Distribution of the Marcellus shale

Source: USGS Fact Sheet 2009-3032

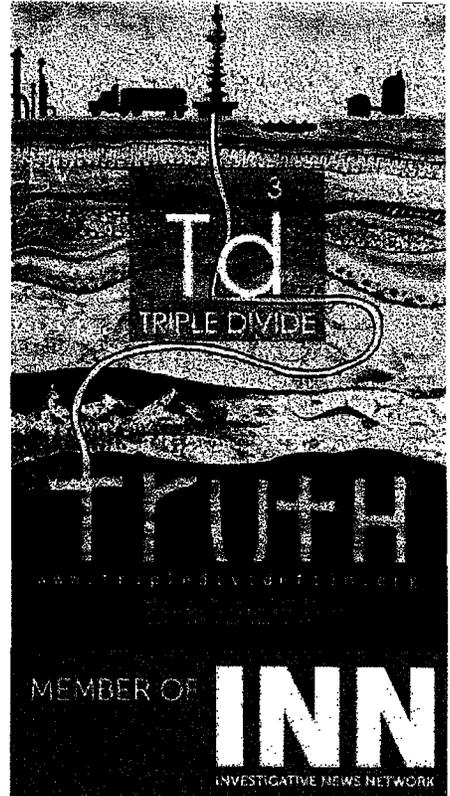
Unfamiliar with Hydraulic Fracturing, Fracking, Flowback, or Natural Gas Drilling... take some time to read our 'Natural Gas' reports »

Flowback Water

Many have a concern about petroleum additives in the fracking water, along with natural radionuclides that enter the water at depth. Typically, as much as 4 million gallons of water may be injected to frack a well, and about 15-20% (up to 600,000 gallons) of that water comes back to the surface. Different fracking-water disposal methods have been tried, but the most prevalent at this time is to truck the water to deepwell injection sites (<http://www.epa.state.oh.us/shale.aspx>). So, whatever doesn't stay in the ground where it is injected, gets injected somewhere else.

Concerns over fracking fluids reaching shallow groundwater

The 600,000 gallons of flowback water has been the main focus lately, but some wise person also asked, "Where does the rest of the 4 million gallons go, once it gets down there?" The big concern is that the fracking



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Comments

- A Hill of Beans: DEP Approves Permit for #Fracking on Unleased

water will get into groundwater wells. When questions about this used fracking water are asked, the response is to point out that the shale is 1-2 miles deep, and groundwater supplies come from less than 300 feet deep, so what could be the problem? The same debate has occurred many times, with regard to (1) EPA permitted deep hazardous waste injection wells, (2) injection/solution mining, and (3) deep burial of nuclear wastes. When we look at problem scenarios from those three past issues, we find that the argument that the fracking fluids won't reach drinking water wells can be a case of "telling the truth in such a way that lying is unnecessary."

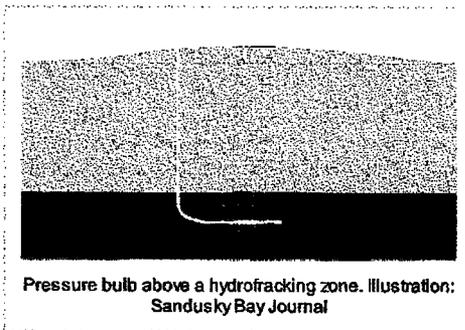
What to really worry about: secondary effects of pressure

Pressure bulb above a hydrofracking zone. Illustration: Sandusky Bay Journal

While it is true that the fracking fluid will most likely not reach the groundwater, what we need to examine are the secondary effects on drinking water wells, caused by a fracking induced "pressure bulb". When you apply pressure to soil or rock, the pressure doesn't just stop at the surface you are pushing on; the pressure spreads and dissipates through the surrounding soil or rock. In hydrofracking, the pressure applied is enormous. In order to crack the rock down deep, the injected pressure has to be in the same ballpark as the weight of the soil and rock overhead. For a rough rule of thumb, we can estimate that the pressure due to the weight of overlying strata is about 1 pound per square inch (psi), for every foot of depth. By this estimate, the pressure a mile down (5,280 feet down) would be about 5,280 psi. Due to internal friction within soil or rock, the sideways pressure is only about 1/3 of the vertical pressure, so one might only have to push outward at 1500 to 2000 psi in order to get shale to fracture a mile down.

That 1500 to 2000 psi will dissipate through the rock and soil above the shale. Pressure is also called "stress," and the movement that occurs in response to stress is called "strain." So, imagine throughout the stress bulb above the hydrofracking zone, there is a corresponding strain bulb. Imagine that all of the rock and soil above the frack moves, just a little bit. This little bit of movement can be measured at the ground surface, by a sensitive device called an inclinometer.

Let's consider an example from salt mining. In 1993, the Ohio Department of Natural Resources (ODNR) issued a report entitled "Investigation of Active and Abandoned Class III Salt Solution Mining Projects in Ohio." ODNR documented a solution-mining operation near Barberton, Ohio, that began in 1899 and continued until the 1980s. At this facility, 36 solution mining wells were drilled into the salt-bearing Salina formation, which was tapped at depths ranging from 2721-3208 feet below the land surface (BLS). Pressure was induced into the subsurface, both to bring brine to the surface, and in some low-pressure attempts at hydrofracking. ODNR made two observations that are key to understanding the effects of



Pressure bulb above a hydrofracking zone. Illustration: Sandusky Bay Journal

Property

- New Aerial Video of Alabama Oil Spill Exposes Cleanup Problems
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fracking:

1. "...faults are conduits for migration, and the migration of petroleum, gas, or water in a fault plane can take place, up or down ...
2. Numerous oil and gas wells surrounding the Barberton solution salt mines had fluid flowback at the surface.

Now, let's put the entire picture together for hydrofracking. High pressure is injected at a depth of a mile or more. This creates a pressure bulb above the injection location, which slightly lifts all of the strata above the injection location. In the immediate vicinity of the injection, cracks open in the shale layer, and a sand "proppant" is injected to keep the cracks open and allow the gas to flow. Further up in the profile, there are tiny shifts along existing fractures, and permeability of the overlying rocks is increased. The existing fluids in the overlying rocks are pushed up by the injected fracking fluids. We never expect the fracking fluids themselves to enter shallow groundwater aquifers, nearly a mile above the shale. However, the fracking fluids may be expected to push naturally salty water up into the freshwater zone near the surface.

This report was produced in collaboration with A Sandusky Bay Journal

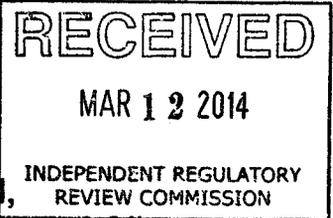
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Categories: Fracking, Natural Gas - Tags: bob haag, brine, contamination, cracks, faults, fissures, flowback, frack fluid, freshwater, groundwater, haag environmental, hydrofracking, petroleum additives, pressure bulb injection well, radio, radioactive, radionuclides, ruth haag, sandusky bay journal

3042



I am Molly Popiel Lindahl. I live at 803 Bolivar Drive in Bradford, Pennsylvania and am here today to lend support to the Conventional Oil Producers. My connection to this industry began with my maternal great-grandfather who was an employee of South Penn Oil in West Virginia at the turn of the 20th century. My paternal grandfather worked for Struthers Wells not long after immigrating to the United States. In 1906 he married my grandmother and moved to Bradford to raise a family. He first made his living as a butcher, but most of his working life was spent recycling bull rope, collecting it with horse and wagon, then selling it to Gold Medal Flour where it was used to make flour sacks. His sons, my father and uncle, evolved the business into an oil field rigging and hauling business. My father and uncle were joined by my brother after he completed high school. This oil-affiliated business supported our families comfortably for 55 years, all fourteen of us.

My personal affiliation spans a nearly 30-year period working for the Kendall brand name as a secretary, lab technician, and purchaser of laboratory supplies. For the past ten years I've been an employee and volunteer for the Bradford Landmark Society, a non-profit historical organization, becoming more aware of the importance of Pennsylvania-grade crude oil and the role of the conventional oil producers. Newspaper articles, books, and files, as well as face-to-face contact with conventional producers confirm this.

It's been my honor to become acquainted with these producers, witness the respect they have for the area in which they work and live, and to know first-hand the good they do for the community. They work long hours to supply local refineries with high-quality crude. They shop local stores. They support non-profit organizations. They attend local churches. They are family, friends, and neighbors.

Their production is on a much smaller scale than non-conventional producers. We're talking gallons vs. barrels. That's a significant difference. Conventional well sites have a smaller footprint and far less impact on the environment than non-conventional well sites, several hundred square feet vs. 5-acre tracts. Imposing one-size-fits-all regulations on small producers would hinder them at best, but drive them out of business at worst. These proposed regulations are akin to being punished for a crime not committed.

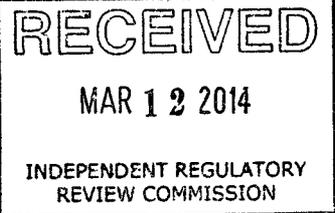
Don't fool yourself. The loss of these conventional producers will affect you. Where will the refineries obtain the high-quality crude they need? The refineries pay good wages, but if there's no crude, there's no refinery

throughput, and there go the jobs. Stores, restaurants, local businesses will all suffer. Our local economy already has enough challenges. Please do not impose these regulations on conventional producers.

Thank you for allowing me the time to speak.

Molly Popiel Lindahl
803 Bolivar Drive
Bradford, PA 16701
(814) 368-3054

3017



**Testimony by Thomas A. Miller
Environmental Quality Board Hearing
Warren, PA
February 12, 2014**

My name is Thomas A. Miller. I am a fourth generation oil producer. I live at 560 Route 16 South, Olean, NY. I am from New York but the Pennsylvania oilfield extends into New York State. If the refineries and supporting industries go down, I go down too. I have been working on oil wells since I was ten years old. I taught high school physics, chemistry and math for a short time after graduating from college but my real love is the oil patch.

The conventional 155 year old Pennsylvania shallow-well oil production industry is located in some of the most beautiful country in the world. This includes the historic Oil Creek Valley where there was once a forest of derricks in the infancy of the industry. This is fact. If you don't believe me, go visit Oil Creek State Park and see for yourself. There was more oil in Oil Creek before the birth of the oil industry than there ever is today. The creek was named for the natural oil springs and seepages along its banks.

The oil produced by this industry, Penn Grade Crude, found only in PA, NY, WV and Ohio, is the most environmentally-friendly crude oil in the world, being the source for many specialties including personal care products and even food additives as well as high quality lubricants.

Besides being direct employment for thousands in western Pennsylvania and beyond, the industry is a very significant economic driver for the whole region. It is responsible for the employment of thousands more who work in other businesses that are providers of services and supplies. This is in addition to the tax base provided by the industry. The elimination of the oil industry would devastate the entire region but the effects would be felt all over the state and into other states as well.

Why should this industry be made extinct by inclusion in a new set of rules designed for a brand new industry (shale gas) that has very little in common with the shallow well industry other than the fact that it produces a resource from the earth? The need for many of these rules, even for the shale industry is suspect. The pressures encountered, the toxicity of substances involved, if any, as well as space required, traffic generated, and water usage for conventional wells is minuscule compared to the unconventional wells. My home water supply is a former oil well.

When applied to conventional wells, many of the rules are actually environmentally counterproductive. For, example, why is it necessary to carve a highway into a well location when not much more than a cow path is needed? The enforcers appear to be driven more by the desire to issue citations and show who is boss than anything to do with actual environmental benefit.

The purpose of the DEP should be to help the industry to operate in an environmentally sound, efficient and productive manner, not to harass it to death.

I understand that this is all being driven by so-called "environmentalists" who get their technical advice from celebrities and media bias and scoff at those who have devoted their entire lives to acquiring genuine expertise. One has to really question the actual motives behind these people. Why should state government give them more credibility than the hard working people who are doing their best to make a living and provide necessary and valuable resources that have made life better for all?

When the big corporations who are no longer in the picture, had large secondary recovery projects in operation they had single point discharges of thousands of barrels a day of produced water. Some of them actually kept the streams flowing in dry weather and some of the streams are renowned for their trout fishing. The government didn't have a problem with that then but now a hard-working little guy trying to make a living is a felon for discharging gallons of produced water which is often beneficial to the vegetation by providing traces of nutrients.

In spite of this it is deemed right and proper for the State, itself, by the State itself, to annually dump hundreds of thousands of tons of unrefined deep-mined salt on the highways. You don't see or hear the so-called environmental groups up in arms about this but it doesn't bother them to constantly cite untruths, half-truths, misrepresentations and non-disasters to further their goal. Isn't there something wrong with this picture?

If the Penn Grade Crude production industry is destroyed not only will it mean the loss of employment and prosperity to many but a tremendous source of a valuable resource will be lost that may never be regained. Over regulation is wasteful, environmentally and economically counterproductive and imposes hardship at least, and more likely, devastation on the lives of the people who are victimized by it. There has to be a balance between perceived benefits and the harm that comes as a result. All new regulations should be subject to honest regulatory review.

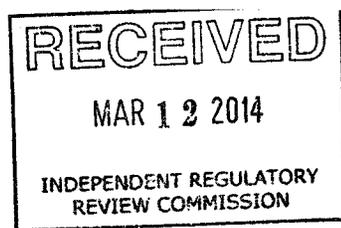
Shallow conventional wells must be considered separately from deep unconventional wells. The regulations that were already in place pursuant to Act 223 were more than adequate to address the conventional industry.

To the members of the Environmental Quality Board I ask that you please be aware of the grave matter of the human element involved when you make your decisions. The industry is run by real people who are all trying to live. It would be wonderful if they could concentrate on doing the best they can at what they do rather than having to constantly fight for survival. It is taking its toll on the lives and well-being of both them and their families.

Thank you.

Thomas A. Miller
560 Route 16 South
Olean, NY 14760

3042



Good Evening,

My name is Alex Grubbs and I operate a service rig for Cameron Energy where I have been an employee for 5 years. I started as a rig hand and have been promoted to my current position. I hope to continue to learn and be promoted.

I'm proud of my job. There are 23 of us at our company and what we do serves all of us in this room in a meaningful way. None of us came here tonight by horse and buggy. And the natural gas that our company produces is fed into the very system that is heating this room tonight, and that heats this room reliably day in and day out.

On a personal level my job supports my wife and I. In addition to my salary my employer pays for all my health insurance. I grew up in Warren County and I can tell you that a good job, with benefits is something to be appreciated.

On behalf of my family, the other Cameron employees, and for the benefit of our town, I ask that any new regulations that affect my industry be thought out carefully before they are proposed. I don't think that careful process has happened here.

I have taken the time to read the DEP's cost estimates. They are far off. I have been on hundreds of new well locations and I can tell you that we take pains to squeeze our work on to a small site so that we only make a small disturbance. The new regulations would require us to have huge pits. The DEP doesn't give any reason for this and I can't think of any good reason myself. What we have now works well although what the DEP proposes will cost a huge amount of money and will tear up land that doesn't need to be disturbed.

The DEP wants us to put PPC plans at every well site and tank battery. The DEP doesn't include a cost estimate for this, but if the whole industry has to put up storage units at over 100,000 well sites and make up individual plans for each site, it will cost 10's of millions of dollars. Talk about a waste of money. Our well sites are all the same. The generic plans that we already have tell us where to go and who to contact, and those generic plans work fine. Our wells only produce small amounts so any spill that we ever have would be small. All that a site specific plan would do is cost a lot of money. But it wouldn't give any more protection.

In another section the new regulations would make us give 3 days notice before closing our pits. We take pride in rigging down and reclaiming the location the next day after a frac job. Usually by noon the pit is closed and by the end of the day the rig is on the next location and the prior location is ready to be seeded. If you make us wait 3 days what will we do while we wait for the inspector? The equipment will sit idle. It will cost thousands of dollars in lost labor and idle equipment. But the DEP report doesn't include any cost estimate for this.

What the DEP has proposed will cost much more than what they say. But apart from the cost what I really have to ask is WHY? Why are they proposing changes to our regulations? What I do out in the woods every day isn't broken. A lot of our wells are in the Allegheny National Forest or right by streams or in the middle of nice stands of timber. The streams run clean and the trees are healthy. Our natural resources have to come from somewhere. We are successfully harvesting those resources right here in a county that is still a beautiful and healthy place to live.

The truth is that there are not problems that need fixed. What has happened is that everyone has seen the big well pads and all the trucks running the roads for the unconventional wells, and there has been a panic

reaction. The proposed regulations are being applied to both conventional and unconventional wells without stopping to think about the differences between the two industries. And there are big differences.

But I have to think about myself and how I am going to support my wife and me. So I'm here asking you to think about me and the other 22 employees at my company. We're in the CONVENTIONAL oil and gas business and I'm asking you to think about how much these new regulations will cost the conventional oil and gas business and whether any of these new regulations are necessary. It will be the most important decision you make in my life.

Alex Grubbs
107 Church St.
Sheffield, PA 16347

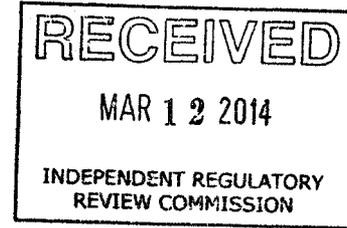
February 12, 2014

2012

Environmental Quality Board

P.O. Box 8744

Harrisburg, PA 17105-8477



Dear Board Members,

My name is Solomon Clark and I aspire to become a third generation Oilman. I am 16 years old and as I have always dreamed of continuing on with our quote, unquote "family farm". But these proposed regulations are a threat to my dream. I know from working in our business that things like ___ (changing tank lids and making huge pits) will bring a lot of new expenses to our business. How will we pay for these new expenses? I think these new expenses will lead to fewer jobs and even more cuts to my school.

I want to talk about schools because our school district has already been forced to make unprecedented cuts to our educational and extra-curricular budgets. In the last 3 years the school district cut its extracurricular funding by ½ and the community now has to raise half the money. Who in my community is currently paying to field my football, basketball and track teams? I personally invite the members of this board to come and see for yourselves whose names are on the banners in my gym, and on the fence around my football field. It is the banner that my family's business paid for. It along with the other banners all around it were paid for by the other small businesses in our communities; businesses that are interwoven with our families business and represents the independent "can-do" spirit that has made our country the best place in

the world. No business should have to deal with unreasonable regulations, but unreasonable regulations are particularly hard for a small business.

I call the regulations unreasonable because they are fixing a problem that doesn't exist. Our towns in the oil region are surrounded by thousands of conventional wells and at the same time we are also surrounded by the highest percentage of high-value trout streams in the state. The majority of the wells around this community were drilled in the last 30 years under Act 223. The most remarkable change during the last 30 years is that the water quality in the streams surrounding our communities have increased in and around our part of the state. This is just one way the conventional oil and gas industry has already demonstrated we are adequately regulated. If the unconventional oil and gas industry had not moved to Pennsylvania, we would not be here tonight. Act 13 would have never been created or adopted and my future would not be in peril. Please refuse to be a part of these misdirected, unneeded, and very damaging regulatory controls. The regulations that were in effect before the unconventional industry came to Pennsylvania already contained some of the strictest environmental standards in the United States. These new regulations are not needed to protect my family, neighbors, and friends. What is needed is to have you vote "no" so our communities can be protected from these devastating regulations. They were drafted for the unconventional oil and gas industry, but they are not needed for shallow conventional operators—operators who have already provided the environmental stewardship necessary for the sustained beauty you see all around you. Take a look for yourself at the job my family and the other shallow operators have done. Where is this horrible list of irreparable damages that Pennsylvanians will pay for, for generations?

You must possess such a list to be willing to unleash such life-changing and damaging regulations on my family, community, and me. The Regulatory Review Act requires the DEP to protect my future and our small family business by providing alternatives or even exemptions to new regulations that they propose. This was not done and I am asking YOU, the leaders whom we kids depend on to rule fairly and impartially, to be a good example and comply with the existing laws of Pennsylvania. If you would do this, it would allow my family to continue to operate safely and profitably. Why can't you allow small conventional operators to operate under the proven regulations provided by Act 223 until separate appropriate regulations can be legally drafted and approved, if needed?

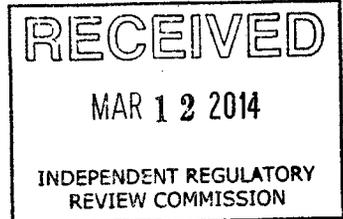
I learned in school that this shallow conventional oil and gas industry provided oil that saved the whales in 1859. The natural gas it has provided saved our trees as we used it as the fuel source to heat our homes. We need our shallow conventional industry to be strong, now, more than ever; it is helping to save our schools in my community. Please think about what you are doing before you unnecessarily destroy the lives of thousands of people living in small towns like mine, for no reason.

Respectfully,

Solomon Clark

x Solomon Clark

3042



Good Evening, my name is Glenn Weaver, I am a fourth generation oil producer ,

My son who is in business with me is a 5th generation,

These Chapter 78 regulations if enacted as written will be the end of the shallow oil and gas industry in PA,.

They were written to regulate the Marcellus and Utica drilling boom that has taken place in PA in the last 4 ½ years. The cost of an average shallow well in northwestern PA is 1 % of the cost of a Marcellus or Utica well.

The permit application has become a nightmare. The application for a permit has gone from 2 pages to 17. The notification of all adjoining townships or municipalities bordering the township or municipalities you are applying for a permit in is ridiculous for a shallow well.

The truck traffic for an unconventional well is terrific for instance a frack job for an unconventional well will be hundreds of trucks for water, sand and so on. On a frack job there will be 20 pump trucks alone. On our shallow wells one cement truck once and on our frack job 3 trucks for 4 or 5 hours and that is all.

I understand the need for these adjoining townships or municipalities to be notified of this kind of traffic on their roads but we the shallow operators certainly don't need held up on our permits with our small amount of traffic.

An issue we recently dealt with is silly. A year ago when we started excavation of our drill sites, which are approximately 100 ft by 100 ft and the unconventional is 5 acres. We were required to post our E & S plan before we moved dirt now they want the E & S plan, the drilling permit, and the casing cement plan posted at the first earth moving . In the past we did not post the last 2 till we began to drill the well, from location building to drilling can vary from days to months. We just got a fine for not having the cement plan on location when I know it was there in the mailbox. It is complete chaos.

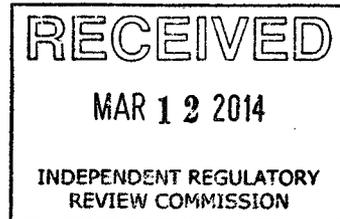
The unconventional companies have full time people to do all the paper work but we don't. We would like to be legal but all this goes beyond reason. If we don't see change there will be no small operators left within 2 years. ~~XXXXXXXXXX~~

THANK YOU

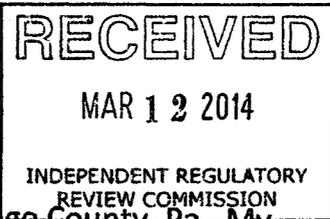
3042

William Ferullo , 4834 Leraysville rd, Warren Center ,Pa 18851 January 27,2014

After experiencing natural gas drilling and extraction in my area of NE Bradford County ,PA. for the last four years and seeing many issues related to gas drilling go unregulated or just plain ignored by the state of Pennsylvania ,I have made it my point of concern to propose the following regulations for the extraction of natural gas in this state that uses the process of High Volume Hydro Fracing .Although natural gas drilling will never be totally safe or predictable due to the process itself possibly these proposed mandatory regulations will help improve the conditions the public involved will have to endure in the future here in Pa.# 1 Water supplies should be restored to the standards of the Safe Drinking Water Act at a minimum .With emphasise on being more concerned for the public having issues caused by the natural gas extraction process and speeding up resolving of such issues related to the drilling# 2 The DEP should establish standards to protect people in drilling areas with mandatory Pre -drilling and After Drilling regulations throughout the state of PA.....# 3 Testing of all drill cuttings and waste from NG drilling process should be made mandatory and comply to safe standards for the public# 4 Establish strict standards and regulations for silica sand dust contamination from fracing on sites near people's homes .This is not being addressed !.....#5 Establish mandatory regulations using the best technology known to eliminate pollution from all natural gas related operations and facilities# 6 Create a statewide information and response program throughout the state of PA. to inform and protect all residents from possible dangers caused by natural gas operations# 6 Increase air monitoring sites close to sources of pollution and facilities of NG extraction, protecting local residents from sources of pollution and inversion caused by local mountainous terrain.....# 7 The use of Halliburton's Clean Stim should be made mandatory for all future fracing done anywhere in the state of PA Thank you William A Ferullo



3012



I am the wife of an independent oil producer in Venango County, Pa. My husband and I have been in the oil business since 1976. We also got married the same year we started in business and the first year was very difficult. My husband has worked very hard for a lot of years and pushed on because his love of the oil business. Looking back I don't know how we ever did it. He has put in 12-14 hour days and worked 6-7 days a week all of his working life.

My comments today originated from a letter I wrote nearly a year ago to the D.E.P. to the acting Secretary Aburuzzo.

I was prompted to write that letter because of the frustration I was feeling at the time in regards to what seemed like a difficult relationship between the shallow oil producing community and the agency charged with regulating it. My comments this evening contain a lot of the thoughts and emotions I was feeling that day.

There is not one day that goes by that my husband and his fellow oil producers has something to deal with when it comes to the D.E.P. If its not one things it's another – the rules change daily depending on who comes out to the leases. These guys work so hard – 12-14- hours a day and now they have a job on the side – trying to comply to the D.E.P. regulations. My husband is on the phone at least two – three times a day trying to deal with these problems. If its not phone calls it is meetings. These guys are no spring chickens either – I can see a lot of them aging rapidly over all of this. I can only imagine what this is doing to their health. My husband is so down right now I feel so bad. His love of the oil business has become tainted with regulations that have become out of control.

We are trying to comply with the regulations. For example, we have made an application with the Department for a small lease sized on-site disposal facility to process our production water. The application for the first part general permit was filed on June 24, 2013. It's been 159 days and we have heard no reply regarding this matter. These small treatment systems will not be the complete answer for all small producers but they might be a practical solution for some operators. The department needs to expedite the permitting process for these systems. Provisions in the proposed Chapter 78 regulations concerning the

reporting of small accidental discharges of crude oil or production water are onerous and unnecessary.

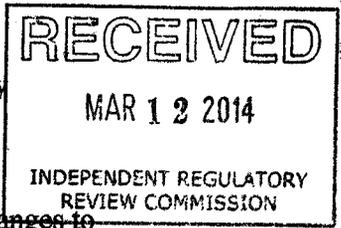
We were in Hawaii (as a 35th wedding anniversary gift from our children) two years ago and as we looked down into the water surrounding the Arizona memorial we saw old fuel oil bubbling to the surface with fish swimming in it (they weren't dead!). Oilcreek in Venango County got its name because of naturally occurring crude oil floating on the waters. By the way – how much salt does Penn Dot discharge into Pennsylvania waters each year either directly or indirectly? As far as soil erosion controls and road construction goes there seems to be two standards between the oil and gas industry and everyone else. Why for example are many logging locations left with no seed and mulch restoration when the operations are completed? It seems as though our small independent industry and way of life are being singled out for extinction.

I hope this letter does not cause increased scrutiny and enforcement of my husband's operations. *It's just that I can no longer standby and observe what is going on without raising my voice in opposition!!*

Linda M. Stiglitz

3042

Testimony from Robert Howard, Marshall Township, Allegheny County



Ladies and Gentlemen thank you for taking public comments related to proposed changes to Pennsylvania regulations governing oil and gas drilling.

Page | 1 First I am not a member of the gas or petroleum industry. I am not a member of an environmental interest group. I am not being paid to address you. I am an average citizen that will benefit directly from lower costs to heat my home. I am an average citizen that will benefit from the expanded economic activity supplying more jobs and community tax revenues.

I am here to request rational regulations based upon the facts and cost benefit analysis. I am here to ask you to resist any temptation to pander to special interest groups. I am asking you to respond to the needs of the average citizen for inexpensive energy ---- energy to heat our homes and energy to create new job opportunities in Pennsylvania while protecting our environment.

I am here to ask you not to be bullied by zealots asking you to believe the worst that can happen, will become the average.

We citizens realize that economic activity has risks associated with it. It was really not that long ago that our great-grandfathers were warned that George Westinghouse's alternating power and light were much too dangerous and that people would be electrocuted daily in the streets and that on a daily bases homes heated with natural gas would blow up and burn to the ground.

Do people get electrocuted? Yes they do. Do homes blow up? Yes they do.

But what if regulators had over reacted to warnings and fears and regulated electricity and natural gas use out of existence or made it so expensive that only a few could afford it? Thousands and perhaps millions would be at risk from breathing candle soot and smoke from burning wood. Improved technology and reasonable regulations provide barriers between us and danger and yet electricity and natural gas are affordable and safe for the masses.

Now is not the time to over-regulate with new regulations that will make energy more expensive for the average citizen, curtail job creation, and continue our dependency on imported energy from a volatile Middle East.

Because of natural gas from Marcellus shale gas prices have fallen and many of us and especially the poor have saved hundreds of dollars heating our homes this winter. Perhaps environmental zealots live on trust funds, but the average citizen many retired in our region are on fixed incomes and cannot afford unnecessary and expanded regulations.

Now is not the time to establish new barriers to economic development and job creation. Unnecessary and expanded regulations related to "special concern species" raises questions about list generation and efforts to mitigate impacts. We need reasonable regulations not a full employment act for the legal profession.

Testimony from Robert Howard, Marshall Township, Allegheny County

Regulation needs to consider the human cost of destroying jobs in the Commonwealth that will deprive thousands of trained apprentices and workers low on the totem pole a chance at a decent wage.

Page | 2 Regulation must consider the impact on the individual's mineral rights and the owner's ability to optimally develop his or her own gas rights. We the citizens do not benefit from the illegal taking of private property rights by over regulation. Class action suits by the citizens deprived of their private property and unable to develop their Marcellus shale rights are costly to the public and stall economic activity.

We want the use of modern and developing technology to protect our environment and expand economic opportunities for the next generation. We do not want regulations that "lock in" existing technologies for the benefit of existing companies. I have had the opportunity to tour several drilling and fracking sites. It is clear to me that today's technology is capable of delivering gas at acceptable risk. I want the DEP to ensure best practices and not certain company practices that will reduce industry competitiveness.

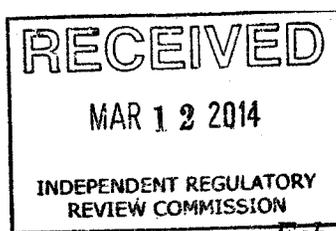
It is time to retain reasonable regulations that provide cheaper energy, more jobs, and protection of property rights. Please be aware that the average citizen doesn't have time to run to hearings all over the state --- all we ask is for reasonable regulations and a DEP that considers the average citizen's needs in its decision making.

Thank you.

Quote from the Pittsburgh Daily Post in an 1885 editorial opposing the use of natural gas in homes: "Save in a state of war we don't believe any large city in the world was ever in more perilous situation than Pittsburgh is today owing to the dangers of natural gas explosions."

Tammy Elder
179 Elder Road
Parker, Pa. 16049

3042



Feb. 12, 2014

First I would like to thank you for giving me this opportunity to speak and share with you how the chapter 78, act 13 regulations will affect my family, as well as many, many other families.

My name is Tammy Elder. My husband Len and I are working on 22 years of marriage. We have two children. Our daughter Rebekah is soon to be 16 and our son Tye is 11. My husband Len is a 5th generation Pennsylvania oil producer that has learned the trade from working along side his father since he was young. He and his father have several leases with conventional wells that produce both oil and gas. Len's work with these wells has been our main source of income and has allowed me to be a stay at home mom to our children. Recently, due to the biased regulations being strictly enforced, Len has had to cut back on our oil production and shut down some of the wells. This has in turn impacted our income. Len has recently ran and been elected as a township supervisor for Licking Township, in Clarion County. He works part time on the township road crew to try and help supplement our family's income. However, this by no means makes up for the lost income, from the wells that are shut down as direct result of these biased regulations.

I am an LPN and work part time as a substitute nurse at the Keystone School District. This too helps supplement our income. From a nurse's standpoint, I would like to share with you how the Pennsylvania petroleum base crude oil has also helped my son with his health issues. My son, Tye, has allergies and asthma, and people with these conditions usually will also have a skin problem called Eczema. Tye recently had a break out of Eczema and I used the ointment that his allergist has recommended as treatment for this. The ointment is called Aquaphor. If you look on the ingredient list on this ointment, the active ingredient is Petroleum; which we all know comes only from Pennsylvania petroleum base crude oil. This ointment was applied twice to his Eczema and cleared it with just 2 treatments. I am sure that Tye is not the only person that suffers from Eczema and uses medication made from Pennsylvania petroleum base crude.

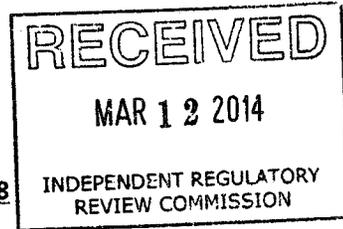
You may or may not be aware, but the loss of Pennsylvania grade crude production will affect more than just families like mine. A dear friend of mine has been recently disabled, due to numerous health issues, and her husband is now the sole source of income for their family. He is a transporter of Pennsylvania crude, working for Ergon and hauls to the refinery in Newell, West Virginia. The loss of his job, due to the inability of the oil producers to profitably produce Pennsylvania crude, will leave his family with no income at all.

I have shared with you today how this has and will affect my family. I have shared just one way that the loss of Pennsylvania Crude can affect many others as well. I am asking today to please take the time to realize the impact that these regulations put on the conventional wells will have on my family, as well as many others. I encourage you to work with PIPP members to find solutions that enable the Pennsylvania petroleum base crude producers to thrive for future generations. I want to see my son Tye and possibly, my future son-in-law, to be able to carry on our family history of working the oil fields and supporting their families. The decisions that you make from what you hear today, will directly affect thousands of people, and what their future holds for them. I hope that your recommendations will have positive outcome for all involved.

If the chapter 78, act 13 regulations are passed in to law, it will indeed be the final nail in the coffin of every conventional oil well producer. It will also mean the loss of thousands of jobs.

Thank you for your time,
Tammy Elder

3042



TESTIMONY BY ADAM GARBER OF PENNENVIRONMENT ON CHAPTER 78

January 22, 2014

Washington, PA

Thank you for the opportunity to give testimony tonight on the proposed oil and gas regulations, also known as Chapter 78 on behalf of PennEnvironment. PennEnvironment is a statewide, citizen advocacy organization with over 100,000 supporters across the Commonwealth.

While we will be submitting more detailed written comments on the proposed regulations before the comment period ends, PennEnvironment's comments tonight will focus primarily on the storage of waste produced from the drilling (§78.56 and §78.57). PennEnvironment recommends that the Department of Environmental Protection significantly improve this section of the proposed regulation.

But first, I'd like to urge the DEP to consider an extension to the comment period and add additional hearings like this around the state. It is our belief that public input is a crucial part of this process and that the public should be afforded ample opportunity to review these complicated and lengthy regulations—and weigh in on them. The proposed regulations are substantial in both their length and complexity-- 60 days cannot possibly be considered a reasonable time period for the public to be able to digest this highly technical proposal and submit comments. Furthermore, the fact that the DEP chose to open this public comment period during the height of the holiday season, a time when most of the Commonwealth's citizens are not tracking new regulatory proposals, gives the public even less time to engage in this process. PennEnvironment, along with multiple other organizations, request that the public comment period be extended to 120 days in order to provide a reasonable amount of time for the public to provide feedback on such a significance proposal to the commonwealth.

Fracking in Pennsylvania is one of the biggest issues facing Pennsylvanians today – with fracking we have seen 700,000 acres of our public lands leased, 161 cases of drinking water contamination, and

1.2 billion gallons of wastewater produced in PA, containing toxic and radioactive chemicals, all putting our air and water, and our public lands at risk. In recent years, the gas drilling industries have committed over 4,363 environmental violations in PA. Recently, even the Pennsylvania Supreme Court warned against the dangers of fracking, stating "by any responsible account, the exploitation of the Marcellus Shale Formation will produce a detrimental effect on the environment, on the people, their children, and the future generations," in striking down large sections of Act 13.

As the damage mounts, more and more Pennsylvanians are speaking out against this dangerous practice. Just this past year, PennEnvironment and a coalition of public health, community, and environmental groups delivered more than 100,000 petitions to Gov. Tom Corbett, calling for a moratorium on gas drilling in Pennsylvania until our environment and the public's health can be protected.

Given everything we have seen, PennEnvironment firmly believes that the fracking frenzy in Pennsylvania has to end. Nevertheless, for those families who have been caught up in the wake of the oil and gas industry – who have seen their drinking water contaminated and their health put at risk, any small measure to reduce the risk is welcome.

For my testimony this evening, I'd like to focus on how DEP must strengthen its currently proposed language in Chapter 78 to regulate the use of open wastewater pits in the commonwealth.

During the informational webinars the DEP presented on the proposed regulations, the DEP stated that the new proposals would prohibit the use of open pits for the storage of produced water (this is found in sections §78.1 and §78.56 to §78.64). PennEnvironment fully supports a ban to the dangerous practice of storing fracking wastewater in open air pits. This wastewater contains toxic chemicals that have been linked to a variety of negative health effects. The chemical components of fracking fluids, for example, have been linked to cancer, endocrine disruption, and neurological and

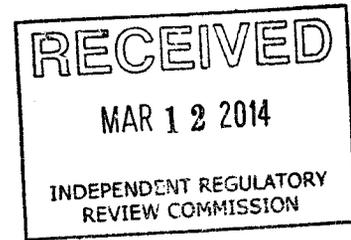
immune system problems. Wastewater brought to the surface by drilling can contain substances such as volatile organic compounds (VOCs) with potential impacts on air quality and human health. The practice of storing such substances in open air pits is an egregious threat to the environment and our health. These wastewater pits can, and do fail. When they do, they may put the quality of our drinking water at risk, and present hazards to wildlife and our environment. In some cases, they are so volatile that they may catch on fire or explode, as was the case in Hopewell Township where a holding pond explosion put the lives of nearby residents and their property in danger.

Sadly, after a complete analysis of the proposed regulations, it is clear the proposed language does not result in the elimination of the destructive and dangerous practice of open storage pits. Sections 78.1 and 78.59a to 78.64 of the proposed regulations, when taken in conjunction, continue to allow open (and even buried) storages of fracking wastewater—contrary to the statements of PA-DEP. Allowing for the continued use of centralized impoundment pits and “temporary” wastewater pits is allowing this dangerous practice to continue. PennEnvironment calls on DEP to completely ban the use all pits for the storage of wastewater, drill cuttings, residual waste, and other contaminated substances in these proposed regulations – whether permanent or temporary holding ponds. Instead, DEP should be ensuring that produced wastewater, flowback, and other contaminated fluids are stored in closed loop systems, with a secondary containment, and a leak detection system. This must happen without exceptions in order to better protect our health and our environment.

Thank you again for the opportunity to give testimony tonight, and PennEnvironment will also be submitting more detailed written comments on the proposed regulations before the end of the comment period.

3042

John Bruner
3521 Route 40
Washington, Pa 15301
724-350-1486



January 22, 2014

Hello, my name is John Bruner and I am a Buffalo Township resident. I am a lease holder with Range Resources.

2013 was a very wonderful year! Three terms emerged within our culture to show how the integrity of our society has advanced so upward....."Selfie", "Twerking" and "Responsible Drilling" all gained light-speed momentum throughout last year. However, one of these terms concerns me a bit as being somewhat more of a concern to our society than the other two terms.

I am talking about "Responsible Drilling".

Webster's Dictionary defines the term "responsible" as "liable to be called on to answer." This raises three questions.

- 1) What **liability** do the gas companies hold to answer? (What is their responsibility?)
- 2) What **liability** does our DEP hold to answer? (What is their responsibility?)
- 3) What **liability** do legislatures hold to answer? (What is their responsibility?)

So Let's look at the first question. What liability do the gas companies hold to answer? What are they actually responsible for? We residents are not naive – we are uneducated. We understand completely that the gas companies are **liable**...to satisfy their investors and stock holders through increased profit margins. That is it. Nothing more; Nothing less. This will not be found in their company mission statement, but we as residents know their number #1 goal is to make money. Let's face it, if they could quadruple their profits **tomorrow** by selling knick knacks in, let's say, Ohama, the industry would move out **tonight**. They came to Pennsylvania to make money and to keep their stock prices solvent. This is Capitalism folk, we understand their goal. This is free market.

The second question. What liability does the DEP hold to answer?

The DEP "Works to reduce air pollution, makes sure our drinking water is safe, and makes sure waste is handled responsible" among other things. Their intent and liability then should be very different than that of the gas companies. They should be our watchdog.

And the third question. What liability do the legislatures hold to

answer? Now this one is a bit more difficult to answer because you must first find out what the people, the residents, want...these are the people who elected the legislatures...to be our voice and represent our position. So this ultimately comes down to the people.

SO as one of those people...as a voter...as a resident, I am here to tell you what it is that I want.

I want our elected officials to understand that a **healthy balance** needs to exist. One where all are held accountable. A balance where the landowner receives his or her fair share in payment and in royalties' without being taken advantage of by the gas company. A balance where our environment, our air quality, our water supply, this beautiful beautiful Earth is being treated with the very same focus & attention....as toping last year's gas production records receive.

We all have grandchildren or know people who have grandchildren. We owe it to these children and to generations & generations down the road to be good and responsible caretakers of this planet. I have heard from so many who agree that our elected officials need to help ensure this "**healthy balance**" while ensuring that our watchdog, the DEP, is working creatively & very hard to officiate and oversee these operations without getting too close.

So it does frustrate and it does upset us...the people... when we hear contradictions to this balance...when we hear companies preach that their fracking recipes are "**safe to the environment**" but then hear that they wish not to disclose the specifics of their cocktails because they need to "protect their interests". And then we pick up the papers and read where drinking water was shut off to over 300,000 people living in Charlestown, West Virginia. Were they once told these chemicals for that particular industry were "**safe for the environment**"?

Ethane migration into water tables, well casing compromise, risky open impoundment settings, waste water injections & Earth quake activities,

land spreading, road spreading, suspected radioactive drill cuttings, swift laws affecting our endangered species ...these are all buzzwords we hear that cause us great concern.

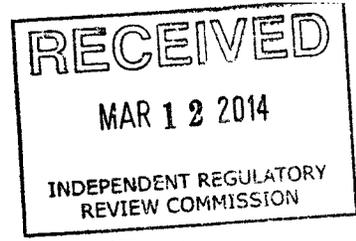
Look, we all understand that every single industry possesses some negative effect.

Renewable energy windmills that have killed birds, emissions from steel mills of yesteryear, some coal mine runoff. It happens.

I want this industry to thrive for all of us. I want the land owner to receive his well-deserved royalty. I want companies to reach profit levels while employing the Pennsylvania worker...while employing Pennsylvania Veteran who fought hard for our Freedoms. I believe we all want to see a healthy balance where these negative effects are held to an absolute minimum.

So I conclude by asking...Do we need to slow down this train a bit? Do we need to have long term studies completed on air quality & water quality at these sites and at our residents?

As a resident I beg lawmakers, gas companies, and our DEP alike to please sit down in a very mature fashion & respectfully and open-mindedly find this healthy balance. And if personalities make this sit down impossible then new people need to sitting at the table. Personalities cannot get in the way here folks. We the people demand it and our grandchildren deserve it...for this to be done successfully...for us to achieve that healthy balance.



3042

Good evening, my name is Glenn Weaver, 823 Congress Hill Rd, Franklin, Pa. I am a fourth generation oil producer and my son who just turned 50 is in the business with me and is a fifth.

zip
16323

Like the farmer's son who had to work on the farm when he was growing up, I had to work in the oil field. I said I will never work at this greasy, heavy tight work. But here I am 55 years later and I love it. But I would like it better with less ridiculous regulations. Such as act 13 and these regulations that we are here to discuss tonight.

One of today's shallow oil operator's greatest challenge and greatest operating expense the proper management and disposal of produced water. Regulations, like the TDS rule and the regulations we are here tonight to discuss, continue to change making operations in the shallow oil patch more and more difficult and more and more expensive. As a governmental body it is unreasonable and inappropriate to continue telling our industry what they cannot do without offering input to what we can do to meet the environmental objectives of the Department. As an example we have a low flow lease sized NPDES permit pending with the DEP that meets all of the existing rules and regulations and after 159 days the Department has offered no response and no action. We are trying and trying hard to adjust to new requirements, but the Department has to do their part and assist this industry. This is just one simple example of the State creating obstacles with no attempt to assist a struggling industry and the proposed changes to the Chapter 78 regulations will significantly worsen this situation. We have \$5000. In advertising and Engineering fees to this date and going nowhere it seems.

713
12/1

Please, give some serious thought to what you are doing to the shallow oil industry in Pennsylvania and seriously consider the written comments I will send to the EQB today.

It seems the DEP no longer uses the slogan to develop the resources of the Commonwealth with reasonable environmental protection.

Thank you.

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INDEPENDENT REGULATORY
REVIEW COMMISSION

3047

EQB
PO Box 8477
Harrisburg Pa 17105-8477

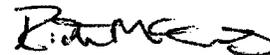
My name is Rich McComb and I am a 5th generation oil producer from 2240 McComb Road Stoneboro Pa 16153. I have worked my entire life in the oil fields of Pennsylvania. I have pumped conventional oil wells with rod lines and powers and I have pumped unconventional Marcellus wells with electronics , automated valves, and monitoring equipment. Other than the fact that both are a hole in the ground there is much not else in common between the two types of wells. From the drilling to the production they are totally different..

I respectfully ask this board to recommend that either a separate set of regulations or a sub section within the new regulations be established to separate conventional from unconventional wells. There are thousands of conventional wells already drilled here. Some of the wells I produce are over 100 years old. Their here, drilled, fracked, or shot. In many cases they have produced countless barrels of oil and mcfs of gas. It makes no sense to crush the operators of these wells with added costs associated with regulations that are unnecessary and in many cases complete overkill. If anything by making these existing wells unprofitable the department would in all actuality be doing more harm than good to the environment as many of these wells fall into disrepair or potentially be abandoned. The citizens of Pennsylvania have an interest in keeping our existing wells profitable and operating.

Second, we all know that the elephant in the room is the responsible disposal of production water. It is my belief that this issue along with many others facing operators and the Department can only be resolved by both parties working to come up with responsible solutions that both parties can live with. Furthermore, I would request that the board recommend that a Pennsylvania Grade Crude Development and Advisory Council be established . This group should be comprised of conventional well operators and Department people who will be charged with developing plans to increase Pa crude production in order to more adequately supply our refineries and to explore and develop responsible, economically viable production water disposal options.

Third, it is my belief that the board should advocate allowing on site disposal of drill cuttings for conventional wells in the drilling and particularly the reworking of existing wells. By sand pumping and reworking existing wells we are able to extend the life of the well with minimal impact to the environment. The pit size and slope also need to be specified as smaller for conventional wells. There is no reason for the changes that are being proposed.

In conclusion I believe it is critical for Pennsylvanians to protect their own. The people working on conventional wells in this state live here. Our industry is 150 years old and the area in which it started was drilled without any regulation, more crude was spilled than shipped to market yet today it is a magnificent state park enjoyed by many. No one is suggesting that no regulation is needed, however the people of this industry only request that we have a set of regulations that allows us to stay in business and produce Pennsylvania crude for another 150 years.



Rich McComb

3042

DEP HEARING January 22, 2014

Hello, my name is Anthony Berardi and I've been working in the industry for the past four years. I'm an independent operations Landman ~~working with Range Resources~~. Every day, I wake up grateful for this incredible resource below our feet. However, increased or a complex regulatory environment will hamper this entire industry and all of its cascading opportunities.

I, as well as my co-workers, am on the "frontlines" everyday keeping people informed and handling matters directly attributed to our local drilling activity. This hands-on approach allows us to combat issues quickly and efficiently without the need for micromanaged legislation. If this same approach is echoed throughout the industry, we can help stay in front of the need of excess governing.

Our most important duty is to try to keep people informed and satisfied with our operations. The easiest way for me to describe my work to friends and family, is to relate to a golf course. I tell them the well site is the putting green but much flatter, much bigger and obviously louder. I try to keep the people who live along the "fairways" happy and calm with the different phases of our operations.

We introduce ourselves to landowners as part of a "notification" process during the initial construction of a well site. We do this to all the homes nearby. This usually starts the, what I call, the "rest easy" process. We not only answer any questions but also extend our direct contact information for any round-the-clock concerns. We also keep the residents informed of every phase of the activity.

In the last four years, I've noticed that the more knowledge residents have about the drilling process the more at ease they are with our operations. The "fear of the unknown" is usually the biggest obstacle for people to get over when talking about drilling. Making personal contact with the neighbors and knowing that they can call us anytime, is great peace of mind. Having such a strong company behind our work, helps tremendously.

Throughout the course of our week, we have issues we have to take care of. We don't let these issues go unresolved. Our prompt attention, helps to maintain a positive persona of the industry in the areas we work. Whether it's a damaged mailbox or a hazardous road condition, we jump on it ASAP. This is vital!

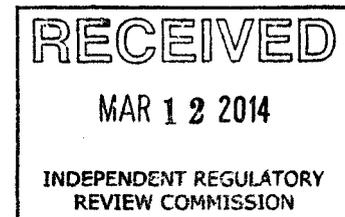
We are in people's back yards, front yards and side yards! They know however, when the construction, drilling and fracing is over, things will get back to normal. We pride ourselves on the fact that we may have to come back into the area in the future so it is important that we maintain a positive relationship with our neighbors.

If you are a resident near an existing or proposed well, you more than anyone else, have the right to your opinion! If you have an issue, make sure you voice it to the company directly involved with the activity. Don't let the issue fester; give the company a chance to address your problem.

The drilling companies are here and want to stay. They want to do things right. They have a lot of money invested and are putting food on a lot of tables. Please let them continue to have this opportunity without over regulation! Lastly, please keep an open mind and stay informed!

Thank you

Anthony "Tony" Berardi



3042

Michael D. Graham

7880 Steubenville Pike

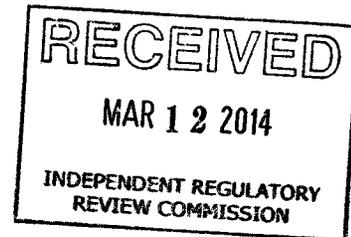
Oakdale, PA 15071

412-994-0540 ph.

724-693-9236 fax

January 23, 2014

Environmental Quality Board
Rachel Carson State Office Bldg.
16th Floor
P.O. Box 8477
Harrisburg, PA 17105-8477



RE: Oil and Gas Regulations
Chapter 78, Sub Part C
Published in the PA Bulletin Dec. 14, 2013

Dear Board Members:

I am Michael Graham, residing at 7880 Steubenville Pike, Oakdale, PA 15071. The conventional oil and gas wells I own and operate are located in Armstrong, Butler, Allegheny, and Washington counties. Some of the wells I own and operate were drilled before 1900. These wells have provided a valuable economic resources to owners, operators, employees, and associated business for a substantial period of time. Some of these wells still provide free gas to homeowners in accordance with the original leases.

My testimony this evening as an independent producer of conventional oil and gas wells is to express my opposition to the passage of these regulations as published in the Pennsylvania Bulletin.

Shallow oil and gas wells (conventional wells) have operated in this state for over 150 years and regulations governing those wells have been more than adequate to protect the environment while allowing producers to operate profitably through most of those years.

Be assured that the legacy wells that produce small amounts of oil and/or gas will not withstand the cost of these additional regulations.

Issues such as:

1. References to Act 2 procedures for clean-up of spills at oil and gas well sites will impose excessive and unnecessary costs to the oil and gas operators and are not justified by a clear environmental benefit.

2. The obligation to return land to "approximate original condition" that existed prior to well site construction disregards the ability of operators and land owners to agree on site restoration.
3. The requirement for PPC plans creates an unnecessary burden for small operators. Plans would be similar for each well site yet frequent updating would be required for the plans to be meaningful.
4. The pit requirement for a slope no steeper than 2 horizontal to 1 vertical for conventional wells which are small (contain less than 100 BBL of fluid) and are used for a short period of time (1-2 days) results in substantial larger areas of disturbance and greater costs without benefit.
5. The requirement for conventional operators to retain soil scientists for certification of pit bottoms relative to the seasonable ground water table adds a significant cost for operators. A performance standard would be appropriate.
6. The reporting and remediating of releases is respected to protect the environment, however modifications are required to eliminate unnecessary costs to the operator. The quantity of releases and various alternatives for remediation need to be considered.
7. The obligations related to "special concern species) result in a process which could be never ending, costly, and possibly without authority or benefit.
8. The protection of tanks from unauthorized acts of third parties is nearly impossible when that unauthorized party decides to vandalize equipment and tanks. Measures that fit the circumstances (tank sizes, location, secondary containment, signing, and locks where appropriate) need applied at the operator's discretion rather than mandated by regulation. Given the number of tanks, manways, plumbing, and valves that have been installed during the existence of the industry a regulation cannot address all the variables without resulting in the need to replace tanks, and tank containment facilities in many instances. Modifying tanks by drilling or welding to secure locking devices would require expensive cleaning, use of inert gases to prevent explosion at substantial cost.
9. Under ground or partially buried tanks that store brine have to be identified and an exemption is required to be requested to preclude the required removal within 3 years is a significant concern given the reason that most buried or partially buried tanks exist. These tanks have been sited in this matter to accept gravity flow from production tanks, provide resistance to freezing and for surface right of ways. Removal of these tanks results in many additional costs including tank removal (and likely replacement from damage during removal) new tanks, secondary containment construction, larger use of the surface and concerns over how to prevent the production water from freezing.
10. The electronic notifications, submittals, and reporting creates a burden for small producers which do not have access for such transactions. Hard copy submittals need to be permitted and over time most producers at their own discretion can choose to submit information electronically.

The small independent producers have been subject to an avalanche of changing regulations over the past several years such as pending revision to Chapter 78 in 2010, passing of Act 13, impact fees, raising bonding amounts, raising permitting fees,

expansion of permit application requirements for ESCGP 1 and 2 and road construction, no land disturbance until a permit is issued, mechanical integrity assessment, spill policies and now Chapter 78 regulations for Oil and Gas wells Sub Part C.

The ability to drill new conventional wells will be reduced due to increased costs resulting from these regulations. Existing wells will be less profitable to operate and abandoned early. The result will be a loss in crude supply to the refineries which currently operate at less than capacity. Jobs will be eliminated and affiliated business, free gas consumers, and royalty owners will be impacted.

The conventional wells need separate regulations that are considerate of a 150 year old industry with a wide spectrum of well construction techniques, a limited margin of profit yet a significant economic benefit to the Commonwealth.

We operators have operated these legacy wells in a respectful manner considering the environment. This environment is our work place and where we live our lives.

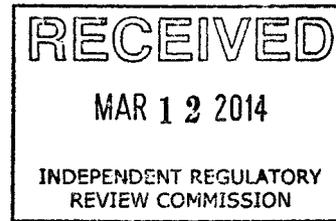
I urge you to vote NO to these proposed regulations and allow conventional wells to operate under the effective regulations in place before the passage of Act 13 of 2012.

Sincerely,

Michael D. Graham 1/23/2014

Michael D. Graham

Samuel Taylor
132 Hillcrest Dr.
Homer City Pa 15748 3042
724-541-4789



My name is Samuel Taylor and I am impacted more than most over all of the EPA and DER Regulations.

First off I lost my job and lively hood due to lies told by the EPA which they later admitted that they falsified the reports. That didn't give us back our jobs did it? Being a driller I have worked out in the field for years. The regulations are to the point of being a dictatorship of government. The safety regulations are very tough and that is not the problem. The purpose of new laws is wasting taxpayer money! If you would use common sense you would see that the laws that are in place are enough.

As far as drilling goes the only danger to anything is a fuel spill, a flash over, or a fire which we as experienced hands are trained to handle. There is more danger to the men working. If people would go see what is going on, they would see it is safe for the environment. If everyone is out of work why are we having a meeting? Make up a committee from the workers that are out of work that has experience on a drilling rig and let them help. They will be able to give input and raise any questions or point out any problems instead of the government stepping in with someone who was never out on the locations being in danger of the rig being hit by lighting during a storm, which has happened or tripping in or out of a hole when you hit big gas and taking the chance of causing a spark and the rig explodes, as this has happened to my family and I lost my cousin, not to mention working in subzero temperatures and getting frost bite. See there are other things we need to worry about. I don't understand why we are having meetings like this when all the area gas and oil companies are out of work.

We need no more regulations. We need to get back to work. Someone needs to review the rules and regulations and they will see that they are very strict. Everything we put down in the hole is environmentally safe as put forth by the government already. I have firsthand knowledge of this, which is more than people who sit behind a desk and say this is how it should be. They need to understand how the things are in the real world. Please read the laws and you will see that there are enough laws on the books. LET US get back to work and LET US make a living for our families. That is the real world.

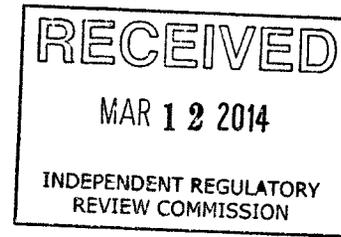
Thank You.

Burt Waite
160 East Adams Street
Cochran, Pa 16314

1-23-14

Public Testimony
Chapter 78

3042



Good evening and thank you for holding these hearings to allow open and public comment on the proposed changes to Chapter 78. This is an important part of the regulatory process and the Department has more than met their obligation in this regard. Well done, and thank you for adding two more hearings and extending the comment deadline to March 14, 2014.

We have an almost unbelievable opportunity in Pennsylvania to become a leader in energy development. The Marcellus Shale and other unconventional gas plays offer an opportunity to reinvigorate our economy and our ability to compete on a global scale. By developing relatively clean domestic natural gas, and I say relatively clean because all energy sources be they fossil fuels or so called renewable energy sources come with an environmental cost, Pennsylvania can again compete as an industrial manufacturing center. The jobs that that have been sent overseas because of our desire to pay American workers a fair and sustaining wage has crippled our ability to compete for many manufacturing jobs and the opportunity is now before us to bring these jobs back to the US and back to Pennsylvania - not by cutting wages and jobs, but by offering safe, reliable and affordable energy. This is the glimmer of hope I see for our children and grandchildren to deal with the debt legacy of my generation and we must not miss this opportunity.

But, and this an important but, we must not squander this opportunity at the expense of clean water, clean air and a healthy environment and that requires a strong and protective environmental regulatory program which I believe now exists in our Commonwealth and it must continue to exist going forward. And I firmly believe that the development of this vast energy resource and the protection of the environment are not mutually exclusive.

Because the Marcellus Shale with the emerging technology to drill long horizontal well bores was new to Pennsylvania it was right and appropriate and necessary to generate new environmental regulations to manage this monster we call the Marcellus. But the regulations must not go so far as to hinder our ability to compete with other states and the rest of the world. We must not drive those that

are willing to invest in energy development in Pennsylvania to other parts of the country. We cannot afford to lose this opportunity.

The proposed changes to Chapter 78, Subpart C go a long way to doing this, but in my opinion and in some instances the changes miss the mark and I offer 13 specific comments to improve the regulatory package. I will go through as many here as time allows and others will be submitted as written comments.

Conventional Versus Unconventional

There seems to be a ground swell growing to separate the conventional gas and oil regulations from the unconventional operations. I want to add my vote to encourage this possibility. The proposed new regulations impose requirements on the conventional operations that are excessive and inappropriate and do little to add to the protection of the environment. Shortly you will see proposed new regulatory language to this end and I am proud to have played a part in the drafting of that language.

Section 78.51 Water Replacement.

The requirement to replace water to a condition better than it was prior to drilling is punitive, unfair and open to miss-use. This is an example where overregulation can hurt our ability to compete with other regions of the country.

Section 78.15(f)(iv) PA Natural Heritage Program

The introduction of new terms and conditions for the protection of some species and habitats that have not been fully vetted and formally listed is inappropriate. Although the intentions are good, the Department is overstepping its bounds in this section.

Section 78.62 Drilling Pits

The regulation of a conventional shallow oil drilling pit that is often less than 1/10 of an acre in size in the same manner as a holding pond at an unconventional site that often exceeds several acres in size is inappropriate. This section alone demonstrates the overwhelming need for separating the regulatory requirements of conventional and unconventional operations.

In addition, for small pits it is recommended that the rule simply state that pits be installed above the water table as determined by water entering (or not entering) the pit hole at the time of installation.

Section 78.66 Reporting and remediating releases

This section is too restrictive and needs to be broadened to focus more on spill prevention and the application of appropriate spill remediation and less on notifications and regulatory process. You will soon see suggested complete redrafting of this section.

Section 78.52a Abandoned and orphaned well identification

A search radius of 500 feet is inappropriate for shallow wells drilled on 300 feet centers. For very sound technical reasons and for these type of wells a search radius of 150 feet is appropriate.

Section 78.15 Municipal Notifications

Notification of all municipalities touching the host municipality of a conventional or unconventional well is excessive. Notification of the host municipality and any municipality that will be underdrilled should be sufficient.

Section 78.17 Permit renewal

It is recommended to extend the life of a permit from one year to three years.

Section 78.55 Planning and emergency response

Operators should not be required to submit PPC plans to the PFBC or landowners. These are public documents that are available through DEP and operators should not be required to do the Departments job or transfer implied regulator authority to other entities. This is simply an administrative task that adds an unnecessary and unneeded burden to the operators.

Section 78.67 Borrow pits

Borrow pits need to remain active for the life of a project area, not just a single well pad.

This appears to be another case where the regulations were drafted for unconventional wells and then applied to conventional wells without due consideration in the differences in operation.

Building permits

Operators should be allowed to build locations with or without a drilling permit as long as they abide by the erosion and sedimentation requirements.

Notifications

There are no less than 23 separate notification requirements for the completion of a new well. This is excessive, time consuming and frankly an opportunity for well meaning operators to get caught in non-compliance issues.

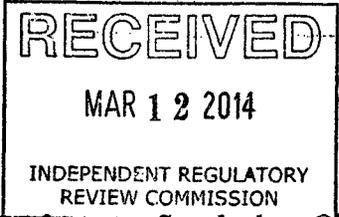
Forms

There are 19 separate and new forms referenced in the regulation package and not one of the forms was included in the draft package. This is a significant oversight and does not allow for public comment on the forms.

I thank you for this opportunity.

Burt A. Waite, P.G.

3042



Comments on Proposed Rulemaking - Environmental Protection Performance Standards at Oil and Gas Well sites. Act. 13 January 22, 2014

Joni Rabinowitz, 7721 Edgerton Ave. Pittsburgh PA 12221
Private citizen.

I believe this current horizontal gas drilling is the most serious issue facing our state -- in fact, facing all of humankind -- that I have ever experienced in my lifetime .

People are dying all over the world because of the oil and gas industry and we are turning a blind eye to that because the industry denies all culpability.

Before I begin, I'm asking for 2 changes in your procedure. First, that the public comment period be expanded to 120 days minimum and second, that more hearings be held in all the affected counties.

Also, you must review your entire document, in the light of the December 19 Supreme Court which requires you to provide "clean air, pure water, and . . . the preservation of the natural, scenic, historic and esthetic values of the environment." PA. CONST. art. I, §27.

Two of the purposes of these regulations are to 1) ensure the protection of public health, safety and the environment and 2) protect public resources to minimize impacts from gas and oil drilling.

I think we would all agree that extensive extraction of fossil fuels doesn't do either of these. By and large these regulations are ^{relatively} weak and DEP doesn't have enough staff to enforce them. They give away too much to the companies. These laws and regulations were negotiated with numerous company lobbyists-- who are in Harrisburg all the time-- and very few with environmentalists.

What got me into this issue in the first place was my concern about the amount of water available to life on the planet. It's finite, and I'm worried about this. I've studied enough about other parts of the world and the U.S. to see how very lucky we are here in PA.

Water is the ONLY thing required to keep life ~~living~~ going.

****One of my concerns is 78.59c which prohibits fluid storage areas within 100 feet of certain bodies of water. "Intermittent and ephemeral streams"-- streams which do not run all year long also need to be protected, under the Clean Streams Act. Like vulnerable wildlife and plant life, vulnerable water sources are not protected by these regulations.

~~This prohibition of storage should be extended to all water bodies, and the distance should be increased to 300 feet. and ~~also~~ to 300 feet for closed containers, ~~added to 300 feet~~~~

****Another of my concerns is wildlife and forests. Our civilization has developed over hundreds of thousands of years. There is a very fragile relationship between all the beings here on earth. Each one has

a purpose and a relationship with others. When we mess with that-- as we're messing with the geology of the deep earth -- we take a big chance with our children's' future.

Already massive clear-cutting has devastated huge sections of our old forests. Planting grass, even planting trees does not substitute for an old growth forest.

Personally, having spent much time in the woods, marveling at all the complex minute details of that environment, I don't think it's possible to mitigate the burden that this industry perpetrates on that environment.

I don't see anything in these proposed regulations to adequately defend our woodlands and their residents.

Also, I don't know if these regulations apply to our state forests and conservation districts but we should stop ALL unconventional drilling in those places.

Many aspects of this unconventional gas industry are not even addressed by these regulations as far as I know. These include: the amount of fresh water they're using; truck and diesel traffic on our roads; health and safety conditions of the workers; lack of training of local emergency workers; compressor stations and containment tanks and noise, *and more* ^{*Sand dust*}

****Spills and leaks.** We don't hear much about spills and leaks. They get reported to DEP, but when you ask DEP for copies of them, they say they don't have them -- as recently happened with a request about Dimock. We hear about occasional fines, but nothing more. Shouldn't the company be responsible for fixing the problem, and assuring that it doesn't happen again?

****Casings-** This industry has a 5-14% failure rate in the first year! Any other industry with a 5-14% failure rate in the first year would be out of business. A recent document uncovered by the ABC Dallas affiliate, shows that Range Resources completely failed to cement their drilling operation despite being required to do so by the industry's own standards. DEP should make the industry fix this..

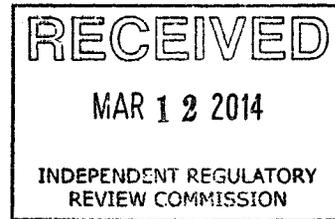
***** Pipelines-** According to a recent study by the League of Women Voters, we are one of 2 states with totally ineffective gas line regulation and inspection, mainly because the laws are weak or non-existent. We need to fix that.

In closing, I want to say that I haven't deeply studied this document and I don't necessarily understand all of it either. I'm just a regular citizen with no special expertise in any of these areas. I have learned, tho, about the destruction perpetrated by this industry.

When I'm on my deathbed, I want to be able to say that I did my best to save the planet from annihilation.

7755 Bennett Rd
Wyncote, PA 19095
Feb 20, 2014

3042

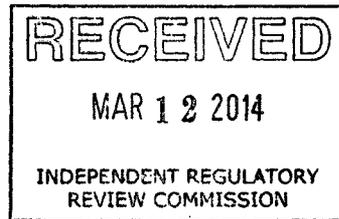


Environmental Quality Board Members
RE. ENVIRONMENTAL PROTECTION PERFORMANCE
STANDARD AT OIL & GAS WELLS SITES
P.O. Box 8477, Harrisburg, PA 17105-8477

I'm not familiar to open fracture pits. I'm not completely
oppose to extracting natural gas. Given the conditions of
natural gas produce less contaminants than oil or coal, our
need for energy and to eliminate our need for foreign
energy, clean energy sources such as solar and wind
must be developed and can help with our energy supply.
A requirement of pre-drill testing and the restoration of
drinking water supplies to safe and/or improve standard.
This should not be a financial burden ^{to} the gas industry.

A. H. H. H.

3017
Kathryn Lezenby
828 League Street
Philadelphia, PA 19147



Environmental Quality Board Members

P.O. Box 8477

Harrisburg, PA 17105-8477

March 3, 2014

Dear Board Members:

I strongly oppose the unregulated and widespread gas drilling that is destroying our state forests and threatening our fresh water and air quality. I urge you to reign in this industry before it is too late.

Most importantly we need a moratorium on drilling on state lands and a ban on open fracking pits. We also need testing of drinking water to maintain its quality.

Our state forests provide vital habitat for wildlife, an ~~and~~^{essential} watershed, and protection from climate change. There is no way to fully restore these forests once they have been opened to drilling, so we must ban fracking on them all together.

Open fracking pits leach chemicals into ground water and poison animals who drink from them. We need to ban them as well.

DEAR Environmental Quality Board Members,
Unless there is a complete moratorium on drilling
in our state, we will suffer inevitable long-term
consequences. As long as drilling is allowed, the DEP
must protect us from these. The only way to do so
is to require full testing of streams and wells before
drilling and restoration of contaminated water after.
As a state agency with the mandate to protect
our environment for the long term good of its
residents, it is important the DEP establish
these bare minimum requirements.

Thank you for your consideration of my
comments. I would appreciate a reply
addressing my concerns.

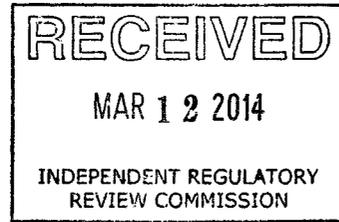
Sincerely



828 LEAGUE STREET
PHILADELPHIA, PA 19147

3042

Kunthear Van
5304 Delancey st.
Philadelphia PA 19143
Tel: 267-601-1638



Dear Sir/Madam

I am writing this letter to ask you to make environment safer for our community. Please do not use toxic chemical agents, follow SOP with cautions.

Best,
Kunthear Van

3042

Cooper, Kathy

From: RegComments@pa.gov
Sent: Wednesday, March 12, 2014 4:10 PM
To: Environment-Committee@pasenate.com; apankake@pasen.gov; IRRRC;
 RegComments@pa.gov; eregop@pahousegop.com;
 environmentalcommittee@pahouse.net
Cc: ra-epmsdevelopment@pa.gov
Subject: Proposed Rulemaking - Environmental Protection Performance Standards at Oil and Gas Well Sites

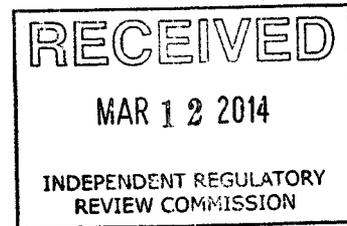


Re: Proposed Rulemaking - Environmental Protection Performance Standards at Oil and Gas Well Sites

The Environmental Quality Board (EQB) has received the following comments regarding the above-referenced proposed rulemaking.

Commentor Information:

Judy Courtney
 ()
 146 Election House Road
 Prospect, PA 16052 US



Comments entered:

Dear Sir:

The Impact that drilling has on a community should never be up to just one or a few individuals or those making a profit from it. It should be brought up for discussion and only excepted if all agree there would be no harm done to the property or those in the vicinity of the property. We all know the impact that drilling does have - even if not immediately shown will have long term effects.

Our environment including air, water and structures can never to replaced if lost. I know the quality of water has changed for many neighbors of those that elected to have drilling done. Also I know of water wells that have been lost.

Why blow up mother natures perfect way of taking care of us. The benefits are short lived here and there are so many other ways of getting power that we as a nation will not except because of those making a profit on our natural resources. Natural resources keeps mother nature alive! Drilling means our quality of life will disappear! I should not have to be writing this letter! Just another reason to say our politicians are being paid off one way or the other. They are not watching out for THE PEOPLE, only themselves.

Judy M Courtney
 146 Election House Road
 Prospect, PA 16052
 Franklin Twp. - Butler County
 724-865-2445

80972



Hoover
256 Anthony Road
King Of Prussia, PA
19406
March 4, 2014

Dear Environmental Quality Board Members,

Please continue to protect our drinking water and be diligent to the effects of natural gas drilling. If fracking is determined to be a safe energy solution, ^{gas company} operators should be required to restore any contaminated drinking water supplies to a safe standard.
Thank you,

Tim M. Hoover
256 Anthony Rd.
King of Prussia, PA
19406

RECEIVED
MAR 12 2014
INDEPENDENT REGULATORY
REVIEW COMMISSION

3042

Environmental Quality Control Board
Standards at Oil & Gas Well Sites
P.O. Box 8477
Harrisburg, PA 17105-8477



Feb. 25, 2104

Re: Environmental Protection Performance

Dear Sir or Madam,

I'm taking time out of my busy schedule to write and recommend tougher rules for natural gas drilling so we can protect our water and our health.

Do you have children? Do you have pets? Do you have grandchildren? Do you care what kind of water goes in your body? What kind of environment are you going to leave them if you don't take the time *now* to do the right thing?

I am joining hundreds of families AND tax payers in PA requesting strongly that DEP enact great, stable, long-lasting protections for our drinking water and public health.

It seems anything worth doing right in this world comes at a cost. Don't cheapen our health by cutting corners.

Thank you for your time.

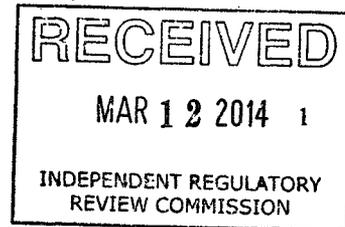
Signed,

A handwritten signature in black ink, appearing to read "Victoria Aslan", with a long horizontal line extending to the right.

Victoria Aslan, citizen
4202 Pine St.
Philadelphia, PA 19104

Cc: Clean Water Action
1315 Walnut St. Ste., 1650
Philadelphia, PA 19107

3042



Congressman John E. Peterson, retired
EQB Hearing – Warren, PA February 12, 2012

I have had the privilege of serving this area for 32 years as the Pa State House and Senate member and then as the Congressman.

I grew up 1 mile south of the world's first oil well, Drake Well. As I grew up I spent a lot of quality time in the beautiful Oil Creek valley that flows from Titusville, Oil City and then into the Allegheny River. The Oil Creek and Allegheny River valleys became the beginning and home of most of the nationally known oil companies and refineries. The discovery of oil at Drake's well changed the world and fueled the industrial revolution. It enabled us to become the most powerful nation in the world!

The oil creek valley oil rush was so intense that the hillsides were covered with oil derricks, dead trees and no vegetation, just oil soaked ground.

As I was growing up 85 years later, nature has healed this valley. It is a lush, beautiful valley with abundant wildlife and great fisheries. It healed with no assistance from a DEP or EPA.

It healed because Penn Grade crude is not tar based like most oils, but paraffin based. The same materials we use to make creams, lotions and basic candles. Western and mid east oils are tar based and their residue is used to make tar products and black top coating for our roads.

As a young boy, fishing for brook trout was an exciting adventure. When you find brookies the environment is good. The forest, land where we spent our days was filled with rod lines and oil tanks.

When oil prices were very low, the industry would diminish and then return again when oil prices increased. This industry has been here for 153 years and our wildlife and fisheries are healthy!

As world oil prices have risen and the oil industry has grown, the marcellus shale gas fields have sprung up across much of PA. As this has become the world's largest gas field, PA was forced to pass legislation to regulate the marcellus production and establish rules to protect the environment.

The original Penn Grade Crude producers tried to be exempted and should have been totally exempt. The regulations that are moving forward and in many cases being imposed on the

traditional oil & gas industry will eliminate them is not pulled back.

It is vital to develop separate rules and enforcement for the Penn Grade Crude industry. We have 2 refineries that depend on them for crude. The refinery in Bradford needs more crude not less to run wide open as refineries are designed to run.

It is time for PA government to develop a comprehensive energy policy to expand and produce the abundant energy resources we are blessed with. We need policies and regulations that will allow us to grow the volume of Penn Grade crude to allow our refinery to grow and flourish. We need a strong partnership between industry and the state to develop affordable solutions for the production fluids that are generated.

If PA is smart and fair with all energy producers, rural PA can rebuild it's weak economy and produce jobs for our unemployed. Everyone can benefit from sound and wise use of our natural resources.

Dear Environmental Quality Board Members,

Jan. 31, 2014

RECEIVED
MAR 12 2014
INDEPENDENT REGULATORY
REVIEW COMMISSION

I am a 7 year old girl who is freaked
out about fracking. Ever since my parents
told me about fracking in grade 2, I have
been scared of it. Don't think about people,
think about kids like me, our future. If
we don't get clean water, we will die and
the future of America will die with us too.
So, I know that some of them will be
commanded but still I would want them
to live. Please, keep fresh water alive, and
everyone else alive, too. SHUT DOWN
FRACKING!!!!!!!

Thanks,

Please
reply.

