2857

BEFORE THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OF

OIL AND GAS HEARINGS

* * * * * * * *

IN RE: OIL AND GAS WELLS CASING AND CEMENTING

* * * * * * * *

BEFORE:

GAIL CONNER, CHAIR

Daniel L. Lapato, Member

HEARING:

Monday, July 26, 2010

7:10 a.m.

LOCATION: Pennsylvania Department of Environmental

Protection Southwest Regional Office

500 Waterfront Drive

Pittsburgh, PA 15222-4745

WITNESSES: Dr. Sharon Brown, Arlene Mercurio, Cathy

Peddler, Suzanne Broughton, Theodore

Robinson, Kurt Limbach, Bridget Dolby, Sue

Seppi, Ron Slabe, Barbara Grover, Loretta

Weir, Adam Pecharka, Mel Packer, Robert

Dunnan, Alex Lapato, Cynthia Walters, Mark

Benkoski, Kate St.John, Al Bicinie, Lynn

Williams, Mary Magan, Ken Weirton,

Scott Left

Reporter: Kayla A. Godkin

Any reproduction of this transcript

is prohibited without authorization

by the certifying agency

				3
1	INDEX			
2				
3	OPENING REMARKS			
4	By Attorney Conner	7	-	10
5	TESTIMONY			
6	By Dr. Sharon Brown	10	-	11
7	TESTIMONY			
8	By Arlene Mercurio	12	-	15
9	TESTIMONY			
10	By Cathy Peddler	15	_	19
11	TESTIMONY			
12	By Suzanne Broughton	20	-	25
13	TESTIMONY			
14	By Theodore Robinson	25		30
15	TESTIMONY			
16	By Kurt Limbach	31	_	39
17	TESTIMONY			
18	By Bridget Dolb y	38	-	40
19	TESTIMONY			
20	By Sue Seppi	40	-	44
21	TESTIMONY			
22	By Ron Slabe	44	_	51
23	TESTIMONY			
24	By Barbara Grover	51	-	56
25				

			4
1	I N D E X (cont.)		
2			
3	TESTIMONY		
4	By Loretta Weir	56 ·	- 61
5	TESTIMONY		
6	By Adam Pecharka	62 ·	- 66
7	TESTIMONY		
8	By Mel Packer	66 ·	- 72
9	TESTIMONY		
10	By Robert Dunnan	72 ·	- 75
11	TESTIMONY		
12	By Alex Lapato	75 ·	- 84
13	TESTIMONY		
14	By Cynthia Walters	85	- 89
15	TESTIMONY		
16	By Mark Benkoski	89 -	- 91
17	TESTIMONY		
18	By Kate St.John	91 -	- 94
19	TESTIMONY		
20	By Al Bicinie	94	- 95
21	TESTIMONY		
22	By Lynn Williams	95	- 96
23	TESTIMONY		
24	By Mary Magan	97	- 98
25			

```
5
 1
                          I N D E X (cont.)
 2
 3
   TESTIMONY
                                                          98 - 102
 4
       By Ken Weirton
 5
   TESTIMONY
 6
                                                         102 - 103
       By Scott Left
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

```
6
                           E X H I B I T S
 1
 2
 3
                                                           Page
                                                         Offered
             Description
 4
   Number
 5
                            NONE OFFERED
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

Sargent's Court Reporting Service, Inc. (814) 536-8908

PROCEEDINGS

CHAIR:

I would like to welcome you to the Environmental Quality Board's public hearing on the proposed regulations regarding oil and gas well casing and cementing. My name is Gail Conner; I am a member of the Environmental Quality Board representing the Citizens Advisory Counsel.

I officially call this hearing to order at 7:10 p.m. The purpose of this hearing is for the EQB to formally accept testimony on the proposed regulations concerning oil and gas well casing and cementing. In addition to this hearing, the EQB held similar hearings on the proposed regulations in South Tunkhannock on Monday, July 19th, in Williamsport on Wednesday, July 21st and in Meadville and Pittsburgh on Thursday, July 22nd.

The proposed rule making which was adopted by EQB on May 17th, 2010 update the existing requirements in 25PA Code, chapter 78 regarding the drilling, casing, cementing, testing, monitoring and plugging of oil and gas wells and the protection of water supplies.

The propose rule making includes updating

material specifications, and performance testing, and amended design construction, operational, monitoring, plugging, water supply replacement, and gas migration reporting requirement. The additional requirements 5 will minimize gas migration and will provide an increased degree of protection for both public and private water supplies.

In order to give everyone an equal opportunity to comment on this proposal I would like to establish the following ground rules.

8

10

11

12

14

15

16

17

20

21

23

24

25

First, I will first call upon the witnesses who had pre-registered to testify at this After hearing from these witnesses I will 13 hearing. provide and any of other additionally interested parties, the opportunity to testify as time allows.

Second, testimony is limited to ten minutes for each witness. Third, organizations are 18 requested to designate one witness to present 19 testimony on its behalf. Fourth, each witness is asked to submit three written copies of his or her testimony to aid in transcribing the hearing. 22 hand me your copies prior to beginning your testimonies.

Five, 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 this transcript can be as accurate as possible. Six, because the purpose of this hearing is to receive comments on the proposal, EQB or DEP staff may question the witnesses. However, the witnesses may not question the EQB or DEP staff.

3

5

7

8

10

11

12

13

14

15

17

18

19

20

21

22

23

24

25

In addition to or in the place of oral testimony presented at today's hearing, interested persons may also submit written comments on this proposal. All comments must be received by EQB on or before August 9th, 2010. Comments should be addressed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA, 17105-8476. Comments may also be emailed to regcomments@pstate.pa.us, that's $16 \mid R-E-G-C-O-M-M-E-N-T-S-Q-P-S-T-A-T-E.P-A.U-S$

All comments received at this hearing as well as written comments received on or before August 9, 2010 will be considered by the Environmental Quality Board and will be included in the comments response document prepared by the Department and reviewed by the EQB prior to the EQB taking its final action on this regulation.

Anyone interested in receiving a copy of the transcript of today's hearing may contact the EQB for further information. I woul like to now call the first witness. Dr. Sharon Brown.

MS. BROWN:

2

3

4

5

6

7

10 l

11

12

13

14

15

16

17

18

Good evening, I'm Dr. Sharon Brown ---OFF RECORD DISCUSSION

MS. BROWN:

I'm Dr. Sharon Brown, of McCandles Pennsylvania. And I'm here tonight to thank you for having this hearing for us, we I'm sure, appreciate the opportunity to consider our questions and our concerns regarding the regulations that need to be changed. And as I think, probably all of us agree.

As indicated in the information that is apparent there are needs for changes on something that's on the books for over 25 years and especially in relationship to a new type of drilling in our area, Marcellus Shale.

Two particular areas of concern I have and questions are related to the operator's inspection of wells, in terms of the frequency. The indication 21 is that inspectors will be inspecting every three 22 months and report to DEP every year. I would suggest 23 that that needs to be a far more frequent inspection 24 time line as well as the requirement for the operators 25 as well as more reporting to DEP.

I would also like to suggest that in terms of the water quality, it has been suggested in the proposed changes that if a public or a private water supply is suspected to be polluted, that the operator must restore or replace it with a source that meets drinking water standards as good as the previous supply. If the cost is above what the normal cost was to be before the water, the operator would be responsible for the payment geminately.

1

5

7

21

22

23

24

25

10 I would suggest that we need to get a 11 requirement in there for a base line measurement. There needs to be an understanding of where the laws 12 13 water quality is prior to the drilling even begetting. 14 And that should be on the responsibility of the 15 drillers themselves to document that the water quality 16 is where it is before they begin. If there is any 17 problem with the owners trying to impede that process, than the documentation would be inherent upon the 18 19 drilling companies to document that they attempted to document the base line levels. 20

But I truly would suspect that most people would be willing to allow their base line water levels to be measured, so that if there is such suspected contamination beyond the drilling initiation that can be documented. Thank you.

CHAIR:

15 l

22 l

The second witness is Arlene Mercurio.

MS. MERCURIO:

DEP, EQB, addressing the question about cement casing of deep gas wells; I believe that all components of the Shale gas extraction process should be guided by the simple and wise philosophy; to use the best available technology and best available materials. Pennsylvania should encourage well established, soundly resourced companies with good reputations and discourage companies that are inclined to cut corners.

This philosophy not only provides the best protection for citizens and the natural environment, it stimulates innovation by ancillary companies that offer new ways to make this process cleaner and safer, perhaps giving start-up companies a boost.

More broadly, I attended the West Deer Township public meeting where Range Resources and Huntley and Huntley were invited to speak and answer questions by the township supervisors. The word that these companies used and I put that in quotes. Most often was the word DEP. They gave the impression that residents and the environment were protected in all

aspects of shale gas production via DEP regulations, permitting requirements and inspections.

If the regulations are not as strong and comprehensive as people are being led to believe, or if the companies choose to ignore the regulations either through poorly trained workers or a strategic cutting of corners due to fines that are set too low, then DEP will end up being overwhelmed by complaints and lawsuits.

I teach yoga, including senior citizen classes. I see over a hundred people during a month. I'm hearing from people who have either recently signed gas leases or those who have old leases and have been told that their vertical wells already commit them to horizontal drilling. Many of them are scared as information has exploded, along with a few wells.

Until very recently, few people understood the difference between shallow, vertical wells and shale extraction. The companies seemed to encourage this confusion or, at least, they do nothing to discourage it. You do not know what people are being told in order to get them to sign a lease.

I have heard that people who are reluctant to sign are being told, since it's

horizontal drilling, we can get your gas by using your neighbor's well, so you might as well sign and get the signing bonus money. Is this true? Perhaps DEP should begin publicizing a pamphlet or on the radio, things to consider before signing a gas lease, like tape record the conversation you have with the 7 landsman before you sign anything. Get a lawyer, get 8 on the DEP website, get your water tested by a certified third party, get yourself informed.

The companies who want to exploit this resource are driving this process, rather than the people who own it. Citizens are crying out for a 13 l moratorium like New York has in place. People need time to get educated about this complicated process, and time to consider before taking appropriate action.

DEP needs time to strengthen regulations The legislature needs time to update and inspections. the Oil and Gas Act and to enact a severance tax and its allocation. Pennsylvanians need time to get trained so they can take these promised jobs.

Once all of this happens, drilling could perhaps gradually be allowed, learning and watching as it begins to happen safely and cleanly as possible. Thank you.

CHAIR:

10

11

12

14

15

16

17

18

19

20

21

22

23

24

25

Will you state your address and affiliation for the record?

MS. MERCURIO:

1

2

5

6

7

8

10

11

12

13

14

15

17

18

19

20

21

22

23

24

My address is 538 Esther Avenue, New Kensington and my affiliation is I'm a grandmother and I really want my kids to move back to Pennsylvania and bring my grandchildren with them and I'm afraid they will not do that, once this state has been devastated by this process.

CHAIR:

Cathy Peddler?

MS. PEDDLER:

I'm Cathy Peddler; I'm with the Allegheny Defense Project. My address is ---. Okay, I'll do my best but I have a soft voice. I'm Cathy Peddler with 16 Allegheny Defense Project and my address is 912 West Second, Erie Pennsylvania, 16507.

First, I'd like to inform the DEP and the oil and gas industry that the citizens of this Commonwealth have not given and will not give permission to destroy the health, safety and welfare of our human and natural communities. All residents, natural communities and eco systems, to the best fundamental and inalienable right to sustainably access, use, consume, and preserve water from natural

water cycles and sources within our respective communities.

We will not allow you through regulations to simple adjust and document the rate of destruction or through mitigation to put band-aids on this destructive development that is destroying our drinking water, polluting aquatic habitats and aquifers and permanently altering the landscape.

If the DEP suspects that our citizen's drinking water and our aquatic habitats are at risk from a drilling process, than the DEP must work with citizens to secure a moratorium of the process. That means that I'd like to address a couple of the specific proposed changes to Oil and Gas Act 78.59, projection of water supplies.

The Pennsylvania Department of
Environmental Protection must clarify the regulations
regarding bonding for the preservation or replacement
of water supplies. Bonding must cover assurance that
there will be a water supply permanently available to
an affected property owner. If the DEP concludes it
does not have the authority, than a legislative
annotative should be on your taking for that
authority.

In the context of limited liability

companies, what assurance can the Department give that the quality means anything. And increase in operating and maintenance costs shall be provided by the operator in perpetuity. If the supply was reasonably 5 attended to provide a greater quantity than was currently used and was capable of doing so, the 6 operators shall provide supply to meet the anticipated need. 78.89, gas migration response, a comment on 8 this, this must not be limited to just natural gas 10 migration but must also include the bi-products of the drilling, hydro-fracturing and production process such 11 as Methane, and to substances created by the 12 interaction of the oil and gas development and the 13 natural and human environment. 14

78.89 C-2, comments, the DEP must address the fact of horizontal well drilling in which wells are drilled up to a mile in multiple directions from the vertical well. The investigation should include the entire longitude distance of the horizontal well. And than add an additional distance for investigation determined by the specific geology of the well location and the fracturing techniques used. That is at least 2,500 feet from the end of the horizontal well, which could be 5,000 feet from the vertical well.

15

16

17

18

19

20

21

22

23

24

25

78.121 production reporting. DEP should propose legislation to remove the confidentiality requirement of production reports, It's not simply a matter of knowing what resources are being depleted. Other states, only with full production of course, for six months as opposed to Pennsylvania which is five years.

10 l

13 l

20 |

A general comment, the DEP seems to take the position that, neither permit applications or permits be published in the Pennsylvania Bulletin, there must be an affirmative obligation on the DEP to publish applications and permits. Why would some oil and gas underground waste disposal activities such as hydro fracturing fluids in waste water, which are not retrieved from the sub-service, not be subject to underground disposal regulations? 91.51 potential pollution resulting from underground disposal.

Just a couple of other points, casing and cementing regulations are necessary to the public health, safety, and welfare. Casing regulations should be by state of the art technology in the oil and gas industry. Regulations should be targeted at preventing gas and other drilling products from migrating into drinking water supplies.

Once a water supply has been affected by

1 drilling, the regulations should make it easier to remedy the affects of surface owners or occupiers complaints of contaminated water from drilling and extraction operations. If the water supply has been 4 5 affected by the well drilling operation, if the 6 proposed rules do not necessarily require the operator 7 to supply the water meeting drinking quality 8 standards, it is unconscionable that a gas driller can supply someone with drinking water that does not meet 10 drinking water standards. Replacement water should 11 meet drinking water standards at a minimum. 12 support the requirement that the operator notify the 13 Department within ten days, if not sooner, or at least 14 give them the complaint.

And the regulations should insure the long term integrity of the well, which requires operators to test wells quarterly or report signs of problems with degradation. Also I suggest that the Department should seek authority to shut down permitting in the event that it does not have the resources to ensure Departments regulations. Thank you.

CHAIR:

15

16

17

18

19

20

21

22

23

24

25

Suzanne Broughton?

MS. BROUGHTON:

My name is Suzanne Broughton. I live at --- do you need that spelled? You have it on there? CHAIR:

Yes, I do.

1

2

3

4

5

6

7

10

13

15

18 l

19

20

21

22

23

24

25

MS. BROUGHTON:

Fine, all right. I live at 2377 Frederickson Drive in Franklin Park Borough. I am the immediate past president of a League of Women Voters of Greater Pittsburgh. Tonight I am speaking on behalf of the League of Women Voters of Pennsylvania, 11 our state level organization since this is a state 12 level issue.

What is F-R-A-C? It's a four letter They spelled it F-K. What has your attention, 14 word. your attention as members of the Environmental Quality 16 Board and it has our attention as the Legal Woman 17 Voters of Pennsylvania. We have just completed a year long study and there's a great deal of information on our website to view.

The League supports the proposals of the Department of Environmental Protection that strengthen oil and gas well regulation in our Commonwealth. These revisions provide substance to our position that promotes the maximum protection of public health and the environment in all aspects of the Marcellus Shale

production. Delegates to our recent national
convention across the country unanimously adopted a
resolution to support safe drilling and mining
practices. These industries must not be exempt from
either federal or state legislation and must be
subject to significantly stronger regulations,
oversight, inspection and penalties.

To strengthen further the Chapter 78 Oil and Gas Regulations, we have several suggestions and each of these is further described in more detail in our written testimony of which I'm going to hand you a copy of including the summary. But we will also turn it in, in accordance with the instructions that we were given here in Harrisburg.

First, extend the definition of fresh groundwater to include fresh and useable water. This will provide protection to water that may be needed in the future, but is not technically deemed fresh today.

Second, change the timeline for notification by the well operator of the pollution or diminution of water supplies. The DEP needs immediate notification to be effective. The current stipulation for reporting within 10 calendar days of receiving notice of such water degradation is insufficient.

Third, consider further restrictions on

excess gas to reduce quantities, to manage emissions, and monitor output with clear parameters. These restrictions are essential to minimize air quality hazards and to promote public health and safety.

Fourth, strengthen the standards for casing and cementing procedures, and treat all wells the same. Special considerations for some wells are subject to interpretation and lead to noncompliance. Any case-by-case exceptions must be considered under the regulations as alternative methods. Let's keep things you uniform.

Fifth, develop cement standards for tensile strength, as well as impressive strength, given any potential for seismic activity in the Commonwealth its imperative for the susceptibility of cement to seismic activity resist.

Sixth, include the scientific name of each hydraulic fraction chemical, its concentration and the amount used in each well as part of the well reporting simulation record. The right to know this information is imperative for testing and treatment from the wells. And as Senator Casey's hearing this morning and I believe that was demonstrated, for our first responders in case of injuries.

Finally, establish noise standards for

all stages of Marcellus Shale production. Special consideration must be given to noise in close proximity to such places as homes, school and property.

You know our commitment to public participation and governmental processes, the League commends the Environmental Quality Board for providing multiple opportunities through out the state for input to these proposed conditions. We are further encouraged that such public input is also required and entitled prior to the approval of alternative methods as testified in Chapter 78, sub-section 78.175.

In maintaining objectivity it is essential that the DEP verify the inspections of the equipment and procedures at critical points and conduct visits on an ongoing basis at each site during various phases of the drilling process.

Of particular importance are those readings and assessments required for the surface casing and fracturing process. Frequent and periodic DEP inspections are also required for operational and maintenance issues all the time.

The League recognizes the importance of collaborative and cooperative relationships between government agencies and private. However the DEP's

rule in protecting the public health and the environment cannot be left with those vested If the Commonwealth is to be a leader in interests. the production of natural gas, we must also before we become the leader in drilling correctly. Mandate best practices, safe guard our environment and protecting land owners and communities and future prosperity.

In closing, we need to be reminded both as citizens and as those who serve our Commonwealth through production of appointment and employment of the Pennsylvania Constitution Article One, Section 27, the people have a right to clean air, pure water, and for the preservation of the natural scenic, historic, and esthetic values of the environment.

Pennsylvania's public natural resources 16 of the common property of all people including generations to come as trustee of these resources, the 17 18 Commonwealth shall conserve a maintanment for the benefit of all. Do I have anything left of my ten 19 minutes?

CHAIR:

10

11

12

13

14

15

20

21

22

23

24

25

Go ahead.

MS. BROUGHTON:

I'd like to add a personnel comment. just read an article in Section 27 of the Pennsylvania

25 Constitution. 2 MR. LAPATO: Louder. 3 MS. BROUGHTON: 4 5 I just read Article One, Section 27 of the Pennsylvania Constitution an amendment that was 6 7 passed in, I think, 1971. It was interesting this morning to see that Senator Casey in opening his hearing, the first thing he did was to read that text. Back in 1970 my late husband Robert Broughton who was 10 a Duquesne Professor of Law, had a hand in formulating 11 that amendment and wrote the article in the 12 Pennsylvania Bar that pertains to legislative history. 13 I have in the law and personally involvement in that, 14 15 or shall I say involvement in the idea of the preservation of Pennsylvania's natural resources. 16 And 17 I'm glad to have the opportunity to say that today. Thank you very much. 18 19 CHAIR: Next is Theodore Robinson. 20 21 MR. ROBINSON: My name is Theodore Robinson. 22 I'm with

Citizens Power, 2121 Murray Avenue in Pittsburgh. First of all, I would like to thank the Department of Environmental Protection for this opportunity to speak

23

25

today on the proposed oil and gas well technical amendments.

My name is Ted Robinson, and I am a staff 3 4 attorney with Citizen Power, a non-profit educational 5 and advocacy organization based in Pittsburgh. One of our main goals is to promote affordable, renewable energy within the Commonwealth of Pennsylvania. that goal in mind and from what we have learned to date, Citizen Power does not think drilling on the 10 | Marcellus Shale warrants the potential adverse 11 environmental consequences. We believe, at this time, the prudent path is for there to be a moratorium on 13 horizontal drilling of Marcellus Shale in the Commonwealth until the true costs and benefits are 14 15 better known. New York has imposed a similar 16 suspension of new Marcellus drilling.

We are also concerned that the 18 environmental benefits of horizontal gas drilling may 19 be overstated. A study by a professor at Cornell 20 University found that the hydraulic Fracturing process 21 may introduce a greenhouse gas warming potential 22 similar to coal because of the leakage of methane from 23 drilling operations.

17

24

In addition the economic benefits of may also not be as advertised. The Marcellus Shale 25

1 Education and Training Center found that the workforce needed during the drilling phase constitutes over 98 percent of the industry workforce needs. 3 process of drilling gas wells in an area is completed, 4 5 this segment of the workforce will no longer be These workers are also very likely to be from needed. other parts of the country, reducing the benefit felt by the local workforce. Citizen Power believes that 8 the expansion of Act 129's energy efficiency and 10 renewable energy requirements is a better alternative to Marcellus Gas drilling, both for the environmental 11 and for the development of high-technology jobs that 12 13 will remain in Pennsylvania.

Although Citizen Power does not believe that Marcellus Shale drilling is in the best interest of the Commonwealth, we do appreciate the efforts of the DEP to strengthen the existing regulations regarding oil and gas drilling in Pennsylvania.

14

15

16

17

18

19

20

21

22

23

24

25

In our view, the proposed amendments to the regulations benefit the residents of the Commonwealth by requiring additional safety measures. However, we respectfully propose modifications to the technical amendments in order to enhance the protections in place for the environment and the citizens of Pennsylvania.

Under Section 78.1, the definition of deepest fresh groundwater should not be determined solely by, the deepest fresh groundwater bearing formation penetrated by the well bore as determined from driller's logs from the well. The operator should be required to use a conservative estimate based upon all information available including any available drillers logs from the well, any available driller's logs from surrounding wells, any available historical records of the normal surface casing seat depths in the area, and any other relevant information provided to the operator.

Under Section 78.51(d)(1)(v), we believe that any increased costs to operate or maintain a replaced or restored water supply should be provided for by the operator through the purchase of an annuity necessary to cover the increased costs. At the option of the owner of the water supply, the cash equivalent of the annuity could be substituted. If there is additional maintenance required that is performed by the water source owner, the operator shall be responsible for the cash value of the work performed.

Under Section 78.51(d)(2), we believe that the restoration or replacement of water supply should not be deemed adequate if it meets the

Safe Drinking Water Act. The restoration or replacement of the water supply should meet the quality of the water supply pre-drilling, even if it was above the standards under the Pennsylvania Safe Drinking Water Act. Water purer then drinking water standards is both a valuable commodity and less likely to fall below drinking water standards in the future.

Under Section 78.51(d)(3)(iii), we believe that the definition of reasonable foreseeable uses should include the reasonable expansion of use in cases where the water supply available prior to drilling exceeded the actual use for all water supplies, not just for agricultural water supplies.

Under Section 78.72(a)(1), we believe that the wording should be changed from, when drilling a well that is intended to produce natural gas from the Marcellus Shale formation to when drilling a well that's intended to produce natural gas from a shale formation, including the Marcellus Shale formation.

Under Section 78.72(h), we believe that the words, as determined by the Department should be added after the words, or equivalent study.

Under Section 78.73(e), we are concerned about the ability of operators to divert excess gas

away from the drilling rig because of the greenhouse gas effects of such a policy. Although diverting excess gas in emergency situations is certainly acceptable in order to protect workers, methods such as flaring or capturing the gas are much better for the environment and should be the only acceptable long-term methods for handling excess gas.

3

4

5

7

8

11

12

13

15

18

19

20 l

21

22

23

24

25

Under Section 78.83(c), Citizen Power believes that the surface hole should only be drilled 10 using air or freshwater. We are concerned about the potential for contaminating groundwater supplies using quote, freshwater based drilling fluid, end quote.

Under Section 78.83(a), Citizen Power 14 believes that the safest approach would be to require operators to run production casing at least to the top 16 of the formation that is being produced and cement the 17 production casing to the surface the entire way. approach may be more expensive, but it will minimize the danger of groundwater contamination. Thank you for hearing our concerns and if you have any questions.

CHAIR:

Thank you.

MR. ROBINSON:

Thank you.

CHAIR:

Kurt Limbach please.

MR. LIMBACH:

Hello, thank you for the opportunity to speak tonight. My name is Kurt Limbach. I do not have copies of remarks, because I'm speaking off the cuff. But I will submit written statements from our groups. I'm here tonight speaking on behalf of the Mountain Watershed Association and also the Commonwealth Trout Club.

We certainly do favor of the increase strengthening of casing in this well cementing standards proposed by the DEP. We think they should go further and also implement the suggestions made by Earth Justice, for which --- actually modify and made tougher standards. We are facing unprecedented drilling in Pennsylvania and tremendous possible dated impacts on ground water. With the amount of money that's going to be taken out of the state by the drilling industry, there certainly is plenty of money to do the best possible drilling practices. Which is the best casing, the best cement jobs known to man; this is what should be done in Pennsylvania.

We should have a high as standards in leeks as any other state in the United States as far

as drilling wells. We shouldn't be second to anybody. 1 We have the biggest gas right in U.S. history. 2 gas industry is not going to walk away from it, if we require intense regulations and intense scrutiny for gas drilling in Pennsylvania. They are not going to go anywhere else, the gas is here.

3

5

6

7

8

10

11

12

13

14

15

16

17

18

21

22

23

2.5

Our most important asset is drinking water. It is our water supplies; it is not our natural gas. And in 10 or 15 years, in 20 years, whatever the industry thinks of the plan in Marcellus out with that will be gone. And what we have to really look at is not the short-term 30 pieces of silver, but what's going to be left when they're gone. So we have to make really sure that this is done Relying on the DEP Oil and Gas so far or the right. industries best practices obviously is not working.

In my community Fairfield Township, we've all ready had a frac pit, completely drained all three or four remaining gallons of frac water and chemicals. Completely gone. Now many people may be --- hundreds of Pennsylvania we have frac pits all over the place that are open, that are accessible for deer to drink out of. Now we're going to have a hunting season coming up where hunters are going to be eating deer that have been drinking frac water. Does anybody

really know the medical consequences of what that is?

I don't think so.

1

19

21

22

23

24

25

The oil and gas in Pennsylvania is 3 currently regulated under the oil and gas act. 4 was written, I think when my grandfather was born. It's certainly didn't envision coal and methane gas for Marcellus drilling. And the industry would love to say it's well regulated under those sets of rules, it don't exist for them, their industry --- the Marcellus industry, the horizontal drilling industry 10 didn't even exist then. I keep hearing public 11 12 statements from the industry that they've been 13 fracking wells for sixty years. They certainly 14 haven't been fracking them in this manner, where it requires millions of gallons of water, using open 15 pits, and tens and thousands of pounds of chemicals. I've seen wells all my life in Pennsylvania, I never saw big pits done --- being filled with water. 18

So the industry is lying to everybody when it keeps saying, oh we've been doing this all along. They have not, this is a new practice. New York State certainly is a little more sensible, let's see, the gas has probably been there for ten million years, they can wait a couple more years to get drilled out. We certainly would favor --- our groups

would favor of a moratorium on gas drilling. would be a sensible thing to do.

1

3

4

5

7

10

11

12

17

21

22

25

The drilling industry keeps saying it's going to make us energy in the pact, but it never quarantees it's not going to sell this gas over seas, to China or India, or anybody else that wants to pay the top dollar for it. It doesn't quarantee it's going to sell it in Pennsylvania and drive our gas prices down. It's a world wide commodity. It's traded in the world markets. It's liquefiable and able to ship any where in the world.

So when they tell you this is for America or for Pennsylvania their lying. The only thing it's 14 for is the green that goes in their wallets, that goes 15 in their pockets. And that's what this is all about. 16 We need to do the best job protecting casing and well I've also seen, again, in my community Range Resources wanted to dump drilling waste water 18 19 down in water line, which they insisted was the 20 Conemaugh River. It didn't go to the Conemaugh; it went to water authority lines that fed six And the DEP was okay with this work. communities. 23 Because the DEP along with gas stands for, do not 24 expect protection or department of environmental prostitution. That's what they stand for.

reason the industry has wanted the DEP to get some more people on its staff is too help write the permits. So they can keep writing the paperwork, so they can keep drilling wells.

1

3

4

21

22

23

24

25

5 We have great concern about the water 6 withdrawals, fresh water withdrawals from our 7 communities. I have a stream that goes through my farm that the Western Pennsylvania Conservancy determined was the second best waterway all of Western Pennsylvania in water quality and by the Conservancy. 10 11 The DEP oil and gas let Exxon have their way with it and drill 30 feet from this stream. 12 They're fracking that well right now. And I hope there's not a 13 I hope they don't spill anything, its right 14 15 next to the stream. And if that's responsible drilling, I don't want any Marcellus drilling. 16 they make a bend, it takes an eighth of a mile to make 17 that bend. They have no reason to be 30 feet away 18 19 from a creek of that quality or any stream in Pennsylvania. 20

I what to echo was the other fellow said. The other fellow said that jobs aren't going to local people. They're temporary jobs and they'll be gone. But we'll be left with a mess. My township now has six Marcellus permits. Three have been drilled, three

more set to be drilled and that's just the start. According to Mary Joe White (phonetic) who's the head of the Center of Environmental Committee, according to her office, 28 percent of the entire surface area of Pennsylvania is now under Marcellus lease. And that includes lakes, rivers, streams, and places where they 7 really can't put a well. So the actual surface area is even greater if you take away very steep slopes, where'd they have to flatten five acres with a 50 degree pitch to put a well, they can't drill there 10 either. So the actual amount of land they have sowed 11 up, reasonably flat land is obviously much higher. 12

5

8

13

14

15

17

18

19

20

21

22

23

24

25

The industry is talking about things like forcing people to take their gas and sell it. taking of people's resources from them. 16 basically stealing. And another thing I want to talk about is when they turn and go a mile in one direction; do they really have everybody sign out their property? How do we know? They love to talk about the right of capture, which is basically the right to steal gas from your neighbor.

The DEP should make public knowledge which way these wells are going and how far. Everybody should have that information. They should be aware of it whether it runs under their property or near their property or not. It shouldn't be a very hard process for a citizen to have to go pull a well permit at the DEP to look at that permit, make an appointment to find out which way that well goes.

That should be public knowledge and it should be on the internet. It should be available to all Pennsylvania citizens who are concerned about Marcellus drilling in their area.

And once again, I want to reiterate that 9 10 we totally support these increased regulations on casing and cementing standards because this is 11 protecting the water, which is the most important 12 thing we have other than our people ourselves. 13 we'd like to see them to go further and use the 14 15 standards set by Earth Justice on some of these items. 16 I appreciate the DEP giving us time to speak here and again, we need a moratorium in Pennsylvania. 17 no rush to do this other than drilling companies want 18 to make a lot of money fast and they want to do it 19 20 before we're prepared and regulated well. It might 21 cost them a little bit more to drill that well, and 22 they'd rather save that money. That's why Exxon 23 wanted to go 30 feet away from Tumble (phonetic) Creek because it saves them a little bit of money. 24 25 they're not going to do what is in the people's

```
interest or the environments interest, or the public
 2 health's interest, that's not their job.
                                              Their job is
 3
  to drill gas and make money.
                                  That's what they know.
 4
  So to expect them to do these other things, we're
 5
  being foolish. We need the DEP to be very strong and
  vigilant about this. And obvious the EPA is very late
 7
  in to the game on this. The EPA should be regulating
   this stuff and it hasn't been.
                                   So we need our own
  state to protect us.
                         Thank you very much.
10
                CHAIR:
11
                Bridget Dolby, please?
                                         Is there a
12
  Bridget Dolby here? Okay. Bridget?
13
                MR. LAPATO:
14
                Bridget Dolby?
15
                CHAIR:
16
                Can you provide your address?
17
                MS. DOLBY:
                                                And it's
18
                Yes, my name is Bridget Dolby.
19
  200 Hartry Street, Springdale, Pennsylvania.
                                                  200
20
  Hartry Street, Springdale, PA.
21
                CHAIR:
22
                And affiliation?
23
                MS. DOLBY:
                I'm a parent and a concerned citizen.
24
25
  One must care about a world one will never see.
                                                     This
```

1 quote by Bertrand Russell resonated with me as I struggled to find the right words to speak. reminded to live in the present moment for from it evolves the future.

3

4

5

6

7

10

11

12

13

14

15

17

18

19

20

21

22

23

24

25

I am a resident of Springdale, PA. small town on the Allegheny River, that benefit from its 4th or underground river or aquifer, which supplies the town with its drinking water. polluted all ready by Chevron, it risks further contamination by the fracking process. We have much to lose. After viewing the now popular documentary, Gasland by Josh Fox, the mere image of water on fire is terrifying. Will my children quench their thirst with hundreds of toxic chemicals? I would like to take a shower and not wonder what invasive diseases, 16 this is triggering.

It is intriguing to me, that when people care about their communities, the environment, and take action, they are labeled hysterical, by the gas and oil companies. These companies have free rein, to do anything they want, however, they want to do it, due to King Cheney who overturned all government regulations concerning the environment which would make the gas and oil corporations accountable.

It will take years for studies to reveal

detrimental results, meanwhile fracking descends on Pennsylvania and elsewhere, unchecked with property owners and water drinkers, unaware, misled, and lied to, with no laws to protect us. Future fracking must be stopped until environmental and all other agencies, regulations, and health issue concerns are addressed. Thank you for the opportunities.

CHAIR:

2

3

5

7

8

9

10

11

12

13

14

20

24

25

Sue Seppi?

MS. SEPPI:

My name is Sue Seppi, S-E-P-P-I, 140 Oak Post Road, Pittsburgh, 15215. These comments are given on behalf of Group Against Smog and Pollution.

According to the Department of Environmental Protection DEP website, there have been 15 l 16 3,345 oil and gas well drilling permits issued and 17 1,482 wells drilled January through May 2010. Secretary, John Hanger said in a recent news article, 18 19 in a few more years, Pennsylvania will likely be producing 10 percent of all the natural gas produced in the United States, because of the huge amount of 21 22 gas in the widespread Marcellus Shale areas throughout 23 the state. He further remarked, we've told the industry that safety can't be sacrificed, and not to allow profit to trump safety.

The proposed amendments to add additional requirements to Chapter 78 regulations to minimize gas migration and protect public and private water systems as well as overall safety is a step towards fulfilling the necessary regulation of this burgeoning state industry and GASP supports this action.

1

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Strong regulation is vital for the health and well being of residents and the industry. expected scale of drilling, the existing evidence of serious problems, examples of which are the Clearfield County well explosion, the recent explosion with loss of life at a well in Indiana Township, the many incidences of individuals reporting loss or contamination of water resources illustrate the need for the very best practices to be adopted. Marcellus well life is different, but a well can be re-stimulated many times, and therefore the life of many wells may last for decades. Add this staying power to the projected growth of the wells and oil and gas drill sites with accompanying equipment and water containment will be omnipresent in a large swath of Pennsylvania.

With that in mind, the need for drilling best practices and technology becomes not just important but really essential to long term co-

existence with residents of the state. For example 1 2 the Chapter 78 oil and gas regulations rightly 3 recommends at 78.78(e), excess gas to be flared, captured or diverted away from the drilling rig in a 5 manner that does not create a hazard to public health. 6 There is no preferential hierarchy or requirement for 7 choosing the least damaging choice to the public or 8 environment.

Flaring may be a best practice under some 10 immediate circumstances such as in equipment However, there are other substantial 11 malfunction. 12 opportunities, to capture these gases. For example, 13 following the first drilling completion at a pad, a 14 gas capture system should be put in place and 15 subsequent wells at the pad could divert gases to that 16 system with no flaring or venting.

9

17

18

19

20

21

22

23

24

25

The capture of the gases would pay for necessary equipment to accomplish the capture. This is sometimes referred to as a green capture. Venting should be a last choice as it simply emits unchecked, unhealthy air emissions. These sorts of choices can be made in many areas of the drilling process.

Another example where Pennsylvania could increase reliability of practices would be the requirement for cement bond logging to monitor the

1 integrity of cement formation bonds in especially important casing, such as surface and intermediate casing that are protecting ground water. This log should be a required report to DEP. Several states require operators to perform these tests not just in situations where there appears to be a problem but in normal situations of cementing important casing Pennsylvania does not appear to regularly strings. require such cement integrity test reporting.

3

7

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

At 78.122, the additional requirement at (6) for a reported list of hydraulic fracturing chemicals is obviously important, but could be stated more inclusively and correctly as requiring the composition of all additive chemicals and their quantities. The EQB has requested comments on a number of additional points as follows: GASP supports the use of centralizers which help to eliminate spots of decreased cement barrier protection.

At 78.85 GASP supports strengthening the critical zone at the drill casing seat to a 72 hour compressive strength standard of 1,200 psi. as a suggested requirement as this is the place for the highest stresses generally occur.

We also support the additional suggestion that the zone of critical cement would also be

required to meet the API free water separation standard conformance standard.

Thank you very much for the opportunity to give makes these comments. And we will be providing additional specific comments at a later time during the comment period.

CHAIR:

2

3

4

5

6

7

8

9

10

11

13

14

15

16

17

18

19

20

21

22

23 l

24

25 l

Thank you very much. Ron Slabe?

MR. SLABE:

My name is Ron Slabe. I live at 516 Angelcrest Drive in Upper Burell, Pennsylvania. 12 I'm here speaking for myself as well as a group I represent, Concerned Citizens against Marcellus Pollution, CCAMP.

Let me start by saying that I agree totally with the recommendations of the Environmental Quality Board in regards to updating and strengthening the existing requirements for drilling, casing, cementing, testing, monitoring, and plugging of oil and gas wells and foremost, the protection of water supplies.

After reading and reviewing the many horror stories of how many people have lost their drinking water due to migrating methane gas, it amazes me that it has taken this long for there to be any

consideration of updating the rules and regulations for gas drilling.

Improper gas well casing, poor
workmanship, the lack of inspection for years of wear
and tear on the casing, have or will cause not only
methane to migrate to well water, but could also allow
the chemicals used in the process of hydraulic
fracturing to do so. Both resolve in the pollution of
water wells; this is why the casing regulations should
reflect state of the art technology that not only
protects current use but also insures the long term
integrity of the well.

The cases of the people in Dimock,

Pennsylvania and the residents of Hickory and

Washington County and Green County all cry out with

the need for stricter controls over our gas industry.

In the documentary film, Gasland, this probable gas migration vividly shown through scenes of people lighting their tap water on fire and methane bubbling up in nearby creeks and streams. In Dimock Township in particular, the cause of migration of gas into the water wells of residents was found by the DEP to be due to improper well casing.

Even in this situation however, the gas company had not complied with a previously issued DEP order and

was consequently fined \$240,000.

1

7

12

15

16

17

18

19

20

21

22

23

24

25

2 As you can see the gas companies seem to 3 be able to thumb their noses at orders to correct the problem of gas migration and the fines are more easily 5 paid than following through on correcting the problem. This must be changed. Companies should never prefer to pay the fines due to their minimal amounts rather then pay the price to fix the problems. DEP fines must be increased to a point that violators would 10 prefer to adequately fix the messes they've created 11 than to pay the fines imposed.

DEP must not only pay attention to migrating methane to well water, but also the 14 migration of fracking fluids to well water, streams, rivers and wetlands. Although such chemicals are a small percentage of the fluids, they are known to be toxic and cancer causing.

A US Department of Energy report concluded and I quote regardless of relative concentration, it is important that additives be prevented ground water and entering unnecessary and creating unnecessary risks, unquote. And in May 2009, the department of energy reports states that until effective alternatives to such fluids are found, I quote, the best way to protect ground water is to

isolate hydraulic fracturing fluids from ground water zones. Let me repeat that, the best way to protect ground water is to isolate hydraulic fracturing fluids from ground water zones, period.

Although the safety of the chemicals used in hydraulic fracturing are currently under review by the Federal EPA, I don't think it can be argued with a common cause report that, quote, cracks in a casing of gas wells may allow well contents from methane gas be derived from shale rock to harmful fracking fluid chemicals to seep in to ground water used for human consumption, end quote. Therefore, it is ever more imperative that the DEP regulations concerning gas well casings not be just state of the art in technology, but state of the art in regards to inspection and enforcement as well.

Aside from having water well streams and wetlands polluted, there is now the ever present danger of migrating gas entering a home and posing a catastrophic situation by way of an explosion. In a more subtle way, undetected methane entering a home can cause brain damage or lead to suffocation.

The recent gas well drilling in Clearfield County, Moundsville, West Virginia, Texas and now Indiana Township, also clearly show the need

to regulate the correct installation and testing of all well out equipment and how close to homes gas drilling should occur. The current rule, under the Pennsylvania Oil and Gas Act allowing drilling to occur a mere 200 feet from a home, is a recipe for disaster and that portion of the gas act must be amended.

3

5

7

25

Commenting on the Clearfield blow out of 8 June 4th, 2010, our own DEP Secretary John Hanger said 10 and I quote, the event at the well site could have been a catastrophic incident that endangered life and 11 12 property, this is not a minor accident but a serious 13 incident, end quote. The Professor and Director of the University of Pittsburgh Center for Healthy 14 15 Environment and Communities, Dr. Conrad Dan Volz 16 commenting on this same event, said that a similar 17 blow out in an urban area setting like Pittsburgh's Lincoln Place and I quote, would have forced the 18 19 evacuation of 5,000 people and at least seven schools, end quote. And moreover he goes on to state, 20 emergency standards should have been set state wide 21 22 before any of this drilling ever started. Emergency 23 preparedness in groundwater safety have all been 24 things that were thought of after the fact, end quote.

In these cases there were severe burns to

workers and respondents at all these blow ups. 1 now we have two deaths at the Indiana Township 3 explosion with responders called in from Texas in order to extinguish the flames. There is an obvious need for the DEP to improve regulations in this regard. And although this aspect is probably beyond the scope of the current DEP regulatory review, DEP needs to do all in its power to advocate for amending the Pennsylvania Oil and Gas Act to increase dramatically the setbacks for drilling near homes as 10 11 well as set backs that deal with how close to wells, streams, and water ways drilling can take place. 12 The current 100 and 200 feet pertaining to theses 13 items, wells and waterways is also in great need of 14 revision in the Oil and Gas Act. 15

Next, there is a question of testing the drinking water of homeowners. Certainly well water needs to be tested before drilling occurs to create a base line. That gas company should do this is fine, but homeowners have been told that independent labs should also do the testing. This is and can be an expensive proposition however. Do to defray such costs, the DEP should provide funding to cover such costs using an increase in permit fees to create such a fund. If a homeowner's water is adversely affected,

16

17

18

19

20

21

22

23

24

25

DEP regulations should make it as easy as possible to remedy any complaints due to drilling operations.

Moreover, pre-drilling surveys of water quality done by gas companies must be reported to the homeowner and DEP. The current perception is that there have not been, nor have been, reluctance on the part of gas companies to do so.

8 Although I support the new and stronger regulations proposed, I have strong reservations however, over the DEP's ability to enforce these 10 11 regulations in light of the tremendous cuts the DEP 12 has incurred. In last years state budgets some 26 13 percent, and this years cut of some 9 to 10 percent. 14 Enforcement of any and all regulations means 15 everything. Just the one incident of many that comes to mind is the recent quarantine and quarantining of 16 17 cattle in Tioga County by the Pennsylvania Department of Agriculture. The gas company involved East 18 Resources Incorporated, did not take the means to 19 20 properly keep the cattle from the contained fracking 21 pond they were attracted too. After being fined by 22 DEP the gas company corrected the problem by 23 l installing, get this, a snow fence around the fracking 24 pond. Now, surely all of us now that a snow fence is 25 | hardly, hardly an adequate means of keeping not only

that can easily hurdle such an obstacle and drink of the fracking fluid containing such toxins as Barium, Strontium and heavy metals to mention just a few.

I believe we are poisoning ourselves in so many ways. Again proper enforcement of any regulations beats everything and requiring proper and adequate means of correcting such a problem is a must.

Finally, I reiterate my whole hearted support for the improvements and strengthening of those regulations and ask the DEP strongly enforce such regulations and support my request and many peoples request to advocate for amendments to the Pennsylvania Oil and Gas Act that I have indicated in this statement. Much yet needs to be done to protect the citizens of Pennsylvania.

CHAIR:

Angela Wiley? Angela Wiley? Barbara Grover? Barbara Grover?

MS. GROVER:

Good evening, my name is Barbara Grover.

And I live at 5526 Wilkins Avenue in Pittsburgh. I'm here tonight representing the Sierra Club's local Allegheny Group. The Sierra Club has 23,000 members state wide and the Allegheny Group has about 5,250 in

Southwestern Pennsylvania.

Shale gas hydraulic fracturing operations have a significantly more serious impact on communities and environment than previous methods of natural gas drilling. If natural gas is to play a part or a role in Pennsylvania's and the nations energy future, it must be carefully regulated to ensure that the health and well being of Pennsylvania and the United States residents as well as our natural resources are adequately protected.

The Allegheny Group of the Sierra Club is pleased that EPA recognized that the regulations currently governing gas well construction and safe water supplies needed to undergo serious review. Significant new technologies and practices have been developed since those regulations were addressed back in 1989.

The changes to the oil and gas regulations that are being proposed are designed and I quote, to minimize gas migration and provide an increased degree of protection for both public and private water supplies.

Clearly, as you've heard many times all ready this evening the casing and cementing aspects of well construction are critical to protecting springs,

well water, ponds and aquifers from contamination.

Consequently, well designed regulations are essential

to ensure the public's health, safety and welfare. We

expect the regulations will require the oil and gas

industry to use best practices and state-of-the-art

technology; a theme that seems to be prevalent this

evening.

The proposed changes provide clear requirements for the proper installation and testing of blowout equipment. We assume these changes, when properly enforced, will prevent disasters such as the blowouts that have recently occurred here in Clearfield County and Indiana Township.

Safe drinking water is the most critical concern of natural gas well drilling, especially the hydraulic fracturing in Marcellus Shale. The Natural Resources Defense Council cites that Dimock, PA, groundwater contamination was due to insufficient or improper cement casings, in up to six natural gas wells drilled in that area.

In Bainbridge Township, Ohio, the state of Ohio found the cement casing was insufficient by standard industry practice and contaminated underground sources of drinking water. In Bradford Township, the Pennsylvania DEP found that the lack of

a cement return in some of the 26 natural gas wells in the area resulted in contaminating the drinking water.

2

12

13

14

15

16

17

18

19

20

21

22

23

24

25

3 Consequently, strict regulations related 4 to the construction of the casings and their rigid 5 enforcement are essential. The regulations must prevent gas migration into our drinking water 7 Pre-drilling surveys of water quality must supplies. be conducted by an independent testing company paid for by the drilling operators. And those surveys and reports must be reported to the DEP and the landowners 10 11 in a timely manner.

Similarly, periodic water testing throughout the life of the well and afterward need to be conducted and reported. That testing will allow the surface landowners and the companies to identify contamination quickly and correct it before serious damage occurs.

At the EPA hearing in Canonsburg last week, many residents whose water supplies had been contaminated by gas well drilling indicated difficulties in obtaining restoration of those water supplies to safe drinking water standards.

The regulations need to make it easier to remedy the affected landowner's complaints of contaminated water from drilling and extraction

operations. It is vital that the EPA and the EQB employ adequate staff to address such complaints in a timely fashion. The quarterly inspections proposed also demand an appropriate number of qualified inspectors to implement that needed regulation.

One aspect of the gas well drilling that seemed to be omitted, although I may have missed it, was ensuring the long-term integrity of the well.

That is, what happens when the well is abandoned for whatever reason? We encourage you to consider you including regulations that address the long term impact of these gas wells whether or not they are fully functional.

We also wish to alert the members of this audience to three bills before the Pennsylvania General Assembly that reinforce and complement these proposed regulation changes.

House Bill 2213, The Land and Water

Protection Act, will require public notice of
applications for drilling permits, mandate inspections
by DEP at each critical phase of drilling, update bond
requirements to cover the costs of plugging a gas
well, extend liability for pollution, and require
minimum setback distances from environmentally
sensitive areas.

House Bill 2443, enacts a severance tax to ensure that natural gas drillers bear the long-term costs associated with increased drilling. portion of these revenues is set aside to enhance public resources.

And thirdly, House Bill 2235, the Save Our Forests Legislation will place a three-year moratorium on new leases for natural gas drilling in our state forests and require an impact study of current leasing on our forests.

We encourage all of you to ask your state representatives to support these bills. We in the Sierra Club trust that the DEP and EOB will conscientiously enforce the new regulations so that an adequate supply of safe drinking water and the lives 16 and well being of Pennsylvania residents are protected. Thank you.

CHAIR:

1

3

5

6

7

10

11

12

13

14

15

17

18

19

20

21

22

23

24

25

Thank you. Karen Bernard? Loretta Weir?

MS. WEIR:

I didn't prepare anything written.

CHAIR:

Okay.

MS. WEIR:

My names Loretta Weir, 4544 Penridge

1 Drive, mailing address is Munhall, Pennsylvania 15120. 2 The reason we're having this dialogue tonight is 3 because something is terribly wrong, okay. Something is terribly wrong and that is why we are having these dialogues now. But what I can't understand why these 5 organizations didn't come to the people and go, hey 6 7 quess what, these drillers want to come to 8 Pennsylvania and we're not sure if this is safe, what do you guys think? All right, I'm a little confused 10 as to why Acleberry (phonetic) and everyone at the DER that infiltrated our forests, they have all ready 11 12 destroyed water sources, why now we have to beg to be 13 We live here. This is where we live; this is heard. 14 the water we drink. It is my understanding from 15 attending many, many, different meetings from accessing the internet, it is the age of technology; 16 17 that these synthetic chemicals can not be removed from the water source. 18

I don't understand one thing, we want to say well, they'll clean it up or we're going to make them responsible to restore --- restore what? It can not be restored. These are man made problems. They do not have the technology in place that can guarantee you another accident. You cannot buy anything that you will say, I don't want a guarantee. I'll buy that

19

20

21

22

23

24

25

TV, I'll buy that car, I'll buy anything, and I don't 2 need a quarantee. Well, your drinking water --- you 3 better want a quarantee, because you can't live without it and once these synthetic chemicals go into your ground you can not control water. 5 That cannot be controlled. It's a resource that will flow to where it flows in to streams, rivers, aguifers wherever. But you can not restore your drinking water. We're in the middle of a healthcare debate in this country, 10 everybody's upset over the healthcare debate, 11 everybody's shook up over giving people free 12 healthcare. What the hell happens when all these people get sick, you want to talk about healthcare 14 I don't understand. People don't feel good; costs. 15 are they going to run blood titers? Are they going to 16 say, here --- do they even know what they're looking 17 I feel this way about it, if it looks like a duck and it walks like a duck, it's a duck. 18 19 exempt from the clean air act, the clean water, clean drinking act --- don't have to tell you what's in the 21 chemicals, something's wrong. Okay, let's talk about 22 accountabilities, let's talk about credibility. 23 been to meetings. I've been there with gas executives 24 present at the meetings. I went to the County 25 Counsel, I will tell you this. We were a --- we were

1 a captive audience for them for over an hour and a half, we respectfully listened to these gas people deny Dimock, PA, deny any well contamination when on the DEP website they can go on to under well water contamination. They sat there and bold faced lied to a public who is educated. It is insulting. insulting to the general population to tell us that things aren't true that we read and we resource ourselves.

3

4

5

7

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Okay, after the meeting, after an hour and a half of being a captive audience for these people they promptly got up when it was our turn to speak. And I want to know why the citizens didn't speak first. Okay, you came here for something, why didn't we speak first? Half the County Counsel left, with the exception of one County Counsel member Charles Bartoni, who respectfully listened to the The rest of them laughed, spun around in citizens. their chairs, walked back and got a drink of water. It was scary that these people are actually leading any citizens, okay. It was an insult to the citizens, it was a disgusting display and I am outraged by this. I am outraged over it quite honestly. I have been there --- I went to the EPA meeting. I had the privilege, okay, to sit behind four well suited

gentlemen with their shiny shoes and their dark suits, okay, and they laughed every time their was a citizen up at the microphone talking about health issues related to this drilling. People that were standing 5 there saying my children are sick, we are sick, They laughed. So I go home and my 6 something's wrong. husband says to me, well here's a new website to 7 access, it's called, Follow the Money.

8

9

So I accessed the website and I started following the money to every damn politician in the 10 11 | City of Pittsburgh and in this state, okay. Mel Packard gives me \$361,000 you're damn right I'm 12 voting for Mel Packard and I'm going to give him 14 whatever he wants. All right, so I want --- I am for I am representing Lincoln Place Action 15 a moratorium. Group and any other action group that will have me because something is wrong when these people aren't accountable for anything, when they walk through safe 19 and they are all ready in your back yard talking about force falling before we even have a chance to speak. We were unsuspecting innocent citizens trying to 21 22 conduct our lives, raise our families and this is what 23 we have to deal with now begging people to save People that should come to us and say 24 Pennsylvania. 25 let's save Pennsylvania okay. I took this class at

1 | Pitt once entitled --- saying a few more things, 2 called the History of Pittsburgh, okay. Andrew Carnegie and his crew what they did in the mill would 3 make you cry. There's a reason those men fought and 4 died for that union. The History of Pittsburgh, Out 5 of This Furnace --- go read those books. Little kids 6 7 had their legs blown off, all right. But at the end 8 of his life he got scared, he through some libraries up for everybody, maybe unwittingly saying --- go educate yourselves so people like me can't come in 10 11 here and do this to you again. 12

But now, how many years later, we will allow our children to drink water that contains chemicals of unknown origin that cannot be removed from our water source. If you can't remove it, you don't use it. There is no other way I can look at this, I am sorry. I will leave you with a quote from Margaret Mead, never doubt that a small group of thoughtful committed citizens can change the world. Indeed it is the only thing that ever has. Thank you.

CHAIR:

The next person is Adam --- and I'm not sure how you spell your name here.

MR. PECHARKA:

It's Pecharka.

13

14

15

16

17

18

19

20

21

22

23

24

25

CHAIR:

1.8

Yes, will you spell that for us please?
MR. PECHARKA:

Yes, I will. My name is Adam Pecharka; spell that, P-E-C-H-A-R-K-A. I'm from Pittsburgh, Bloomfield; my address is 445 Taylor Street Rear, Pittsburgh, PA. My affiliation --- I'm affiliated now I do environmental policy in the city, but it's my personnel affiliation right now. I was coming here to talk about some of the well casing stuff. There's been a lot of criticism of well casing procedures within the drilling operations. Cement casing plays a large role in deciding the overall responsibility of the methods in technology.

And the recommendations for well integrity and cement stress are not adequate enough. The regulations specify a minimum level of 350 psi; pounds per square inch. But requirements have been higher than this historically and I believe --- I don't know who it was, they gave the Texas --- gave a relation to Texas Law. I will give that. So this provides the question, why are we not regulating to ensure the upmost integrity of the well, as far as just cementing casing? So the instances from those proposed role making Section 38.85(b), Cement

1 Standards, it's under cement standards. This is where
2 it's stated in the proposed regulation. The operator
3 shall permit the cement to set to a minimum
4 compressive strength 350 pounds per square inch, PSI
5 in accordance with the American Petroleum Institute's
6 API specification ten.

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Now the comparative laws from Texas ---Texas, their railroad commission governs their drilling so the comparative law is --- I don't know what he document is, but it's Chapter three from the Oil and Gas Division Law, it's 3.132 under Casing, Cementing and Drilling and Completion Requirements, Surface casing. I'm sorry --- 3.132(c)(i), surface casing strengths must be allowed to stand under pressure until the cement has reached a compressive strength of at least 500 PSI in the zone of critical cement before drilling the flow, or initiating the The cement mixture in the zone critical cement test. shall have a 20 --- 72 hour compressive strength of at least 1200 PSI. So that's a comparative cement compressive rate.

Now, I've heard people compare to the Texas law, this is what I don't think has come up; The Pennsylvania Oil and Gas Conservation Law, which actually applies to deep drilling. Marcellus drilling

is actually the deepest drilling that occurs that does not come under jurisdiction of this law. So it's kind of interesting almost the exact same depth --
Marcellus Shale is right about there, but it's not.

It's Chapter 79.12(e) the cement shall be aloud to set to a minimum compression strength of 500 pounds per square inch using generally recognized industry engineering data for the type of cement used prior to the resumption of drilling.

10 So my main point is I quess you go what? I don't know how many feet lower, but the compressive 11 12 strength changes from 350 PSI to 500. So I don't know 13 why the regulation --- the proposed regulation 14 wouldn't reflect historical data for pounds per square 15 inch and historical compression data. It doesn't 16 reflect, I mean, what Texas's regulation is. 17 was --- I think this is a 1961 law so I don't know. don't know what that means. What is this disconnect 18 19 occur here, the recommendation of minimum stress absorption, 350 PSI does not reflect historical 20 21 standards. My recommendation is a 500 PSI or greater. 22 That's a responsible decision to make and making that 23 decision would hit at least four of the points for 24 this meeting, casing stuff, regulations, and other 25 regulations over the long-term integrity of the wells.

That's the specific. I'll give you a personnel comment from my own regard.

1

2

15

16

17

18

19

20

21

22

23

25

We need to examine all risks and benefits 3 4 of shale drilling from a wider perspective. 5 people are giving their great perspectives on this. The environmental resources represent a massive best suited values and interests that we can either decide to protect or ignore, so the gas has been present for millions of years, other environmental resources such as water, or land, have developed on the same time 10 11 line. So it's when we impact these waterways, our air and our land that that balance disintegrates. 12 can't drill for gas and destroy our waterways at the 13 14 same time.

I'll leave with one last remark. In economics one of the largest things in economics is this; modern economics doesn't address environmental theory. We can inflate money, we can do whatever we want with manmade capital and inflate it and try to trade it off and make a substitutable relationship with natural capital and that instance doesn't exists. I mean, it's natural capital; you cannot substitute it with manmade capital money. You can't substitute it with labor that's why labor is cheaper in third world countries. Because that's manmade capital and

they trade it for natural resources like, steel in Brazil and coal production in India. So I mean we're 3 seeing the disintegration of our resources such as the The DEP's budget was cut 90 percent for 2011, in 4 DEP. a year where were --- I don't know how many permits 5 are supposed to be --- occur. So, I appreciate the 7 DEP holding this hearing and especially hearing I like the ten minute period of making -it gives a --- it's easier t talk that way. 10 appreciate that, I realize that it's a larger problem 11 than even me and the DEP can do. That's why I went to 12 the EPA hearing. So, I think we'll see this progress 13 in an interesting way. That's somewhat of a vague descriptive point, but it's apparent that we defiantly 14 15 need to protect our resources. The DEP is a resource. 16 We need to make sure even if their listening to us that we provide them with all the sorted comments that 17 I've heard tonight. So that's all I have to say. 18

CHAIR:

20 Thank you. Mel Packard?

21 OFF RECORD DISCUSSION

19

22

23

MR. PACKER:

My name is Mel Packard, I live at 623
Kirtland Street in the city of Pittsburgh. I'm a
parent and a concerned citizens. I'm with the Green

Party, I'm the nominated of Green Party of the U.S.

Senate. Allow me to open with a quote all ready used by a friend of mine who testified at a previous hearing in Williamsport. This quote is naturally from one of my favorite people, Donald Rumsfeld, the former Secretary of Defense. But it's an appropriate comment in which he said, there are known known's, there are known unknowns, and there are the unknown unknowns.

Keep that one in mind as I testify today.

Earlier this year, according to a public statement in Williamsport by DEP director John Hanger, we were told that we have only been practicing hydraulic fracturing for about five years. This is, of course, completely contrary to the industry statements, which claim such an incredibly long and as they stated, incredibly safe history of fracturing that I sometimes wonder if the bright stars that brought throngs to the manger of Jesus might not have been a flaring operation instead.

This history forces us to ask the DEP and the Environmental Quality Board why it's taken so long to address this issue. Since fracking began people have been filing complaints of wells contaminated and useless, animal drinking ponds totally polluted and contaminated, cattle and other animals either sickened

1 and dying, birth deformities in calves, drinking water 2 that must be purchased or even delivered by the same drilling companies that at the same time claim it's not our fault. Apparently we are supposed to believe that those companies deliver the water out of the goodness of their hearts while claiming no responsibility for the contamination.

3

5

8

10

11

12

13

14

15

16

17

18

19

21

22

23

24

25

So we have to ask, why is it taken so long for the DEP and EQB to even begin this process, when it's taken this long to begin, how long will it take to end? How much longer will the citizens of this state have to stand by while one of the basic elements of life, water, is being destroyed?

In addition, as other people have commented, what safeguards will be put in place to prevent further contamination 10-15-20 years on down the road when these companies have taken their money and their gone folks? Their not sticking around, they come in, they take it and they leave. The industry is already five years ahead of the DEP; how far behind will the DEP be in five more years as industry develops new, unproven, untried, chemical compounds and practices?

There's a very old coal mining song goes something like this, its two lines it goes;

Coal train, coal train, pulling down the track, taking away our coal and they can't put it back. We can change that in this case to; Drillers, drillers, fracking out in back, taking away our water and they can't put it back.

Ĭ8

Because in fact, you can't put it back.

When the water's gone, polluted, aquifers poisoned,

filled with chemicals, wells sealed off due to

chemical contamination, the water that we need to

function as human beings, clean water, pure water, is

gone, as Loretta testified and many others and will

never come back.

And the problem is not just gas infiltration although I think this town has a tensidy, concentrate gas infiltration, you have to deal with chemical contamination and the ones who speak very specifically is a medical practitioner of emergency medicine about a case in Colorado --- so you understand how serious this can be, maybe you all know this, but I want to remind you in the year 2008, a nurse in Colorado had to take care of a worker who came in from a well who had been doused with fracking chemicals. They would not release the list of chemicals because it was a proprietary secret. That nurse hovered near death, with kidney, liver, and I

believe, either heart or lung failure --- I think it was lung failure, for weeks while he wouldn't release it. They finally released the list of chemicals and they were able to treat her. But it's not just the list of the chemicals which you're talking about; it's the concentration of chemicals. If somebody comes in 6 to me, who has contamination in their eyes from some 7 chemicals and say they're working in some steel mill, they come in with material data safety sheet, they may even come in with a container of that fluid, I can 10 call poison control and I can get some information on 11 12 that right away. They submitted a list of 96 13 chemicals, what am I supposed to do? I have no idea what I'm seeing here, what I'm treating here. I can't 14 15 just call poison control and say its 96 chemicals. 16 They want to know what the concentration is, there's 17 no brand name, there's nothing. This is just a witch's brew that they brewed up and shoved into the 18 19 ground and we've got to treat people, plus the practioner him or her self can be poisoned by that 20 21 process. So this is part of the huge responsibility 22 to recognize that you're all ready years behind in 23 fulfilling this monster. You are years behind in 24 getting control of the damage, with far more years to 25 come even if we stopped all of the drilling right now.

The only answer and I know it's not in your peripheral but it's not in your range to do this, but the only answer is the moratorium on drilling now and not just on new wells, but on all Marcellus Fracturing until it's proven that it can be done without poisoning our water.

As a medical practitioner I have to take a vow to do no harm. And the DEP should take exactly that vow. I believe there's enough evidence already in towns, villages, cities and farms all over this state to tell the drillers to shut it down.

It's beyond my comprehension why any government body that purports to represent the best interest of its constituents, would not close the barn door before the rest of the cows get out. There's too damn many loose already.

Now remember my quote at the beginning, the consequences of Marcellus Shale fracturing are one of the unknown unknowns, and we need some preventive medicine. Next year's too late, we need it now.

There is a class war being waged against the citizens of this state by those with money and economic power against those of us who don't have the same amount of money, nor do we have the same amount of economic power. But we have taken up that battle, you can see

this, you can see it in every other meeting that's taken place, that the citizens have taken up this battle, they are going to wage this battle to protect our environment, our communities, our families and future generations and we're going to do it with every means at our disposal. Because we know which side we're on. As the old labor song goes, we ask the DEP, which side are you on? Thank you.

CHAIR:

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Robert Dunnan?

MR. LAPATO:

Robert Dunnan?

MR. DUNNAN:

I'm coming. Bob Dunnan, 107 South

Newport, McMurray, PA. As far as drilling affecting

water wells, you got to believe it because more and

more people we talk to --- the lady you saw on the

news today ---. And first of all I want to thank the

DEP for having this meeting tonight because they truly

are working overtime. This is an added meeting

because of a Thursday night event. So thank you.

CHAIR:

Sir, what who do you represent?

MR. DUNNAN:

Myself. Okay, so the people we talk to

1 around drilling, the lady that was on the --- probably 2 saw her on the noon news, or the evening news June chapel, but seven wells were drilled next to her When they began drilling those the neighbor on the far side immediately lost her water well. company did re-drill that well, but the point is that drilling defiantly affects water wells.

7

8

9

11

12

13

15

16

20

22

23

24

25

We've talked to other people who have had pressure drops in their wells. And over and over again the jar fills with cloudy water, the muddy looking water, so something is happening. I think the well casing regulations are important. As far as in the wording in there it says something about common practice, I think Pennsylvania should institute the best practices. And on these casings we need to have longer cement drying times. I think a lot of these wells are not aloud to cure long enough before they're As far as the meters, I think it's good to bring transparency to the --- how much gas the wells are producing. A lot of these wells have --- the meters are covered so that the landowner can't see I think that they need to be unlocked and them. uncovered, just like your gas or water meter at home, so you can read it too.

As far as water testing, base-line water

testing and post drilling testing, they need to extend the list of things they test for. Right now DEP doesn't test for any BOC's. And the testing should be 3 extended to a two year period, not six months. got me started on this was when our Mon River tap water became affected, almost two years ago with the high PBS in the Mon. Now, last November the Top 7 Corporate Lab tested our water on the same basis they test a lot of wells out in Hickory that what they were turning up in a lot of these wells was Acrylontrile, 10 11 the other name for that is Vinyl Cyanide. We believe it's something that the drilling companies mix with 12 13 Acetone to make like a slick water frac. So long 14 story short, when this Acrylonitrile was turning up in these wells in Hickory, I said --- and I know that 15 16 there hauling this drilling ground to places like McKeesport, Clairton, and Advance Waste up in New 17 Castle, dumping it in the rivers. And it only makes 18 19 sense, let's test the tap water. You know, if it's brought into the Mon, it's probably coming out of the 20 21 Mon. Sure enough our tap water turned up with .94 22 Acrylonitrile. That's 11 times the permissible level 23 But of course the water company says of a stream. it's not something they have to test for, it's not one of the 83 compounds that their required to test for.

```
1 And then they compared it to some other EPA standard
 that said well, that's not a dangerous level, but it's
 something that's not supposed to be in your water.
```

So longer story short I support these better regulations on well casings as they are amended in the letter sent by Earth Justice. Thank you.

CHAIR:

3

4

5

7

8

10

11

12

13

14

15

16

17

18

19

Final call for Angela Wiley? Final call for Karen Bernard? Okay, we'll go to those who signed in, starting with Mark Gleason?

MR. GLEASON:

I'm not going to speak.

CHAIR:

Okay, sorry. Alex?

MR. LOTORTO:

Lotorto.

MR. LAPATO:

Thank you Alex.

MR. LOTORTO:

20 My name is Alexander Lotorto,

21 \mid L-O-T-O-R-T-O. I live on 5498 Main Street, Apartment

22 Two, for any gas company men who want to come and

23 harass me, anybody because I recommend --- and I

24 recommend this to the DEP officials who disagree with

25 I recommend --- I personally believe and I

believe anyone who doesn't believe this is being 1 willfully ignorant at this point, for anyone who's heard the testimony at the EPA hearing and the County Council hearing, the clean water act testimony at 5 every single hearing that they give every week, which is I respect them and it's very valuable and they site 7 how many violations have been found. That's not something you hear very often. The DEP has found them many, many, --- too many violations. One too many 10 violations is one too many because if there's a human life at risk, it's murder and we cannot allow this to 11 And I live in two fronts where 12 happen in our state. fracking is about too happen, I'm in Pike County 13 Pennsylvania and in Pittsburgh City limits. And I 14 15 have testified at so many hearings since 2007. given workshops at every state in the Marcellus Shale. 17 I know every detail I can get from point A to point Z, from pipe-line to well, to dis --- reclaiming the land to housing property values going down, to every 19 20 aspect of quality of life destroyed.

This industry has to disappear, all 500 billion dollars of it. They need to start looking for other jobs and the DEP is not going to shut down this industry and stop issuing these permits after finding so many violations. They're the ones who know every

21

22

23

24

25

1 single detail of what's wrong. I don't know how they sleep at night, it must be the money. Because if my parents --- my dad's a landscaper and my mom is a 3 florist and they don't have --- they saved their whole 4 5 lives to buy the house that they raised me in, in rural Pike County Pennsylvania. And they built a Tennessee pipe line through our county and right 7 before they built it guess what happened? The old pipe line exploded, they were testing it with water. They pressurized it because they got to ship it --the 34 percent of the natural gas that goes through 11 12 the Tennessee pipeline goes to Boston and is exported 13 in Norway as the Columbian University Statistic study in Hancock, New York. 14

15

17

18

19

20

21

22

23

24

25

And Mel Packard said it --- I was going 16 to say it, there are two sides to this issue. There's no offense, there's no responsible drilling. sorry, I stayed up all night last night because I found out that the Marcellus Shale coalition is having a big conference on October 1st and I'm going to be there with Tom Ridge, Onorato, Corbett all the government candidates. And all the CEO's and big investors are going to wine and dine them and if you haven't looked up the corruption follow the money, right? Rendell officials leaving money --- first

thing I noticed my senator chief of staff --- Lisa Baker's Chief of Staff left to work with --- to be the 2 spokesperson at all the community meetings for CAD That's the first thing I had to face. Rendell guys leaving, he started working for the industry and then Onarato and Corbett receive all this 6 money, we have --- this is corruption to the core. 7 This is Dick Cheney in our own state plus every state politician asking them, you know, support --- let's 10 put an tax which I support, I want to cause these 11 companies a ton of money, because that's the only way 12 their going to get out of here. That's the only way we're going to win is if the investors walk away, 13 14 that's how we'd be nuclear. There's no private investment in nuclear reactors anymore until now that 15 16 Obama's pitching it right? And now Obama's pitching 17 on his clean energy platform, right? There's no 18 mountain top removal, right, that mountain top removal movement has done a very good job at making ---19 everyone has heard the argument against clean coal and 20 we need as a social movement to build that same 21 movement here. And I'm at a loss for words. 22 I looked 23 at the Clean Water Act, Penn environment, Penn future, all these green groups. I've worked for clean water 25 action and they asked me call people on the phone in

1 Pennsylvania and tell them we support the drilling, we just want it to be safe. Well you know what, that's not going to fly anymore. And I'm an effected 3 community member and I say that --- and if they aren't 5 listening to us then what kind of allies are they and I just --- we are our only friends at this point. 6 7 have some politicians who want to work with us, but it's very politically difficult for them. And we have 8 to create that space, and the DEP is run --- the boss is Rendell who calls himself the best ally of the 10 It's a quote from Governor Rendell; he's 11 12 the boss, handing out permits like its candy after finding all these violations. What does that say? 13 14 How can we trust these people? I know you want the 15 best intentions --- you probably studied environmental 16 science for your whole life in studies and policy to 17 make our world a better place, but God damn do it. We have whistle blowers in the EPA and the gas land, we 18 have whistle blowers all over the country speaking out 19 20

I've been working full time on this issue since 2007, doing ant farm demonstrations with water coloring, to show how the water gets contaminated with the Natural Park Service in front of search groups, you know, this is ---. I'm sick of organizing around

21

22

23

24

25

And they've declared war on us back in the day, this. when Ron Rola (phonetic) his farm was the second fracking well. They sat him in this room in 3 Pennsylvania and testified, you know, they destroyed his land, can't get a mortgage on his land, to sue the 5 company for all the wrongs they did to him, you know. 7 And it's like, you know, that's story after story. There are a million stories. Children are getting sick, lesions on your skin, brain lesions, the --- one of the normal things that they talk about is benzidine 10 11 exposure is if you talk to somebody who's a doctor, zombie like qualities, and there's formaldehyde in the 12 What, are we going to turn into zombies, you 13 water. 14 know, I mean it's like, I don't know --- it's so 15 terrifying. And my dad said --- I'll echo my dad because he couldn't be here and he works really late 16 in to the night, working on his sites and stuff, but 17 he said at the end of the gas line premier he said 18 this too me and he said this to the whole audience, 19 and got a standing ovation. He said, after 911 they 20 21 told us the terrorists were going to poison our 22 reservoirs and they raised the code level to red, and And guess what, they did and they're 23 to the orange. here, and they have CEO's and politicians and big 25 lobbying bucks and my dad said we better treat them

And what we do to terrorists when we like terrorists. find them in this country or we find them in Afghanistan and --- that's what my dad said, he said 3 that publically. I'm echoing --- I'm quoting him. But he is a man who is being approached, you know, for water trucks to come on to his site, and where are 7 they coming from? They're coming from frac sites and their saying; we're going to water your lawns with it. We're going to put the frac water, the salt we'll put it on the roads to melt the ice, we're going to water 10 the dusty roads down with the water from the frac 11 12 site, you know. They were at the hearing today with 13 Bob Casey saying Hydrogen Sulfide on the site, so 14 workers haven't even been talked about. Hydrogen 15 Sulfite is like mustard gas, and their drilling on ridges and in valleys next to streams and they've been 16 17 drilling out in the plain states, flat Texas, flat Wyoming, flat Colorado and they're drilling and this 18 gas is heavy, it settles in the ditches, they're doing 19 five acre clear cuts. This is a rig worker telling me 20 this at a bar, because I talk to them. 21 Go to a bar, 22 go up Route 28 and talk to these guys. Go to a bar 23 and ask these people. The rigs have not been serviced 24 since they were in Wyoming. They haven't been in the 25 shop. They went from Wyoming to Texas to here.

They've only gotten field service. That's a mechanic. a welder, from Wyoming brings his own welding rig 3 here, from Wyoming because he doesn't trust the industries equipment, because he's been there, you know, this is like stories that you can't --- a goo! fiction writer could not make this up. That I've heard millions of stories, I've been all over this region, you know. And when we stand up, are we going to ask, the well casing is incorrect, you know. I'll tell you what, if the well casing is incorrect 10 11 what happens 75, 100 years down the road when the 12 Tennessee pipeline is corroded to hell and its 30, 36 inch pipeline, well we're going to get the --- the 13 farther you can see from space, I think the blowout 14 15 that happened in Fort Worth a couple weeks ago, the 16 same week that the explosion happened in Brownsville, when the firefighter showed up and there was nobody on the site with this little volunteer fire company, with 18 19 no hazmat suits, all exposed to these chemicals, you know what I mean. It's --- you know and that could be 20 And they built it across the most beautiful 21 mv town. 22 park in Pennsylvania. I'll leave you with this, Charles Park, its three waterfalls where I go cliff 23 24 jumping and I used to take my prom date and at the 25 bottom of the last waterfall, is a 50 yard clear cut

with the Tennessee pipeline that there supposed to build two more 36 inch pipeline. And if you walk up the ridge its as far as you can see, it comes from Texas to Boston, and it's all exported and they're going to build liquid natural gas ports in New York City, New York, there's Newark, New Jersey and southern New Jersey to export all this gas. These industries have no borders. This is free trade capitalism at its worst.

10

11

12

13

15

16

17

18

19

20

21

22

23

24

25

They're exporting this gas --- they have no allegiance to the United States. It's not patriotic to waive a flag, to cheer on these industries they have no allegiance to us. They're all from --- they're investors from India, you know ---. There not from here. And then they turn us against each other. The four farmers who were screwed over by big agriculture, you know, and their going on their land and saying, you know, sign this lease you're working 80 hours a week --- this is a Hancock, New York's farmer testimonies it. I'm working 80 hours a week, this gas lease is going to let me retire, you know, well why is he working 80 hours a week, why is his farm falling to pieces, why did his family move to the outskirts of New York City? Because there's no money in the agriculture industry anymore, because we

2 Then the jobs issue; it's going to be at 3 best 25 years of jobs at the bubble --- the peak of 4 the bubble than they leave, and what happens in 5 Pennsylvania when industry leaves? Anvbody? Braddock, you know, all the steel --- at junk yards 7 and everything, Rossville and what happens when coal Well, I'll tell you what happened in Carbondale, Pennsylvania when coal left a hundred years ago, it turned into a white working class slum in the middle 10 11 of the woods. And now they built this mile long 12 fracking truck facility where they train in these 13 chemicals from probably Leadsdale (phonetic) where

didn't support our local farmers when they needed to.

this is not safe. They're asking us to take a risk and put our lives up for grabs and it's not going to be in back of the Governors mansion, I can tell you that right now.

the back of the Trib? I'm just saying there's ---

CHAIR:

14

15

20

21

22

23

24

25

Thank you. Cynthia Walters?

there was another chemical plant exposure, see that in

MS. WALTERS:

I only have three copies. I'll have to send a copy to you.

CHAIR:

Okay.

MS. WALTERS:

My name is Cynthia Walters. I'm from 916 Athens Drive, Greensburg, Pennsylvania. My remarks here are drawn on 27 years teaching and research on water quality and also my personnel knowledge of many good people in the DEP who don't believe that the DEP stands for the Department of Easy Permitting. They believe that the DEP can and should stand for a true environmental protection.

I'm beginning to wonder though if the regulations that you have revised are even close to what we need. I am astounded that a number of people tonight have proposed and documented very clear gaps of knowledge. How can this group of the DEP, a group that I don't know. I know other members of the DEP, how can this group have these gaps in their knowledge at this time? I'm just astounded at this.

So I would say yes, of course, we need to strengthen these regulations, but we do not need to delude ourselves that small increments in these regulations, modifications provide true environmental protection. They do not, because of what we've been hearing as evidence to the contrary.

So again, I support the general trend but

1 this trend is not nearly as strong as it needs to be. 2 A couple more specific issues are first of all, the issue of containment. The issue of containment seems to be willfully inadequate given the long term 5 residence of those wells in these --- in our long, long, shale and multiple varieties of sedimentary 7 layers that isn't in the regulations. The long term nature of containment in --- caused by those walls, it's not presented there. 9

Secondly the inspections, I think the idea of quarterly inspection is fine, you know, make it weekly, and make it monthly. But those inspection records that are provided had to be reviewed by the DEP themselves and we don't see any evidence that the DEP is going to be capable of either reviewing the 16 minimum that they have.

10

11

12

15

17

18

19

20

21

22

23

25

For example, let's look at what's been happening so far. We see the DEP's getting fewer dollars, fewer amounts of resources to do the reviewing. Just recently, if you look at the last six months, they've reviewed and granted some thousands of permits and the only ones that they refuse --- they rejected were 17 out of 4,611. That means 99.7 percent of all the permits were perfect. I really doubt that. That's just way too crooked. I can't

believe that all those permits were thoroughly reviewed and that only 17 were found lacking.

1

2

3

4

5

7

10

11

12

13

14

15

16

17

18 l

19

20

21

22

23 l

24

25

Okay, the third thing is this response to gas migration. Okay, well we've seen all ready that there's not only the gas migration but also the fracking fluid that the industry is putting down in those wells. There's two issues that don't seem to be addressed so far tonight and I'm not sure if they're in the regs and they need to be. One is the issue that was partly address and that is, that only from 15 to maybe 70 percent or so of the fracking fluid comes back out. In other words, you put a whole ton in and only portions of that come back out. If the industry is leaving those residues behind that is a new regulation category. And the regulations now don't seem to account for the fact that the companies don't see the amount that their leaving behind as a greater responsibility and as a new category of regulations.

Finally, there's one other statement and that is that while we all love mother nature, and on the surface we see mother nature as providing fairly healthy soils and air and water to us. As a biologist, and a water quality person, I know that Mother Nature has a lot of things hidden under her skirts, that if they are revealed and brought back up

in the fracking fluid may not be the safest things in the world.

So in other words, the migration of radio active material that is natural, of course it's 4 5 natural, but it was sealed off underneath that. Ιf you look, you look at the story the formations underneath most of Marcellus Shale, the Tully limestone formation is above most of Marcellus Shale. They expect those formations to have sealed off these outer components that are part of mother nature's many 10 When the fracking fluids go down in there and 11 the fracking process occurs, many of those things that 12 are all ready somewhat sealed off from our current 13 exposure, are going to be brought back up through this 14 15 When those things are brought back up where process. is the regulation going to apply? In other words, 16 17 these companies are responsible for bringing up things 18 that were naturally sealed. And where is that in the regulations? I don't see that. So, in other words, 19 I'm just me, just a little old teacher from a small 20 21 collage in Western Pennsylvania. Just little old you 22 folks, you know, all sorts of folks --- we don't seem 23 to have a lot of engineering degrees, and geo-24 chemistry and hydraulic degrees and so on. 25 have found huge numbers of gaps in these regulations.

What does that say? We're not ready for this. 1 have to have a moratorium. The regulations are no 3 enough. So, I thank you for your time. I really look forward to working with the DEP to be a true 5 environmental protection and not an easy permitting Thank you. 6 group.

CHAIR:

Mark Benkoski?

MR. BENKOSKI:

My name is Mark Benkoski. I'm a resident living just off of Rich Hill Road in Indiana Township, PA.

MR. LAPATO:

Could you spell just the last name for

15 us?

7

8

9

10

11

12

13

14

16

17

18

19

20

22

23

24

25

MR. BENKOSKI:

Benkoski, B-E-N-K-O-S-K-I. On Friday, the residents of Rich Hill Road witnessed firsthand the hazardous nature of gas and oil wells. During routine maintenance by trained professionals, two men died. 21 The incident, while in a wooded area demonstrated how lethal a gas well can be. To my knowledge the local municipality and the Allegheny County Emergency Management Team where extremely challenged by the incident.

The fact that professionals had to be flown in from Texas to handle the shutdown of the burning well proves that the State of Pennsylvania may not be prepared for the onslaught of gas and oil well drilling.

Gas and oil drilling is a hazardous commercial business that has demonstrated to me personally little regard for the public's safety and concern. Within a thousand feet of my residence, the Stephen Sokol Gas Well, which is located off of Rich Hill Road, lies in a residential neighborhood. Had this incident occurred at the Sokol well the death toll would have been far greater.

This well went into operation without notifying me or testing either of my water wells. In addition, the Donna S. Shields well has been permitted to be drilled 225 feet from my home. It's approximately 205 feet from my water well. As demonstrated on Friday, 200 feet is not a reasonable safety zone.

Earlier this year, I sent a letter to Marco Drilling of Penn Hills to address my safety factors associated with their drilling. To date, I have not been able to get a response from Marco Drilling other than to hire a lawyer. This type of

activity should be criminal. To put the public safety at risk without due consideration to the potential hazards posed by their operations over the lifetime of a gas or oil well in un-American. How many people have to die before some common sense regulations are put into the laws governing and regulating these operations in Pennsylvania? Thank you.

CHAIR:

Wolfson?

Thank you friend. Cindy Wolfson. Cindy

MR. LAPATO:

Is there anybody else that has not spoken and would like to offer testimony tonight?

MS. ST.JOHN:

I handed mine in and said I wouldn't speak, but I might as well read it out. This is just a --- my name is Kate St.John; I live in 731 McCaslin Street, Pittsburgn, 15217. I looked through the regs, condensation of the regs from someone else and I decided I would just make it as one page so it's pretty brief.

I think that the casing should be extended, cemented and secured completely at least 100 feet below the water table, not just 50 from top to bottom.

1 Pressure-test the cement after it has set 2 and before fracking begins. Report the test results to DEP; DEP has to get an inspection there before Require the operator to test public fracking begins. 5 and private water supplies within 2,000 feet prior to Pre-drilling water tests should include drilling. 7 tests for both natural gas and fracking marker chemicals; for example, methane, benzene, styrene and acrylonitrile. And the DEP should specify what to 10 test and what methods to use. Pre-drilling tests results should be given to the water supply owner and 11 persons who use the water supply before the drilling 12 13 begins and without any of them having to ask for the The report should be in laymen's terms. 14 results. 15 Require the operator to test the same water supplies 16 both 6 months and a year after drilling. I like the 17 two year idea too.

The post-drilling water tests results should be given to DEP and to the water supply owner and persons who use the water supply within ten days of the operator having received these results and without the affected persons having to ask for the test results. Reports to laymen should be in laymen's terms.

18

19

20

21

22

23

24

25

Until the water supply can be cleaned to

Safe Drinking Water standards (SDWA), the operator 2 | must supply replacement water that meets Safe Drinking water standards. And water tests made during that period must be published as I said in the pre and prior points about letting every body know.

3

5

6

7

8

10

11

12

13

14

15

17

18

19

20

21

22

23

24

25

When the operator supplies replacement water he may not ask nor require those who receive replacement water to sign a non-disclosure agreement. The operator must be bonded to replace drinking water for 100 years.

When DEP receives complaints of water pollution or diminution the DEP investigation should begin within 24 hours so the drillers and frackers are still present. The DEP should immediately notify all potentially affected neighbors so they don't drink the 16 bad water.

This is about flaring; as I understand it, a new well pad. You may have to flare the first one with the first well because you don't have the pipes ready. But if there's no gas pipeline to a new well, the first can be flared. However, all wells after the first on every pad must use green completion instead of flaring. And require operators to keep accurate records of gas venting and flaring and report them to DEP including the amount vented and burned.

1 Require operators to report to DEP the 2 amount and names of gases emitted by the condensate 3 Don't allow a frac pit within one mile of any occupied building including buildings occupied by If this is not possible, the operator must 5 6 use tanks. I'm not fond of frac pits, I don't really 7 think they should be --- but I did say that if they're built they must be fenced ten feet high so wildlife 8 9 cannot get in. Thank you.

MR. BICINIE:

Good evening. I will provide you with a 12 transcript.

CHAIR:

10

13

14

15

16

17

18

19

20

21

22

23

24

25

You're name and address?

MR. BICINIE:

My name is Al Bicinie, B-I-C-I-N-I-E.

301 Alpha Drive, Pittsburgh. Going to thank the DEP for consideration, many of the speakers here have talked about the importance of base line testing or pre-drill testing. I think what we need to look at though is --- mentioning many of the compounds of concern are not covered in routine analytical testing list of protocols for operating in the community. So there'll be a need for new methodology to be developed to support these. The DEP will play an appropriate

1 role in working with the community to standardize methodology and medical performance, if we're ever going to make a decision, we should make it on data and it should be on good data. And so that part of the standardized methodology --- the compound lists will need to be expanded from the routine drinking water markering list or the prior compound lists, to cover the compounds; both the apparent compounds and other compounds if they exist from the fluids of Define the performance as part of that interest. methodology studies in the medical community. We have to understand that many of the compounds don't have associated risk levels. So I think the risk assessment team needs to be involved in helping to understand and defined risk assessment. So if we're going to have data to the public on the results, we need some sort of baseline by some sort of criteria from which to compare that too. And then those are just a couple of recommendations from the medical community. Thank you.

MS. WILLIAMS:

5

6

7

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Lynn Williams, 213 Sycamore Ridge Drive, Springdale. I was not going to speak, but last night my husband was on the web and found an article from the American Chemical Society. Three men from the

David Campbell. Natural Gas Plays in the Marcellus Shale: Challenges Potential Opportunities. Tapping the 3 lucrative Marcellus Shale natural gas deposits may 5 have a host of environmental concerns. However, at the end of this article, are potential opportunities, 7 different ways to do the fracking that do not use all of the water. A simple replacement of diesel fuel by 8 9 natural gas can result in 85 percent less DOC's spuing into the air. Using Carbone Dioxide and then 11 introducing Nitrogen so it doesn't freeze. And my husband was pointing out that the cement casings, the 12 13 problem is that it doesn't have enough time to cure 14 because of the temperatures, it cures too quickly. 15 And they cannot control the integrity of the cement. 16 I live in Rachel Carson's backyard and I 17 am scared to death and we need a moratorium. I'm from New York State originally and I have a friend who is 18 19 in the business in New York and well, I quess he's a 20 friend. He may be a former friend, because he has told me that this has been in place for 60 years. 22 has told me every lie that the industry spews. 23 know better. And I hope that we can get the word out. 24 Thank you.

U.S. EPA, David Karqbo, K-A-R-G-B-O, Ron Wilhelm

CHAIR:

25

Final call.

1

2

11

14

15

16

17

18

19

20

21

22

23

24

25

MS. MAGAN:

3 My name is Mary Magan, M-A-G-A-N. at 2335 Tilberry Avenue, Pittsburgh, 15217. 4 happy to have all you here tonight. To hear it one 5 more time, over and over; I guess we just have to keep 6 7 chanting and get crazy if we have too. I hope we will, if we have to come to that that you're all going to be with me? When we, like, go to the Mayors office or whatever we have to do because this is going to get 10 There's a lot of money involved and there's a lot of resources involved. And it's our state it 12 13 should be our gas and nobody should touch it unless we know that that's going to happen.

One of the things I haven't heard tonight, that I think is an environmental problem is the pounding of the ground. The word frac --- and I don't know that much about fracking --- I want to talk to you later. When they break open rock and shale and things that have been there for millions of years, this is got to do something to everything around it. It's a living organism and when you break something and break it apart even the word fracture, as you know, now, when you fracture a bone --- when you fracture anything it's not a good thing.

serious thing and it needs to be healed. And how we're going to heal this earth and heal what we're doing really is an unknown environmental decision and we better find out before we let it go any further 5 there are so many unknowns. There's so many --- like a thin layer of protection that underneath that is 6 7 just an abscess, that's really growing. And you guys, you need to realize this is your job. That we're putting our health, our homes, our children in your hands and I hope you take very seriously the care that 11 we need, we put into your hands. That's all I have to 12 say.

CHAIR:

Thank you.

MR. WEIRTON:

My name is Ken Weirton; I'm with affiliate of the Lincoln Place Action Group.

CHAIR:

Okay.

13

14

15

16

17

18

19

20

MR. WEIRTON:

And I only have a couple things to say.

A \$2,500 bond on one mile is not enough money.

33 \$25,000 for a blanket well bond for all wells, that's

24 ridiculous. That's ridiculous to set a \$25,000

25 blanket bond on all the wells the company drills,

that's incredible. That's not enough money to do a --- a driveway, you couldn't --- that's ridiculous. 2 And what happens when one of these companies goes Like the coal industry did, they went bankrupt, walked away. Massey Coal just bought a coal mine in Pennsylvania because it was a bankrupt coal The guy worked there 35 years, he went to work mine. 8 and they said it's closed. It sat there, acid mine run off and that's what we're looking at here. facing the same types of problems. And I don't have 10 much to say but I wish --- I go to these meetings and 11 I hear there's been no known ground water 12 13 contamination from this drilling. I hear it all the 14 time. I go on you website and right there it says 14 known cases in Dimock, Susquehanna County. 15 And you 16 guys put it on there. Why don't you just dispel them? Why don't you just dispel the gas industry and say 17 quite lying to the people? And there's another thing 18 19 that bothers me about this. What this gas industry is doing here in Pennsylvania is an age old method of 20 21 divide and concur. They come in here like thieves in 22 the night, they signed up people with leases who knew 23 not what they were signing, and then they put the people who have signed the leases against the people 24 25 who don't want the leases. So we're at each others

throats, while their reaping all the benefits. Hitler did that in Nazi, Germany, he had kids turning 3 in their parents. And this is an age old strategy. They know how they lost in New York. They know how 5 they lost in New York. They're making sure they don't 6 loose in Pennsylvania the same. Well, they know how 7 they lost in New York. How New York got the That's what we need to follow. 8 moratorium. However New York did it, there's people that know. We need to 10 find out. And I live in Lincoln place, that's a city 11 neighborhood. There's over 80 leases signed in the 12 city neighborhood and we sit right directly opposite 13 the Allegheny County Airport, which is one of the 14 sites that they've all ready earmarked to allow for 15 the drilling. And we know that area is all undermined. It's all undermined and the methane gas 16 17 that blew in Moundsville was from an abandoned coal mine that they knew wasn't there. That's the problem. 18 19 They didn't chart the coal mines. They don't know where the coal mines are. Because it was a 20 deregulated industry, they came in here, the people 22 needed jobs and they gave us jobs, at what price? 23 We're still paying the price with abandoned coal 24 mines, acid mine run off.

And there's another thing that bothers

25

If they're so up and up, the gas industry and me. they're only here for our best interest to give us these jobs. Why do they need to be de-regulated in Why? If you're on the up and up, why did you need de-regulated? I think it's obvious. Everybody here knows the answers to those questions. 7 couldn't pull off what they're pulling off. And we're the people it's, you know, it's a shame. And one 8 other thing and I'll be done. It was just for all of 10 us people who --- we're the little people, right? We're just the little people, we're here. Billy Joel 11 12 wrote a song, right? We didn't start the fire, the fire was always burning and there's a reason for that. 13 Because this has been a classic struggle, it's the 14 haves who are up here and their dictating to us. And this is ours --- if it was your football or your 16 17 basketball, it was your court, would you allow someone There coming 18 else to come in and tell you what to do? in there and telling us what to do with our resources. 19 20 Why? How did that ever come about? Probably the best ally Eddie Rendell did it. He gave them all the 21 22 land. And you can't blame the poor guy that's sitting 23 out in the field making no money and they come in and 24 say, Here, here's money for you ---, you know, what's he going to do? That shouldn't even been an option. 25

These things should all been worked out before. 1 And I'm done. But one more thing, one more thing. Tomorrow night, Lakewood Place, Ellis, there's a 3 meeting being held. It's in Lakewood Place on Buttermilk Hall at 7:00. 5 We got a big hall there, we're going to try to get as many people and we're 6 7 going to see if the little people can do something about this big problem. 8

MR. LEFT:

9

10

11

15

16

17

18

19

20

21

22

23

24

25

Scott Left. 1211 Shady Avenue, Pittsburgh, private citizen. Just a simple, small point but I think a significant one, and maybe I've 13 been mishearing because I haven't read the regs, I'm new to this. But in hearing the discussion about pretesting the water with conversation of the operator getting the water tested. It brings to mind a little economic downturn some of you may have remembered --remember that we had a couple of years ago when there were a lot of securities that collapsed, that had been rated as perfectly fine securities by standard. people were kind of shocked to learn who paid the rating agencies, the folks who were being rated. think if we are having regulations about water testing in place, the folk's highering the water testers should not be the companies who are potentially going

to be liable. Thank you.

2

1

CHAIR:

3

4

7

6

8

9

10

11

12

13

14

16

17

18

19 20

21

22

23

24

25

Thank you very much for your testimonies tonight. And on behalf of the Environmental Quality Board, I hereby adjourn this hearing at 9:34 p.m. Thank you.

HEARING CONCLUDED AT 9:34 P.M.

CERTIFICATE

I hereby certify that the foregoing proceedings, public hearing held before Chairperson Conner, was reported by me on 07/26/2010 and that I Kayla Godkin read this transcript and that I attest that this transcript is a true and accurate record of the proceeding.

Kayle Mohn

	•
	•••
	•
	,
	\$
	ı
	,
	o 3