BEFORE THE

ENVIRONMENTAL QUALITY BOARD

* * * * * * * *

IN RE: PROPOSED CHAPTER 78

ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

AT OIL AND GAS WELL SITES

JRIGINAL

* * * * * * * * *

BEFORE: LAURA EDINGER, Chair

COLLEEN CONNELLY, Member

JESSICA SHIRLEY, Member

KURT KLAPKOWSKI, Member

ELIZABETH NOLAN, Member

HEARING: Monday, January 27, 2014

6:04 p.m.

LOCATION: Tunkhannock Area High School Auditorium

135 Tiger Drive

Tunkhannock, PA 18657

Reporter: Randyll P. Lloyd

Any reproduction of this transcript is prohibited without authorization by the certifying agency

WITNESSES: Kate Gibbons, Emily Krafjack, John Augustine, Diane Ward, Stephanie Wissman, Craig Stevens, Peggy Maloof, Vera Scroggins, Kristin Landon, Mark Cline, David Buck, Thomas J. Shepstone, William Ferullo, Howard Hannum, Epifanio Bevilacqua, Victoria Switzer, Melissa Troutman, Joshua Pribanic, Adrienne Panuski, David Wasilewski, Charles Spano, Wendy Lynne Lee, John Trallo, Duke Barrett, Scott Miller, Ann Pinca, Jeremy Connor, William Huston, Nicolas Katkevich, Deirdre Lally, Alex Lotorto, Adam Hughes, Caitlin Myers, Barbara Clifford, Jay Sweeney, Richard Ide, Laura Rigell, Sherrie Andre

1		INDEX			
2					
3	OPENII	NG REMARKS			
4	Ву	Chair	6	ā	11
5	TESTI	YNONY			
6	Ву	Kate Gibbons	11	-	15
7	Ву	Emily Krafjack	15	7	20
8	Ву	John Augustine	20	-	24
9	Ву	Diane Ward	24	=	28
0	Ву	Stephanie Wissman	29	-	33
1	Ву	Craig Stevens	33	-	37
2	Ву	Peggy Maloof	37	Ξ	41
3	Ву	Vera Scroggins	41	-	45
4	Ву	Kristin Landon	4 5	8	50
5	Ву	Mark Cline	5.0	<u>-</u>	53
6	Ву	David Buck	54	=	57
7	Ву	Thomas J. Shepstone	58	-	61
8	Ву	William Ferullo	61	-	65
9	Ву	Howard Hannum	65	-	68
0	Ву	Epifanio Bevilacqua	68	_	69
1	Ву	Victoria Switzer	70	-	74
2	Ву	Melissa Troutman	7.4	-	77
3	Ву	Joshua Pribanic	78	-	82
4	Ву	Adrienne Panuski	82	_	86
5					

1	I N D E X (cont.)			
2				
3	TESTIMONY (cont.)			
4	By David Wasilewski	87	-	89
5	By Charles Spano	89	-	91
6	By Wendy Lynne Lee	92	=	96
7	By John Trallo	96	-	100
8	By Duke Barrett	100	-	102
9	By Scott Miller	102	-	105
0	By Ann Pinca	106	=	108
1	By Jeremy Connor	109	-	111
2	By William Huston	112	3	116
3	By Nicolas Katkevich	116	-	118
4	By Deirdre Lally	118	-	120
5	By Alex Lotorto	120	-	125
6	By Adam Hughes	125	-	127
7	By Caitlin Myers	127	_	129
8	By Barbara Clifford	129	÷	133
9	By Jay Sweeney	133	=	135
0	By Richard Ide	135	Ξ	138
1	By Laura Rigell			139
2	By Sherrie Andre			139
3	CLOSING REMARKS			
4	By Chair			140
5				

		3
	EXHIBITS	
		Page
Number	Description	Offered
	NONE OFFERED	

PROCEEDINGS

1 2

CHAIR:

Good evening. I would like to welcome you to the Environmental Quality Board's public hearing on the Environmental Protection Performance Standards at Oil and Gas Well Sites, proposed rulemaking. My name is Laura Edinger. I am chairing tonight's hearing on behalf of Pennsylvania's Environmental Quality Board.

Joining me tonight are Elizabeth Nolan, from DEP; Kurt Klapkowski, from DEP's Office of Oil and Gas Management; Jessica Shirley, with DEP's Policy Office, and Colleen Connelly, Community Relations Coordinator for the Northeast Regional Office.

I officially call this hearing to order at $6:04\ p.m.$

At this time, please silence all cell phones. A little bit of housekeeping, exits right to the back and on either side of the auditorium. And restrooms are located out the back and all the way down the left of the hall.

The purpose of this hearing is to formally accept testimony on the proposed regulations, Environmental Protection Performance Standards at Oil

and Gas Well Sites.

In addition to this hearing, the EQB will hold two additional hearings on the proposed regulations on February 10th in Troy and February 12th in Warren. Please note that the two hearings in February are additional to the original seven hearings that were scheduled. Throughout this hearing and comment process, we heard from commenters that we should hold additional hearings and extend the comment period. Given the importance of public participation in crafting these regulations, we agreed that extending the comment period and adding two hearings would be beneficial to the rulemaking process. Information about the specific locations of these hearings is available at DEP's website at www.dep.state.pa.us.

There are also copies available of the Citizen's Guide to DEP Regulations. Inside this document you will find descriptions of the environmental regulatory process in Pennsylvania, the Environmental Quality Board's role, how to submit comments and tips for submitting effective comments.

The proposed rulemaking, which was adopted by the EQB on August 27th, 2013, would amend 25 Pa. Code, Chapter 78 to update the requirements

related to surface activities associated with the development of oil and gas wells. EQB adopted the proposed rulemaking with the recommendation for a 60-day, now 90-day, public comment period, in at least six hearings across the state. This represents a heightened level of public participation, as there is usually only a 30-day public comment period held for the typical Department rulemaking.

Additionally, public hearings are held on the basis of public interest. And for some regulations there are few or even none that are held if there is no request for hearings. Due to the increased public interest in this rulemaking, EQB initially scheduled seven public hearings, and as previously mentioned, increased the number of hearings to nine in order to allow for ample opportunity for public comment on this proposed rulemaking.

The proposed regulatory amendments would address recent statutory changes in Act 13 of 2012 and codify existing practices. This rulemaking would allow for the implementation of key provisions of Act 13, including further consideration of impacts to public resources, such as parks and wildlife areas, the prevention of spills, the management of waste and the restoration of well sites after drilling.

The proposed rulemaking also includes standards affecting the construction of gathering lines and temporary pipelines, and includes provisions for identifying and monitoring abandoned wells close to proposed well sites.

In order to give everyone an equal opportunity to comment on this proposal, I would like to establish the following ground rules. I will first call upon the witnesses who have preregistered to testify at this hearing. After hearing from these witnesses, I will provide any other interested parties with the opportunity to testify as time allows. Testimony is limited to five minutes for each witness. Please note that if you run out of time for your spoken testimony, please don't worry. Written and spoken testimony both carry the same weight. That's why we requested written copies of your testimony, so if you run out of time, we will read the rest of your comments and your written testimony.

Organizations are requested to designate one witness to present testimony on its behalf. Each witness is asked to submit three written copies of his or her testimony to aid in transcribing the hearing. Please place two copies in the box marked public comments and please hand one copy to our stenographer

prior to presenting your testimony. When you come to the microphone, please state your name, address and affiliation for the record prior to presenting your testimony. The EQB would appreciate your help by spelling names and terms that may not be generally familiar, so that the transcript can be as accurate as possible.

1

2

3

4

5

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Because the purpose of the hearing is to receive comments on the proposal, EQB or DEP staff cannot address questions about the rulemaking during the duration of the hearing, but may address any questions after the conclusion of the hearing. addition to or in place of verbal testimony presented at today's hearing, interested persons may also submit written comment on this proposal. Again, written and verbal comments hold the same weight when considered in the finalization of this rulemaking. All comments provided become a part of the official public record. All comments must be received by the EQB on or before March 14th, 2014. Comments should be addressed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA, 17105-8477. Comments may also be e-mailed to reg comments, that's R-E-G, C-O-M-M-E-N-T-S @pa.gov or submitted online through the EQB's regulatory comment system, accessible from

DEP's website.

All comments received at this hearing, as well as written comments received by March 14th, will be entered as part of the formal record and considered by the EQB and will be included in the comment response document, which will be prepared by the Department and reviewed by the EQB prior to the Board taking its final action on this regulation.

Anyone interested in receiving a copy of the transcript of today's hearing may contact the EQB at (717) 787-4526 for further information.

I would now like to call for the first commenter. I have Kate Gibbons.

MS. GIBBONS:

Good evening. My name is Kate Gibbons, and my working address is PennFuture, 8 West Market Street, Suite 901, Wilkes-Barre, PA, 18701. And my title is Northeastern Pennsylvania Outreach Coordinator at PennFuture.

PennFuture is a statewide public interest organization with members across this region and Pennsylvania, working to create a just future where nature, communities and the economy thrive. And I appreciate the opportunity to comment here tonight on the proposed oil and gas regulation changes, and

will add that PennFuture will submit comprehensive reg comments in addition prior to the new extended March 14th deadline.

Oil and gas extraction operations are intensely industrial, inherently hazardous activities that can threaten water, air and land resources and public safety if proper regulations with vigilant oversight aren't in place. PennFuture supports aspects of the proposed regulations by DEP. Among other things we support DEP's decision to regulate wastewater pipelines and to regulate drilling operations installing pipelines under streams.

As a plurality of the Pennsylvania
Supreme Court Justices just recognized in their
Decision in Robinson Township versus the Commonwealth,
also known as Act 13, our Commonwealth has a history
of prioritizing resource extraction over citizens'
health and long-term preservation of its environment.
By adding the Environmental Rights Amendment to the
Pennsylvania Constitution, the people of Pennsylvania
determined that their well-being and the well-being of
future generations should never again be less
important than the short-term benefits that can bring
with them damage like, for example, here in my region
of Northeast PA, orange streams and still burning

underground mine fires.

So I'll comment on two specific areas that we believe need to be strengthened in the proposed regulations. First, the DEP should prohibit the disposal of residual waste at well sites. The draft regulations would allow well operators to dispose of residual waste in pits, or essentially mini landfills, on well sites as long as they comply with certain minimum requirements.

Because oil and gas site waste is exempt from hazardous waste regulations, the result is that this hazardous waste can be managed as residual waste and disposed of onsite with a single synthetic liner and no long-term groundwater monitoring. These minimal protections are inadequate. Given the high risks posed by these many landfills, DEP should prohibit well site disposal of residual waste entirely.

Second, we recommend the DEP should entirely prohibit operators from using open pits and impoundments to store flowback, brines and other drilling wastes and instead require that such wastes be stored in tanks and other closed-loop containment systems. Pits and impoundments, as we know, that are used to hold flowback and other wastewaters have

repeatedly leaked due to holes in liners, faulty design and construction and human factors. In one case involving an impoundment operated in Bradford Company with a company --- Bradford County, excuse me, it was discovered that chunks of cement or rock had been tossed in the pit and had caused numerous tears in the liner. Tears are also caused by the use of backhoes and other heavy equipment.

These pit and impoundment failures routinely lead to the contamination of both groundwater and surface water. With leaks, sites are supposed to be cleaned up and restored to background standards under Act 2, which is Pennyslvania's Ground Fills Law. But because of limited personnel and resources, DEP usually relies on operators and their consultants to verify the cleanup and verify elimination of the source of contamination. And even when sites are cleaned up to the legal standards, the long-term impacts are unclear.

It is true that tanks can and do leak and overflow as well, but when tanks leak, it is clear that they are leaking, which is not the case with pits. For all these reasons, we recommend DEP completely eliminate the use of pits and impoundments to contain drilling waste and require operators to use

closed-loop systems.

That concludes my comments. Thank you to the EQB for your consideration tonight of what is one of the most essential parts of our democratic process, citizen input into decisions that affect us all. Thank you.

CHAIR:

Next we have Emily Krafjack.

MS. KRAFJACK:

My name is Emily Krafjack and I'm speaking tonight on behalf of Connection for Oil, Gas & Environment in the Northern Tier. My address is 1155 Nimble Hill Road, Mehoopany, Pennsylvania.

Good evening. My name is Emily Krafjack and I'm providing comments in my purely voluntary, uncompensated role as President of Connection for Oil, Gas & Environment in the Northern Tier. C.O.G.E.N.T. focuses on the five-county region of Bradford, Sullivan, Susquehanna, Tioga and Wyoming Counties. C.O.G.E.N.T. is the resources for landowners and communities alike striving to find and advocate for a balance that supports public health and safety, community and the environment, with the needs of industry.

There are approximately 183,000 souls in

our five-county region. Unconventional gas well sites and facilities have been located within and around our rural farmland and forested communities, nearby family homes, schools and local hospitals. Because of these facts, we take a keen interest in this long awaited rulemaking.

Through the 2013 year end, our region hosts 43 percent of the Commonwealth's unconventional spud wells. Of the total wells inspected in the state, 50 percent of those are located in our region and are responsible for 54 percent of the violations recorded by DEP. Here are just a few examples why we need more stringent regulations and how they may be improved.

78.15(f)(1). We recognize that Sullivan County is home to some of the most scenic vistas and viewsheds in our region. Every county within the Northern Tier has public lands that may be subject to exploitation. These public lands and more are home to threatened and endangered species, critical communities, species of special concern, scenic vistas and viewsheds, high quality and exceptional value streams and wetlands, and are well-known for recreational opportunities and support regional tourism.

The 15-day comment period does not provide public resource agencies a sufficient time frame for adequate consideration of the public resource and to provide sufficient response, therefore we recommend this comment period be changed to 30 days. The 200 foot notification zone is inadequate. Further discussion of this provision will be included in our submitted written comment.

The poor siting of a well pad along the Loyalsock Trail, at some points within 30 feet of the cleared well pad area, indicates the need for better planning. An adequate notification zone, coupled with adequate comment period of 30 days provides opportunities to properly mitigate and avoid such siting problems in the future. We recommend revisions to provision 78.15(f)(1).

78.51(d)(2). Private water supplies in Wyoming County, as well as the Northern Tier Region have experienced gas migration issues. C.O.G.E.N.T. supports the interpretation as based on Act 13, guaranteeing that those with private water supplies whom had pre-drilled tests which were superior to the Safe Drinking Water Act Standards, that in the event they are subject to a replaced or restored water supply, that the water supply must be comparable to

the quality of that superior pre-drill water supply.

C.O.G.E.N.T. supports that those water supplies is guaranteed by Act 13, which failed to meet Safe Drinking Water Standards, that those water supplies are to be replaced or restored to Safe Drinking Water Standards. The inconvenience, worry and additional stress placed on a family necessitates that they be justly compensated with the same superior water quality their pre-drill test reveals or when deficient to the Safe Drinking Water Standards accordingly. The operator is addressing the water supply, therefore, it is the responsible action to do so entirely.

78.52(a). Tioga County experienced a serious situation with an abandoned well issue due to a hydraulic fracturing communication. This incident caused environmental harm and caused the operator a great deal of time and money. Based on information shared at the TAB subcommittees this summer, we recommend that DEP not only continue to collect data, creating a database, but also that an assessment be done after spudding a well. We recommend that a fact sheet regarding orphaned and abandoned wells be included in the landowner notification certified mailings.

78.56. As a better environmental and community-friendly practice, we support the use of modular above-ground containment structures. One operator in Susquehanna County has utilized such structures already. These structures are a viable method to replace the lingering practice of flowback/ wastewater earthen impoundments still utilized by an operator within our region. We recommend the provisions related to modular, above-ground containment structures, as they can assist operators in their recycling methods and water storage and are a better environmental practice near our homes.

occurred, such as those in Bradford County's Rome and Wilmot Townships and throughout our region, we recommend the codification of these provisions as written, but provide more stringent requirements regarding the reporting and corresponding remediation at well sites that many times are located near homes and schools. One operator in our region is voluntarily complying with Act 2 for their remediation practices. We encourage this procedure and desire to see it used by all operators.

We've been anxiously awaiting many years for the regulations to be enacted. Some of these

provisions are policies that are around four years old, while others are based in Act 13 almost two years old. Thus, we ask that with attentive consideration given to the information provided during the comment period that these regulations move forward without ---.

CHAIR:

I'm sorry. Thank you. We'll read the rest of your written comments. Thank you. Next we'll call John Augustine.

MR. AUGUSTINE:

Good evening. I'm John Augustine. I'm the Community Outreach Manager in northeastern Pennsylvania for the Marcellus Shale Coalition, an association working with regional partners since 2008, and currently comprised of nearly 300 exploration, production, midstream and service companies committed to developing clean burning natural gas resources. In 2012 our members were responsible for 96 percent of the natural gas produced here in Pennsylvania.

Energy development has an incredible history in the Commonwealth. And indeed, natural gas development can serve to enhance and improve our natural resources.

Significant investments have been made

across the Commonwealth by our industry to provide needed habitat and restore lands and watersheds. Partnerships with conservation, agriculture and outdoor groups are examples of our industry's willingness and commitment to voluntarily protect and preserve our natural resources. And our industry has raised the bar for shale development further with practices designed specifically to lessen the impact on surface disturbance that provide strategies to improve habitat and landscapes.

\$1.8 billion in taxes since 2008, and \$406 million over two years to communities, counties and the state in impact fees across the Commonwealth. More than 200,000 new hires in Pennsylvania are supported by industries associated with shale development, according to and tracked monthly by the Pennsylvania Department of Labor & Industry. Last year the International Union of Operating Engineers Local 66 noted their 7,000 member union was very close to full employment, with much of that work being a direct result of Marcellus shale. And despite the rhetoric, the majority of those leading the shale revolution here in Pennsylvania, like myself, are lifelong tax-paying residents of this great Commonwealth.

Just think of some of the other benefits that may go unnoticed by many.

Shale development has led to a great cost reduction in residential fuel. In recent years my grandmother saw her monthly budget for natural gas be reduced by hundreds of dollars, a huge savings to seniors who live on a fixed income. Within the farming community, change is constant. And that statement exemplifies the transformation that has occurred in Pennsylvania agriculture over the past several years due to the Marcellus shale activity. Benefits include decreased heating and electricity costs and increased sales in seed and fertilizer. Farmers are using this new income stream to expand and grow the farming operation and, in many cases, save their farm.

Increased partnerships with the National Wild Turkey Federation and other sportsmen's groups are resulting in more access to hunting lands, specifically designed feed plots and increases to the wildlife, like the pheasant population with some of the highest numbers in years.

Even more locally, for over 50 years the Old Forge borehole has dumped an average of 65,000,000 gallons of water per day into the Lackawanna River and

is the largest point source of pollution in the Chesapeake Bay. And now the process has begun to clean up this problem, thanks to Marcellus shale development and the Act 13 Impact Fee.

Another important development to be noted, the U.S. EPA confirmed in October of 2013 that carbon emissions are at their lowest since 1994, thanks to the increased use of natural gas.

While these are just a few of the positives of having Marcellus shale, imagine a world without oil and natural gas, where electricity prices skyrocket and becomes unaffordable; where home fueling prices increase and affect the poor and elderly; removal of everyday products, like rubber for our tires and shoes, paint, plastics and pharmaceuticals; and increased fertilizer costs, raising the price of agriculture production and food consumption.

And while it's nice to talk about renewables as the main source of energy, and we do believe the proper energy policy should include every option, it's just not practical at this time.

One of the most cost-effective ways to heat your home is with natural gas, used by more than half of all American households. These savings can make a difference between life and death for elderly

or poor deciding to purchase medications and put food on the table. And so instead of talking about moratoriums and bans, we should be discussing safe ways to work together in bringing affordable, clean-burning natural gas to everyone's home and business.

Our overarching message is straightforward. Instead of undermining our strong, consistent and predictable regulatory framework, we should work cooperatively to revise these proposals, to maintain a balance between strong environmental protections and a competitive economic climate.

Thank you for the opportunity to provide this testimony. And remember, it does not need to be a false choice between environment and economics. It can be beneficial to both. And we urge the DEP to continue working with our industry and stakeholders across the Commonwealth on a reasonable, competitive path forward. Thank you.

CHAIR:

Next I'd like to call Diane Ward.

MS. WARD:

I'm Diane Ward, 902 Grove School Road, Wysox, PA, 18854, Bradford County, PA resident and landowner, and also Wyoming County, PA landowner and former resident.

Thanks for the opportunity to provide testimony tonight. I will focus my comments on the proposed standards regarding abandoned, orphaned and inactive wells in 78.52(a), 78.73, 78.103 and 78.105.

My understanding of the issues regarding drilling near legacy wells dates back to 2009, when I realized that the planned Lundy horizontal 2H well in Standing Stone Township, Bradford County was in close proximity to the legacy Harold W. Lundy well, plugged in 1991. At that time I provided input relative to the permitting of the Lundy wells, wrote letters to Oil & Gas, Technical Advisory Board and Chesapeake, amongst others. I provided input on the 2010 advanced rulemaking, and again during the public comment period, a final determination of the regulations in 2010. I am providing copies of the comments I made and the response that I got.

Although no regulations regarding abandoned wells were enacted by DEP at that time, my efforts were not in vain. The Harold W. Lundy legacy well, which was ascertained as inactive, okay, at the time, did get evaluated and ultimately was plugged in March of 2011, prior to the fracking of the new Lundy 2H.

I think facts around that particular

case show that Chesapeake and the DEP did, indeed, agree that although this well was just an inactive well that had been plugged, there was a necessity to plug that well. And we've not heard any data to the contrary since then from any organization, and we feel good that that was plugged.

Although I am pleased to see the DEP addressing this issue at the time, I am more than disappointed at the lack of strength of the regulations, specifically regarding the abandoned and orphaned wells. These regulations only deal with a limited set of wells, the officially abandoned and orphaned, and do not include identification of inactive wells in the area of proposed new wells. Given the Harold W. Lundy well experience, there is clearly a need to identify inactive wells also.

I have attached my testimony, the facts concerning the Harold W. Lundy well, so that you can reacquaint yourselves with the particular well and kind of the evidence as to why you should be including inactive wells in this regulation.

Identification of the wells is not enough. All wells in the area of a planned horizontal well must be evaluated, even if previously plugged.

In Bradford County there are currently five orphaned

and abandoned wells. By my last count from DEP fact records, when the site search for inactive wells was still operational online, Bradford County has 23 inactive wells. The potential hazard to our environment from fracking near these wells is potentially much greater than from the orphaned and abandoned wells. I assume there is a similar situation statewide. And I understand the numbers are huge statewide just for abandoned and orphaned, but we need to include the inactive wells also. The similar situation statewide, the wells must be plugged or replugged, if necessary, prior to fracking.

The visual monitoring at unspecified frequency in your proposed 78.73 is insufficient. The concept of allowing fracking until changes in the monitored legacy well are noted is unacceptable. Requiring plugging after the changes occurs is requiring plugging too late to prevent impact to the environment. This approach is not proactive and does not protect our water.

My proposal is to adopt the Alaskan proposed regulations which were reviewed by the DEP and commented upon in the regulatory analysis associated with these standard changes for the identification piece and for the actual standard that

would provide meaningful change. I have twice provided the DEP with the standard which would require the actual assessment of these wells in the area, not just the monitoring of them. And this standard that I have twice submitted to you before, I am submitting again, because as I would hope that you would review the standard because it goes much further in terms of allowing the assessment to occur prior to fracking, such that plugging can occur prior to fracking.

I'm not going to go through all the rest of this, because I realize I only have one minute.

But in addition to that, I just want to make you aware of a specific concern in our area around Wyoming

County's glacial lakes. Encroachment of drilling toward glacial lakes, such as Lake Carey and Lake

Winola threaten these special resources and current standards do not adequately deal with the special needs of this area.

CHAIR:

Thank you, Diane. We'll read the rest of your written comments.

MS. WARD:

Thank you.

CHAIR:

Thank you very much. Next we have

Stephanie Wissman.

MS. WISSMAN:

Good evening. I'm Stephanie Wissman,
300 North 2nd Street, Harrisburg, Pennsylvania, 17101.

I'm the Executive Director of the Associated Petroleum
Industries of Pennsylvania, a division of the American
Petroleum Institute, a national trade association that
represents all segments of America's oil and natural
gas industry. Its more than 580 members provide most
of the nation's energy.

API is also a standard-setting organization. For 89 years, API has led the development of petroleum and petrochemical equipment and operating standards. These standards represent the industry's collective wisdom on everything from drill bits to environmental protection. API maintains more than 650 standards and recommended practices.

Many of these are incorporated into state and federal regulations.

API supports strong environmental safeguards in stewardship, and commends DEP on the regulatory oversight program, however, we do have concerns with several provisions contained in the proposed rulemaking that we plan to outline in detail in our formal written comments.

In the interest of time, I will highlight some general comments that we have, and also provide a few suggestions on how to better define some of the terms included in the proposed rulemaking.

We suggest language be added to clarify the effective date for the new requirements and that wells constructed prior to that date are grandfathered in. There are a number of definitions and sections of texts that refer the reader to other statutes or regulations. This causes the reader to search elsewhere to find the other statute or regulation and review it before being able to understand what Chapter 78 requires. This is not user-friendly and does not facilitate regulatory understanding and compliance. Also, a number of sections are very detailed and descriptive. We suggest that the sections be given some flexibility to allow for the use of alternate methods as approved by the Departments.

There are eight definitions contained in the proposal that we would like to see better defined. Definition one, approximate original conditions. The definition talks about original land uses. Land use is outside of DEP's jurisdiction to regulate and is largely an issue to be resolved between the lessor and the operator.

Definition two, centralized impoundment, number two. This definition talks about the escape of which may result in air, water or land pollution. It is interesting to note that the oil and gas program regulations propose to contain air pollution controls. This reference to air pollution should be deleted or should be carefully considered, especially in light of recently promulgated federal air rules, which will be implemented by the Air Quality Program via QGB5, the Air Quality Permit Exemption List, categories 33 and 38.

In addition, we suggest that language be added to clarify that this definition does not include secondary containment or impoundment at well sites.

This language should also clarify a centralized impoundment does not include freshwater impoundments.

Definition three, gathering pipelines.

This definition is not consistent with the Department of Transportation definition of the gathering line.

To avoid confusion, we suggest that DEP rules simply use the Department of Transportation definition.

Definition four, mine influenced water. We suggest that the second sentence be deleted. The first sentence captures any relevant discharges to surface waters from mining activities.

Definition five, oil and gas operations, number five. The definition talks about earth disturbances associated with the oil and gas exploration, production, processing or treatment operations or transmission facilities. These activities, under the construction phase, do not involve earth disturbances. We suggest that this be changed to read, earth disturbances associated with oil and gas exploration and the construction of facilities for production processing.

In addition, it is noted that this definition differs slightly from the same definition in the Oil and Gas Act. We suggest that the definition be kept consistent with the statutory term, rather than create confusion of what that term means when it is used by the Department.

Definition six, pits. We recommend that language be added to clarify that this definition does not include secondary containment or impoundments at well sites.

Definition seven, temporary pipelines.

This definition is unclear what differentiates a temporary pipeline from any other pipeline.

Definition eight, water source. We also have a suggestion for that definition.

Thank you for the opportunity to testify this evening. API and its member companies stand ready to continue to work with DEP on striking a balance between environmental protection and economic development. Thank you.

CHAIR:

Thank you, Stephanie. Next I'd like to call Craig Stevens.

MR. STEVENS:

Good evening. My name is Craig Stevens.

I live in Silver Lake Township.

I'm a sixth generation Pennsylvania land owner. And in reading the new regulations that you're proposing and the overview here, I just want to remind everybody in this room that we have a Constitution in the Commonwealth of Pennsylvania. It's quite clear how we're supposed to protect the environment. It says that people have a right to clean air, pure water, the preservation of the natural scenic, historic and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

I'm reading your regulations and I'm hearing the ---. It doesn't sound like the earlier speakers that are representing the oil and gas industry were doing anything constructive towards these. It just sounded like a commercial that I'm seeing on TV all the time. So I will just let you know, some of us live here in the areas where this is going on. And the industry is making it quite easy for us to have questions about it.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

When I moved here four-and-a-half years ago, I was very pro the industry being here. I have a large piece of property that I'm a shared owner in. We have a gas lease. I let them put a pipeline across my property. And what I've seen so far is nothing but problems. There's the DEP's own information that had to be extracted from you by right-to-know, by Laura Legere's article, Drilling Killing Water. I have 161 documents here that are all clearly stated on each one that natural gas drilling contaminated private water wells. What was most interesting was, one of them says Dimock. I have documents on me right here that were signed by the CEO of the corporation three times, of Dimock --- of Cabot Oil and Gas in Dimock, that 19 water wells were found to be contaminated, but only one document.

So I ask here while the DEP is here and the public, is the multiplier on these documents one times 161, or is one 19, and one 6, and one 3? We're confused.

Secondly, I experienced the ---. I see a regulation on boring and putting in pipelines. My own creek in my backyard on my ancestral property was blown out eight times in a row over two-and-a-half months.

The industry told all of us when they came here they're experts. They've been doing this for 70 years on fracking. They've been putting pipelines in everywhere. If they're such experts, why couldn't they get a piece of pipe going under a simple creek in my backyard done without damming the entire creek?

Then we caught them dumping what looked like 100,000 gallons of liquid unknown --- of unknown origin on my private property. By the way, the DEP later found them guilty of doing it and so did Fish and Boat. They fined them and then did not have them come and clean up the spills on my own property.

We're getting tired of watching the commercials and listening to the oil and gas industry come here. I am especially getting tired of it as a

constitutional conservative. If you want to make us feel better about your industry here, if the industry does want us to feel better about them, stop sending predatory land men in signing old ladies up in nursing homes like my grandmother was done. Stop ripping off your landowning partners by taking high production costs out of their checks. And everyone in this room that works for the industry knows that they're being sued by thousands of people.

So stop the activities. Stop putting in compressor stations and have them blow up all down the line here. We've had at least six in the area. So my focus is, you can put every regulation you want on this industry and without proper enforcement and without taking the landowner into consideration --- and my many neighbors nearby who live with plastic water tanks where their water wells used to produce water ---. And I know, you know, we've got a whole denial industry. This is an addiction. It's an addiction. And the first thing people have to do is admit they have a problem before they can get it fixed.

I would love to see the industry be able to come in here and do this properly and get the gas out from underneath my property, and oil. But it

doesn't look like they're proving themselves wrong every single time with their own actions. So I ask them to stop running the commercials. Instead of spending \$150 million a year trying to convince us all this is the best thing since sliced bread ---.

And the next person that tells me it's America's fuel can please explain to me why there are 33 export terminals going in, in North America, right now? Four have already been approved. If this is America's fuel, why are we shipping it all overseas? It's going to cause the price to go up. So the price for natural gas and for heating oil and for propane is the highest level it's been. So I would appreciate if DEP not only puts in new regulations but actually enforces them. That would be a real novel concept. Thank you very much.

CHAIR:

Next we have Peggy Maloof.

MS. MALOOF:

My name is Peggy Maloof, 703 Heart Lake Road, Montrose, Pennsylvania. I am a member of the Susquehanna County League of Women Voters and the League of Women Voters of Pennsylvania for whom I speak.

The League applauds the Environmental

Quality Board for extending public hearings on this proposal. This is consistent with our ongoing commitment to inform citizen participation in government decision-making.

Tonight we focus on the protection of public resource provisions of the proposed oil and gas regulations. Based on our national position, we believe that government policies should promote environment beneficial --- an environment beneficial to life through the protection and wise management of natural resources in the public interest. In concert with the Pennsylvania Constitution, our advocacy stems from Article 1, Section 27 that assures us the right to clean air, pure water and the preservation of natural resources, today and for generations to come.

Based on our statewide study, consensus and position, we recognize that the production of natural gas significantly impacts the environment and the economy. However, such environmental development should not come at the expense of our natural resources and public recreation areas.

Given these positions, we address

Application Requirements. The inclusion of mandatory
notification of well permits within close proximity to
public resources, and the identification of parent

subsidiary business entities are most helpful.

The following League recommendations strengthen the protections of public health and the environment: Post the entire text of all well permit applications when submitted and grouped by watersheds and political subdivisions. This should be in an easily-accessible location, written in a user-friendly format to facilitate public review.

Extend proof of adequate investigation and assessment regarding state, federal, threatened or endangered species with respect to all ecologically-significant species and communities. Given the rapidly increasing rate of environmental degradation and evolving issues related to climate change, a broader purview will offer greater protection for our Constitutional rights.

Trigger the initiation of the application process when permit modifications and renewals occur, while still avoiding other permit duplication.

Expand minimum required distances around proposed surface locations. The proposed distance of 200 feet from these site is inadequate. Degradation from noise, light and air pollution extend beyond such limits. The proposed distance of 1,000 feet from a

drinking water source is inadequate. Homeowners have a 3,000 foot distance from water wells and springs for required notification. Taxpayers deserve the same protection for their public resources. Based on the Duke University study, a distance of a mile or more is needed to safeguard public health.

Extend the 15-day period to 30 days for a public resource agency to make recommendations based on a comprehensive review, analysis and response. The national park review should be the minimum standard used to protect Pennsylvania public sites.

Allow the public, not the applicant, to determine a description of the function and uses of public resource required by the permit.

Include conditions for cumulative as well as site-specific modifications to avoid and mitigate impacts to public resources. The rights of Pennsylvanians should take precedence over the optimal development of oil and gas resources. It should be industry's responsibility to prove their actions will not be harmful. And their executives should be held financially and criminally responsible for damages to public resources.

Post permit renewals consistent with the recommendation for all permit applications.

Finally, we support the addition ---.
We support the addition of disposal and enhanced recovery well permits to the proposed regulations.
However, we suggest these relatively new hazards be examined with greater scrutiny, consistent with the environmental impact studies of the National Environmental Policy Act.

The League appreciates your consideration of our comments this evening. Thank you.

CHAIR:

Thank you, Peggy. Next we have Vera Scroggins.

MS. SCROGGINS:

I'm Vera Scroggins, and I live in Bradley, Pennsylvania, Silver Lake Township, Susquehanna County. And I'm the Director of Citizens for Clean Water.

I've been documenting the industrialization, the heavy industrialization, of our county since 2008, showing what is happening right next to homes, within 300 feet of homes, and what is happening on school grounds and on farms where we produce our food.

Five school districts in our county ---

they are all leased. One school district has two gas wells and high pressure gas pipelines. And now we even had consideration in the paper recently by the superintendent of Elk Lake Schools ---. Mr. Bush, has said that he would consider a compressor station and a dehydrator, a processing situation, right there on the school grounds, which I find absolutely appalling and disturbing.

I would like to say that we have continuing contamination of water in our county, besides the rest of Pennsylvania. You're now proposing 40 more regulations. How are you going to enforce them? Where are the inspectors? From what I've been told recently by an inspector, there's only three oil and gas inspectors for the Northeast Region, and we have two inspectors for water quality. How is that going to be able to help us? We need many more inspectors. We need a Governor that is truly wanting to enforce and regulate and he needs to supply hundreds of inspectors.

I just looked at a site ---. I just looked at a gas site near my home in Silver Lake, the Ftorkowski (phonetic) Farm. This is a farm. They have two gas pads on this farm. It is presently being fracked. Ftorkowski South is being fracked. Then

when I looked up the amount of inspections, there's only one, and they're already fracking. One inspection for a whole gas pad where there are four wells. This I considered absolutely unacceptable, even disgraceful. I do not feel protected in my own township in my own county.

So, therefore, you now are proposing 40 more regulations. What is the point? And why are you proposing them? What are you trying to tell us? You mean there are problems? We need to do more regulations? We need to have more oversight? You mean things are not working out perfectly like the industry likes to tell us? All the ads in the industry, every time they hear an industry rep speak, everything is fine, there are no problems. I even heard one man this morning on a radio station, and he said, there's no contamination. He had the nerve to say that.

Meanwhile, we have at least 161 cases in our state that we know of. I am asking for stricter proposals even. I would like to expand the liability distance from the gas wells. Right now it's 2,500 feet. If there's contamination within 2,500 feet from the gas pad, the industry is automatically liable. I say we need to go at least a mile or a mile and a

half.

We have cases right now that are to me explicitly clear that they have been contaminated since drilling and fracking. And they are a mile or a mile and a half away.

We also have leaking wells. We still have leaking wells. The industry tells us they know what they're doing. Why do we still have migration of methane and heavy metals in our communities? We have a leaking well right now on State Route 3023. The Cabot Oil and Gas has been working on it, starting next month in February it will be a year. One year trying to repair it. They put millions into it. They don't want to admit that it could be a problem.

I would like to see a limitation of how long they can repair or fix a leaking well. One year is totally unacceptable. The people that live there have to be exposed to the noise, the lights, the traffic now for a year. And they still haven't fixed it. And DEP has told us several times it's going to be plugged. Meanwhile, Cabot resists and they keep trying to fix it. So I would like to see that changed.

And I would like to see more transparent records. Every time there's a contaminated well and

DEP has determined it, I want to see that on the DEP site. I want to know when my neighbors are contaminated and I have to really start to check my water even more closely and get it tested. We need to have that on the DEP site every time you've determined a site. Thank you.

CHAIR:

Thank you. Next is Kristin Landon.

MS. LANDON:

Hi. I'm Kristin Landon, 11 Baker Hirkey Road, Tunkhannock, Pennsylvania.

Good evening. My name is Kristin

Landon, and I am a lifelong resident of Wyoming

County. Currently I live in Lemon Township. I hold a

degree in electrical engineering from Wilkes

University, and I have spent 20 plus years of my

career working for the wireless telecommunication

industry on siting towers and other infrastructure for

the industry.

I'm a natural gas leaseholder, a stayat-home mother of two young children, and I work full
time as an engineering consultant. I've been
observing and experiencing firsthand the Marcellus
shale development over the past four years. Within a
two mile radius of my home I have six active well pads

and approximately 16 spudded wells, the Hirkey

Compressor Station, and one freshwater impoundment.

The closest well is within 3,500 feet of my house. I

want you to know that I actually feel, hear, see and

breathe Marcellus development 24 hours of every day.

I'm here to state my support for the quick passage of revisions to the Chapter 78 Oil and Gas Wells Code. I've read reports on both industry and environmental comments from hearings in other parts of the state. Industry states the proposed regulations kill jobs. Environmentalists state the regulations are not strong enough. As I see it, these regulations will help create jobs in the local environmental and engineering firms that currently exist in Pennsylvania. The industry will not stop drilling because of the regulations. They are not prohibitive, so the argument about job loss is unfounded, in my opinion.

On the other side, the environmentalists want strict regulations that may impede industry. The proposed regulations are much better than what we have currently, which is nothing. So it is of benefit to the environment to enact these regulations.

We need compromise in the middle, which is what I think these proposed regulations represent.

It is my understanding that both industry and environmental groups work on roundtable subcommittee discussions about these regulations over this past year. That was the time to debate and fight it out.

I want to use my five minutes this evening to express how critical it is to me as a resident and leased landowner in the development area to have these regulations in place to better protect the health, safety and welfare of my community. I live in a county and the township has no zoning or protections for landowners on any of these issues. I feel regulations are extremely important when you have an industry that has a large amount of operators, 73, according to the DEP executive summary document.

Speaking for residents of the shale region, we need action now, and I urge no further delay.

three of the revisions being proposed. First, Section 78.15, Application Requirements. I'm very heartened to see that the natural gas industry will be required to consult with the Pennsylvania Natural Heritage Program, as well as be required to notify about the impacts to public lands.

While it is not as encompassing or as

protective as it should be, it is a start. And these regulations need to be approved quickly to afford some type of endangered species and public land protection.

In addition, I recommend that DEP look at added provision to the section that a company planning for a well, pipeline or compressor station or other gas-processing facility should only be allowed to apply for a permit if they have a current lease in place or a letter of authorization from the landowner.

Currently, the above-described applications can be submitted to the DEP for review without a lease in place with the landowner. It would save DEP's time and resources and allow the public to have accurate information on the facility prior to the installation, instead of receiving amendments to the permit after the fact.

Second, Section 78.51, Protection of
Water Supplies. This section has brought quibbling
from both industry and environmental groups. I
understand this section to mean if my private water
supply was a superior supply to the Safe Drinking
Water Standards pre-drill, then it needs to be
returned to that superior level, not just safe. By
means of example, if my pre-drill fluoride level is at
a hundred milligrams per liter, and Safe Drinking

Water Standards is 250 milligrams per liter, and my post-drilling water supply rises to 600 milligrams per liter, I expect that this section will require the industry to return my water supply back to a hundred milligrams per liter, not 250.

If something happens to the quality of my water as a result of drilling, it is only fair and just that the quality of my water be put back to the same high quality that existed before drilling. If the industry or environmental groups feel this language is ambiguous as written, then DEP needs to make it clear in its language, perhaps by listing examples as given above.

Impoundments. I recommend these centralized impoundments be eliminated entirely and not permitted. This section was the lengthiest in the proposed Chapter 78 changes, ten pages of regulations on this section alone. The storing of flowback fluids in an impoundment area provides inadequate protection of groundwater resources. The industry can do better and has done better. Many operators do not even use centralized impoundments. The industry should be required to use the above-ground containment systems outlined in Section 78.57 of the Code.

Protection of groundwater and other water resources should be one of the Commonwealth's greatest concerns. Leaks can go undetected in these centralized impoundments. Why take the chance? Since there are other methods available to the industry, why not require them to do the safer alternative? I thank you for the opportunity to speak before you this evening and provide my input.

CHAIR:

Thank you, Kristin. Next we have Mark Cline.

MR. CLINE:

Good evening. My name is Mark Cline, 1
Longfellow Avenue, City of Bradford, in McKean County.

I'm a fourth generation oil man, and I'm also on the
Board of Directors of the Pennsylvania Independent

Petroleum Producers.

These new Chapter 78 regulations, the way they are now written, will destroy the conventional oil and gas business. I would like to read to you the first sentence of the DEP handout given at these hearings.

In 2012 Governor Corbett signed the 2012 Oil and Gas Act, Chapter 32, Act 13 of 2012, which significantly revised Pennsylvania's oil and gas laws

to address unconventional well development in the Commonwealth. I believe that sentence alone says it all. Conventional operators were not meant to be in these regulations, but here we are fighting to save our industry because we were included in regulations that were not written for us.

The conventional industry should never have been included as we are not a new industry. We have been here for over 150 years. Our two industries both drill wells, but we are completely different. The conventional industry drills shallow vertical wells. The unconventional industry drills deep horizontal wells. Their drill cuttings have contaminants in them, ours don't. They have very high pressures in their wells, ours don't. The unconventional frack job sometimes uses 100,000 barrels of water. The conventional frack job uses about 1,000 barrels. The amount of traffic going to and from a Marcellus drill site and frack job is about 50 to 1 compared to a conventional well being drilled and fracked.

The well site for an unconventional well is around five acres. A conventional well site averages 100 feet long by 50 feet wide. We leave a very small environmental footprint.

I would like to tell you that we support the Marcellus industry, but we should not be regulated the same.

In 2010 the conventional industry had 7,280 operators of oil and gas wells in Pennsylvania. There are over 100,000 oil and gas wells in PA. Most of these wells produce less than a barrel of oil a day, but when you take the sum of them all, they produce quite a bit of oil. The year 2011 was the most current year that I could find for production records for conventional wells in PA. We produced 2,270,500 barrels of oil and 249,323,980 mcfs of natural gas.

A study done in 2008 said that

Pennsylvania conventional oil and gas industry

supported more than 26,000 jobs and generated over

\$7 billion each year, with an additional \$200 million
in annual royalty payments to landowners.

These conventional wells produce Penn

Grade Crude oil, which is the best lubricating oil in the world. There are two refineries that refine Penn

Grade Crude oil. One is in Bradford, PA and the other is in West Virginia.

American Refining Group in Bradford is the oldest continually running refinery in the world.

They are now operating at 2,000 barrels a day less than they would like because of a shortage of oil. Fewer wells are being drilled because of Act 13, and now these Chapter 78 regulations are going to make things impossible for conventional operators to drill new wells and operate their older wells.

Most of the 7,280 conventional operators will be put out of work. The jobs lost from companies that deal indirectly with the conventional industry will be many times that in people out of work.

What the conventional industry is asking for is to revert back to the regulations of the 1984 Oil and Gas Act and have our own inspectors. The Marcellus industry should have their own regulations and inspectors. The reason we are asking for separate inspectors is there are too many regulations to learn, and enforcing the right regulations to the right industry would be complicated.

On behalf of the conventional operator,

I am asking the Environmental Quality Board to not

pass these regulations as they are now written. Thank

you.

CHAIR:

Thank you, Mark. Next we have David

25 Buck.

MR. BUCK:

Are you ready? Thank you. Thank you for letting us be able to speak tonight here in Tunkhannock.

Dear members of this hearing, I am David
A. Buck of 7417 Route 187, Sugar Run, ZIP Code 18846.

I live and my occupation is on the Susquehanna River. I own a canoe and kayak livery business, and we are in the 15th year of business. The Susquehanna River is a national recreation water trail, and is a national historic water trail. It's a connector trail to the Captain John Smith historic trail in the Chesapeake Bay.

The river has national recognition, but it's not a scenic designation. The water quality of the river is also the quality of life of the Chesapeake Bay.

On January 23rd, 2014 our water quit flowing into our house from our well. Our water lines had frozen. It's a simple problem, but it was a short time without water that makes me realize how important our water really is.

The contamination of the river in West Virginia was a large wake-up call when thousands of people lose their water to a chemical spill. How long

after an event like this does it take before one can allow their children to drink or bathe in once-contaminated water.

A methane leak from a gas well being drilled almost two miles from my home contaminated the water wells near my residence and my neighbors. I have two residential wells that were contaminated that Chesapeake Energy had to install expensive water treatment systems on. I want to sell both of these properties and having had a water problem reduces the value and the possibility of buyers.

away, the methane --- excuse me. The methane problem seems to be going away. The methane bubbles in the river have diminished, but the threat lingers. A neighbor, Ed Bidlack, who owns the business, Ed's Heating, is not as fortunate. His water well is polluted so bad he does not have any water that's safe to use. He has water bottles brought to his residence. He spoke to me about this problem. I'm sure those of you sitting on this Board know about this.

Here's a home and business with no water. How does that diminish the value of his investment property? Who makes up the difference of

the money? Are there others --- buyouts of improper drilling activities that have had total polluted water supplies? If the chemicals are in the aquifers of our drinking water, it is only a matter of time before it is in the Susquehanna River.

DEP was proud to release a short documentary last week about the research they are doing on the lower Susquehanna to maybe find out what is causing the smallmouth bass to be scarred with sores and black marks. If you have not seen this link, it's interesting.

even show this. I've heard from scientists that have been studying the river, this is a piece of crap that I've seen about the Susquehanna. If it is antibacterial soaps and personal hygiene cleansers that are polluting the river, then ban them from use in our watershed. Little mention of sewage that is being released every day into the river.

Now, on top of that, drilling chemicals are left in underground areas all throughout Northern Pennsylvania. It will surface someday and may go undetected in our drinking water and in the river until it's detected by sickness or death.

Our forefathers who burned and destroyed

the Indian villages along the beautiful Susquehanna River did, when the dust settled, guarantee the residents of this state clean air, clean water. You, the Department of Environmental Protection, are not doing your job.

Whether you are staffed, understaffed, reregulated or somewhere along the line bought out, the citizens can only throw their hands up in the air. Environmental Protection, do your job.

When the big --- excuse me, the big gas corporations have drilled and gone away, who pays the Pennsylvania citizens for the loss of clean water?
With that being said, not to weaken proposed regulations and our standards of living by pressure from the gas and oil industry, 200 feet is not enough distance from the important lands or structures.

The legislation is even now up in the House to reduce riparian distances between our waterways. If I would stand in this room, I would say I'm probably not too far from 200 feet from that corner of this room to this corner. It's not far enough. Thank you.

CHAIR:

Thank you, David. Next I'm calling Tom Shepstone. Thank you.

MR. SHEPSTONE:

I'm from Honesdale, Pennsylvania, 100 Fourth Street.

I'm a planning and research consultant and I've consulted with numerous municipalities throughout Northeastern Pennsylvania gas region, and I've assisted some of them in drafting some regulations having to do with certain aspects of the industry.

I also have consulted with some gas companies. I'm a leased landowner myself, and I publish a blog called NaturalGasNOW.

I support most of what is in the proposed new version of the Chapter 78 regulations, because they strike a reasonable balance of economic and environmental concerns, and address some of the details that need to be addressed to keep Pennsylvania's regulatory program where it needs to be.

Nonetheless, I remind you,

Pennsylvania's existing regulations were reviewed in
the fall of 2013, just last year, under the State

Review of Oil & Natural Gas Environmental Regulations,
or STRONGER program. It was determined the

Commonwealth's oil and gas regulatory program, even
before the currently proposed revisions, was well-

managed, professional and meeting its program objectives. Moreover, this followed an earlier STRONGER report that called Pennsylvania's hydraulic fracturing regulations one of the nation's most stringent.

So the system is hardly broken. We don't need to fix anything, although upgrading and tweaking to keep up with technology are always warranted, provided Pennsylvania avoids the temptation to fall into mission creep, that horrible disease of all governments that has paralyzed our neighboring state of New York and resulted in job stagnation, and sales tax decline just over the border. We don't need their zero job growth across the Southern Tier or recently announced 8.7 percent sales tax decline in the Binghamton area.

What we do need is a balanced set of regulations, not unlike the ones we have now, that have protected the environment, allowing our economy to compete with that of other states. The proposed revisions to these regulations include a few troubling things in that regard. Most important is the addition of a new category of protected species, an action that will empower special interests to throw up regulatory obstacles to any and all development for what are

purely speculative concerns of no substance.

Section 78.15(f)(iv) refers to critical communities and special concern species, neither of which is defined, except to say they're the same. We already have federal and state-listed threatened and endangered species list. We already give more rights to some species than we do to people in this Commonwealth.

While the industry has supported protective measures for endangered and threatened species and will continue to do so, there's absolutely no basis for designating species this way. It is a loophole just waiting to be exploited by unscrupulous opponents of development as a delaying tactic. It is vaguer than the morning fog in some parts of Route 6.

Will environmental special interests be effectively making it up for DEP by challenging every application with form letters objections based on the possible existence of some relatively rare but non-threatened plant? What criteria will be used to determine whether there's an impact to a species and to mitigate it? This is a recipe for unending uncertainty, which is what is killing New York. We don't need this in Pennsylvania. I urge you to revise the proposed

61 1 regulations to eliminate this and other unwarranted extensions of legislative authority. Thank you. 3 CHAIR: 4 Thank you, Tom. Next we have Carolyn Nepp (phonetic). Carolyn Nepp? 6 MR. FERULLO: 7 Carolyn isn't here tonight, but she said 8 I could speak in her place. 9 CHAIR: 10 Okay. We need to get your information, 11 then. 12 MR. FERULLO: 13 Huh? 14 CHAIR: 15 We'll have to get your information. 16 MR. FERULLO: 17 Yeah, okay. I have it here. My name is 18 William Ferullo. 19 CHAIR: 20 Can you spell that, please, for us? 21 MR. FERULLO: 22 Yeah. It's F-E-R-U-L-L-O. Okav? 23 name is William Ferullo. I live at 4834 Leraysville 24 Road, Bradford County, Warren Center, Pennsylvania. 25 I could really rattle on here for quite

a long time, especially since my friend there, Tom Stepstone (sic) has just spoken, who he knows me by --- online I've talked to him, and I think I've met him a couple times. Actually, he's a person that really doesn't know what's going on, in my opinion, but I won't go there. Okay.

After experiencing natural gas drilling and extraction in my area of Northeast Bradford

County, PA for the last four years, and seeing raised 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 hydraulic --- hydrofracking.

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 Pennsylvania. Number one, the water supply should be restored to the standard of the Safe Drinking Water Act at a minimum, with emphasis on being more concerned for the public having issues caused by the natural gas extraction process and speeding up the

resolving of such issues related to the drilling, which is not being done right now. I know people that it's over a year and they have no response from the DEP at all, not even a call or a letter.

Number two, the DEP should establish standards to protect people in drilling areas with mandatory pre-drilling and after-drilling regulations throughout the State of Pennsylvania.

Number three, testing of all drilling cuttings and waste from natural gas drilling processes should be made mandatory and comply to safe standards for the public.

Number four, establish strict standards and regulations for silica sand dust contamination from fracking on sites near people's homes that's only a few hundred feet away. This is not being addressed at all. And I have called the DEP a number of times, and they tell me I should contact my legislators. And the legislators kind of pass the buck to the DEP. So it's just a constant game here, you know what I mean?

All right. Let's see, number four ---.

Number five, establish mandatory regulations using the best technology known to eliminate pollution from all natural gas-related operations and facilities.

Number six, create a statewide

information and response program throughout the State of Pennsylvania to inform and protect all residents from possible dangers caused by natural gas operations.

Number six, increase all air-monitoring sites close to sources of pollution and facilities of natural gas extraction, protecting local residents from sources of pollution and inversion caused by the local mountainous terrain that we have here in Northeast Pennsylvania and in other spots of the state. In other words, inversion. Okay?

Number seven, the use of Halliburton
CleanStim should be made mandatory for all future
fracking done anywhere in the State of Pennsylvania,
mandatory. CleanStim is a cleaner ---. Not that I
promote it, but at least it's a step towards doing
something. I have lived with this here now four
years. And I hear all of these people from the
industry talk about how wonderful. I watch
commercials. I see all these guys with all this ---.
I mean, they got papers here. I've seen them flip
through papers here and they're all in the jobs and
all that stuff.

I spent the day today down at Bradford County Commissioners with a person who has been out of

his house for almost a year and the DEP has done nothing. I talked to the head counsel. I've done everything. This person had to leave his house because of methane in his water and fumes in his home. Him and his wife left his house. They left everything there. They rent a place now in Johnson City, New York for a thousand dollars a month. Nobody's done nothing for them. The State, the DEP has done nothing, nobody. So today I went to the Bradford County Commissioners.

Okay. That's all I've got to say. I hope this doesn't just pass in the wind and something is really done. Thank you.

CHAIR:

Thank you, Bill. I just wanted to make a quick note. And just to be respectful of everybody in the room, please do not reference anybody personally in your comments. We respect everybody's opinion and we know that this is a very interesting and at times contentious process. So we just want to be respectful of that. Thank you. Next we'll call up Howard Hannum.

MR. HANNUM:

Howard Hannum, H-A-N-N-U-M, Sidney
Center, New York, which is located in the Southern

Tier of New York, about 50 miles north of Montrose, where we currently have 5.6 percent job growth, the cleanest air in the world, the cleanest water in the world, and the best organic farms in the world.

As a good neighbor policy, on behalf of the Concerned Citizens of the Southern Tier of New York, I would like to comment on the new proposed regulations.

78.51 and 78.52. We would like all current and future water quality tests to be done by an independent lab to include the required certification. We do not think it's appropriate to have the lab of choice be selected by the operator. Therefore, we'd like to see the DEP put a halt to this policy.

78.52. We'd like to see the Department identify spent wells and enter each one into a database to make for easier identification. We would like any and all spent wells to be capped before any future work begins.

78.70. We would like to see brine spreading on roadways to be discontinued. We would like to see harsh penalties for any operator that spreads brine on any roadway, and especially those near schools, bus stops, churches, as well as

hospitals and any roadway that is used for walking pets, hiking and biking.

In general, we'd like to see any and all gas drilling operations, including gathering lines, pipelines, transportation, operations and compressor stations prohibited within a mile from all schools, churches, bus stops, parks and hospitals as well as any public place used for congressional --- congregational purposes. We'd also like to see these same listed operations banned from all State Forests and State Game Lands.

We would like to see the Department put a halt to mountaintop removal. We would like the Department to put a halt to open air pits for produced water and wastewater, as well as drill cuttings. We'd like to see onsite burial of these same items prohibited. We would like to see the prohibition of open air pits with liners as well.

Here at the Concerned Citizens of the Southern Tier of New York, we would stand with the Clean Air Council in favor of green completion technology used for any existing and future gas drilling operations to include well pads, compressor stations, pipelines and gathering lines and fibulators, ventilators and dehydrators, LNG

processing facilities and fertilizer manufacturing facilities.

And finally, while we stand with the Clean Air Council on the issue of green completion, we think the best course of action is to enact a statewide two-year moratorium on any current and future gas drilling exploration in order to sit down at a table for intelligent discussion with members of the DEP, the gas drilling industry and concerned citizen groups across the State of Pennsylvania.

CHAIR:

Thank you, Howard. Next we have Epifanio Bevilacqua. I apologize if I mispronounced that.

MR. BEVILACQUA:

Mello. How are you doing? We've been mostly talking about putting a compressor station to put --- and well pads to put computerized monitors. And I've also called DEP of Pennsylvania. If they hang up the phone in Pennsylvania, what are we going to do in New York when they start coming? So we don't want them in New York, period. We have too much to lose in New York. We have too many people depending on the water that's being brought down to the five boroughs and people up here. The Susquehanna River is

already enough polluted.

And I have family in Sidney also. I have a grandchild coming along, so we don't need to have people have cancer from all kinds of ingredients that they put into these things and we just keep polluting the air and everything else.

We also need to have them do less pollution. And we have to maybe get Homeland Security to oversee all of it. It's our homes. It's homeland. Homeland gets involved with terrorists. We have terrorists right in our backyard, the oil companies and all the industries. So we need Homeland Security to come in and clean up house the way they clean up houses and organizations in Manhattan and all over the place. And I've seen it done. People that don't do their jobs, people that are participators, so we need Homeland Security in this. Thank you.

CHAIR:

Next we have Reverend Dr. Ellen Silvilo (phonetic).

MR. HANNUM:

Dr. Silvilo is not with us today, ---

CHAIR:

Thank you.

MR. HANNUM:

--- because of the weather.

CHAIR:

Thank you. Okay. Well, next we will have Kathy McNulty.

MR. HANNUM:

Kathy's not with us either, because of the weather. It's snowing in New York.

CHAIR:

Oh. Thank you. We'll move on to Victoria Switzer.

MS. SWITZER:

Victoria Switzer, Dimock, Pennsylvania.

On November 18th, 2008, I attended the Senate Majority Policy Committee hearing, held at the College Misericordia in Dallas, Pennsylvania. It was advertised as a public hearing to better understand and manage the opportunities and challenges posed by the development of the Marcellus Shale Play.

Industry, elected officials, representatives of DEP and DCNR, as well as others, were slated to speak. It seemed like an opportunity for citizens to learn more. I was particularly interested, since we already had over a dozen unconventional gas wells drilled near my home.

industry representatives complained about the burdensome paperwork Pennsylvania required, demonstrating with a huge pile of papers and the delays it cost in obtaining permits. One by one industry reps warned of ominous consequences if DEP did not become more welcoming. They would move drilling rigs to West Virginia and delay transfer of a significant number of employees into PA because permitting delays were worse than any other state.

Texas had a seven-day permit wait and Pennsylvania had a 45-day process in place at the time.

With new wells going in monthly in my neighborhood in 2008, I wondered what delays had occurred there.

The GOP Senators were very sympathetic, nodding their heads and went further to expound on the importance of thousands and thousands of jobs, and even denounced the danger of killing the Golden Goose.

When the newly appointed Secretary of DEP, John Hanger, concluded his remarks with the emphasis on the need to protect Pennsylvania's environment, he was directed to streamline the process.

Fast forward to now. That Goose has been very busy in the past six years, \$800 million

plus at the wellhead, and over \$4 billion and some change for residential price. And that's just from one Goose in a four-mile radius of Dimock.

I'd say we are well past the point of worry that the industry will not set up drills or bring their workers to Pennsylvania. In fact, I would say we know a lot more of what they will bring. That train has left the station and it is loaded. Where that train is heading remains the challenge.

Regarding (sic) the regulations and proposed revisions to Chapter 78 is almost as difficult to get through as the Affordable Healthcare Act. Try as I may to be a participant and not a victim in the process of submitting the suggestions, I focused on the section on pits. I know a little about pits.

There are pages of requirements and directions on how to do the pits. How about no pits? The idea to allow any pits to be buried on a landowner's property without having to obtain his or her consent was dropped because the industry protested and DEP determined such restrictions were not practical.

Each morning, faithful to my commitment to never again be ignorant regarding natural gas, I

read the gas news. Invariably the morning headlines proclaim yet another ban in another city, another community, another country, no fracking. Other headlines announce the liquification and exportation of our resource. Exclusive world buyers line up to buy U.S. natural gas, China, Japan, India. Even Forbes Magazine published an article with the lead-in, Billionaire Father of Fracking, George Mitchell, Says Government Must Step Up Regulations.

We know all too well that the necessary sacrifice will be allocated to areas of poor, rural, nonzoned communities. Certain areas, areas with affluence and influence will be exempt from the massive industrialization of their backyards, front yards and even their school yards.

DEP, Department of Environmental
Protection, I suggest you no longer regulate or
mitigate what harm is allowed but do everything in
your power to prevent it. And if you do not have the
ways, the means to do so, then stop issuing new
permits. You are the foot soldiers, boots in the
field. You were hired to protect Penn's Woods.

As for the elected officials, DEP, hit the pause. There is no rewind for this, only a fast forward into a disastrous future for the children,

your children, our children.

CHAIR:

Next we have Melissa Troutman.

MS. TROUTMAN:

Hi. My name's Melissa Troutman. I'm at 122 Billy Lewis Road, Coudersport, Pennsylvania in Potter County. Apologies for exceeding the five minutes at the last hearing. I'm going to try to be extra brief tonight.

At the last hearing in Indiana, Ron Slabe, from Westmoreland County, testified about shallow fracking in his township of Upper Burrell by a small conventional driller born and raised in Pennsylvania --- Penneco. And I was reminded of that shallow fracking, shallow fracking by a conventional driller.

DEP defines conventional and unconventional not by methods used or the amount of pressure used, but by what formation is being drilled. Or in fracking, in this case, last part. And please, somebody interrupt me and even shout at me if I'm wrong, but I don't remember seeing anything --- any mention in the proposed regs of pressure at all. And so I'd just like to propose that, you know, considering that some conventional drillers are doing

shallow horizontal fracking now, that maybe the regulations conventional and unconventional definitions are revisited to incorporate more of the methods used, the amounts of pressure, yada, yada, yada, rather than just the formation that happens to be.

Like I said, I saw no ---. I saw really no mention of pressure in the regs at all. And in the documentary, Triple Divide, I submitted at my last testimony, Jim Harkins, who is a resident in Potter County, his well water turned brown two days after fracking, and that was attributed to the movement of pressure underground. The company provided water until it cleared up, but, you know ---. And, again, in the film, Triple Divide, we have hydrogeologist Bob Haag, who explains the pressure bulb effect from fracking. And I'm also including Mr. Haag's report about the pressure bulb in my --- with my testimony. And I urge you to take into consideration the pressure bulb and other factors when you revise these regulations, hopefully.

I know we cannot stop oil and gas production cold turkey, but we can certainly put on the brakes. Conventional drilling is not without its own legacy of pollution in some parts of the state,

but it's nothing like the high volume slick-water bores in hydraulic fracturing or modern fracking going on today.

I

The industry wants to do an estimated over 100,000 frack bore holes underneath three-quarters of Pennsylvania. And does anyone know what the net effect of that will be, you know, on the bedrock of our state, really? A hundred thousand new holes and there's an estimated 250,000 old and abandoned ones that still need to be plugged. We don't have any cumulative figures on what this is all going to mean for our water and our soil and our public land and our climate.

I mentioned at the last hearing that Pennsylvania has more freshwater resources than any other state, except Alaska. And meanwhile DEP hasn't denied a single stream setback. 87,000 miles of streams in this state and there has not been an opportunity to enforce a stream setback?

We are all here nitpicking the new regs and the old ones aren't even being enforced. So where does that leave us? Why are all the people taking our time to do this? Everyone whom the Department is supposed to be looking out for, it leaves us right where we should be, I guess, paying attention. And

all over the state people are waking up more and more every day and saying, hell, no, I do not want this, it's not being done right.

And what do our great protectors do in return? The DEP and the informative administration are trying to trump the State Constitution by taking away our verbal rights to say no. This is America, land of the free and home of the brave; right?

I want to leave you with two quotes, both by Pennsylvanian's I greatly admire. The first is Dr. Stephen Kleghorn. And I promise I'm not giving away the end of Triple Divide when I say he has these last lines, but Dr. Kleghorn says, you do not scare me. You ought to be scared of me and what I'm capable of nonviolently to resist you, because this is my life and you don't get to take away my life without a fight.

And the second quote is by Ralph Abele, who served many state conservation posts, including head of the Pennsylvania Fish and Boat Commission for 15 years until 1987. And Ralph pretty famously said, do your duty and fear no one. So thank you.

CHAIR:

Thank you, Melissa. Next we have Joshua Pribanic.

MR. PRIBANIC:

Good evening. My name is Joshua

Pribanic. I'm here to submit comment as an
investigative journalist for the nonprofit news
organization, <u>Public Herald</u> and as the co-director of
the documentary on fracking, Triple Divide.

My comments today will focus on Section 78.62 of the proposed rulemaking regarding pre-drill testing, prealteration surveys.

On February 23rd, 2012 a resident of
Windham Township in Wyoming County called in to
complain to DEP, stating that their water had changed
since drilling occurred. The call is documented in
DEP water complaint files under the number 287194. A
month later DEP responded, conducted post-drill tests
of the water supply. During the testing, the resident
voiced concerns to DEP about drinking their water.
DEP field staff stated in the complaint file, I
further explained to the property owner, I'm not
making an assessment whether or not the water is safe
to drink. I explained that sampling I will conduct is
an attempt to determine if changes were the result of
drilling activity, end quote.

Post-drilling test results by DEP found elevated levels of iron, manganese and aluminum.

Arsenic tested at .463 milligrams per liter, which is 46 times above the safe level for human consumption. The investigation notes that pre-drill test results found no technical levels of methane in the drinking water, whereas post-drill test results found methane above levels --- alert levels and in some cases 14,000 micrograms per liter, approaching explosive levels for a home.

These tests all proved the drinking water supply had changed from pre-drilling conditions. However, DEP concluded that natural gas drilling did not impact this drinking water supply. This story is not uncommon. So far there have been over 60 fracking complaints in Wyoming County submitted to DEP. Here's what happened to a few of them.

Complaint number 282615 found explosive levels of methane at 30.6 milligrams per liter. Complaint number 297422 saw contamination after fracking. Complaint number 282558 found methane at 25.8 milligrams per liter after fracking. Yet these complaints from legitimate pre-drill data were poorly investigated by DEP in Wyoming County, then received non-impact determination letters. In fact, they're not included in that 161 number that's been mentioned many times in the state.

In Triple Divide, we spent nearly 15 minutes to show how DEP mishandled pre-drill testing. In April 2011, Chesapeake Energy experienced a blowout at the Atgas 2h well in Leroy Township. Chesapeake hired SAIC, who studied seven residential water wells near the blowout, which included pre-drill water tests for each well.

In October 2011, SAIC sent DEP their conclusions, which showed one water well named RW04, 1,200 feet directly downhill from the blowout, had a tenfold increase in methane and other contaminants, and ethane and arsenic that were not found in predrill tests showed up in post-drill tests.

Regarding this well's significant change in water quality after the blowout, Chesapeake concluded their own pre-drill water tests did not reveal the well's true water quality, that the water quality was always this way before the drilling.

In the final consent order, DEP neglected to address the failed pre-drill test scenario and allowed Chesapeake Energy to go unquestioned.

A decision like this not only changes the water quality history of this state, but it establishes a preexisting condition that can be used

by industry to avoid liability in other cases. For multiple pre-drill tests to go through a DEP-certified lab and later be discarded by industry, draws into question the validity of baseline data collected as a whole from both DEP and industry.

DEP has been aware of these cases long before these hearings were scheduled. They're aware of the pre-drill scandal, yet have done nothing in these updates to correct it.

In conclusion, based on the science available to DEP and to the EQB Board, Section 78.62 on pre-drill testing is a failure to both resources of Pennsylvania and to the Americans that have protected these resources for decades prior to fracking.

If you do not change this section by including specific testing parameters and exactly how many pre-drill tests represent the drinking water supply, more Pennsylvania residents will go unprotected not by the result of failed science, but by a criminal negligence on your part to establish comprehensive laws based on available data. In essence, your lack of action is forcing more residents to drink contaminated water by no fault of their own. Use the science, study the data and change this section to protect Pennsylvania drinking water sources

for generations to come. Thank you.

CHAIR:

Thank you, Joshua. Next we have Adrienne Panuski.

MS. PANUSKI:

Hello. My name is Adrienne Panuski and I am from Luzerne County, Pennsylvania. I am a citizen concerned about the current impacts of oil and gas drilling operations throughout Pennsylvania.

I believe the best way to protect
Pennsylvania citizens and our natural resources are
through transparency and accountability. Every
Pennsylvania citizen has a right to their health,
clean water and clean air. I believe and urge the
Pennsylvania Department of Environmental Protection to
make as much information as possible from gas drilling
operations available to the public online so the
public can have all the information necessary to
choose where they would like to live.

For each recommendation that I mention, I would highly urge that the DEP create an online database available for free to the public so the public may have access to that information at any given time.

First, I highly urge the DEP to make all

drillers conduct pre-drill water testing and air testing at sites and not at the cost of the property owners or those living within the area. I highly recommend this testing be completed by a neutral third party that has no ties to the gas industry or even the DEP. If water should become contaminated after drilling has occurred, it should be up to the driller to pay the costs and return the water quality to the highest standards available for drinking water.

Secondly, I urge the DEP to make it mandatory for all drillers to provide a list of chemicals they use in their drilling process, and the dangers to humans and the environment. It should be prohibited to not list a chemical because it is considered proprietary. With public health and safety in mind, if a disaster were ever to occur, how would the public know how to prevent exposure or treat exposure to these chemicals if they are not known? How would our emergency room personnel know how to treat citizens as they come in with varying symptoms? This is why it is critical that a regulation be passed to make these chemicals available to the general public, first responders and medical personnel.

Third, since the technology already exists to contain contaminants in closed-loop systems

and tanks, then I urge DEP to propose in their regulations the requirement for closed-loop systems. All open pits should be banned, including temporary pits. The suggested nine-month allowance is also too long for temporary storage pits, and these should be prohibited.

I agree with the DEP to have freshwater impounds be registered with the Department, and I suggest this information also be made available online, along with open pits, temporary open pits and underground partially buried storage tanks, et cetera. Obviously though we would like all of those prohibited, but if they are not, then we should have a database.

I highly recommend DEP prohibit the use of brine for dust suppression and de-icing and road stabilization. We need to pass all regulations possible to stop these chemicals from entering our air and waterways and adding to the already heavy air pollution we experience, especially in the winter months.

The DEP acknowledges that public resources are a major economic contributor to Pennsylvania. Therefore it is absolutely necessary that the strictest regulations are put into place to

protect these resources.

These regulations should also extend into other areas of the gas drilling industry, such as pipelines, compressor stations, gate and metering stations, dehydration stations, et cetera. DEP's current proposal of the Chapter 78 provisions requires applicants to notify appropriate agencies when applying for permits within 200 feet of a public resource. I highly urge DEP to increase this distance to at least a half a mile around the public resources, including publicly-owned parks, forests, game land or wildlife area, national natural landmarks or historical or archeological sites. These areas must be protected and preserved so present and future generations may be able to enjoy them.

I live near Frances Slocum State Park in Luzerne County. There are already vast stretches of land that have been clear-cut for pipelines very near the park. I can't bear the thought to think that well pads or open pits, et cetera, can next be placed so close to this State Park if stricter regulations are not put in place.

In closing, I would like to urge the DEP to extend the public comment period to the full 120 days. I would like to urge the DEP to hold more

public hearing comment sessions in other counties. I live in Luzerne County, and I had to drive an hour today to this hearing, since it was the closest for me. And also, it seems many other people have driven quite farther.

I believe a public hearing comment session should have been held in each county across Pennsylvania. I also find it extremely inconvenient for the public comment period to be held during the holiday season, and these public hearings to be held during the dead of winter, when weather and travel is so difficult. This meeting had to be rescheduled due to weather, and it is not fair for those citizens who now cannot make the meeting. I also feel five minutes is not a sufficient amount of time for each citizen to speak on a matter that greatly affects their health and everyday life.

So I would like to thank you for the opportunity to comment on the proposed revisions to Chapter 78. And I highly urge you to please take the comments that you hear tonight into serious consideration. Thank you.

CHAIR:

Thank you, Adrienne. Next we have David

25 Wasilewski.

MR. WASILEWSKI:

Good evening. My name's David
Wasilewski. I live in Hunlock Creek, Luzerne County.

Currently for the moment, my home is on the safe side of what Terry Engelder has referred to as the line of death. But it might not stay that way. There's another shale that they want to exploit called the Utica. And the rules that govern exploiting the Utica shale provide even more leverage to the drillers. So I am concerned for myself, for my own health and welfare.

But that's not really why I'm here tonight. Tonight we're talking about putting in place regulations to be able to help those people who are stuck in gas land right now. Now, we have heard representatives from the industry refer to practices as well-managed. I fail to see how one can refer to something as well-managed in light of the testimonials that we've heard here tonight regarding water.

Also, we have heard another industry representative refer to the industry as representing the best collective wisdom. I fail to see how an open air pit used to collect massive amounts of poison represents collective wisdom.

Here's what we get from the industry.

We get water plagues. We get, fracking doesn't cause pollution. Oh, right. The one minute during which an explosion occurs has not been directly linked to pollution occurring in, what, a 30-second time frame. Is that what they mean? Probably.

They cling to their little word plays and they want to be the people who enforce regulations and develop regulations. Look, it's common sense.

Open air pits should be illegal. Burying the waste on sites should be illegal. These are two things that you can do to help these people whose homes and health have been compromised by an industry that spends millions of dollars on political campaigns and public relations. They can spend that money putting the waste in tanks, keeping it out of these open air pits, to try and protect the people who live near these places. Let them spend the money to try to do something reasonable for the people who are suffering now.

And we need regulations that don't have wording such as, the industry will oversee itself and report on itself. We need DEP and the State of Pennsylvania to get serious about regulating this industry, to put the boots on the ground, to spend the money which, of course, they can get from the industry

if there was any kind of reasonable tax in place. Thank you.

CHAIR:

Thank you, David. Next we have Charles Spano.

MR. SPANO:

Good evening. Thank you for allowing me to testify. My name is Charlie Spano. I live at 718 Stafford Avenue in Scranton, 18505. I'm a former Director of the Lackawanna River Corridor Association, an environmental citizens group, and a former member of the Governor's 21 Century Environmental Commission.

I'm asking you tonight to not enact any regulations that would hurt the 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 export. The natural gas industry is supporting hundreds of thousands of Pennsylvania jobs. And in this economy, that's nothing to sneeze at.

Not only is natural gas production helping Pennsylvania businesses and workers, but it's also helping to 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 for years to come.

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

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

It is vital that regulations provide no unnecessary barriers to further growth of this resource. As Pennsylvania's 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 of the Marcellus shale are currently in development, recent studies show increased access to create, again, thousands more jobs that 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 in the Manhattan Institute found that a 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. And for the sake of our economy and our public services, this must continue.

Please keep this in mind as you revise the state's oil and gas regulations. Thank you.

CHAIR:

Thank you, Charlie. One more time I just want to let you know there are many strong and sometimes conflicting perspectives on these regulations. And I'd like to thank you for being respectful of the process and of each other.

Next I'd like to call Eleanor Harding. Eleanor Harding? Okay. How about Bill Burgo

(phonetic)? Okay. No problem. Wendy, I only have Wendy.

MS. LEE:

Wendy Lynne Lee.

CHAIR:

Wendy Lynne Lee. Could you spell your last name? Spell it. Thank you.

MS. LEE:

My name is Wendy Lynne Lee. I care about and am a citizen of Pennsylvania. I live at 1811 Main Street, Bloomsburg, Pennsylvania, Columbia County, 17815. So I drove quite a ways to be at this hearing tonight.

I'm also on the Executive Board of the Shale Justice Coalition, who supports not merely a moratorium, but a clear-headed thinking ban on all hydraulic fracturing, mountaintop removal, unconventional oil extraction and tar sands.

I'd like to begin by reiterating that the public comment period must be expanded to 120 days minimum, with more hearings in frack-effected counties. And, indeed, I reiterate in all counties. This expansion is crucial, not only to ensuring that affected people and communities get to be heard, but because being heard is a bulwark of a democracy,

however much this state and its agencies routinely ignore it, just as they ignore the science relevant to the hazards posed by fracking and its associated infrastructure.

As opposed to commenting on each of the stipulated changes proposed for Chapter 78, I'd like to address the very idea that hydraulic fracturing from wellhead to compressor, to pipeline, to export depot, to transport tanker can be regulated sufficiently to guarantee the ecological integrity, species diversity, human health, property value or the Constitutional right to clean air and water.

While perhaps no regulation can offer a guarantee against accidents, the now well-documented hazards posed by fracking have clearly been shown to be substantial, whether or not accidents occur. Hence, it is equally clear that no regulation can be adequate to make this process of industrialized extraction safe.

We know that the intent of the industry is not to make fracking safe, but to make it as inexpensive, expeditious and profitable as possible. A few days ago the hearing on Senate Bill 411, legislation that would render immune to liability the use of acid mine drainage as frack water, SB 1047,

that would gut and politicize the process by which species are listed as endangered, or SB 259, that would allow old leases to be treated as newly negotiated even if the leaseholder declines to permit fracking on her property or didn't know there was an old leak, all of these, each of these, make plain that regulation in Pennsylvania is written by and crafted for the oil and gas industry.

Because fracking is inherently unsafe, the proposed changes to Chapter 78 are inconsistent with Article 1, Section 27 of the Pennsylvania Constitution. Given moreover the clear legislative pattern, we must assume that the intent of the changes --- of these changes is consistent with SB 411, 1047 and 259. In other words, to act to facilitate the interests of oil and gas.

what the proposed changes really encapsulate, therefore, are the negotiated terms of our surrender to these industries. We at Shale Justice have no interest in acceding to this forfeiture of our autonomy as citizens or our recently reaffirmed right to clean air and water. We would like to publicly thank Chief Justice Castille for his role in overturning significant parts of Act 13 as unconstitutional.

changes runs directly contrary to that 4 to 2 Supreme Court Decision. Here's why. To wrestle over the details of changes to Chapter 78 presumes that fracking will continue. Many are resigned to this grim possibility. Otherwise, we'd not be haggling over who is responsible for pre-drill water testing, the use of open pits for frack wastewater, the definition of freshwater, the disposal of brine or the status of orphaned wells. Make no mistake, the industry will cry foul, that such regulatory changes will cost them too much money, that they are somehow the injured parties.

But the facts are that these proposed changes are nothing but crumbs offered to appease us, to convince us that the agencies charged with protecting our air and water actually act to do so when they do not.

CHAIR:

Thank you, Wendy. We'll read the rest of your written comments.

MS. LEE:

Okay.

CHAIR:

Thank you, Wendy.

MS. LEE:

The last sentence that I'd just like to conclude with, many things are negotiable. Some things aren't. Just as there can be no compromise on apartheid or slavery, there can be none when the stakes are climate change.

CHAIR:

Thank you, Wendy.

MS. LEE:

My yard is a special place, so is yours.

CHAIR:

Next, we have John Trallo.

MR. TRALLO:

Thank you. My name is John Trallo. I' a resident and home owner, teacher, small business owner in Davidson Township, Sullivan County, Pennsylvania. I'm also a father and a grandfather.

Before I continue with my prepared statement, I just ---. I have to say this. As far as those representing the industry, talking about the jobs, please, you know, it serves you no purpose to be disingenuous and mislead people. Direct industry-related jobs are about 10,000 in this state, that's all. Also, you're not taking into account the jobs that have been lost in forestry, agriculture, new home

building and tourism in this state, which is about 100,000.

Bottom line, Pennsylvania went from 7th in job creation, minus the Marcellus, to 49th in job creation.

Okay. After carefully reading DEP proposed amendments to the Pennsylvania oil and gas regulations, it's clear that the primary intention of these regulations is to encourage the expansion of oil and gas in Pennsylvania and not to protect the environment and unique ecology of Pennsylvania, our valuable forests and state lands or the people who live in the communities in the shale regions. I hear the usual code words, such as minimizing and acceptable practices, lessening impact, et cetera, et cetera, but nowhere in the rules and regulations do I see any measures or provisions for shutting down what are commonly referred to as the bad actors in this industry.

The only consequences for any violations caused by either negligence, intent or by accident are scandalously low and inadequate fines. There is no mention of any measures that the state would impose upon any operators to justly compensate or restore the quality of life to those who have been negatively

impacted. On the contrary, these rules are clearly slanted in the industry's favor.

1

2

3

4

6

7

8

9

10

11

12

13

74

15

16

17

18

19

20

21

22

23

24

25

To date, more than 1,600 Pennsylvania residents have come forth and have avowed that drilling has --- drilling operations in their area has made them ill and impacted their quality of life. 161 of those cases have been documented and confirmed by the DEP, the Right to Know Request. There have been studies done by the Colorado School of Public Health that indicate persons who were within one half mile of unconventional gas drilling operations have an increased risk of disease, both cancerous and noncancerous, and also chronic diseases such as neurological disease, hematological diseases, respiratory effects, developmental effects. Cornell University found that decreased birth weight went up in areas, you know, where hydro was concentrated by 25 percent.

Furthermore, what I'd like to say is, by its very definition, regulation means to adjust, organize or control something or the rate of something. You're controlling the rate, you're not controlling the quantity of it. That's all you're doing by this.

I'd like to conclude that there's no

such thing as a regulation that will adequately or sufficiently protect the people or ensure the safety and protect the health of our children. If there are, I would like to know what regulatory model the DEP has been following and looking at, and where this has worked. What state has this worked, where there have not been serious health consequences?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Therefore, all regulations and the amendments to current regulations you propose do nothing more than attempt to adjust the rate of damage to the environment, our public health and safety and security of our community and our children. majority of Pennsylvanians, although divided evenly, who support drilling and those who oppose it, 73 percent have asked this administration to enact a common sense moratorium on all new unconventional gas drilling activities until independent, comprehensive public health, safety and environmental studies can be completed, peer reviewed, publicized and publicly discussed before the industry expands and puts more people at risk. Because, after all, the industry is not here because of, you know, workable regulations. They're here because the gas is here, no other reason.

Therefore, the only responsible and acceptable solution, since our Governor and its

administration has refused to consider any reasonable option to employ precautionary principles that would best protect the people of Pennsylvania, then, you know, I suggest that in this state we initiate a moratorium, hopefully leading to a ban on this dangerous and invasive practice of extreme fossil fuel extraction and move towards developing renewable and sustainable energy policy, which will create permanent, sustainable family-friendly jobs in this state.

CHAIR:

Thank you, John. We'll read the rest of your testimony. Next I'd like to call Duke Barrett.

MR. BARRETT:

Hi there. I'm Duke Barrett. I'm from Dallas, Pennsylvania, 4 Fox Hollow Drive.

A lot of the speakers tonight have taken a lot of my thunder, but I'd like to point out that drilling tens of thousands of holes in the ground, pumping tons of poison into it where you have an initial well piece failure, which is a little cement that protects the aquifers failed immediately seven percent of the time ---. And the industry projects it's going to fail 60 percent of the time over 30 years and a hundred percent of the time over a hundred

years, when you're drilling tens of thousands of wells over two-thirds of the state, this is an ecological disaster in the making, which few people are considering, because we're all going to get rich.

I was a member of the Citizens Marcellus Shale Commission. We had hearings all over the state. John was a member, too. And at these hearings we asked, is --- the technology to do this safely for the 100-year mark very acceptable, low incidence of contamination, is that currently available? And the answer is no. Is it in the pipeline literally? The answer is no. Is it even conceptionalized? The answer is no.

I think the DEP, at a minimum, might want to track the plague of poison going across the state from this industry. You don't have to go back and track all the oil stuff that's already happened, but going forward. And along with the water contamination, which DEP said 398 complaints were filed, drilling --- bad water, plus the DEP confirmed incidents of it, that you might want to track the progress of whose homes were contaminated and where they are, and also a new species, called water buffalos, a herd that is evidently growing, so that we can see where we want to live and choose where we want

to get our food from, at a minimum. Thank you.

CHAIR:

Thank you, Duke. Next we have Scott Miller.

MR. MILLER:

Good evening. My name is Scott Miller.

I'm a community relations representative for WPX

Energy in the Marcellus Basin.

WPX Energy is one of the largest natural gas producers in the country and has been in the Marcellus Basin since 2009. Many of our employees have over 30 years experience in the natural gas industry.

Our team of experts has been actively involved from the start of the public review of the Chapter 78 regulatory proposals. Along with our trade associations, we have engaged with the DEP, DCNR, TAB and all of the environmental working groups involved in this labor-intensive process. We respect and appreciate all those who have given up their time, energy and efforts in vetting the proposed regulations.

Prior to providing comments on proposed changes to Chapter 78, we would also like to encourage DEP to recognize their well-managed and professional

oil and gas regulatory program, one that is meeting the Commonwealth's program objectives. This is not a distinction just in our words. It's a program evaluation determined by an independent, national, nonprofit organization called the State Review of Oil & Gas Environmental Regulations, STRONGER.

Upon the DEP's invitation, STRONGER conducted an assessment beginning in May 2013, and released its final evaluation of the Pennsylvania regulatory program in September 2013. STRONGER commended the DEP for many of its initiatives and regulations, and determined that the Commonwealth's oil and gas program is one of the strongest in the nation.

WPX asks this Board to recognize STRONGER's assessment and not make regulatory changes just for the sake of change. As the Board is here tonight to receive comments on proposed regulatory changes in Chapter 78, we will only comment on a few items and WPX will submit a technical paper before the March deadline.

There are many challenges in the Commonwealth in regards to private water wells, especially the lack of construction standards. Our experience with pre-drill testing and several studies

independent of natural gas development have also found that a large number of private wells are poorly-constructed. Many contain iron, manganese, coliform and methane, and many do not meet the criteria of the Safe Drinking Water Act.

The Pennsylvania legislature needs to pass legislation to require property owners to construct private water wells properly and to test their water. We request if an operator impacts a private water supply, the DEP should require the operator to bring the private water supply back to the pre-drill test water quality, whatever that may be.

Regarding waste and water management at a well site, the natural gas industry has been recycling and/or reusing water and minimizing fresh water use for quite some time now. And unfortunately, the proposed regulations are forcing operators to rethink this option. In order to increase the amount of water being reused and recycled in the Commonwealth, the regulations need to provide an avenue for the operator either through permits or DEP approvals to document, move or reuse water from one site to another.

Additionally, the Oil and Gas Division must have its own regulations concerning water

management and not be conflicted with or confused with that of the Waste Management Division.

Finally, the proposed requirement to identify active, inactive, plugged, abandoned and orphaned wells prior to hydraulic fracturing may be something that the industry can work with the DEP, but not to the level of the proposed regulations, which may lead to never-ending obligations for operators for wells that are not even ours.

We thank you for your efforts and desire to continue to seek better and more efficient ways to regulate the oil and gas industry and safeguard Pennsylvania's environment. WPX Energy is also committed to this regulatory review process. We do appreciate and respect the communities in which we operate and are dedicated to protecting Pennsylvania's environment.

We look forward to continuing to work with the DEP and other interested parties to finalize these Chapter 78 provisions. Thank you for your time this evening.

CHAIR:

Thank you, Scott. Next we have Ann Pinda. Oh, I'm sorry, Ann Pinca.

MS. PINCA:

Hello. My name's Ann Pinca. Thank you for the opportunity to testify. I live at 2154 Cloverfield Drive in Lebanon, but I'm also a leased landowner in Sullivan County. And that's a decision I regret daily or even right now.

And I'm glad this hearing was postponed, because it gave me time to finally get through all of the proposed regulations because it's a tough read.

But as I read through them, all the detailed instructions, I just couldn't help but think how much time they spent developing these regulations and the others that we have. And I also kept in mind the expense that's going to be involved for the operators --- that they will protest --- to be sure that they are in compliance.

So as I read all of it, it became even more clear to me how little sense it makes to even pursue this expensive activity that will reduce a large swath of our state from productive wooden and rural farmland to a network of industrial zones producing tons of barrels of waste products harmful to all living things.

Our time and dollars should go, instead, to truly clean, renewable energy, not invested into mile-long or longer holes that open pathways into an

unknown future. For we still have no definitive study that says absolutely the practice of hydraulic fracturing is foolproof and safe. What we do know is that the leaks, spills, blowouts and failed well casings that hydraulic fracturing bring pollute the water we drink. And that the compressor stations, processing plants and pipelines have polluted the air we breathe. No amount of regulation will change those problems, only a ban on any future hydraulic fracturing will truly mitigate the impacts of this industry.

That said, since the purpose of this meeting is to comment on the proposed regulations, I will do so, though I suspect it will have little impact, since we already have regulations that are not adhered to or adequately enforced.

But I would insist that no open pits be allowed anywhere. Michigan and Ohio don't allow them. Why should Pennsylvania? Years ago my land man touted to me how his corporation used only closed-loop systems because they were so much safer. So that is how it should be for all operators in Pennsylvania.

Onsite burial or spreading of drill cuttings should absolutely be prohibited. Why on earth would we leave a legacy of buried landmines for

our future generations?

And likewise, brine should not be used for dust suppression or de-icing of roads. This only allows to achieve a convenient means for operators to dispose of a pollutant we don't need or want to have running off our roads into our creeks and streams or draining into our aquifers. And let's be sure fresh water really means fresh water.

Finally, the varying setbacks are mind-boggling; 200 feet here, 500 here, 100 feet here. To think that a five acre industrial site can be a hundred feet from a blue line stream, or 200 feet from a natural landmark, less than a football field away, it's ridiculous. Make all setbacks a truly meaningful distance. A mile sounds good to me. And make it away from everything.

Or better yet, let's just not do hydraulic fracturing at all. We already have better ways to generate the energy we need. Let's work on those. Our future depends on it. Thank you.

CHAIR:

Thank you, Ann. That concludes our list of registered participants. Is there anyone in the audience tonight who would ---? Okay. I saw a person in red first.

We'll need to get your information after the hearing, your address and all of that, so if you wouldn't mind hanging around. Okay. And please state your name for the record.

MR. CONNOR:

years ago, beyond any of my own doing. My parents brought me here, so I consider myself a seed. And I have two seeds of my own at home. I'm a gardener and I know what it's like to put a seed into the ground. And I'm learning more and more about the soil every year and how important that is to us and how connected we are to everything that we see, breathe, think about, everything, like breathing in your sweat right now.

I am connected to you right now. I am connected to everything else and everybody in this room, in this world right now. Scientists are discovering that more and more every day.

I have a sign on my front fence that says no fracking. I have friends in Australia who are, you know, very close with the damages that have been done. I know somebody who told me about the truckers, and he's a trucker. And I told him I really don't appreciate him being a trucker for the water.

And he said how the truckers --- he knows how some of them just dump their stuff all over ---.

1

2

3

4

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

I love, love, love, love Pennsylvania. I swim in the waterfalls. I spelunk in the caves. jump off the cliffs, I ice climb, I rock climb. I get into it. I do the Susquehanna River on my canoe. There's this place that is very dear to me called Tionesta, and it's the most beautiful place in Pennsylvania as far as I'm concerned, over 3,000 acres of old growth. There's this huge swath going through it of a pipeline. And there was a day I walked by and I'd say like up to a year or two ago, and there's bubbles coming up from nastiness. You can't even find the place and I'm sure they want you to not find the place because of that, because of the gas that's coming up underneath the most beautiful place in Pennsylvania. And it's like marked like years ago in red. Like, oh, geez, this is something we need to deal with.

The Gulf of Mexico deal, it's still happening. I mean, I love, love my kids. I would die right now to give them a better future. Would you do the same? I hope so. I don't live for me, I live for my kids. I want my child to have the same opportunity that I have to

go outside and to breathe and to live and to be. And I'm afraid that if you don't do your job, my kids, my seeds, are going to have rotten soil.

Please do your job. I'm freaking begging. Please do your job. Until we know ---. I mean, it's like, do we care more about me and my life now and my economy and my freaking money or do you care about your kids? Because you know what, if we sit on this land, the value's going to go through the roof. Because every other place in the world is going to screw it up. And if we don't screw this up, there's a gold mine right here if you don't touch it. It is gold.

I swam in it. I've gone underneath it. I dig my hands in it. And you know what, if you don't honor the soil and the things beneath you, it's going to come and bite you. If it doesn't bite you, it's going to bite your children.

 $\label{eq:connected} \mbox{I love my kids.} \mbox{ We are all connected.}$ $\mbox{Don't screw this up.}$

CHAIR:

Thank you, Jeremy. I'm going to go from left to right. I'm trying to get everybody in. So I saw you, sir. Again, anybody who hadn't preregistered and is speaking, please stay after the hearing so we

can get your contact information.

MR. HUSTON:

Hi there.

CHAIR:

Please state your name.

MR. HUSTON:

My name is William Huston. I live in Broome County, New York. And most of my living relatives are in Bradford County, PA.

And I've taken some aerial surveys of Bradford County and Susquehanna County. And I want to tell you that the amount of physical scarring that this industry is causing is unimaginable unless you see it from the air. And I encourage you all to do that.

And I am sickened by what this industry is doing and I want to ditto and --- everything that Dr. Lee said and John Trallo said. I agree, it is absurd to suggest that any regulations can make this industry safe. This industry is proven to be inherently unsafe. It is toxic and deadly to living things.

I've done analysis. I didn't bring the data with me, but it's on my blog. The amount of forests, the amount of forest land, that has been

already destroyed, Pennsylvania is two percent developed. That's what Dr. Ingraffia (phonetic) says.

At two percent development we've already --- hence the Commonwealth has already lost, in my best recollection ---. Like I said, I just was reminded moments before this hearing that it was going on tonight, so I'm a little unprepared. I believe it's on the order of 5,000,000 trees. If you include edge effects, it's 11,000,000 trees have already been permanently destroyed. They aren't coming back. These rights-of-way, the pipelines, the well pads, they are not going to be ever reclaimed. Massive scarring and damage has already been done to the Commonwealth of Pennsylvania.

Okay. So I'm looking at these regulations. First of all, I think it's absolutely unconscionable that you did not have these hearings in the counties that have the largest impacts, i.e., this area, Bradford County, Tioga County and ---. Maybe there might have been a hearing in Tioga County, I'm not sure. But Bradford County and Susquehanna County. OFF RECORD DISCUSSION

MR. HUSTON:

What's that?

CHAIR:

There will be one in Bradford.
MR. HUSTON:

I

There will be one. Okay. That's very good. It might be good to have one in Susquehanna County, because they've had a lot of impact there. I'm looking at these regulations and I see 200 feet, publicly-owned park, 200 feet; 1,000 feet from a water well. Are these numbers scientifically-derived, scientifically-determined or are they picked out of somebody's hat? Let's say hat. I was expecting that would get a laugh or two.

Because we have examples. I know of --there are three homes on Paradise Road in Terry
Township, Bradford County, not far from here where
they have ---. It was determined by a court or it
might have been this Board, I'm not sure, but it was a
determination that three homes have been abandoned,
bought out by Chesapeake, because of water
contamination. That's Terry Township. The homes were
4,000 feet from the vertical well bore.

We have cases in Franklin Township,

Susquehanna County, massive contamination. We've got
the highest methane readings I've ever seen, and I've
looked at a lot of these well tests, 81.3 milligrams
per liter. That was a Duke study in Franklin

Township. Industry people say it's naturallyoccurring. Lisa Molofsky and GSI Environmental did a
pre-drilling survey of Susquehanna County and their
reading ---. The highest reading that they measured
was --- and this was 10,000 times greater than that,
10,000 times.

When you get a pressure difference of 10,000 times, we don't call that naturally-occurring, we call it an explosion. There is an explosion of methane in Franklin Township. And there is no way that that --- thank you. There's no way that that's naturally-occurring.

And it's not just methane. There's heavy metals, total dissolved solids, chlorides, which my understanding can be salt and it also can be hydrochloric acid.

There is one lady in --- Gerri Kane, Bradford or Susquehanna?

MS. SCROGGINS:

Susquehanna County.

MR. HUSTON:

Susquehanna County, PA, where she has ---. She can run a magnet. She has this --- in my ---. She can hold a magnet to her water and it pulls iron filings out of it. In my opinion, this is

proof of fracking fluids. And I can explain that technically, and I will give you detailed comments later, why I think this is conclusive proof that fracking fluids have contaminated drinking water.

So in conclusion, these limits are absolutely inadequate. We need to at least expand this to the Act 13 distances of 2,500 feet. But since they're doing the vertical --- or horizontal laterals that are 5,000 feet, it seems to me that you need to be going out at least a mile. Thank you.

CHAIR:

Thank you, William. Okay, going from left to right, in the back there. Oh, sorry. Did you have your hand up? Okay. Sorry about that. It's hard to see.

MR. KATKEVICH:

Hello everybody. My name is Nick Katkevich and I'm from the future. I'm from the future and they sent me back here to Pennsylvania because there were some unfortunate decisions made here in Pennsylvania which made the future a dark place.

We heard earlier from my opponent from the oil and gas company about definitions. So to this Board I would like to talk about defining your legacy.

Because in the future, we look down upon you all. We're sad that you made the wrong decisions and did not regulate and stop fracking. So as we talk about definitions, you have to think in your own mind what you want --- how you want your legacy to be defined.

Next, to my fellow human beings who happen to work for the oil and gas companies, I'd like to talk about defining one's life. Your great, great, great, great grandchildren are my friends in the future and they're ashamed of you all working for the oil and gas companies that wrecked our planet, poisoned people and gave people cancer. They're not proud to talk about you all. And I say that with love and with compassion, because as fellow human beings, I want the best for you all. That's real talk. All right?

Excuse me a moment. So I would fully encourage the Board ---. You know, since I'm from the future and we're back here now, you know, things can change. I would encourage you all to change what your legacy is going to be and work towards banning fracking.

And to my friends from the oil and coal --- excuse me, oil and gas companies, I have a message from your ancestors to be. They asked me to tell you

to please join the resistance to stop oil and gas and to quit your jobs and fight for what's right.

So I'm from the future. I've got to head back in a couple days. But those messages are from your all ancestors to really think about the future. And, again, my friends from the oil and gas companies, it's not too late. You need to think about what you're doing. You need to quit your job and join us. We're a fun group over here. We make lots of vegan food, you know, it's a good group. So please join us. And thank you, everybody.

CHAIR:

Thank you, Nick. Thank you. The person behind you.

MS. LALLY:

My name is Deirdre Lally. I live in Benton, Pennsylvania, Columbia County. I also had to drive an hour to come here. My only other alterative was Williamsport, which is also almost an hour. So I do appreciate the comment earlier about having a hearing in every county.

So basically I wish that you all would go door to door and talk to people impacted by fracking, like a lot of people in this room do, and hear why people signed gas leases. My family, being

one of those people. And it's because there are no economic alternatives in this state. And it's time to explore how to keep young people in our beautiful state through implementing community resiliency and sustainability projects. Rather than extracting fossil fuels, we should be finding alternative and locally-based economies that will sustain themselves and create healthier lives for the generations we're leaving this place for.

I am a seventh generation Pennsylvanian and I have no interest in bringing the eighth into the world that I was left by my family and that you all are responsible for leaving behind. And I think that the regulations you're proposing should lead to an immediate ban, otherwise you're allowing the slow death and painful illness of this state and the people living in it.

On a more personal note, in addition, I just spent \$450 fixing my car due to a rusted cooling system, which the garage owner attributed to road brine spreading and said that he's been seeing it more and more these days. So if you care about the economic well-being of people here, if not their health, put a halt on brine spreading. Let me know where to send my repair bill to, because I never asked

for that.

And also the guy from WPX earlier said that they are here to protect our environment, but they forgot about that objective when they drilled the Martin well two miles from my farm that got clogged and none of the fracking fluids were ever recovered from the ground. They didn't offer water tests or water-quality alerts for those of us that live around it. And so now I'm constantly terrified of the water coming out of my tap. And when people visit my home, they ask me if I have poisoned water because I live in Northeastern Pennsylvania.

I think you'll regret all of these permits that you all have been rubber stamping, because you live here, too. And if you don't already know what it's like to live like myself and other people in this room do, you will soon enough, so ---.

CHAIR:

Thank you, Deirdre.

MR. LOTORTO:

My name is Alex Lotorto. I'm from Milford, Pennsylvania in Pike County. I work as a consultant with the group Energy Justice Network and I'm also a union delegate for the Industrial Workers of the World, so some of my comments will pertain to

labor.

I'd like to --- and by trade I'm a grounds technician and I install and have installed miles of erosion and sediment controls, hay bales and silt fence. And so I would also like to speak to that regarding birms and things.

The first thing I'd like to urge you to look at is the DEP's new authority that was not overturned at the Act 13 ruling, and Section 3211, the bad actor clause of Act 13. Under that new statutory authority, DEP has the ability to deny a permit to any driller with an outstanding violation that had not been resolved to DEP's satisfaction. And the Environmental Quality Board, you know, helps determine what is satisfactory remediation.

And I'd like to use the case of
Southwestern Energy, who --- just on the other side of
the river here there's the Tunkhannock islands and the
river, which is a core habitat for endangered species.
Pennsylvania Sedge Grass grows there. When it's
washed out with the high waters, any contaminants in
the river will contaminate the designated highest
endangered species habitat.

There's a well permit to start drilling on February 10th at the end of Margrove (phonetic)

Road. One of the properties in the parcel listed is

Don Sherwood, who is our unfortunately renowned

Congressman who was fired for beating his mistress or,

you know, we fired him, got him out of there. But

he's one of the property owners.

1

2

3

4

6

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

As well as on the Dziuba --- it's called Dziuba 2H. I filed a 78 page public comment with a woman there --- and her doctor --- who is on oxygen and will be. And was notified under Act 13's notification requirements that the well was coming. We followed through the 45 day, filed the comment with the doctor statements from a Stanford and Harvardeducated doctor that states that she cannot ---. She's on oxygen, cannot withstand diesel soot. And the trucks will be lined up all the way to 29 on this road going past --- you know, Union Township is the township. The well will maybe be flared. Condensate tanks be vented for the life of the well. The best management practices, in short, are not being followed by the industry, who identifies them and is so proud of them. The API identifies them as best management practices, but they're not even being followed.

The statement I --- you know, DEP filed my letter. That's the response, in a nutshell, that I got from DEP.

So we filed an appeal with the Environmental Hearing Board, which is everyone's right if you live within a distance that you feel you may be harmed, or a habitat that you care about, a class A trout stream that you fish in will be impacted by a Marcellus or any DEP action or permit, you can file an appeal with the Environmental Hearing Board. So we've been working through this system. We are seeking a Supersedeas, an injunction, on the well that the cost of expert testimony and affidavits is at least \$250 an hour for the experts that are required. The Pennsylvania Bar Association has acknowledged that there are hardly any attorneys in this part of the state, they're all downstate where the drillers headquarters happen to be, for environmental law attorneys. And we're --- you know, attorneys are very hard to come by.

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

And so we're --- so many objections I made. And I'll just read one. And I want to acknowledge that you're under a lot of pressure. And I want to acknowledge a man who is not with us this evening but owns the Keystone Sanitary Landfill in Throop, Pennsylvania. On April 30th, 2013, Southwestern was disposing of a fluid that was transported by tanker truck to the Keystone Sanitary

Landfill and disposed of its E10 drill cuttings, which should have been labeled fluids. And we all know, if you live around and in Scranton and you've talked to people who grew up there, stories about Mr. Louis DeNaples, who is accepting millions of dollars to make the waste disappear as landfill cover on top of his landfill.

At a Throop land screening that was sparsely attended with a few of us last year, I had them admit that the solids that are taken out of the recycling process are also disposed and mixed with drill cuttings and wood chips from the logging operations. And I have pictures and photo documentation from Lakewood Township of pits being dredged and the waste being hauled. I have another violation --- Southwestern drove a truck down I-81 with a valve open and it got pulled over and, you know, they had to clean up all the way up and down.

You know, in short, you know, these are bad actors. You have your authority given to you and I had stories and things to tell you, but, you know, please, you know, Doreen Dougherty's (phonetic) got --- you have to really, you know ---. I'm not going to say do your job because I know what your job is.

And I hope that you'd be proud of that, you know, own

up to it and do the right thing. I don't know, whatever you're going to do, but Southwest ---.

CHAIR:

Thank you, Alex. Okay, the gentleman in the ---. Okay. Thank you.

MR. HUGHES:

from Seymour, Connecticut. And I want to thank everyone on all sides of this issue for the opportunity to come and speak. I come for several reasons. One, because my family in Connecticut faces a pipeline expansion that would bring radon-carrying fracked gas through Connecticut, cancer-causing gas.

And I also come because I've had the opportunity to meet so many wonderful people from this Commonwealth, some who I'm honored to call my friends, some who I haven't been fortunate enough to meet yet. And I worry.

and set or urge you to set a particular policy. But all I can do is do my own research, look up the facts on this issue and simply urge you to consider them.

As we think about these regulations which would require permit applications within a thousand feet of a water well, I urge you to consider a Duke University

study that says methane concentrations for any water well within a whole mile of a fracking site has six times higher methane concentrations, 23 times higher ethane concentrations and the health benefits --- or health risks associated with that.

As we hear people talk about the uncertainty of what would happen to the bedrock when all of this thousands --- hundreds of thousands of gallons of water is injected, I urge you to consider the case in Oklahoma. The New York Times reports that until the last few years, Oklahoma averaged 50 earthquakes a year. That number has gone into the thousands, 2,600 last year, including the largest earthquake in the history of the state.

And as we think about the economic impact of imposing these regulations, and we hear these numbers of jobs the industry can bring in, which I believe Mr. John Trallo adequately described as maybe being misleading, I also urge you to consider a study reported in The Economist that looked at 19,000 properties in Washington County, Pennsylvania. It showed a net decrease of 13 percent in value for homes within 1.25 miles of a fracking site that get their water from the groundwater, 13-percent decrease in value.

As we think about the possible costs that government regulation can have on the economy, just consider that you could tax these homes ten percent of their value, you could burn that money and they'd still be better off than they would be being within 1.25 miles of the fracking site. Thank you so much for having me today.

CHAIR:

Thank you, Adam. In the green.

MS. MYERS:

Okay. So I didn't actually ---.

CHAIR:

Please state your name.

MS. MYERS:

Sorry. It's Caitlin Myers. People call me K-ditto (phonetic). I didn't prepare an actual --- so I'm sorry if I ramble a little bit. I just wanted to tell quickly a story of the mountains that are around us. They're really, really old. They are, I think, possibly the oldest mountain range in the world.

So once upon a time, before the asteroid hit back when all the continents were all like mixed up together and there weren't any national borders or anything like that or nations or presidents or

whatever, there was just like dinosaurs tromping around, this was a shallow tropical sea. It was swimming with lakes and like those cool little like --- I don't know, like all the cool fish that you see in like natural history museums, you know, with like all the like different weird spines and like ---. It was really awesome.

So gradually all that changed because things changed. That's the way geology works. The earth changes. It is not a static place. The mountains rose. They got to be higher than the Himalayas. And then they shrank again because that's what happens. The winds just like ground them down and down and down over the ions. And the continents shifted and what was once part of the Appalachian Mountains actually became the Atlas Mountains in Morocco. So we have a sister mountain range in Morocco, which is really, really cool, I think.

All of the living things that lived in that shallow sea lived before the asteroid and so on and so forth got buried under the ground and they gradually became fossils and liquefied, whatever.

They became fossil fuels.

We are sitting on the dead. We are extracting the dead to fuel our cars and our

industries. So, yeah, this mountain range is older than any of us can even begin to imagine. It's older than the Himalayas and it was once higher than them.

And even if we strip every last tree and we drain every last drop of natural gas and whatever, the mountains will still be here when we are gone. So just to give like a little sense of perspective, let the dead rest and let the mountains live. What's buried is buried. Thank you.

CHAIR:

Thank you, Caitlin. I'm going to move to the middle section here. Thank you for patiently waiting. Thank you.

MS. CLIFFORD:

Good evening. My name is Barbara Clifford. I live in Montrose, Susquehanna County. Because I find your technical papers difficult to pare down to what they really mean in real life, I'm going to attempt to give you my wish list, partial wish list, and ask that you word your regulations so as to fulfill a safe result for the natural environment we all depend on for our health and well-being.

Please require a separate ---. I'm going to list a few items.

Please require a separate marker for

every oil and gas well. Without a marker determining where leaks travel, we will be forever obliged to spend tax dollars for tests and legal costs, and in the end be unable, in many cases, to prove the source, which in most cases is actually obvious but cleverly --- currently cleverly unprovable.

Sorry, I can't read this. Is this light on?

Please undo the wording that allows a landowner to say yes to the burying of drill cuttings on the landowner's land. Landowners may either not know enough about hazardous burying of such material, or they may not even care. Either way, the containment is bound to release the material over time and can eventually leach to another person's land.

Please make clear that the distance between a pad and a residence and other areas under the regulation mean the outside perimeter of the entire working area of the operation, not the well pad itself. Since leases state that the leasee will be responsible for restoring quality and quantity of the resource water, please find a way to write a regulation holding the leasee to that. DEP does not permit what can do harm without making sure it can be fully restored.

Please do not allow any waste pits of any kind. Please require decibels from compressor station properties and at the compressor station property perimeter. Chesapeake Gas Company advertised on film how they can close the door of their operating compressor station and no sound would be heard. After wells lose pressure, we will begin to experience compressors on well pads, which are very close to where people live. They need to be soundproof and emission-proof so close to homes, schools and public places.

Please require the use of the most current, best technologies to catch all possible --- to capture all possible emissions from the production, processing and transportation of shale, gas and oil. Please do not fall for industry arguments that these technologies and their operating measures are too costly. Many are cost-effective.

In addition, as safer methods come along, require their use on all future and existing equipment. In addition, it is imperative that emissions from production processing and transportation operations be considered in aggregate when being considered for permitting. Not doing this is detrimental to our air, water and agricultural

soils.

Please adopt OSHA's recommendation to Halliburton regarding the capture of silica dust in the process of fracturing. While a recommendation is aimed at protecting workers on the pad, it is also applicable for area residents, as videos of the process show plumes of white dust not confined to the pad, but blowing to surrounding homes.

Another item not being addressed is a monetary item; is the problem of gas being extracted from under unleased land. There are landowners who do not want the land under their surface fracked or other landowners who might want to save their gas for the future. But if a landowner's land is surrounded by active wells, fracturing reaching their underground boundary allows their gas to drain away with a tremendous pressure created by these gas wells.

I understand Pennsylvania allows citizens to drill for their personal water supply and use the water that comes up that water well, whether it originates from under their property or beyond, but the law of capture that allows this for water should not be taken advantage of by a for-profit corporation. Please address this problem and at least require an estimate for fair compensation for this loss. It is

not right for people who want nothing to do with this industry to have what is theirs stolen and sold.

I will end by saying that I feel citizens living in gas fields of Pennsylvania sacrifice enough simply having the operations of shale gas --- shale oil and gas here at all. On top of that, we are left with land unusable because it is now industrial. Restore paths. Field with stone for industrial trucks will not grow crops. Fragmented forests cause a much wider loss for its native plants and animals ---

CHAIR:

Thank you, Barbara.

MS. CLIFFORD:

--- than a swath open for pipeline. Can I just one last ---.

CHAIR:

We'll read your comments. We have to respect the process and we have to respect the time limits. I'm sorry, Barbara, but we have to move on.

MR. SWEENEY:

Hi. My name's Jay Sweeney. I'm from Falls Township, Wyoming County and I would like to say that if the money that's behind this industry, the tax subsidies, the tax breaks, the subsidies from our

government, this had been applied to solar and wind and geothermal, we would not be here tonight and Pennsylvania would be on a sustainable path and a far less stressful place to live.

I would also like to say that the recent Supreme Court Decision on Act 13 upheld Article 1, Section 27 of the Constitution of the Commonwealth of Pennsylvania. The people have a right to clean air, pure water, and for the preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania public natural resources are the common property of the people, including future generations, generations yet to come.

As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people. All people, not just the people with gas leases, all the people. Not the gas industry, the people.

In addition, the Department of
Environmental Protection's mission is to protect
Pennsylvania's air, land and water from pollution, and
to provide for the health and safety of its citizens
through a cleaner environment. To achieve this
mission, DEP must uphold the Safe Drinking Water Act
and see that our water does not fall below its

standards. To achieve its mission, DEP must prohibit the use of brine in any beneficial manner and treat it as the hazardous waste material it is. To achieve this mission, DEP must prohibit the treatment --- I'm sorry, the treatment of brine at municipal water treatment facilities. And to achieve this mission, DEP must prohibit the processing, storage or exposure of drilling cuttings onsite and treat it as the hazardous waste it is.

DEP must establish adequate bonding to address abandoned wells and future environmental problems. DEP must also prohibit the application of any water or solid waste to any Commonwealth soil. Thank you.

15 CHAIR:

Thank you, Jay. To the left? Thank you.

18 MR. IDE:

19 Listening to all this tonight, it gives 20 me a little problem.

CHAIR:

Sir, could you state your name for the

23 record?

1

2

3

4

6

7

8

9

10

11

12

13

14

21

22

24

25

MR. IDE:

I'm sorry. I'm sorry. Richard Ide,

I-D-E, 103 Warren Street, Tunkhannock, Pennsylvania. Listening to all this, it gives me a little problem tonight, because I, together with my daughter, own 300 acres on top of the Mehoopany area. The drilling stops at the bottom of our land, not far from where our property begins. And that driller and myself and my attorney, which have spent a good deal of money over a period of a year or two, went back and forth four, five, six times, never getting a lease satisfactorily ---. Finally the driller just threw up their hands and went to Ohio.

This is the same driller today that a number of people that signed to in many counties, and that driller is not paying its royalties and is the subject of a class action suit. So maybe that was a good thing. I don't know.

Now we have a driller who is, I'm told, going to drill a test well further on down the mountain toward the line of death that was discussed before. If it turns out that we have gas under our land, we are going to be subject to more negotiations.

After what I've heard tonight, do I really want to do that? Are you sure? I'm not sure. I mean, what if they offer me \$10 an acre or even more. What am I going to do? I don't know. Will I

get paid? Will I get my royalty? These other people are in court or they're going to be in court. It may get settled. I don't know what's going to happen.

So the more I hear, the more I wonder.

Maybe it's fortunate we didn't do anything. The same driller, now that we're talking about that's been mentioned here before ---. I'm not going to mention who it is. But they are guilty of having open pits all over the place, including, I believe, flowback water out of the wells, which is highly toxic. And I believe they have been storing flowback water aboveground. You can check on that.

They also, with the same driller that was involved in the Elexco, Kilmer case, they were the so-called defendant. And due to their work in this case, we now have the problem that the first driller is exploiting the net back, which wipes out your royalty and you don't get it, because the poor drillers --- we've heard from these other people who take care of you --- need that 1/8th guaranteed minimum royalty to cover their overhead.

The poor fellows don't have enough overhead to drill. So they need to take your royalty back. That's what it looks like. That was part of the argument, I think, with the Supreme Court, though

I wasn't there. The Supreme Court was very sympathetic to the driller's problems. They overlooked a lot of things, but we're stuck with that now. And I don't know how it will be settled. I hope it settled well.

I don't have much more to say. You know, I'm weary. I'm weary listening to all of this. I don't want you folks to do anything. The oil and gas industry is powerful. They've got you completely outclassed. They've got me outclassed. They've got lawyers that I've hired outclassed. For two or three or four lawyers I hire, they've got 40. They're smart. They've been at this for 40 years. They know all the angles. They can twist any little phrase into meaning something else.

I've got one minute left and I don't think I need it. I'm tired. I'm worn out. I don't know what to do. I tried my best. I'm nowhere.

Neither is my daughter. We have a lovely place on the mountain. But she lives up there. I live in the town. So what do I do? You tell me. You think about that. Thank you.

CHAIR:

Thank you, Richard. On the left.

MS. RIGELL:

Hi. My name is Laura Rigell and I'm a student at Swarthmore College. Fossil fuel extraction is incompatible with health and climate stability. I want gas drilling to stop by 2015. I want to live in a world without the oil and gas industry. I ask the DEP to work to eliminate this industry as quickly as possible and facilitate a transition to a just and renewable energy-based economy.

CHAIR:

Thank you, Laura. I'll work my way back to you. Is there anybody over here? Okay.

MS. ANDRE:

from Rhode Island. And I know that anything I have to say doesn't affect your decision, but a group of us that drove up here, I want you all to know, those of you who are standing against oil and gas and fracking, that I feel like a lot of you may think that your voices aren't heard, but we hear you. I hear you. We drove over nine hours to hear you and we're going to continue to listen to you. And I want you to know that we want to stand with you and we want you to keep talking to us, because we are afraid of the same things happening. And that's all I really wanted to say.

CHAIR:

Thank you, Sherrie. Is there anybody else who would like to speak tonight? Okay, then. With no other commentors present, on behalf of the EQB, I hereby adjourn this hearing at 9:15 p.m.

Thank you very much for your participation. We appreciate having you here.

* * * * * * * *

HEARING CONCLUDED AT 9:15 P.M.

* * * * * * * *

· .

CERTIFICATE

I hereby certify that the foregoing

proceedings, hearing held before Chair Edinger was

reported by me on 1/27/2014 and that I, Randyll P.

Lloyd, read this transcript and that I attest that

this transcript is a true and accurate record of the

proceeding.

Court Reporter