# COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: PROPOSED REGULATIONS FOR OIL AND GAS SURFACE ACTIVITIES

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BEFORE: BURT WAITE, CHAIR

SCOTT PERRY, Member

HALEY BOOK, Member

LAURA EDINGER, Member

HEARING: Wednesday, January 15, 2010RIGNAL

6:00 p.m.

LOCATION: Meadville Area Senior High School

930 North Street

Meadville, PA 16335

WITNESSES: Bonita McManus, Laurie Barr, Joy M. Ruff,

James E. Erb, Mark Cline, John Stewart,

Carrie Hahn, Robert Trevail, Margaret

Henry, Ray Stiglitz, Lisa DeSantis, Jan

Hendryx, Sister Claire Marie Surmik, Luigi

DeFrancesco, David Weinkauf, Daniel

Soltesz, Marlene Bertke, Thomas A. Miller,

Reporter: Shannon C. Fortsch

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WITNESSES: William Granche, Karen Granche, Shane
Flannery, Michael Brown, David C. Dean,
Kenneth C. Kane, Gregg Buchanan, Glenn
Weaver, Mac Sawyer, Randy Reimold,
Christina Sporer, Mike Genz, Diane Sipe,
Karen Fletch, Allen Larson, John Lindberg,
Becky Kolodowski, Joe Stiglitz

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#### PROCEEDINGS

# MR. WAITE:

the Environmental Quality Board public hearing on the environmental effect and performance standards of oil and gas drill sites proposed rulemaking. My name is Burt Waite. I'm the representative of the Pennsylvania Environmental Quality Board. Joining me tonight on my left is Scott Perry from DEP's Office of Oil and Gas Management, Haley Book, on my right, Laura Edinger, further to my right, with DEP's Policy Office. And Gary Clark, in the front row, Community Relations Coordinator for Northeast Regional Office of DEP here in Meadville.

I officially call this meeting in order at 6:01 p.m. In the event of an emergency, there are exit doors to the rear of the building. And if they are blocked, there are exit doors on both sides of the stage. I ask that you turn off your cell phones or put it on vibrate so they don't interrupt the speakers and they're not making any noise.

The purpose of this hearing is to formally accept testimony on the proposed regulations and Environmental Protection's performance standards

to the oil and gas drill sites.

In addition to this hearing, the EQB will hold additional hearings on the proposed regulations in Mechanicsburg tomorrow night, in Washington, PA on January 22nd, in Indiana, Pennsylvania on January 23, and Tunkhannock on January 27th. And there are discussions if additional hearings may be added or not. That is not finalized at this point. Information about the specific locations of these hearings is available on the DEP webpage at www.dep.state.pa.us.

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

The proposed rulemaking, which was adopted by DEP on August the 27th, 2013, would amend 25 Pa. Code Chapter 78 to update the requirements related to surface activities associated with the development of oil and gas wells. The EQB, the Environmental Quality Board, has not adopted the proposed rulemaking with a recommendation for a 60 day

comment period and at least six public hearings across the state. This represents a heightened level of public participation as there is usually only a 30 day comment period held for the typical Department only. Additionally, the public hearings are held on the basis of public interest. And for some regulations, there are a few or even none, but are held if there is no request for hearings.

Due to the increased public interest in this ruling, the EQB has scheduled seven public hearings to allow ample opportunity for public comment on its proposed rulemaking. And that may be expanded. The proposed regulatory amendments, which would address recent statutory changes in Act 13 of 2012 and codify existing practices, this rulemaking would allow the implementation of key provisions of Act 13, including further consideration of impacts of public resources, such as parks and wildlife areas, the prevention of spills, the management of waste, and the restoration of well sites after drilling.

The proposal may also include standards affecting construction of gas lines and temporary pipelines, and includes provisions for identifying and monitoring named wells close to proposed well drilling sites. In order to give everyone an equal opportunity

to comment on this proposal, I would like to establish the following ground rules for this evening. I will first call on the witnesses who have pre-registered to testify at this hearing. After hearing those witnesses, I will invite any other interested parties for the opportunity to testify as time allows.

each witness. Organizations are requested to designate one witness to present testimony on its behalf. Each witness is asked to submit three written copies of his or her testimony to aid in transcribing the hearing. Please hand me two copies, including one copy for our stenographer at the table to my right, prior to presenting your testimony. Please state your name, address, and affiliation for the record prior to presenting your testimony.

The EQB will appreciate your help in spelling names and terms that may not be generally familiar, so that the transcript can be as accurate as possible. Because the purpose of a hearing is to receive comments on the proposal, the EQB or the Environmental Staff cannot answer questions about the rule-making hearing this date at the hearing today. But you may address any questions after the conclusion of the hearing.

1 While you are giving testimony, I will 2 give you a one-minute warning that your time is going 3 to expire. And at five minutes, I will ask you to conclude your comments. All written comments must be 4 5 received by the EQB on or before February 12th, 2014. 6 Comments should be addressed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 8 Comments may also be emailed to RegCommitees@.pa.gov. To submit it online to the EQB's regulatory comments 9 system, access it on DEP's webpage. 10

All comments received at this hearing, as well as written comments received by February 12th, will be admitted as part of the formal record and considered by the EQB and will be included in a comments response document, which will be prepared by the Department and reviewed by the EQB prior to the Board taking one or more actions on the certainty of this regulation. Anyone interested in receiving a copy of the transcript of today's hearing may contact the EQB at (717) 737-4526 for appropriate information. I would now like to call the first commenter, Bonita McManus.

#### MS. MCMANUS:

Good evening.

25 OFF RECORD DISCUSSION

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#### MS. MCMANUS:

Good evening. My name is Bonnie McManus. I live at 546 Conneaut Lake Road ---.
BRIEF INTERRUPTION

#### MS. MCMANUS:

Okay. My name is Bonnie McManus. I live at 546 Conneaut Lake Road, Adamsville, PA. That's Mercer County. I'm a leader in the League of Women Voters of Pennsylvania, on behalf --- on whose behalf I'm speaking. We appreciate this opportunity to provide input in these proposed regulations that will shape our future as individuals and communities across the Commonwealth.

The League advocates based on our Constitutional rights to clean air, pure water and the preservation of our natural resources. Our position, based on statewide study and consensus, supports requiring the use of best practices, comprehensive regulation and adequate staffing across government agencies to provide the maximum protection of public health and the environment in all natural gas operations.

We speak this evening on Section C ---

24 I'm sorry.

25 BRIEF INTERRUPTION

# MS. MCMANUS:

Oh, yeah. Okay. All right. I'm sorry. We are speaking this evening on Section C, Environmental Protection and Performance Standards. Centralized impoundments should be replaced by enclosed tanks because of the nature of hazardous substances stored within them. Proposed regulations are inadequate to prevent catastrophic risks to public health and the environment.

Oversight of liner installation by manufacturers rather than Department inspectors is not appropriate. Even the most sophisticated detection systems, sump pumps, monitoring wells, and requirements to fill out forms to monitor leakage cannot prevent irreparable damages from impoundment releases. Water testing parameters need to be expanded throughout the document to include petroleum distillates, heavy metals, and radiation levels.

This is particularly true when provisions provide for allowable leaks through the primary liners that are --- that, in some instances, are dealt with case by case. Such language is not the intent of the League's recommendation for site-specific plans. To promote strict compliance, certified statements vouching for the testing,

instruction and integrity must be tied to personal as well as corporate accountability with direct liability for any contamination. Pictures and drawings submitted by operators can be deceptive.

When it comes to restoration, centralized impoundments should be treated as superfund sites. The possible two year restoration between --- beyond the 90 day timeline is acceptable --- unacceptable, I'm sorry, and fails to promote --- let me start. The possible two-year restoration period beyond the 90-day timeline is unacceptable and fails to remove public risk in a timely manner.

To meet citizen expectation, words such as approximate and to the extent practical must be eliminated in regard to restoration. Further, the abilities of operators to ask for deviations from these requirements is asking for trouble. Best practices in restoration must be the standard.

In examining discharge requirements and other sections of the proposal, The League requests that references to other related Pennsylvania codes by number be excerpted and placed as footnotes to promote understanding. Land application of any residual waste substance, fill, or dredge must be prohibited. In most cases, the composition of these wastes and their

risks are unknown. We cannot afford to poison our land.

#### MR. WAITE:

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One minute.

#### MS. MCMANUS:

of our leading industry, agriculture. Bonds must be set higher to cover potential costs of consequences over a minimum of 100 years. The three business day notification period to DEP should be extended to ten to allow for appropriate monitoring of any disposal process.

residual wastes have been applied should go beyond revegetation to best practice. While the regulations include compliance for chemical analyses based on documentation by the operator, consistent, boots-on-the-ground monitoring and enforcement promotes greater public trust. Regulations for containment around oil and condensate tanks must be strengthened, based on the recent experiences in West Virginia.

The League recognizes the need to regulate unconventional wells differently and more stringently than conventional wells. All pits and centralized impoundments should be prohibited. Only

1 closed tanks should be closed for all pollutional
2 materials, including fuel and non-regulated wastes of
3 unknown composition.

League comments concerning containment and practices for conventional wells are also applicable to unconventional wells. Greater expectations are placed on operators to provide written standards ---.

# MR. WAITE:

Bonnie, time's up. We'll have to read the rest in the transcript.

# MS. MCMANUS:

Thank you.

## MR. WAITE:

Thanks again. I'm sorry. Laurie Barr?

#### MS. BARR:

Hi. My name is Laurie Barr, and I'm here from Save Our Springs, PA. I'm from Potter County. I have some suggestions for the abandoned and orphaned well identification. In addition to the United States farm lines map that you're asking the operators to consult with, the Department of Conservation and Natural Resources have been digitizing their files recently. And they're putting them online.

More and more are available online,
like, all the time. And they have topomaps. A lot of
---. They have maps that operators had made over the
years, also, and special reports. They have the deep
well summaries done of the deep wells in Pennsylvania.
So they have a lot of reports and maps that they've
been digitizing. In addition to consulting those,
during an appointment with the geologists in Meadville
at the DEP, he provided us with a farm line map that
wasn't reconciled with the DEP's database.

So including --- I mean, in addition to consulting with the maps that are available online, they should consult with the geologists at the DEP Office. As far as the STRONGER review that was brought up in other people's comments in past public comment hearings, in 2010, STRONGER finished a review of Pennsylvania's oil and gas regulations. And I copy and pasted this out of the STRONGER recommendations.

The review team recommends that DEP consider whether there are areas or situations in which wells, active and abandoned, in the vicinity of hydraulic fracturing operations provide pathways for fluid movement into groundwater. In such areas or situations, DEP should require operators to identify and eliminate the potential pathways for fluid

movement into ground before conducting hydraulic fracturing operations. So it says eliminate the potential pathways.

And I copied that page of the STRONGER recommendations and I attached it to this statement. The proposal to identify and monitor the wells within a thousand feet, it simply ignores the STRONGER recommendations. It doesn't comport with them. And it does nothing to prevent fluid movement between formations.

As far as asking people to --- passing out questionnaires and asking people to survey their property, the Thomases in Duke Center have been searching for their wells and hiking around their property for 20 years. And they just found the 32nd well a couple weeks ago. A survey of a piece of property, if it's big, is difficult, especially if it's vegetated. And over the years, some of the operators removed all of the equipment and infrastructure.

So when it's vegetated, it's really difficult sometimes to just find a hole in the ground. And sometimes formation pressure changes underground with the seasons. And sometimes, oil comes out of it. And then it just doesn't. So that's something that

has to be considered. Shell hired professionals to
search for Maggy Henry's wells on her farm in Lawrence
County.

Maggy's here tonight. She has 27 wells identified on a farm line map. And they looked for those wells. And they weren't able to find any of them. They gave up. They weren't able to. And those were from people that had equipment and training to look for abandoned wells. So expecting homeowners and property owners to even be able to identify them is unrealistic.

Surface owners should be provided with funding to conduct these surveys, and a reasonable amount of time to search their property. I suggest 30 days per acre. I don't know what a reasonable amount of time is. That's just --- I threw that out there. Because we've got to start somewhere. We can't just hand them a questionnaire and expect them to be able to search. I mean, if they have 50 acres, you can't search that overnight. So you have to give them a reasonable amount of time to search.

#### MR. WAITE:

Laurie, the time is up and we'll read the rest of ---.

#### MS. BARR:

Okay, thank you.

#### MR. WAITE:

Thank you. James Erb.

OFF RECORD DISCUSSION

#### MR. ERB:

Good evening. My name is James Erb. I am speaking on behalf of the Associated Petroleum Industries of Pennsylvania, API-PA. API-PA is a division of the American Petroleum Institution, or API, a national trade association that represents all segments of America's oil and natural gas industry. Its more than 580 members provide most of the nation's energy. API is also a standard setting organization.

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

Many of these are incorporated into state and federal regulations.

API-PA strongly supports environmental safeguards and stewardship, and commends DEP on their regulatory oversight programs. However, we do have concerns with several provisions contained in the

proposed rulemaking that we plan to outline in detail in formal, written comments. In the interest of time, I will highlight some general comments that we have, and provide comments on provisions that address disposal of drill cuttings, containment systems, and practices at unconventional well sites and site restoration.

In general, we suggest that suggest that language be added to clarify the effective date of the new requirements, and that wells constructed prior to that date are grandfathered. There are a number of definitions and sections of text that refer the reader to other statutes or regulations. This causes the reader to search elsewhere to find that other statute or regulation and review it before being able to understand Chapter 78. This is not user-friendly and does not facilitate regulatory understanding or compliance.

And it would be better to state, as defined in Pa. Code, whatever the number is, and repeat the definition or section. Also, a number of sections are very detailed and prescriptive. We suggest that these sections be given some flexibility to allow for the use of alternate methods as approved by the Department.

Disposal of Drill Cuttings. Section
78.61 (a) talks about drill cuttings from above the casing seat. Since all casings have a casing seat, it is suggested that this be clarified to read drill cuttings from above the surface casing seat. Section 78.61 (b) is similar, so the same comment applies.

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Unconventional Sites. Section 78.64 (a) --- (e)(3) requires the liner compatibility to satisfy ASTM Method 5747 Compatibility Test for Wastes and Membrane Liners. Section 78.62 (a)(12) requires liners to satisfy EPA Method 9090, Compatibility Test for Wastes and Membrane Liners. Either method would be applicable to either section. So either both methods should be referenced in both sections, or one should be selected as the standard. Section 78.64a sub K should be revised to state that records should be maintained and made available upon request to the Department.

Site Restoration. Section 78.65 (d), it's suggested that the sentence, drilling supplies and equipment not needed for production may be stored on the well site if express written consent of the surface owner is obtained, and the supplies or equipment are maintained in accordance with 78.64a.

That this be deleted, since land use is an issue between the landowner and the operator.

Additionally, it's suggested that this section be revised to reflect that, when multiple wells are being drilled on a pad, the site restoration should occur within nine months after hydraulic fracturing of the last well. A well permit is an arbitrary means of demonstrating the operator's intention to engage in future development activities. DEP should not require the operator to obtain a well-drilling permit simply to extend the timeline for site restoration.

78.65 (d)(3)(iv) requires the stabilization of the well site to include best management practices from Chapter 102. Yet, subsection (d) requires, quote, other measures to be employed to minimize E&S. It's recommended that either other measures be defined or deleted. Thank you for the opportunity to testify this evening. API and its member companies stand ready to continue to work with the Department to strike a balance between environmental protection and sustained development.

#### MR. WAITE:

Joy M. Ruff.

MS. RUFF:

Ĭ Joy Ruff from Marcellus Shale Coalition, 2 24 Summit Park Drive, Pittsburgh, Pennsylvania 3 Marcellus Shale Coalition is a trade association 4 working with our regional partners since 2008. We 5 operate under a set of Guiding Principles, which includes participating in public dialogue and fact-6 7 based education. We've been working with our regional 8 partners, including those in Northwestern Pennsylvania, quite actively to help them respond to 9 10 shale development. 11 As the birthplace of oil, Northwestern 12 Pennsylvania is particularly well-position to 13 capitalize on shale development. With our partners, 14 we are working to support this benefit, again, to the 15 local communities. Organizations such as the 16 Northwest Commission, Titusville Redevelopment Authority, the Economic Progress Alliance of Crawford 17 18 County, they've all been working together to dedicate 19 resources or technical support to help our local 20 businesses expand and meet the needs of the industry. 21 And we also work with elected officials 22 to help them understand and plan for shale 23 development. We need to understand that this effort

fragmented, with over 2,500 municipalities. And this

is vitally important, because Pennsylvania is

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has caused ratings to identify our decentralization of regulations as an impediment to revenue growth for municipal budgets.

Natural gas development will ensure the ongoing vibrancy of other industry sectors that are the backbone of the regional economy here in Northwestern Pennsylvania. Crawford County, with 18 percent of its workforce employed in the manufacturing sector, that stands in particular to capitalize on the availability and --- of a reliable and affordable energy supply that is reviving manufacturing across our nation. We must ensure that Pennsylvania's regulatory process is predictable.

Our uncertain fiscal climate and our complex regulatory environment has placed us behind other states and countries in attracting capital investments. The Fraser Institute recently found that --- our regulatory and tax policies to be a major deterrent for attracting oil and gas investment. We of Pennsylvania, we're recognized as having some of the nation's strongest regulations for oil and gas.

We do not need onerous rules. But, rather, we must continue to invest in a highly-trained and competent workforce. And we encourage and commend DEP for working with the industry to support technical

training. The MSC is concerned that some of the proposed regulatory changes to Chapter 8 provide little to no additional benefit to our natural environment, and will weaken Pennsylvania's competitive edge.

Special concern species. Federal and state-listed threatened and endangered species are protected in the Commonwealth. We support that. The proposed rule, however, creates uncertainty about an applicant's obligation, and does not provide the clear guidance we seek. There is no rationale to create a new, vague term, no legislative or regulatory definition for such. How do you create it? How would you determine impact? And how would you mitigate?

Abandoned wells. The MSC supports the rule that requires reasonable diligence to identify nearby active, inactive, plugged, abandoned, and orphaned wells prior to hydraulic fracturing.

However, as written, this proposal would lead to openended obligations for identifying such wells, which is unfair and, again, creates uncertainty.

Better than standard. Pennsylvania has no construction standards for private water wells.

And we agree with the Technical Advisory Board that it is unreasonable to require the oil and gas industry to

upgrade private water supplies beyond that which existed to pre-drilling. Such a double standard applying only to the oil and gas industry is unjust and punitive.

We urge the DEP to continue working with the industry and other stakeholders across the Commonwealth to ensure that we provide a reasonable, competitive path forward for long-term, responsible shale development. Thank you.

#### MR. WAITE:

Mark Cline.

## MR. CLINE:

Good evening. My name is Mark Cline, and I am a fourth generation oilman. We in the conventional industry should not be regulated the same as the unconventional industry. So I am asking the Environmental Quality Board to not pass these regulations the way they are now written. After being at the EQB hearing in Williamsport on Monday and hearing how harmful our oil and gas is according to the environmentalists who were there, I thought I would tell you about how everyone's day was probably like.

This morning, as every morning probably is, we all picked our heads up off of our pillows when

the alarm clock went off. We then swung our feet to the side of the bed and put our slippers on, and headed to the kitchen to eat breakfast. We take a plastic bowl out of the cupboard and pour in our cereal, then pour ourselves a glass of milk or juice. After eating and reading the morning newspaper, we go brush our teeth and jump into the shower.

After enjoying the hot water, we shampoo our hair. Then we open the shower curtain and get out. Next, most people blow dry their hair and comb it. Some women use hair curlers. Men put on shaving cream to shave. Then the women start with their makeup, lipstick, deodorant, nail polish, and perfumes. If they are older, they use denture adhesive, then, perhaps, put on their glasses to see what they are doing.

Some people wear soft contacts --contact lenses instead of glasses. Now, people are
taking their clothes off of the hanger and getting
dressed. Women put on either pantyhose or nylons.
Then comes the shoes. Now, everyone is ready to go
jump into their car and drive to work.

I could go on and on with this story.

But, hopefully, I will have gone far enough to have made my point. The point is that the pillows, alarm

clock, slippers, plastic bowls, milk or juice container, the newspaper and how it got there, toothpaste and toothbrush, the hot water heated by gas, shampoo, the shower curtain, blow dryer, the comb, hair curlers, makeup, lipstick, deodorant, nail polish, perfumes, shaving cream, razors, the denture adhesive, glasses, soft contact lenses, the clothes hanger, panty hose or nylons, shoes ---. Next, comes from every part of the car and its fuel. Every one of these items I have mentioned come from paraffin-based crude oil, which is what Penn Grade Crude Oil is.

From the way you people describe it, I think it's a miracle we are all still alive. Crude oil is in every part of our lives everyday. Most of the environmentalists were calling for no drilling and no fracking in PA. And I'm sure you don't want it anywhere in the United States.

In 2012, there were 124,092 automobile accidents in Pennsylvania. 87,846 people were injured. 1,310 were killed. 168 pedestrians were killed. 4,548 were injured in car accidents in 2012. 210 motorcyclists were killed, and 3,919 were injured. Sixteen (16) bicyclists died, and 1,377 were injured.

I could not find one death directly connected to health issues from oil and gas. If you

people want to save the world, find a way to reduce automobile accidents in the state and leave us to do our job and help this country to become less reliant on foreign oil. Are you willing to send your sons and daughters to the Middle East to keep peace and fight a war so we can have a supply of oil?

At Monday's meeting, you talked about how you are doing this for your children. Let me tell you this secret. We in the oil and gas industry have children also. Do you really think that we would harm our own children? The people of the United States need to start working together to become energy independent. The attitude of not in my backyard is destroying our county.

environmentally safe way. It would help this country if you spent time trying to find new forms of energy, instead of trying to destroy the only sources of energy that actually works. We are proud oil and gas people, but we are also proud to be environmentalists. We try our best every day to protect the Earth and still do our job. We want a healthy world for our kids also. Thank you.

# MR. WAITE:

Arthur Stewart, followed by Carrie Hahn.

#### MR. STEWART:

Good evening. My father, Arthur, couldn't be here tonight. My name is John Stewart. I live at 17 Branch Street in Warren, Pennsylvania 16365. I'm a member of the Pennsylvania Grade Crude Oil Coalition, PGCC. PGCC was formed last year by producers and refiners of conventional oil and gas. By conventional, I refer to shallow, vertical oil and gas wells of the type first drilled by Colonel Drake in Titusville, some 150 years ago.

Conventional wells are different in many respects from the unconventional shale wells. It is fair to say that Act 13 and the proposed regulations are a direct product of the advent of unconventional wells. In that discussion, however, there's been little note taken of the differences between unconventional and conventional wells. As a result, the proposed regulations contain consequences that, at best, are inappropriate for conventional wells, and at worst, will put many small businesses out of business.

Conventional well sites are 35 times smaller and require far fewer truck trips than unconventional operations. A conventional well is drilled through a few feet of oil and gas-bearing strata. A horizontal unconventional well is drilled

through thousands of feet. An unconventional well, in one day of production, can produce more natural gas than a hundred conventional wells can produce in a year.

I am not pointing out these differences to say that conventional wells are safe and that unconventional wells are not. To the contrary, it is the PGCC's position that both industries can operate safely and responsibly. But I point out the differences to underscore that the regulations that govern the two industries must be thought about differently. Nevertheless, the proposed regulations overlook many costly impacts to the conventional industry.

For example, in discussing the cost of installing locking valves and lids on tanks, the DEP's regulatory analysis fails to consider the cost of converting the tens of thousands of tanks already existing in the conventional industry. One cannot weld or drill on these existing tanks without the risk of explosion. Thus, each of the tanks will have to be emptied and filled with water or inert gas in order to make the required conversions. The cost of this overlooked conversion exceeds \$300 million.

The cost of the regulations must be

balanced with the benefits to be gained. The conventional industry stores small amounts of fluids. And these fluids are different in composition than fluids used in the unconventional industry. The 150 year history of conventional oil and gas does not support the need for this sweeping new regulation, especially at such extraordinarily crushing cost.

Another requirement of the proposed regulations is that all pits be constructed with a two to one horizontal to vertical slope. Again, the use of pits is very different between conventional and unconventional wells. A conventional pit is used to store only a small amount of fluid, usually 50 to 100 barrels, and is in use for just one or two days. Conventional pits are constructed with vertical walls, thus helping maintain a small site of operations.

The new requirement would expand the pit size by 10 times on a level area, and up to 100 times where the slope is 40 percent. There is no environmental benefit to be gained. In fact, the increased pit size increases the area which must be covered by a plastic liner, this increasing the chances of puncture and failure.

There are many more examples that demonstrate the proposed regulations are out of

balance with the environmental requirements and the economic realities of the conventional oil and gas industry. Those economics are significant. The conventional industry directly contributes three quarters of a billion dollars to Pennsylvania's economy.

I work in that conventional industry as a roustabout. And, my job and the jobs of the 21 other people I work with in my company are all put in jeopardy by the extraordinary cost of the proposed regulations. Working in that industry every day, I can testify to you that conventional operations have a small impact on the environment. Every day, we work beside high quality trout streams and some of the finest timber and hunting areas in the state. What we are doing is working.

The proposed regulations are far out of context with what is necessary. The DEP's analysis of those regulations does not properly describe or analyze the harmful impact to our conventional industry. And even though required to by law, the new regulations do not consider alternatives for small businesses.

To address this, PGCC submitted a white paper during the Technical Advisory Board hearings

held in the summer of 2013, which white paper outlined numerous problem areas not properly analyzed. PGCC and its members will also submit additional written comments and economic analyses in this process concerning the impact to the conventional oil and gas industry. Thank you.

# MR. WAITE:

Carrie Hahn is up, and Robert Trevail will follow.

#### MS. HAHN:

So I have to state my name and address at the hearing. Carrie Hahn, 994 Indian Run Road, Volant, PA 16156.

From the Pennsylvania Constitution,
Declaration of Rights, Article 1, Section 27, the
people have a right to clean air, pure water, and to
the preservation of the natural, scenic, historic, and
aesthetic values of the environment. Pennsylvania's
public natural resources are the common property of
all the people, including generations yet to come. As
trustees of these resources, the Commonwealth shall
conserve and maintain them for the benefit of all the
people.

The Environmental Rights Amendment was ratified in 1971 by Pennsylvania voters by a four to

one margin. For more than 200 years, citizens of this state paid the ultimate environmental price after industrial interests stripped our forests bare and extracted our iron, coal, gas, and oil. It was not 5 until the advent of the television that we became painfully aware of the damage inflicted upon our environment by the unregulated and under-regulated use 8 of natural resources.

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We realized that the trustees of our Commonwealth had been exploiting our natural resources and the environment in which we live, for economic prosperity. And we demanded that our state government, the trustees appointed by us to act on our behalf, no longer stand as accessories to the exploitation of our natural resources. People across the state will be weighing in on your new proposed regulations for oil and gas.

They will recommend additional provisions, setbacks, definitions, et cetera. I hope and pray that you heed their suggestions. But it is my belief that regulations, in general, simply give the industry permission to pollute. It's just a matter of how much they're allowed to poison our environment and exploit our natural resources.

New regulations will not change the fact

that the PA DEP is woefully and purposefully understaffed and underfunded. You have failed to perform your duties and even --- even with the current regulations. You are not doing your job. And the people of the Commonwealth lost faith in you.

In Lawrence County, where I live, four private water wells were affected soon after drilling for a non-conventional well in Pulaski Township, in May of 2012. Two of the landowners contacted DEP when they began to see changes in the quality of their water. The other two contacted Hilcorp Energy, who subsequently failed to report the incident within 24 hours. Correspondence records show that the DEP began investigating the possible contamination of all four wells, and water tests were taken on numerous occasions.

On August 1st of 2013, the DEP sent a letter to Hilcorp Energy requesting information regarding the investigation of the four affected water supplies. The last time any of these wells had been tested was in November of 2012. An inter-office memo dated September 25th, 2013, again, reiterated that four private water wells had been affected.

And on October 1st, the DEP finally went back to test those wells. But they didn't test all

four wells. They only tested two wells, those whose 2 original complaint had been filed directly with the 3 DEP. Based on the water tests taken in October, the 4 DEP determined, with determination letters, that nearby drilling had affected their private water wells. And these two landowners were sent the results of their findings in early November of 2013.

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The DEP never went back to re-test the water supplies for the two landowners who first contacted Hilcorp Energy when they noticed changes in their water. They also received letters from the DEP around the same time as the first two determination letters were sent out. But their wells were only found to be temporarily affected. Their results were based on water tests taken a year earlier on November 8th, 2012. And according to the DEP letter, their investigation is now closed.

Why in the world would the DEP not retest all four water wells? It makes absolutely no sense to me. You did not protect these landowners, and you wasted taxpayer dollars. You're not doing your job. From my perspective, this is a clear example of government allowing the exploitation of our resources at the expense of its citizens.

According to DEP's geologist, Christine

Minor, no one was complaining --- that's her quote --in regard to water contamination at the latter two
locations. Do people in your administration really
believe that Hilcorp Energy is going to continue
complaining on behalf of the landowner regarding the
impact that their gas well has had on the landowner's
private water well, for which they might be liable?
Why does the DEP allow the industry to run their own
investigations into such issues by hiring their own
water testing companies? You're putting the fox in
charge of the henhouse.

## MR. WAITE:

We'll have to read the rest in the transcript. Bob? It's going to be Bob Trevail. And Bob is followed by Margaret Henry.

### MR. TREVAIL:

My name's Bob Trevail, 168 Wolf Run
Road, Freedom, PA 15042. I work for Dallas Energy,
which is a small oil and gas producer based in
Bradford, PA, and is one of a group of companies owned
and operated by the Morris family of Bradford, which
has been involved in the oil and gas industry for over
90 years.

In addition to Dallas Energy, the family operates a drilling and well service company, an

oilfield trucking company, and a company which
provides pumping services for well completions. The
family prides itself on its long-lasting presence in
the industry, the ongoing involvement in the fourth
generation of family members in the organization, and
its commitment to be leaders in the environmental and
safety issues.

Many of Dallas Energy's concerns with the proposed new Chapter 78 regulations regarding the surface activities related to oil and gas well development have been addressed in the report titled. The Impact of Pennsylvania's Regulatory Framework on Conventional Oil and Gas Operations released last September by the Pennsylvania Grade Crude Oil Coalition.

That report describes in detail how the implementation of many of the proposed new regulations will impact operators of conventional shallow oil and gas wells through increased drilling, completion, and production operating costs, as well as paperwork filing requirements. Rather than provide a rehash of the PGCC report, I would like to provide three examples of how the regulations do and would impact Dallas Energy's operations.

With respect to temporary storage pits,

of 60 by 100 feet, or 6,000 square feet. The pit used to contain fluids and sand that flow back during the well stimulation and completion process is approximately 8 feet wide by 40 feet long and 8 feet deep, disturbing an area of approximately 320 feet.

And this particular style of pit has vertical sides.

This size pit fits within the confines of our typical well site. It can be constructed using one excavator in a few hours, depending on the soil conditions encountered. This type of pit is used for a short period of time, and is usually filled in shortly after the well is completed.

Implementation of 78.56(a)(10), which requires the interior slopes of the pit must have a slope no steeper than two horizontal to one vertical, would require a pit with a top of 40 feet wide by 72 feet long to have a bottom of 8 feet wide by 40 feet long, similar to our currently used pit. And it would disturb an area of approximately nine times greater than our currently implemented pit.

Construction of this style of pit would require use of both an excavator and bulldozer, take a minimum of eight hours or more to construct depending on the soil conditions encountered on the well site,

and result in a cost of three to four times that of a pit with vertical sides and require an increase in the size of the well site to accommodate the larger pit size.

Control, storage and disposal of production fluids. Dallas Energy's leas production system consists of a number of wells producing oil, water, and gas into gathering lines that are tied into a tank battery, which typically includes two 210 barrel aboveground oil storage tanks, one buried or bunkered 200 barrel brine storage tank, a gas separator and a gas meter all contained within an area surrounded by a berm or dike two and a half to three feet in height.

Brine produced into the oil storage tanks is transferred into the brine storage tank by gravity drainage. Because it's at a lower level than the oil tanks themselves. A Spill Prevention Control and Countermeasure Plan certified by a professional engineer is prepared and implemented for each lease. The plan includes recommendations for periodic inspections of all production equipment, including storage tanks, to ensure that there are no fluids or leaks.

Proposed regulation states that

underground or partially buried storage tanks may not be used to store brine or other fluids during the operation of the well, unless approved by the Department. And the existing underground or partially buried storage tanks shall be removed within three years of the effective date of this new subsection. To date, Dallas Energy has not experienced any leaks from its buried brine storage tanks, and believes that the periodic inspections it carries out ensures the

We recently prepared an estimate to remove the buried brine storage tanks and replace them with an alternate brine-oil separation system, which would comply with the applicable corrosion control requirements. The low end of this estimate is \$12,000, which works out to 130 barrels of oil at today's oil price of \$90. This, in turn, works out to over four months of production from one of our one barrel per day oil wells. And it's going to be even longer if we took into account the operating costs. Thank you for the opportunity to present the testimony to you today. Thank you.

#### MR. WAITE:

brine storage tanks are well maintained.

Margaret Henry is up, followed by Ray

25 Stiglitz.

#### MS. HENRY:

My name's Margaret Henry. I live at 606 Columbiana Road, Wellsboro, Pennsylvania, in Morris County. As much as would love to get into it with you today about regulations, I'm here to tell my story. I live on an 88 acre farm smack dab in the middle of a six mile wide square radius historical oil field. I was actually given a farm line map at ADP with over a thousand holes numbered and listed on it that was published in 1915, I do believe. Don't hold me to the dates.

You have that in your packet; okay?

It's actually a map of the New Castle quadrangle. I'm circled on it, too; okay? The location of my farm. I have at least 27 deep wells on my farm. I had not had any issues to date when I found out that they had permitted a Marcellus Shale well just about, just 4,100 feet from my property; okay? So I filed an objection to DEP permitting this well.

And I mean, you know, the rest is historical literature on the Environmental Hearing Board website. The fact of the matter is, no one bothered to look for these wells. Not DEP, not one of these wells is listed on the DEP spreadsheet. Not one of them. There's a thousand of them on this map, and

not one of them is up on the DEP lost and abandoned spreadsheet; okay?

Then I just got into research. I found historical records published after this map, to an additional 1,500 wells being drilled in the Wellsboro oil field. And it actually said that they have to stage production of oil up that year from decreasing over other years. Now, I'm up to 2,500 wells in this 6 square mile radius. But not one of them is on DEP's map.

There is a spreadsheet that I gave you of some 16 wells on --- in that general area that have been put on the spreadsheet. But, honestly, 16 minus 200 and --- 2,500 hundred minus 16 is not a very happy figure in my book; okay? From all of this interaction that I had with the DEP and Shell and all the environmental hearings, and working with two other agencies, I've come to the opinion that you all don't give a rat's ass about the citizens of Pennsylvania. You don't care who poisons me.

You don't care who puts me out of business. Frankly, if you had a meal today, you need to thank a farmer. I'm so tired of Pennsylvania's number one industry being blown off by oil and gas simply because oil and gas has money to file and

1 legislate over tax rules that totally and completely

2 favor them, Act 13. And then we actually have a

3 Republican legislator that voted in this bill. I'm

4 going to vote these jerks out. Because I'd like to

5 bitch-slap him, to tell you the truth. He comes here

6 and bitch about something that he voted for.

7 Politicians drive me nuts; okay?

Now, you could easily stop all of the pollution and everything by merely requiring every company to add nanotechnology markers into their frac fluid. Then we would know whose frac was in my well, or anybody else's well.

In your packet, which you have, there is two listings from the <u>Wellsboro Gazette</u> and another newspaper of Shell blowing up the Butter's Well and shooting frac fluid into the air, evacuated the Ralston Hunting Club and other housing around there. I don't care to see this happen on my farm. I don't care to see it happen in my neighborhood.

You all permitted Shell when they were in the process of doing that. You should relinquish the permit for the Kephart well immediately. Why do you keep letting them do this to us? And, you know, the sad part of all this, the really sad part of all this, is they've been treating people like this in

1 third-world countries forever. And all of the sudden,

2 | they started to do it to Americans, middle-class

3 Americans, highly educated Americans, and we don't

4 like it very much.

And you want to know something else? We ain't those third-world people that can't stand up for themselves the way that we can. I know what the real question for you tonight is.

## MR. WAITE:

All right. Ray Stiglitz is up, followed by Lisa DeSantis.

# MR. STIGLITZ:

Ray Stiglitz, 896 Victory Church Road, Franklin, Pennsylvania. Good evening, and thank you for accepting my comments. I'm here this evening representing the Pennsylvania Independent Petroleum Producers. PIPP is an organization which represents the interests of approximately 300 members, most of whom are small, family-run business. Many of our members have only a handful of wells on their properties, which they operate as a sideline to their regular day jobs or to supplement retirement income.

Other members may be companies who drill

and operate shallow, conventional wells on a little larger scale. One thing that all PIPP members have in

common, though, is the fact that they are all small 2 businesses struggling to remain viable in the face of 3 the Marcellus and Utica industry juggernaut. Act 13 and its proposed regulations have caught up the 5 traditional shallow well operators in many of the same 6 requirements that were implemented to regulate the shale gas operators.

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One of my biggest objections to the proposed regulations is the increased burdens concerning notification requirements. For example, on wells that I drilled on my property in Venango County last year, it was necessary for me to notify the surface landowner, the local municipality, and no less than an additional eight adjacent municipalities. What possible environmental benefit can come from me notifying these eight additional municipalities of my intention to drill four shallow 900 foot deep oil wells?

Municipality notification is just a start. You're then faced with spud notifications, casing cement notifications, frac notifications, well reports after drilling, completion reports after fracking, well site restoration reports, and last but not least, annual production reports, and probably a few that I can't bring to mind. Forget to do any of

them, and you're faced with a Notice --- a possible Notice of Violation.

Additionally, DEP's proposed Mechanical Integrity Assessment Program will allow another crushing layer of operator reporting requirements, with very little environmental benefit to show for it. The proposed Section 78.66 regarding crude oil and/or production water spills is, potentially, the most frightening aspect of these new regs, if Act 2 standards are applied to the cleanup. A less intrusive and cheaper solution to the cleanup of small crude oil spills should be the adoption of bioremediation practices, which, by the way, are recognized as successful by the federal EPA.

My family and I operate a small well drilling and servicing company based in Venango County. We also operate a number of shallow stripper oil wells in Venango and Clarion counties. We produce crude oil from wells that date from the late 1890s to some that were drilled within the last few years. My son is actively involved with the business, as is my wife, who assumes business management duties. We currently employ six other workers on a full time basis.

The daily output of our wells and the

wells of our well service customers are, by and large, measured in gallons of oil per day, not barrels per day. The two refiners of Pennsylvania crude oil and all of their employees rely on the efforts of many small independent producers like us to supply them with a needed and valuable commodity, a commodity that touches each of us in our daily lives in more consumer products than we can count.

It seems to me that the environmental health of Pennsylvania and the good of its citizens are best served by promoting and encouraging responsible development of our oil and gas resources, rather than regulating small businesses such as ours out of existence. I hope and pray that you will fully consider all of the ramifications of these proposed regulations before making a final decision. Thank you.

#### MR. WAITE:

Hendryx.

Lisa DeSantis is up, followed by Jan

### MS. DESANTIS:

Hello, my name is Lisa DeSantis, and I'm from New Castle, PA, 2316 Pennsylvania Avenue,
Lawrence County. And one of the main reasons I'm here is because Lawrence County is giving away water. The

1 state DEP is giving away. They will give away ---.
2 And they keep passing permits for water withdrawal.

3 | And we're giving it away for free.

And another thing. I'm a thousand generation mother. Every mother before me has protected their children, has breastfed them, has nourished them, has cherished them, and protected them from everything. And this I've got to protect my children from. This is Butler County. This is the school, with the well. They cleared this well the Monday after school started, while kids were playing in the playground.

There's something wrong. We don't want these in schools. The mother bears are getting angry. We're waking up. We're showing up. We gathering for meetings, and we're meeting with people all around the world to push back this industry to bring natural resources and other things that could be produced from oil or other options, where our scientists and our geologists --- where our scientists can develop other energy sources.

And a few questions I do have, is why is flow-back waste considered residual waste and not hazardous waste? Make sure you write that down, because I want that answered, why it's not hazardous

waste. I'd also like to know how many families in Pennsylvania are living with water buffalos, and the proximity of those water wells to fracking wells. I'd also like to know where all these water trucks are going, because I can't seem to find that out online. They just seem to be going up and down the highways over and over.

And the beneficial use that was written into some kind of stuff, where fracking waste is beneficial use? I'd like to see that totally revoked. I do not feel that there's any beneficial use for fracking waste. And the charade of this industry, of an industry that hasn't caused harm, an industry that's created all these jobs and energy independence, the number one big thing? Then why is the cracker (phonetic) plant being put in? Why is the pipeline going to Louisiana?

Why is all this trying to get out on the L&G line? Why, if it's such energy independence at the expense of our rivers? And nobody's mentioned West Virginia. Why don't you ask them if they'd like to see this 12 million gallons of water that's pulled a day out of their rivers --- out of our rivers, see if they go flowing down the river?

I also spoke with Vanessa Kline

(phonetic), who's an English fractivist of mine, who sent word over from the island. Because they're fighting. They're fighting hard. She volunteered to reinstatement for her. It's a gross human arrogance to even begin to think that we can legislate for the 6 fair use of subterranean geology. The problems and havoc that have been already been brought by the inherently un-regulatable insanity of high volume sick water hydraulic fraction should already have been called for an absolute halt anywhere.

This is not happening, and it causing exponentially growing numbers of people worldwide to ask very serious questions about whose interests the government are acting on, both sanctioning and pretending to be able to regulate it. Vanessa Kline, BIFFS, Britain Island Fracturing and Fracturing Substance. We stand in solidarity with people around the world, who are putting this off in California and in Indiana. I keep educated every day. I educate myself. And I'm a guardian of water. And, someday, you're going to have to fight for water before you have to fight for water. Thank you.

#### MR. WAITE:

Jan Hendryx is up, followed by Claire M.

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#### DR. HENDRYX:

Good evening. My name's Jan Hendryx, address 4409 Ellsworth Avenue, Erie, PA 16509. I'm a physician, and I'm extremely concerned about the public health and environmental issues resulting from unconventional shale oil and gas development. I submit this verbal comment on behalf of myself and all citizens who may be directly, indirectly, or potentially affected adversely, health-wise.

The proposed new oil and gas regulations state the purpose of this update is fourfold. In my opinion, number one, ensuring protection of public health, safety, and the environment is the first and foremost duty of the DEP, EQB, legislators, Governor, and the gas companies. In order to accomplish this, all parties must ensure that potential or real exposures of toxic substances are minimized or removed completely.

Land, air, and water all need to be monitored appropriately and consistently, and reported on regularly, something that the new regulations do not address or mandate. Potential exposures of the general public and the oil and gas workers to various pollutants occur in most phases of gas well development. Toxic substances can cause morbidity and

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mortality to people located at, next to, or even some difference from the well pad, compressor stations, flaring towers, condensate tanks, impoundments, et cetera.
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In addition, light and noise pollutions need to be addressed and mitigated effectively.

Possible routes of contamination, exposures, and drilling and gas-related dangers include, but are not limited to, the following. Drilling mud chemicals.

Casing and cementing failures resulting in methane migration. Chemical migration. Spills and discharges. Impoundment leakage. Drill cutting contamination and disposal. Land-spreading of residual waste at the site, or anywhere. Residual waste disposal. Well blowouts. Venting and flaring.

fires. Diesel, ozone, and particle pollution.

Hydrogen sulfide emissions that can cause death within a few minutes of exposure. BTEX chemicals.

Compressor stations, explosions and

20 Radioactivity, radon, radium 226 and 228. Proprietary 21 chemicals. Shale formation chemicals. Frac sand.

Noise pollution/vibration from 24/7 activity. Erosion and sedimentation/stormwater failures.

Property damage from seismic testing, and potential earthquakes from fracking/deep well

injection of waste water. Increased sensitivity of children and older individuals to toxic air, water, and contact exposures. Stress-related illnesses from fear of water/land/air contamination, intimidation, loss of property values and way of life.

One of the first considerations before the drilling and fracking should be, how can we safely dispose of the massive amounts of waste generated? Our governor, legislators, regulatory agencies, and industry need to answer these questions practically and deal with it appropriately before any further unconventional shale development occurs. They also need to perform long-term health impact studies in concert with public health experts and toxicologists to determine what damage has been done so far to citizens and what one can expect in the future.

There have been no appointees from the public healthcare arena or environmental biology on either the Oil and Gas Technical Advisory Board nor the Marcellus Shale Advisory Committee. In my opinion, unconventional shale development in Pennsylvania is one of the biggest threats to public health facing us all. Therefore, ban unconventional shale well development, period, until protections for both citizens and oil and gas workers can be

guaranteed. We should follow after our intelligent New York neighbors.

According to the new regs, solutions to wastewater storage and disposal actually contaminate Pennsylvania landscapes and cause more harm, rather than protect health and the environment. DEP appears to be talking out of both sides of its mouth. On one hand, it issues violations, occasionally fines oil and gas companies and waste haulers for spills and discharges. And then permits the same material to be dumped in rivers at brine treatment facilities and POTWs, on land and in the form of land spreading, road spreading and de-icing, or buried.

The term land spreading needs to be defined in the document. Land spreading and waterway dilution needs to be abolished from any consideration as appropriate oil and gas waste disposal methods. Similarly, drill cuttings from deep shale layers are radioactive, are contaminated from drilling mud chemicals, and should not be buried at the site. How many thousands of tons of drill cuttings are produced from a ten well unconventional well pad? Apparently, obtaining landowner consent for burying waste has been dropped from initial discussions by DEP.

I strongly advocate the following. Bar

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     all dumping of frac waste in our rivers, streams, and
     our lands. All wastewater trucks should be equipped
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     with a GPS device and monitored from a central, non-
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     governmental computer location to ensure that they are
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     not dumping illegally into the streams in the middle
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     of the night or at POTWs. Drillers should be mandated
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     to use individualized non-toxic tracers in their
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     drilling solutions, frac fluids, and water --- mine
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     drainage, treated sewage effluent, or freshwater ---
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     so there is no doubt who and where the pollution is
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     originating from.
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                   Air monitoring should be performed at
     all sites and inside homes for 2.5 and 10 micron
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     particles, at least. Setbacks, from homes, schools,
 15
     and universities, should be at least one mile from the
     well site pad, impoundments, and lateral well
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 17
     trajectories.
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                   MR. WAITE:
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                   Thank you. We'll have to read the rest
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     in the transcript.
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                   DR. HENDRYX:
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                   Okay.
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                   MR. WAITE:
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                   Claire Surmik is up, follow by Luigi
 25
     DeFrancesco.
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## SISTER SURMIK:

My name is Sister Claire Marie Surmik, and I'm from Mount Saint Benedict's in Erie, Pennsylvania. Former Prime Minister Margaret Thatcher surprised people in 1988 when, in a lecture to the Royal Society, she said, for generations, we have assumed that the efforts of mankind would leave the fundamental equilibrium of the world's systems and atmosphere stable. Unwittingly, she said, we have begun a massive experiment with the system of the planet itself, end quote.

I believe if Margaret Thatcher were alive today in 2014, she would change the word unwittingly to knowingly. I'd like to read a few excerpts from the guest voice of Matt Walker in the July 18th edition of <a href="Erie Times News">Erie Times News</a>. Fracking and all of shale gas equipment and facilities that come along with it release a significant amount of harmful pollution into the air, water, land, and can have serious impacts on residents who live nearby.

Shale gas, Mark says, is also touted by the gas industry and elected officials as a solution to climate change. Methane, or natural gas, is 105 times more potent at warming our planet than carbon dioxide from coal. The gas industry leaks anywhere

1 from 3 and a half to 9 percent of the gas it produces.
2 End of excerpt from Matt Walker.

In this week's <u>Erie Times News</u>, we read that, since 2008, Pennsylvania has signed several major new sale gas leases of almost 139,000 acres of public land. So far, these have generated \$413 million for the state. How many times in recent conversations have you said or heard someone say, it's all about the money?

I would like to say a lot more about jobs and the economy. But just let me say that I believe that if we stopped putting our money on fossil fuels and started seriously spending it on renewable energy, we would have jobs a-plenty. And we would be healthier, happier, and, yes, holier people. We would be seriously taking care of our planet Earth and all of God's creation for future generations.

As we all know, the DEP is required by the Pennsylvania Constitution to protect the people's rights to a clean environment. With that said, I am concerned about several of the EQB's proposed oil and gas regulations. One, all fluids related to oil and gas development should be contained in engineered facilities, not in natural depressions.

The DEP should not allow the storage of

wastewater in open pits or impoundments. At issue here is the protection from drilling operations related to fracking. Our streams and groundwater should be secure. Proper disposal of waste materials at well sites is of great concern to me. We should not even suggest that Pennsylvania will allow fluids related to fracking in the oil and gas business to be managed in natural depressions.

Second, the definition of seasonal high ground table should be returned --- be retained in the proposed regulations. Because the term continues to play a key role in the regulation of oil and gas activities. Third, the collection and analysis of chemical samples of waste that the operator intends to dispose of on site should not be discretionary. The regulations should be clear that it is a mandatory obligation.

The DEP's proposed revisions to Chapter 78 should require meaningful standards for the final restoration of well sites and impoundment sites, as well as for the interim post-drilling restoration period. The DEP's proposed regulations for the road-spreading of brine pose unacceptable threats to Pennsylvania's water resources. And it would be unlawful. Currently, the DEP's ---.

MR. WAITE:

Claire, we'll have to read the rest in the transcript. Luigi DeFrancesco is up, followed by David Weinkauf.

## MR. DEFRANCESCO:

DeFrancesco. I reside at 27502 Highway 77, in Richmond Township, Crawford County. Mr. Chairman, once again it appears that Pennsylvania will come to the rescue of the residents and the whole nation by working towards an energy independence that we have --- hoping to achieve all these past years. We, as Pennsylvanians, should consider ourselves lucky to have a Governor in Tom Corbett, with a vision and the desire to achieve the goal of energy independence, and, at the same time, bring economic prosperity to our Commonwealth.

I would also like to acknowledge the intensive work that the Department of Environmental Protection has applied to the permitting process and field oversight. The Department mission statement said it all. The Department of Environmental Protection's mission is to protect Pennsylvania's air, land, and water from pollution, and to provide for the health and safety --- please, remember the health and

safety --- of its citizens through a cleaner environment.

We reside in a state that values individual and property rights. And stopping the exploration of minerals and other natural resources, such as natural gas, is not an easy task, if impossible. However, due to the fact that the Pennsylvania Constitution guarantees the people the right to clean air, pure water, then it's imperative that regulations are enacted to ensure the mission of DEP becomes a reality. To this extent, I'd like to emphasize four points on the safety of --- the health and safety of the citizens.

Because, usually, we always talk about the operation of drilling these wells. But we also should be concerned about what happens after the drilling is done. Therefore, what I'm proposing is, number one, setbacks from a road right-of-way should be established. Neither equipment nor storage facilities related to a gas well shall be built within 300 feet of a municipal road. This would include, but not limited to, storage tanks, compressors, water separators, above-ground sections of high-pressure lines.

Number two, high pressure compressors.

High pressure compressors should be located in underground vaults in order to attenuate noise and vibrations. Also, the casing standards should be evaluated. The standards for casing should include, also, a standard that casing materials are capable to withstand temperatures that are consistently found in 10,000 feet below the surface.

And, four, in line valves, there should be a standard establishing an amount of valves that should be installed along the transmission lines and how far apart. The purpose? To allow a quick response in case of leaks and accidental line damage. Now, the reason why I don't particularly like to have any equipment too close to the road is because during the mineral exploration in this country, too many gas companies build their storage tanks and lines too close to the road.

In fact, there's one in Richmond

Township right next to the roadway, and 30 feet away
from my house. And there's been leaks before.

There's been leaks before, and there's no protection
against any uncontrollable vehicles that might do
damage. As a matter of fact, an accident did happen
on the --- in the --- up the four ways in a road in
Crawford County. So in other words, you know, the

Board should consider protection after the drilling is done, for the safety and health of the individuals in our state. Thank you.

## MR. WAITE:

David Weinkauf is up, followed by Daniel Soltesz.

### MR. WEINKAUF:

Dave Weinkauf from Conneautville,

Pennsylvania. Forgive me for repeating this quote,
but our State Constitution says, and I quote, people
have the right to clean air, pure water, and the
preservation of the natural, scenic, historic, and
aesthetic values of the environment, end quote. While
these new DEP proposed regulations we're discussing
today are a step forward in protecting that
Constitutional provision, there still need to be
improvements to those regulations.

First, on the issues related to health, the DEP needs to bypass the so-called Haliburton loophole and force this industry to adhere to both state and federal environmental and endangered species laws. Second, there should be complete transparency in DEP's dealing with the public and drilling operations. For example, the reference to trade secrets in Section 78.122 should be eliminated. And,

instead, the industry must be required to list all chemicals to be used in the drilling process prior to drilling, and keep inventories of names and amounts of chemicals used during drilling and extraction.

Next, very extensive independent air and water quality tests related to proposed chemicals and other byproducts to be used in the drilling process should be conducted prior to drilling for all residents near drilling sites and above all proposed horizontal pipelines connected to the well heads on those sites. On the subject of pipe, DEP regulations should require that all pipe must be API standard to avoid the substandard pipe now being imported, used, and prone to failure. Since compressor stations are part of gas operations, rules governing these stations must be written and included in these new regulations.

Under Section 78.51, I would suggest that Tier 3 quality water be required for water replacement. On that same subject, it's well known that there is widespread damage caused by the gas industry to water supplies in Pennsylvania. At least 161 such incidents have already been identified. And the reason there isn't more information about this problem is because of the industry's common practice of forcing residents to sign non-disclosure agreements

before reparations are made.

It's also known that industry and the DEP have taken away water replacements without the consent of affected residents. These practices must stop. The new regulations must require industry to replace water supplies in perpetuity, or end replacements only with the consent of the affected residents.

Likewise, industry must be held responsible for all damage to water supplies, property, air, and health. DEP must clearly state that fines must be equal to the cost to the environment. Not only must fees be levied, but in every instance, the violation for which those fines are issued must be stopped immediately. Continued violations by operators should be severely punished as well. I suggest, for example, a three strike and you're out rule be added to the regulations.

Inspections to drilling sites must be done at least once a year by well-trained inspectors without the prior knowledge of the industry operators. It's obvious that, with the increase in drilling, a burden will be placed on DEP to increase its numbers and inspectors. I suggest the DEP and its allies push legislative bodies to properly fund inspectors through

the taxation of gas produced at the well head, as other states do, fees to operators, and/or through increased fines for violations.

These, then, are my suggestions for tightening up what might be a good set of regulations for this new industry, and something that could address DEP's stated mission, quote, to protect Pennsylvania's air, land, and water from pollution, and to provide for the health and safety of its citizens though a cleaner environment, end quote.

I hate to say this, but it's the impression of many of us, including me, that DEP is not carrying out its stated mission. We believe that, instead of doing the job assigned to it, DEP is protecting the industry it is charged with regulating. One has only to look at DEP documents related to incidents described and contained in the film <a href="Triple Divide">Triple Divide</a> such as the Atgas blowout, the Birch Run Exceptional Watershed, and Big Nelson Run incidents, among so many others, to know why I and many others have lost their trust in DEP. Because of this, these new regulations are absolutely meaningless unless DEP changes the way it does business.

Is it any wonder why we citizens no longer trust the DEP to protect us and the

environment? Having said that, I offer this bit of advice to DEP. Put your feet on the ground, and use state and federal laws, along with your own rules and regulations, to properly regulate this industry in order to carry out your mission and protect the provisions of our state's Constitution. Perhaps then, and only then, you might regain our trust.

### MR. WAITE:

Daniel Soltesz is up, followed by Marlene Bertke.

### MR. SOLTESZ:

My name is Dan Soltesz. Address is 389
Sabbath Drive, in Pleasant Hills, Pennsylvania. Good evening, everyone. I'd like to thank you for allowing me the opportunity too address you this evening regarding the oil and natural gas drilling right here in Pennsylvania. One thing I'd like to point out is some of the benefits Pennsylvanians have been able to see since we have begun to develop the Marcellus and Utica shales, as well as the benefits we've seen from the conventional drilling.

In Pennsylvania alone, we have seen the creation of thousands of jobs, both within the industry itself and outside of the industry in areas you may have never imagined. We have seen new jobs

provided by the energy companies that are establishing themselves here, along with more directly related industries such as water recycling, trucking, and the steel and pipe manufacturing, just to name a few.

We'll also see countless more as the industry continues to grow and develop, and as new plants are created, such as the proposed cracker plant in Beaver County.

There will also be jobs in areas that many of us never would have even considered. One time, I had the pleasure of meeting a woman that owns a small diner in Washington County. And she told me that her diner did well. But then a few years ago, the Marcellus Shale started to be developed. Her small business was really able to take off. She now provides food on numerous drilling sites to the workers. And because of this, she has had to greatly increase the number of people she employs.

I would also like to take a moment to point out that, in the last census, we saw growth in many of the counties where there is drilling activity. The fact is, over the past few decades, we have seen thousands of Pennsylvanians leave our state for other states that have greater job opportunities and more robust economies. The oil and natural gas industries

provided us with one of the best solutions to that problem and one that we have --- excuse me one of the best solutions to this problem that we have seen, our population decline --- since we've seen it begin. It is not only bringing new people into Pennsylvania, but it's keeping Pennsylvanians here by providing them with good, solid jobs especially in rural areas, where the number of jobs was already limited.

Me must also look at an issue that is not only important to Pennsylvania, but important to Americans and even the entire world. Much of the energy produced on Earth is not produced by nations that always had our interests or the interests of our allies at heart, but, rather, their own. These nations raise and lower energy production to best serve their own political and economic interests.

West Virginia and North Dakota, seeing such a great increase in energy production, we are able to sell our own oil and natural gas in the United States and to other countries. With continued development, energy independence is a true reality for our nation. And the ability to buy energy from allies becomes a more realistic option for countless others.

I've listed several of the benefits that

the energy industry has provided Pennsylvania and others tonight through the development in the Marcellus and Utica shales, as well as other conventional oil. We are seeing new jobs, new people, and a more secure Pennsylvania. We've seen nearly \$2 billion in tax revenues since these developments began. We will continue to see more as the industry continues.

This tax money is helping to develop our communities, to fix our roads, and even fund our schools. We are seeing low energy costs that greatly benefit every Pennsylvanian, especially during our cold winters. I would also like to say that none of us are here --- that are here wants to see the industry be allowed to operate unchecked by lawmakers and regulatory agencies.

We all support proper rules and regulations that will ensure the safety of Pennsylvanians --- Pennsylvania and its environment. But I will ask that we also work to allow this industry to grow without any unneeded or unnecessary restrictions. That allows all Pennsylvanians to continue to benefit. Thank you all for allowing me to speak tonight regarding this important issue. Thank you.

#### MR. WAITE:

Marlene Bertke, followed by Thomas

# MS. BERTKE:

Miller.

Marlene Bertke, 6101 East Saint Road, Erie, Pennsylvania. My fear about the regulations is that they do not adequately address my fear of what fracking is doing to our water supply. Water is our most valuable and scarce resource. We've heard a lot lately about peak oil. Have we reached the point where we have produced all the oil that we possibly can? My worry is about peak water. Are we reaching a point where we have produced all the available water? There is much water, but sustainable, managed water is becoming extremely scarce.

Fracking a single well can require up to five million gallons of water. This depletes local groundwater and can dry up nearby creeks. In 2012, Pennsylvania used about 15 millions gallons of water a day for fracking. That's about eight percent of the total water use in the state. Roughly 65 percent of that water comes from our rivers, creeks and lakes. The other 35 percent is purchased from the municipalities by drilling companies.

This is water that is lost to us,

because of the chemicals that are put into those five million gallons of water being forced down the well. It becomes wastewater. The chemicals are put there to dissolve minerals, kill bacteria that might plug up the well and insert sand to prop open the fractures in the shale. The fracking industry produced two billion gallons of toxic wastewater a day in 2012, water that is no longer available for us to use.

The Marcellus Shale formation under PA is naturally high in radioactive material. So the wastewater picks up radioactive material as well as barium, magnesium and various other organic compounds. Because of this, no suitable treatment for making the wastewater safe for human or animal consumption has been found, so the industry has become increasingly dependent on underground injection wells, forcing the fluid deep underground and permanently taking the water out of its natural cycle. Usually the water we use is returned to its source to be used over again. Not so with fracking wastewater.

About half of the wastewater returns to the surface and the other half stays underground. No one is entirely sure what happens to that half of the toxin-laced water that remains underground. But there are strong indications that at least some of this

toxic cocktail makes its way back into the water supply.

This happens in several ways. If the well casing that penetrates the aquifer is not well-sealed, chemicals fill into the aquifer and make the water not fit for us to use. And, overtime, most well casings fail. When fracking fluids seep from them to connect with underground fissures, previously abandoned wells and natural faults and fractures, the contaminants can readily migrate over a long distance into underground waterways and fresh drinking water sources. There goes more of our usable water.

Trucking and storage accidents have spilled fracking fluids and brine, leading to contamination of water in the soils. Accidental spills, explosion and improper disposal of wastewater have polluted streams and rivers. There is one bit of good news, however. Since 2011, Pennsylvania companies are using some of wastewater that came back to the surface to frac more shale.

Most water treatment plants cannot remove enough of the radioactive material to meet Federal drinking water standards, before discharging the wastewater into rivers, sometimes just miles upstream from drinking water intake plants. As I

mentioned, in addition to the chemicals used in fracking, the wastewater that is a byproduct of the drilling process picks up salts, naturally occurring radioactive materials, barium, magnesium and other various volatile organic compounds, which are also carcinogenic.

It has been definitely concluded that the wastewater contains radioactivity and other toxic materials at levels that are frequently much higher than the level that Federal regulators say is safe for wastewater treatment plants even to handle.

# MR. WAITE:

All right. We'll have to read the rest in the transcript.

### MS. BERTKE:

Thank you.

#### MR. WAITE:

Thank you. Thomas Miller, followed by Bill Granche.

### MR. MILLER:

My name is Thomas Miller. And I live at 560 Route 16 South, Olean, New York. Yes, I am from New York. But the Pennsylvania water field extends into New York, and if the Pennsylvania oil field goes down, so does the support industries. So our industry

is down, too.

The 153-year-old Pennsylvania shallow-well oil production industry is located in some of the most beautiful country in the world. This includes the historic Oil Creek Valley, where there was once a forest of derricks in the infancy of the industry.

This is a fact. If you don't believe me, go visit Oil Creek State Park and see for yourself.

The oil produced by this industry, Penn Grade Crude, is found only in Pennsylvania, New York, West Virginia and Ohio, is the most environmentally-friendly crude oil in the world, being the source for many specialties, including personal care products and even food additives.

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

Why shouldn't this industry be made

extinct by inclusion in a new set of rules designed for a brand new industry, shale gas, that has very little in common with the shallow-well industry, other than the fact that it produces a resource from the earth? The need for many of these rules, even for the shale industry, is suspect.

Many of the rules are actually environmentally counterproductive. For example, why is it necessary to carve a highway into a well location when not much more than a cow path is needed? The enforcers appear to be driven more by the desire to issue citations and show who is boss, than anything to do with an actual environmental benefit. They will say they are just doing their job, which is just what the Nazi soldiers said as they marched good people into the concentration camps.

The purpose of the DEP should be to help the industry to operate in an environmentally sound, efficient and productive manner, not to harass it to death. I understand that this is all being driven by so-called environmentalists, who get their technical advice from celebrities and media bias, and scoff at those who have devoted their entire lives to acquiring genuine expertise. One has to really question the actual motive behind these people. Why should state

government give them more credibility than the hardworking people who are doing their best to make a living and provide necessary and valuable resources that have made life better for all?

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

In spite of this, it is deemed right and proper for the State itself to annually dump hundreds of thousands of tons of pure salt on the highways.

You don't see or hear the so-called environmental groups up in arms about this, but it doesn't bother them to constantly cite untruths, half-truths, misrepresentations and non-disasters to further their goal. Isn't there something wrong in this picture?

If the Penn Grade Crude production industry is destroyed not only will it mean the loss

of employment and prosperity to many, but a tremendous source of valuable resources will be lost that may never regained. To the members of the Environmental Quality Board, I ask that you base your decisions on truth and justice and not on narrow-minded opinion.

Thank you.

## MR. WAITE:

Granche.

Bill Granche is up, followed by Karen

## MR. GRANCHE:

My name is Bill Granche and I live in Ridgeway, PA, 24 Lincoln Street. And this is the second time that I've attended something like this. The first one was, we did it at a fire hall. It was a little bit different. It was a different format, much less formal. So I've made some adjustments to what I originally wanted to say. Since you've sat through enough of these to have heard all of the arguments before, I'm sure, I just wanted to remind you that the DEP statutes about --- should not compromise its obligation to protect the environment by balancing citizens' constitutionally guaranteed right against private interests in oil and gas.

the gas and oil industry to do their best. That just

Now I know it's in the best interest of

makes sense. I wouldn't go around and deliberately destroy somebody's house. I'm a retired teacher. I've witnessed --- you know, for 37 years, and so I have a lot of anecdotal evidence and stories that I can share. But I've witnessed gas and oil companies involved in unconventional drilling habits that have --- where there have been lies and citizens were bullied. I had one person told that I don't need your permission to drill on your property, that kind of bullying. And government officials shirk their duties.

It's evidence. I have friends and students who have been made ill by working on the sites and I have heard a kid coming to me. I told him just to get out of it. But he said he was scared for his mom and dad. So what I'm going to do is just say that since Act 13 was found unconstitutional, I question why the DEP, the Department of Environmental Protection, would want to appeal that decision. I don't understand why people have to prove safety --- why they have to prove safety rather than to prove error. People who get drugs --- before you get those drugs, they've been tested. This isn't what has been happening in the industry. No.

There must be sweeping changes in

staffing, regulations, enforcement in order to protect Pennsylvania citizens from future harmful effects of unconventional drilling. I agree with the former DEP head John Hanger, who has written that proposed regulations are not adequate and will not strongly protect resources and people. Just the idea of residual waste being mentioned earlier, residual waste is now accompanying municipal waste at the same time and so that's a misnomer. That's a kind of propaganda that enables people to think that what's happening is okay. You know, it's just like throwing out a tin can.

Anyhow, he has recommended that to protect us, strong rules must be enforced and like DEP staff that is big enough to do its job. Something that's needed is more jobs. Today the DEP staff regulating the gas industry is at least 105 positions too small, according to a person who has been in charge. Instead of subsidizing a multi-billion dollar profitable industry, the money should be used to enforce the rules and regulations that are needed to protect people and the natural gas industry here on out.

I've had people from the DCNR tell me that they cannot enforce certain things, because it

would be --- well, they don't have money to have prosecute. So even though they've had confessions, they couldn't get a conviction.

# MR. WAITE:

Karen Granche, followed by Shane Flannery.

## MS. GRANCHE:

Thank you for having this today. I'm not here because somebody paid me to come and I'm not here to protect my income and my investments, but I'm here because clean water and clean air are very high on my priority list.

As of today, tens of thousands of people in West Virginia still don't have water, because of the coal chemical spill that happened last Thursday, January 9th. Now, today even, officials in Ohio and Kentucky are preparing for the 60-mile long chemical plume, as it flows downstream, fouling the air and water.

According to an NPR News report, there are around 2,000 leaks every year of above-ground storage tanks. In 2001, more than one million gallons of sulfuric acid spilled from an above-ground storage tank in Delaware. In 2008, two-millions gallons of fertilizer spilled in West Virginia. And another

accident involving an above-ground storage plant at a Bayer pesticide plant, two workers were killed.

Now, the Chemical Safety Board, which has been investigating chemical spills and accidents, has concluded that there are just too many gaps in the rules and regulations governing the storage of chemicals. After thousands of incidents, no one has made any effort to close this gap, so the leaks continue. Public health specialists and some government officials say the consequences for violating existing rules and regulations for above ground storage tanks amounts to almost nothing.

This sounds all-too familiar with regard to leaks and spills stemming from natural gas activities. In 2012, according to a report delivered to New York State regulators by Cornell engineering professor, Anthony Ingraffea, inspection data from the State indicated that over 150 Marcellus shale wells in Pennsylvania had severe flaws that have led to some large leaks, and yet, the operators of those wells were never issued violations by regulators for these breaches of State law.

In light of this, I wish to address two major concerns. The first one concerns the standards for frac pits and impoundments. Prohibit operators

from using open pits for storages of regulated substances, including waste water, drillings, drill cuttings and substances like gels and cements that return to the surface after fracking. Many spills, leaks and other problems involving pits have occurred State-wide to contaminate water, soil and air. Waste should be stored only in closed systems.

Prohibit onsite processing of shale drill cuttings, which often contain hazardous substances and radioactive materials and require thorough analysis and special handling.

Define fresh water that is used in oil and gas operations. Water left over for fracking and contaminated fluids being recycled for fracking, such as from mining or sewage, is often mixed with clean water for additional operations. The lack of a clear definition allows operators to avoid regulations on the use and disposal of polluted substances.

Section 78.59c, of the current draft regulations, prohibit well operators from building centralized impoundments for wastewater within 100 feet of any solid blue line stream identified by the U.S. Geological Survey. Having a fluid storage area as close as 100 feet of any stream, whether it's the Allegheny River or an intermittent seasonal stream is

way too close. If there is a leak, the 100-foot buffer could be completely inadequate to assure that the leakage dos not enter the stream.

Even if it's a dry creek, 364 days a year, once leaked frac fluid gets into it, it becomes a stream and that frac fluid will flow downhill, eventually to a solid blue line stream. Any dry creek bed is a channel to the water system and the frac fluid must be kept out of it. Even 1,000 feet is too close to if the impoundments are at a higher elevation than freshwater resources.

Second concern is disposal of brine,
drill cuttings and residual waste. Pennsylvania
should apply the U.S. Resource Recovery and
Conversation Act standards to regulate all aspects of
storage, transport and use of hazardous materials
contained in pits, centralized impoundments and tanks.

And additionally, DEP should prohibit the burial of land application of drill cuttings, which can contain polluting and radioactive substances. DEP proposes different conditions for disposal of drill cuttings from above and below well casings, but neither makes the practice safe.

# MR. WAITE:

Karen, we'll have to read the rest in

the transcript.

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MS. GRANCHE:

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Okay.

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MR. WAITE:

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Thank you. Shane Flannery is up,

Good evening. Thank you for the

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followed by Michael Brown.

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# MR. FLANNERY:

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opportunity to speak this evening. My name is Sean

10 Flannery and I'm the General Manager for Drake

11 Manufacturing and Drake Machining. We're located in

12 | Sheffield, Pennsylvania in Warren County, an active

13 area for conventional oil and gas wells. Drake

14 manufactures series 10, 16 and 25 pump jacks that are

15 sold through distribution locally and in other parts

16 of the country. We also have a machine shop that

17 supports our pump jack manufacturing as well as direct

18 work for many local companies, many of which are oil-

19 and gas-related. Drake employs about 20 people.

I'm here today to voice my opinion that

21 the proposed changes to Chapter 78 of Act 13 will have

22 a dramatic negative impact on small businesses, like

23 Drake. The DEP has developed, proposed and finalized

a variety of policies permits and forms within the

25 last 12 months that have hampered and will continue to

hamper the conventional oil and gas industry, often with unclear environmental benefit.

Regulations developed for unconventional oil and gas operations are often inappropriate for conventional operations and impose a disproportionate regulatory and financial burden on small businesses.

In oil and gas regulations, one size does not fit all. Here are some of the recommendations to ensure viability of the conventional oil and gas industry in Pennsylvania.

DEP should restructure Chapter 78 to separate those regulations that apply exclusively to unconventional operations. Given the stark differences in the nature of conventional shallow oil and gas activities and operations compared with unconventional oil and gas development, DEP should structure Chapter 78 in a manner that clearly identifies and separates the provisions that apply only to unconventional operations and activities.

Many of the new provisions of Act 13 focus on operations and impacts of unconventional well development. For example, Act 13 provides specific requirements for unconventional wells related to permit application, notification requirements, comment opportunities, notifications to DEP, water management

plans, site location setbacks, presumptions of impacts
to groundwater, containment requirements and
unconventional well sites, recordkeeping requirements
for flow back and air emissions, inspections and
penalties. These provisions cannot apply to
conventional operations and any Chapter 78 rules that
implement these new provisions could easily be placed

into a separate subsection for unconventional wells.

The current effort to revise Chapter 78 for the implementation of these provisions creates the ideal opportunity to segregate these rules and apply only to unconventional operations. If not done in the current rule revision, the task will be much more difficult in the future.

DEP's PNDI Policy and proposed changes to Chapter 78 for the consideration of well permit conditions to mitigate impacts to public resources ignore the status of the oil and gas mineral owner as the holder of the dominant estate.

The public resources provision in Act 13 was already adopted by legislature in the Oil and Gas Act of 1984 at the time of the PA Supreme Court decisions in Belden and Blake Corp. versus DCNR in 2009. In that case, the Pennsylvania Supreme Court affirmed the concept that any reconciliation a surface

owner disputes, whether a private person or public entity, is through negotiation. Belden and Blake makes clear that a public surface owner cannot unilaterally impose conditions on oil and gas operators.

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This proposal defies all principles of administrative law and rulemaking protections that are beyond DEP's statutory authorization under Act 13. DEP's proposed Mechanical Integrity Assessment guidance for reviewing casings and cementing standards ignores fundamental differences in the way conventional wells operate versus unconventional wells. There is not a compelling need to impose significant new casing, cementing and inspection standards in the view of the reported .02 percent failure rate of well integrity problems with conventional wells. The impact of the new MIA form will be significant financially to small businesses. Using DEP's formula, it appears that at least one additional employee may be required for every 500 wells. Conventional production should be allowed to comply with Section 78.88, as it is written and categorically excluded from the new MIA program for all the reasons stated above.

In summary, now is the appropriate time

to restructure Chapter 78 to separate regulations and policy for conventional and unconventional oil and gas wells. It is vitally important to not impose undue financial and regulatory burdens on the conventional operators. This will allow these small independent companies to prosper in turn and allow companies like Drake to grow and prosper. Thank you.

## MR. WAITE:

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Dean.

Mike Brown is up, followed by David

## MR. BROWN:

Hi, my name is Michael Brown, and I live at 7764 East Wayne Road, Guys Mills, Pennsylvania. I would like to thank you for the opportunity to speak at this hearing. I work with my brother and father at Clint Brown and Sons, an excavating company that does all kind of work related to the oil and gas companies, and has done so for many years.

At our business, we build well pads, roads, install pipelines and tank batteries and install oil and gas pipelines, as well as other work for those companies. We employ six other people that we work with on a daily basis. Much of our business comes from conventional oil and gas industry. And for this reason, I am ready to express my concern about

the proposed changes in the regulations affecting the oil and gas business.

The proposed regulations will result in an increased cost for oil and gas companies. The conventional oil and gas companies I work with will suffer significantly from these new regulations. The profit margins in conventional oil and gas wells is low. The difficult economics are reflected in the shrinking oil and gas production. New conventional well completions have dropped from nearly 5,000 wells six years ago to less than 1,000 this past year. The conventional oil and gas industry is already in difficulty.

As conventional oil and gas activity shrinks, my business is hurt. In turn, the costs of the proposed regulations will further hurt my business. The State has not done an adequate job of analyzing this harmful economic impact. Sadly, this harmful impact is being proposed even though the conventional oil and gas industry has had a very small impact on the environment. The proposed regulations do not take into account the small footprint, minimal truck traffic and small volumes of fluid involved in the conventional oil and gas industry. The cost of the proposed regulations is not justified.

1 Everyday, I see how important the oil 2 and gas is to our local economy. This includes the restaurants that we eat in at the various towns that 3 4 we work, our fuel supplier for our equipment and 5 trucks, the gas stations that we use in different 6 towns that we work, the parts and filter suppliers that we use to keep our business operating, and all of the other places that our employees and ourselves 9 spend our income. The proposed regulations are going 10 to unnecessarily hurt our local economy. It is 11 important that these new regulations not be passed 12 until their harmful economic impact is properly analyzed and until the regulations are altered to 13 14 support the economic well-being of the Commonwealth of 15 Pennsylvania. 16 Thank you again for this opportunity to 17 address this hearing. 18 MR. WAITE: 19 David Dean followed by Gary Fronz

David Dean followed by Gary Fronz (phonetic).

#### MR. DEAN:

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Good evening and thank you for this opportunity. My name is David Dean. I'm from Corry, Pennsylvania, in Erie County. I'm a registered Republican, and I love to hunt and fish. I like to be

outdoors and I own 80 acres north of Corry. I'm a teacher.

Liberty lies in the hearts and minds of the citizens of Pennsylvania. Our inalienable rights to life, liberty and the pursuit of happiness is the bedrock of our Commonwealth. The Citizen's Commonwealth. Responsible, representative government for the people's best interest was born here in Pennsylvania. Our forefathers' blood spilled and our veterans' sacrifice have made this liberty and government of popular consent a reality.

Penn's Woods was founded as a refuge for settlers seeking the sacred right to ownership of private property, which is pursuing happiness. This is our understanding. These are our constitutionally guaranteed rights. Owning a home, raising a family and enjoying one's property free from contamination or nuisance is our dream. This is the true economy that builds this Commonwealth and will see it well into the future.

Today, the actions of our assembly and Governor have denied us these rights. Public Health, private property rights and the right for families to enjoy the resources of the Allegheny Rivers, Tamarack Swamp, Edinboro Lake, the farms and woodlands and

streams of all of Pennsylvania are being summarily pushed aside. As a Republican, I stand in disbelief over Act 13 and the acts that force the pooling of private property, which decades have old leases on them for unconventional drilling units, bills that permit the use of coal mine waste run-off across the State to further degrade our water, a bill to remove the power and the expertise of the Fish and Game Commission from listing animals as endangered. As a hunter, it ticks me off. This is not compassionate conservatism at all. It is rampant crony capitalism.

Chief Justice Castille, a Marine and a Vietnam vet, got it right. Act 13 is unconstitutional. The blatant removal of local self-governance, removal of zoning, permitting waivers of environmental laws and property boundaries, and the removal of physicians' rights to serve public health is unconstitutional. We should never handcuff our doctors. Ever.

Article One of Section 27 of the

Pennsylvania Constitution says the people have a right
to clean air, pure water, the preservation of the
natural, scenic, historic, esthetic values of the
environment. As trustee, the Commonwealth should
preserve these for the benefit of all the people. All

the people. This is our rule of law. Stop wasting our time and our future and start to enforce.

Since unconventional drilling began, Ron Gulla, Crystal Stroud, Jared McMicken, Joe Giovaninni and Jim Harkins have been forced to flee their homes. Farmers Terry Greenwood, Carol French, Don Johnson, Wayne Smith have had cattle poisoned. Twelve (12) families in Dimock, 50 in Connoquenessing, 4 in Pulaski Township, Lawrence County; families south of Warren have had their rights to clean air and pure water denied. You have obviously not protected the people and families.

Registered Nurse Stacy Haney should never have had her children poisoned. She signed a lease, so she was for this and now she's suing the very agency, the DEP, meant to protect her from harm. Chris and Stephanie Hallowich should not have lost three homes. David and Linda Headely should not have to worry about their children's health and future. The DEP has failed all of these families and more. Our fisheries, dairy cattle, milk and aquifers deserve better protection.

The citizens need the following changes: Unconventional wells should never be permitted under one mile from any school. Flaring of wells should not

be permitted, as this pollutes the air and wasters the resource. Releasing contents of holding tanks in the atmosphere should be outlawed, permitting operation of unconventional drilling between 9:00 p.m. and 7:00 a.m. should not take place, as it puts too much stress upon families who can't sleep. Tier-three testing of water wells and streams on private property must be done before, during and after production.

compressor stations for unconventional gas should not be permitted less than one mile radius from family homes or farms. The use of pits, ponds for storage of fracturing fluid or waste needs to end, s these leak and can flood, when it rains, into the water table. Burying of frac waste on-site or of drill cuttings should end and carry a fine of no less than \$500,000.

Illegal dumping of frac waste into any waterway should carry a mandatory fine of \$2 million. The use of lab error, naturally occurring migration from preexisting salt or coal mines or vertical wells by the DEP in their findings must be followed. To end, I'd just like ---.

#### MR. WAITE:

Okay. We'll have to read the rest of it. Thank you.

## MR. DEAN:

To end, I'd just like to say we demand that you follow your mission and adhere to Article One, Section 27, and follow the sacred words from Leviticus enshrined on the Liberty Bell, Proclaim liberty unto the land to all, all the inhabitants, all the inhabitants thereof.

## MR. WAITE:

Gary Fronz followed by Kenneth Kane. I understand Gary may not be here tonight. Kenneth Kane is up followed by Greg Buchanan.

12 OFF RECORD DISCUSSION

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## MR. KANE:

Good evening. My name is Kenneth Kane.

I'm the President of Generations Forestry, located in

Kane, Pennsylvania, Post Office Box 319 ---.

OFF RECORD DISCUSSION

### MR. KANE:

Didn't know I was that light-spoken.

Excuse me. Thank you for the opportunity to be here.

Again, my name is Kenneth Kane. I'm President of

Generations Forestry, Post Office Box 319, Kane,

Pennsylvania, 16735.

Generations Forestry is a consulting

Generations Forestry is a consulting forestry company located in McKean County,

Pennsylvania. Generations Forestry is involved in the forest management of approximately 250,000 acres of forestland, mostly located in Northern Pennsylvania.

I was born and raised in Kane,

Pennsylvania and chose to move back to Kane shortly

after graduating from Penn State. The area I live and

work has been providing natural resources to society

since the time of settlement.

In practicing forestry in this resourcerich region for over 30 years, I've worked with many
conventional oil and gas producers. Though, I have
not gotten along with all of them all of the time, I
can honestly say that I never felt that one of them
got out of bed in the morning with the intent of
harming the environment. They all want to produce a
product that's in demand and desired by our society.

I have worked diligently with oil and gas producers throughout my career in reducing the impact of resource extraction on the environment through smaller strategically placed well locations, pipelines and access roads. I am concerned that if the proposed rules are implemented, the landscape will experience more disturbance. I believe the rule implementation will require a larger footprint on the landscape, causing a larger and longer overall impact

that has been historically experienced.

I urge you to reconsider implementing the proposed rules. I also urge you to separate the regulation on conventional drilling from the regulations of unconventional drilling.

Unfortunately, time does not allow for more detail on all of this matter. However, I would make myself available at the Committee's request for more discussion. Thank you for your time.

## MR. WAITE:

Greg Buchanan, followed by Glenn Weaver.

## MR. BUCHANAN:

Greeneville, Mercer County. My testimony is concerning possible wellbore damage caused by natural occurrences like earthquakes and unnatural occurrences caused by inferior products used in the wellbore and human error that can lead to oil and gas leaks below the surface.

We are all-too familiar with the BP Gulf disaster undersea and the damage that leaking wellbore caused. At least that leak was able to be cleaned up. If we experience something of that magnitude underground, we may be looking at something that we can never clean up for obvious reasons. And it may

affect whole communities not just wildlife.

I'm asking that this Board give lots of consideration to requiring blowout preventers, or BOPs, also be operational in the wellbore under the surface in the construction of the wellbore, if aquifers or/and water sources are nearby. A BOP is already required at the wellhead under certain conditions, as written in Pa Code Title 25, Chapter 78, Section 72. I provided that as an attachment.

Oil and gas blowout preventers or BOPs should be required in the wellbore and checked regularly for good operational state to prevent disasters from happening later down the road should a leak occur, when normal means of controlling a leak underground would not be sufficient. This BOP should be placed in the wellbore below known water levels and left as long as the well exists.

The oil industry developed this kind of safeguard after the BP Gulf disaster and now we have a chance to prevent this kind of disaster in Pennsylvania. This should be added to the Code. I've attached a documented underground leak that occurred just days ago, last Friday, in Canada. And thank God, there was no aquifers in the area of that leak.

I finish with a quote from former

General Norman Schwarzkopf, you can't help but with 20/20 hindsight, go back and say, look, had we done something different, we probably wouldn't be facing that what we are facing today. Thank you.

### MR. WAITE:

Sawyer.

Glenn Weaver, followed by Malcolm

## MR. WEAVER:

Good evening. My name is Glenn Weaver.

My address, 823 Congress Hill Road, Franklin, PA,

16323. I am a fourth-generation oil producer. My

son, who just turned 50, is in business with me and is
a fifth-generation.

Like the farmer's son who had to work on the farm when he was growing up, I had to work in the oil field. I said I will never work at this greasy, hard-living work. But here I am, 55 years later and I love it. But I would like it better with less ridiculous regulation, such as Act 13 and these regulations we are here to discus tonight.

Some of these are, two years ago, an application for a permit to drill a well was two pages. Now that same application is 17 pages. Thanks to Act 13, we now have to make contact with any township or municipality bordering the township or

municipality in which we are applying for a permit to drill on.

I understand the reason for this, for an unconventional well, because of the amount of truck traffic on an unconventional. For instance, moving the rig in is 40 loads of equipment, the pipe is five or six loads, then several hundred truckloads of water and frac sand to do the fracking. Then 20 or more pump trucks to frac and many loads of water out for treatment.

Our shallow wells take three truckloads to move the rig, one small load of pipe, then one to cement and three to frac for four or five hours and maybe three loads of water out for treatment. The size of our locations are 50 by 100 feet or, at most, 100 by 100 feet. And unconventional site is five acres and twice as wide a road for regress.

The cost of an average shallow well in PA is one percent of the cost of the Marcellus or Utica Well. An issue we recently dealt with is silly before Act 13. When we broke ground on our well sites, we were required to post onsite our E and S plan. Now they want our E and S plan, the drilling permit, the casing cement plan. In the past, we did not post the last two 'til we began to drill. From

location building to drilling can vary from days to months. We just got a fine for not having the cement plan on locations when I know it was right there in the mailbox. We're in complete chaos.

The unconventional companies have lots of fulltime people to do all the paperwork, but we don't. We would like to be legal, but all this goes beyond reason. If we do not see change, there will be no small operators like myself within a couple of years.

When I was a boy growing up, my father had five refineries to sell his paraffin-base crude, to. We now have two. How long will they be around when we lose the small operators to an overkill of regulation? At the price of oil, the oil patch should be booming, but it's losing.

Thank you for the opportunity to express our concerns.

#### MR. WAITE:

Malcolm Sawyer, followed by Randy Reimold.

## MR. SAWYER:

Yeah, hi. My name's Mac Sawyer. I know there's a lot of pro-gas guys here tonight. And nobody was more pro-gas than I was when I worked for

the industry. But I got to tell you --- first of all, thanks for letting me come to speak to your guys.

I just want to talk about the proposed regulations related to my experiences of being on the pads. When I started in the industry, I was a truck driver. Then I got into environmental cleanup and then promoted to environmental supervisor over many sites. But for me, and countless others discarded by this industry, you know, life goes on and the gas continues.

There's a lot of people who are sick from this industry. I didn't believe it, either. But we start seeing these people, these people are sick. Their lives are ruined, their lands are ruined, their water's bad. And they're actually holding their ass over this. You had a guy here earlier that mentioned Joe Giovaninni. Joe Giovaninni is a friend of mine. I help relocate people now out of the gas fields, to try to get them into cleaner water and cleaner air.

You know, the gas industry --- go to Towanda, go to Dimock, go to Washington, go to Butler, go to places where these guys are at and they've destroyed it. You know, we're told the industry can do unconventional drilling safely. It can't. It's a farce. It's just no way it can be done safe.

Like I said, I started working as a truck driver and I graduated, got into the rigs, working on the rigs. But none of these regulations are being enforced. If you get a spill and it doesn't come to the light of day, nobody knows about it, that's it. It's covered up, it's just washed under the rug. So, you know, for you to give these guys the authority to police themselves, it's ludicrous. You're inviting trouble.

Corruption is widespread in this industry, just by the shear money involved. You know, I mean, we made up our own rules on the pads. You know, we weren't subject to any enforcement whatsoever. If there was inspection coming, we were told about it, we got everything done and the inspection went through. No problem.

Like I said, you know, you just need to get legislation that is going to be independently monitored. You know, it just can't be done safe. We were drilling out in Wyalusing, right down from Towanda. A couple of the guys fell asleep on the pad. The water went over the containments and flowed for hours into the Wyalusing Creek. The next morning, when I come in, there was all kinds of stuff, man, going on. They fired the guys. I don't know how much

water went into the creek, but there was a lot of problems over this.

When I started seeing that and I started seeing what this company was or what the industry is, there's a lot of people who get sick. I suffer from health issues from exposure to the sand, to the chemicals. We were never given respirators. We were never given nothing. You know, I mean, I really loved this industry. I really did. And it was just so hard to see what these guys do. You know, ram and cram, baby, that's just it. Get the gas. Do it as safe as you can, but get the gas.

You know, like I said, if you guys want to really see what this going to do, go to Dimmy, go to these places, you know. I know there's a lot of pro-gas guys here. But I'm not lying, man. I've worked them. You guys know. But I'm telling you the truth. This stuff cannot be done safe. And they're out of their minds, man. You just can't do it.

Fifty-two (52) guys I worked with, probably 18 of them, right now, have health issues. I can't get treated, because the doctors won't tell me what's wrong with me. Randy Moyer can't get treated. Guys I worked with. They can't get treated, because nobody can tell us what's wrong. I was okay before I

started there, that's all I'm saying, you know.

I don't know, man. I'm just telling you, you know, these regulations are really good, you know, that you guys are trying to do. But just, you know, just don't give the key to the store to these guys. That's all I got to say. Thanks.

## MR. WAITE:

Sporer.

Randy Reimold, followed by Christina

## MR. REIMOLD:

Good evening. My name is Randy Reimold.

I'm from Greenville, Pennsylvania, here in Mercer

County. I am the Environmental Supervisor for WPX

Energy. Wait a second here. Sorry about that. With

WPX Energy in the Marcellus Basin. I've been a

resident of Pennsylvania my entire life and many years

have been spent doing environmental work in the oil

and gas field.

WPX Energy is one of the largest natural gas producers in the United States and is active in many of our nation's basins. We have been in the Marcellus shale since 2010 and, to date, have drilled over 100 wells --- unconventional wells in the Commonwealth. Many of our employees have over 30 years of experience in the natural gas industry. WPX

was founded on a set of stringent values, and we want to be the difference makers in our communities and in the natural gas industry. Building relationships with a variety of stakeholders while establishing and obtaining trust is very important to us.

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

I will only speak a few moments this evening and WPX will submit a technical paper to the Board before the deadline. Recognizing the voluminous nature of the Chapter 78 regulations, I will only take a few --- make a few comments on items we believe to be of the utmost importance.

Initially, Section 3215(e) of Act 13 requires the Department to develop regulatory criteria to protect public resources while ensuring optimal oil and gas resource development and respecting oil and gas owners' property rights. However, the proposed regulations in Chapter 78, Section 15, do not

adequately implement or address these requirements.

The regulatory criteria for conditioning a permit has not been provided and the draft regulations only frame the Department's authority to implement the conditions. If industry is required to avoid or mitigate potential impacts to these resources, the criteria used to assess impacts must be established and provided.

In addition, potentially requiring industry to gain clearance for species of special concern may significantly limit our development opportunities and/or create costly litigation solutions, which would be in conflict with Section 3215(e), as it pertains to ensuring oil gas development and property-owner rights. If the Department goal is to protect the Commonwealth Resources as they specifically relate to threatened, endangered or species of special concern, then the industry has the right to know the locations of such resources in order to avoid or litigate any potential impacts.

Another significant issue is water replacement. The main concern is the DEP proposal (sic) the industry replace a water supply to Safe Drinking Water Act Standards or better, even when the

results of pre-drill testing of a water supply show the water did not meet these standards in the first place.

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There are many challenges in the Commonwealth in regards to private water wells, especially the lack of construction standards. Our experience with pre-drill testing and several studies independent of the natural gas development demonstration (sic) that there a large number of private water wells, are poorly constructed and many contained iron, manganese, coliform --- fecal coliform and methane above standards. And many do not meet these criteria of the Safe Drinking Water Act. Until Pennsylvania legislature passes legislation to require property owners to properly construct private water wells and ensure they meet the Safe Drinking Water Act, it is unreasonable for the DEP to require the industry to restore a private water supply to better standards then originally existed. We are requesting that if the operator impacts a water supply, the DEP requires replacing the water supply to the pre-drill water test results.

Regarding waste and water management at a well site, the natural gas industry has been recycling and reusing water and minimizing fresh water

use for quite some time now. And, unfortunately, the new regulations are forcing operators to rethink this option. In order to increase the amount of water being recycled and reused in the Commonwealth, the regulations need to provide an avenue for the operator, either through permits or DEP approvals, to document, move or reuse water from one site to another.

## MR. WAITE:

We'll read the rest.

## MR. REIMOLD:

Thanks for your time.

## MR. WAITE:

Okay. Christina Sporer, followed by

15 Diane Sipe.

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### MS. SPORER:

My name is Christina Sporer. I am the City Engineer for the City of Oil City, Venango County. The City of Oil City owns and operates a public drinking water system, which serves all residents of Oil City, as well as parts of neighboring Cranberry and Cornplanter Townships. The source of our drinking water is a well field, and the City is fortunate that it owns over 300 acres of the watershed which, at one time, was thought to protect the source

water from contamination. However, the area that actually needs protecting is now known to extend beyond the City's ownership onto privately-owned land.

In 2010, the City participated in the Source Water Protection Technical Assistance Program, sponsored by the Pennsylvania Department of Environmental Protection, or DEP. DEP hired and paid a consultant, SSM Group of Reading, PA, to develop a Source Water Protection Plan for the City's well field. Part of that plan was to determine the area from which the wells withdraw water. This is a challenging task, since water flows through the ground in complex ways.

using the Groundwater Modeling System developed by the United States Department of Defense. This model is well accepted among geologists and hydrogeologists and is commonly used to help manage groundwater resources. The model required significant information about the study area, topography, geology, slopes, soils, infiltration rates and water table elevations. SSM Group collected the necessary data for the model to estimate the recharge areas of the wells, and how long it takes water to travel through the subsurface to the wells. The model was then used to delineate

protection Zones I, II and III.

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Zone I is the smallest of the three zones, encompassing a 400-foot radius around each well. Zone II is defined as the land that contributes groundwater to the wells in a ten-year time of travel and is an area of 105 acres. It is irregular-shaped, 6 7 not just a radius around each well, and it goes onto privately owned land not under the City's control. Zone III is the remaining land that can contribute water to Zone II and ultimately reach the groundwater level in more than ten-years' time of travel. Zone III for Oil City's wells occupies an area of 1.45 square miles and is also irregular-shaped.

The State's oil and gas regulations do not protect our drinking water sources. The regulations call for unconventional developers to simply notify water purveyors when a proposed well is within 1,000 feet from a public water source. That's it. We can comment and then DEP will make a decision. Why would the Commonwealth of Pennsylvania not use the information developed by source water protection plans throughout the State to limit oil and gas well development? Allowing oil and gas wells within delineated drinking water protection zones doesn't make sense.

I have been told that private property owners have rights. Do they have the right to threaten contamination of a drinking water supply in existence since 1897 serving 15,000 people? How about setting up a State fund using impact fees for water suppliers to purchase mineral rights within our water protection zones?

I have been told that well drilling is very safe and the threat of contamination is very small. I say to you, is it worth the risk? According to DEP, Clean, Safe and Reliable Drinking Water is fundamental to the viability of any community. And as advanced as today's treatment technologies are, they are not perfect. Not all contaminants can be removed or treated, and it is often far more costly to treat contaminated water than to prevent contamination from occurring in the first place. The oil and gas regulations completely contradict what DEP already knows.

Information from the State puts all the responsibility for source water protection on the water supplier. They tell us to perform baseline monitoring for contaminants, stay abreast of oil and gas development in the area, and have a collaborative dialogue with resource extraction companies. The

regulations tell us what we do after our water becomes polluted. All of this is a mockery to those of us who take the quality of our drinking water seriously. It is time for the Commonwealth of Pennsylvania to take a stand and be proactive in protecting our drinking water instead of passing the buck.

And, finally, I want you all to know that I am not against oil and gas development.

Indeed, the new shale gas extraction methods offer a shining ray of hope in our dismal regional economy.

Rather, I support the intelligent development of oil and gas resources while protecting existing resources that provide our citizens a good quality of life and that includes our drinking water. Thank you.

### MR. WAITE:

Thank you. Diane Sipe, followed by Karen Fletch.

#### MS. SIPE:

Hello, my name is Diane Sipe. I'm here tonight representing Marcellus Outreach Butler. We're a group of concerned citizens about the natural gas development in our county, Butler and beyond. I want to thank you for having this hearing and giving a chance to speak. But I would like to request that there be further hearings at more convenient

I know other counties in this DEP region are far afield and people are not able to make this night at 6:00 p.m. So I would also like you to extend the comment period. It did occur during the holidays and many people just were not paying attention.

Marcellus Outreach Butler, MOB, is also a partner in the Protect Our Children Coalition that was formed in reaction to the alarming proliferation of gas activity being conducted near schools. Though our group is opposed to drilling until it can be proven safe, we nonetheless join this coalition because it is the ethical and moral thing to do to protect our most valuable resource, our children.

Children are especially vulnerable to the hazardous effects of toxins transmitted in water and air pollution from natural gas activity for the following reasons. Their respiratory, immune and nervous systems are still developing. They have less ability to detoxify dangerous chemicals compared to adults and they spend greater amounts outdoors and are, therefore, exposed to sustained, low levels of chemicals for long periods of time.

We do not fully know the ramifications of such exposure, especially how they effect in

combination with one another. We currently have a well site being prepared in the Connoquenessing Borough of our county, that is 1,900 feet from Connoquenessing Elementary School, as well as the nearby municipal park.

Maps contained with the Geological
Survey Bulletin 873, of the United States Department
of Interior, published in 1936 demonstrate that
numerous wells were drilled in the Little Creek field
where the school is and those wells would be located.
The Survey notes the many hundred abandoned wells, all
trace of which have disappeared, and yet no more
concern is accorded to the fact that the proposed
wells will occur in a known pin cushion that surrounds
an elementary school with a student population in
kindergarten through grade six of over 270. There is
no difference whether the structure is a school or
whether it's a tool shed.

And Connoquenessing Elementary School is not the only school in Butler with children --- that it will be putting children at risk. We had a well flare 900 feet, which I believe you saw a photo of earlier, this summer at the Summit Elementary School. Another well was proposed to be replaced very close to the Moraine Elementary School in Prospect, PA. In

1 Jackson Township, my township, the MarkWest Bluestone

2 Processing Plant is operating 1.2 miles from the

3 Seneca Valley Secondary School Campus, with

4 approximately 4,000 students in three school

5 buildings. They're building another adjacent plant

6 and another one is planned next year. All within the

same distance from this school campus.

These plants are not aggregated for purposes of EPA air quality standards. So we need to look to the DEP to protect our children. We request that DEP, therefore, include in its regulations that no drilling or gas-related activity occur within a one-mile district of any school.

With respect to your regulations, I have the following general comments, though, in addition to this comment about schools. The public are excluded from your permitting process. Only people with water supplies within 1,000 feet are notified that there's even going to be drilling. People wake up and find out there is a drill pad coming next to their house, unbeknownst to them beforehand. You need to elicit the comments of the public. And, of course, they have to be notified in order to comment.

We are happy that you are looking at abandoned well issues, but it is not sufficient.

Thank you.

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#### MR. WAITE:

Thank you, ma'am. Karen Fletch, followed by Mike Genz.

# MS. FLETCH:

Hi, my name is Karen Fletch. I live at 214 First Street, Butler, PA, Butler County. With respect to the specific proposed regulations, I have the following comment. Pre-drill water testing should be mandated for a comprehensive and consistent list of substances, and the test results should be publicly available. Drillers should not be able to decide when, where and how to conduct the pre-drill water test. Open pit storage of regulated substances should be prohibited as should onsite processing drill cuttings. Fresh water should be defined in regulations, prohibit the burial or land applications of drill cuttings, topical water, pit water, fill or dredged material. Prohibit the use of brine from shale gas oils for dust suppression, de-icing and road stabilization and identify orphan and abandoned wells. There are estimated to be 200,000 abandoned wells statewide. There are many more than these that are unknown. Prohibit drilling in known areas where many of these are known or suspected to occur.

And I just want to add that protect our children. I have two grandchildren that are affected by this. They have nosebleeds and rashes and stomachaches. And it's time. You know, you used to put industrialized operations in parks, not next to their school. So you need to think about that. Thank you.

## MR. WAITE:

Mike Genz, followed by Allen Larson.

# MR. GENZ:

Thank you for the opportunity. I'm Mike Genz. I live in Edinboro, Pennsylvania, 214 Fairway Drive, 16412.

I'm a professor at Edinboro University of Pennsylvania and a member of the Association of Pennsylvania State College and University Faculties, ASPSCUF, the professional organization representing over 6,000 faculty and coaches at the State's 14 publicly owned universities.

On Friday, September 20th, 2013, at the legislative assembly in Harrisburg, a resolution that initiated was voted and approved against drilling on all of the 14 State university campuses throughout the State of Pennsylvania. We took this action because we believe that unconventional drilling is dangerous and

harmful to people and the environment. We felt it had no place on university campuses. I come here tonight to address my key concerns about unconventional drilling as they relate to these new regulations. I first want to say that the DEP needs to have greater accountability and implement regular intervals in the monitoring of groundwater, air and land in all areas being affected by drilling.

There needs to be public access to the data for all the violations committed by the gas and oil industry. There needs to be complete transparency on the specifics of those violations and the amount being fined. The funds then could be used to hire more staff to locate and identify abandoned wells so they can be permanently sealed to the highest standard to prevent future leakage.

As a public employee, it is my concern and duty to ensure that the protection and safety of 120,000 students who are currently enrolled in the 14 State system universities have the constitutional right to pure water, air and land. Thank you.

### MR. WAITE:

Allen Larson, followed by John Lindberg (phonetic).

#### MR. LARSON:

1 My name's Allen Larson. I have a farm 2 outside of Grove City in Mercer County. In an e-mail, 3 I received entitled Why Regulations Won't Work, I'd like to read a couple of those reasons why. No 4 5 regulation can prevent the extraordinary squandering of fresh water, five-and-a-half million gallons 6 7 average per well, 100 percent of which is contaminated, permanently, and removed from the natural water cycle. Multiply that with the tens of 10 thousands that are proposed. No regulations can 11 prevent the salts, heavy metals and radioactive 12 substances loosened by the fracking process from 13 coming out with the fracking fluids.

No regulation can stop up to 65 percent to 90 percent of the toxic fracking chemicals from remaining on the ground. No regulation can prevent these chemicals, salts, heavy metals and radioactive substances now loosened and mixed by the fracking process from becoming a toxic underground fluid that can wangle its way into existing fissures as well as into new fractures, created by the drilling.

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No regulation can predict or control the underground migration of these toxic plumes. No regulation can predict or control the time frame, years, decades, millenniums, over which such plumes

can migrate. No regulation can prevent the
deterioration of the steel and cement casings intended
to protect drinking water over the decades and
centuries ahead. No regulation can create a safe
manner or safe location for permanent storage of
waste. Even toxic waste still must be put somewhere.

No regulation can provide the risk from a high-pressure disposal in injection wells for potential leakage and aquifer contamination or earthquakes. No regulation can guarantee enforcement, without 24/7 oversight. Drillers will not obey the grossly inadequate rules now in place to safeguard the safety and health of people or other living beings or the environment.

Only a national policy, enthusiastic support for efficiency, conservation and renewables will set this country on the path to a sustainable, post-coven society. Regulations might make hydrofracking less unsafe, but it can never make it safe. Is it rational to accept any form of highly destructive drilling in agricultural areas and watersheds that produce the food and drinking water of millions.

There's only one way to render this practice safe. Ban it. Unequivocally, forever. This

is not extreme. It is extremely rational. Anything less dooms us.

#### MR. WAITE:

Thank you. John Lindberg, followed by Jack Lynch.

# MR. LINDBERG:

My name is John Lindberg. I'm from 4573
Camp Coffman Road in Cranberry, Pennsylvania, ZIP Code
16319. And I'm the owner of a conventional oil and
gas well drilling company located in Venango County.
We drill wells in most of Western Pennsylvania. And
I'm very proud to have a good staff and good
employees. And most of the work that we do do I hire
out as a contract. And I'll use anywhere between 30
to 40 different companies in the drilling of a
conventional oil well, that hires as many 100
different men all doing very specialized and very
serious at what they do. Like myself, most of them
have had many generations before them. And I'm the
third generation oil producer and I'm very proud to do
so.

And I guess the question was asked, because not only am a geologist, but when I graduated from Allegheny College, right here in Meadville, many years ago, I also got a degree in biology. So on the

one hand, I'm a geologist who drills wells, but on the other hand, I'm also a farmer who's a hunter, who's very proud of being an environmentalist.

And I don't know if many of you at all can accept the fact that you can do both, but with the proper balance and the proper regulations, we can all come to a point where we have achievement without to the detriment of others. In that case, the work that you want to do right now, as well as all the input from everybody here. And I'd like to say that I believe you're acting very respectful to everybody's opinion and everybody's opinion is very important to this.

I, for one, would wager that the DEP is doing a good job and an adequate job of regulating my industry, which is conventional. And I would emphasize that the most important thing of that is safety, that you understand the difference between the new arrivals of the unconventional drilling, which you've heard is a much larger and potentially a more dangerous industry, which needs to follow regulation, but not at the detriment to overregulate an industry that has been here for 150 years, that employs many, many people, and one that's also been in a somewhat depressed area of Western Pennsylvania.

To illustrate what I mean, DEP is doing a pretty adequate job as far as regulating this, and I brought with me a two-page document from the 1980s that was --- all that was required to permit and drilling the conventional oil wells, two pages. And it worked back then. Well, it's been replaced now. And, of course, you know, we have to update as technology becomes better to do a better job. But now a single well permit, and this is an actual well permit, is 32-pages long. It has soil maps, it has water maps. It has slopes, it has GPS coordinates, it has casing points. It has all the engineering that we're going to be doing, so we're just not out there running wildly in the woods drilling wells.

We have water quality specialists who come on a daily or a weekly basis to see what we doing. We also have engineer specialists in the department, and I'm one who fully believes that when I need help with a problem, the DEP is there to help me and they do it on very much of a daily basis. In fact, I spent about two hours this morning with a Department water quality specialist that was able to give me good advice to do a proper job.

 $\label{eq:continuous} \mbox{In addition to a 32-page document that}$  we did for just the permit, I'm also obligated to

- 1 prepare, and these don't come cheap, an environmentally competent erosion sedimentation 2 beforehand, which exceeds all indications. It also 3 4 soil maps, slopes, every culvert that we're going to 5 replace in, every blade of grass that we're going to replace when we drill. And in addition to that, this 6 7 particular lease required a 60-page document that is known as a remediation report, so that we do not 8 9 burden any environmentally sensitive plants or wildlife, in addition to also having to watch out that 10 11 we don't have any endangered species. 12
  - So I'd like to thank the Board for having me tonight and I'd please like you to remember that our industry has been here for a long time. A spec on your skin and a tumor in your lung can both be cancer, but they require much different treatments.

    And I'd like you not to involve one with the other.

    Thank you.

## MR. WAITE:

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Jack Lynch, followed by Becky Kolodowski (phonetic). Is Becky here? Becky?

### MS. KOLODOWKSI:

I apologize, not knowing the protocol to bring extra copies. I'll speak slow. Thank you to the representatives of the people's Department of

Environmental Protection for our great State of
Pennsylvania, for holding this event. Your mission
statement has been quoted tonight, so I won't do it
again.

Our DEP oversees what we call brown fields and those are contaminated grounds from past industrial abuses. And what we're basically talking here today is the continued industrial abuse on natural resources. It is the unconventional fields that I'm interested discussing, an abuse that is depleting our water supply at a great deal unimaginable and an abuse that may not be repairable. Most of our plants and natural aquifers are already gone. But in Pennsylvania, we are blessed with freshwater assets. However every day millions of gallons of fresh Pennsylvania water are laced with deadly chemicals forced into the ground where our drinking water resides.

The industry we're discussing gives lip service to protecting our water as the assault on our resources continues unabated and unregulated. A family that once lived in Mount Pleasant,

Pennsylvania, only 45 minutes southeast of Pittsburgh, is a case in point. In 2011, the industry paid the Hallowich family three-quarters of a million dollars

for ruining their ten-acre family farm, its land, its
water and their health. How much damage was done that
an amount of that magnitude was required to
compensate? Was the environment of that farm ever
restored to its natural state?

Added to the killing of a family farm and causing extreme illness to its owners, the industry supported settlement included a gag order on the family's seven- and ten-year-old children. They are never to discuss fracking for the rest of their lives. Imagine that? Through our courts, the corporation was granted free rein to --- as the original Patriots define it, to tread on us, as long as they hand out some cash and as long as we stay silent about the abuse.

Our DEP has sworn to regulate this industry for the people. But what happened in the Hallowich case? Where was the protection of the Commonwealth's natural resources and its environment? That was two years ago. How many other families and interests have been destroyed since? What complaints about water, air and land quality continue to be answered with fabulous and monetary handouts? And will our DEP take heed of these capacities with open palms, whether they be filled with corporate funds,

taking them or radioactive and deadly chemicals that have been flowed into the natural world killing it.

There should be no open pits of toxic waste anywhere, ever. And any debris through these operations must be stored with the same seriousness we store other nuclear waste. Every step of this process should be tightened and regulated. The DEP alone, with the people's government of the State, are charged with that duty.

The Creator made us a lush, green, reusable and renewable world and we are killing it as we allow dangerous and deadly events to occur in our search for energy. Energy the Creator gave us at the beginning of time in the forms of soil, wind and water. Our limited supply of fresh water should not be used at millions of gallons at a time, so that private industry can gain unchecked power over our very existence.

Look at pictures of that tar sands in Canada and you'll see how well we have been stewards of this great planet, how we are simply killing the very world that sustains us. The DEP by its own mission statements must not let the industry police itself or allow the industry to determine what is satisfactory to the people's Commonwealth.

Water must be drinkable. The water supply on this plant is a closed system. There is no new water. So what we do to our water table today is forever. It is up to our DEP to carry forward, complete its mission statement to the letter. To do otherwise is to allow corporations to commit treason upon people's environment and their continuity of life, liberty and the pursuit of happiness.

Canada's current government has begun to destroy all of the water data ever collected there.

Centuries of data. They are shutting down our facilities. People need to be aware, our planet is under assault.

## MR. WAITE:

This completes the portion of the hearing tonight for those testifiers, who were previously registered. And we are going to keep the record open for few more minutes, in case someone's in the audience that would like to come down and register and also make a statement.

#### MR. STIGLITZ:

My name is Joe Stiglitz and I'm from Pleasantville.

#### MR. WAITE:

Could you spell your last name, please?

#### MR. STIGLITZ:

S-T-I-G-L-I-T-Z. I'm a victim of the oil business. We fracked a well two weeks ago and it took a week for my skin to grow back. Then when I finally got back on my feet, I went to my drilling rig and the drill cuttings made my hair fall out. Some of its coming back. We've got two different groups here. You know that, I know that. I don't need BOPS in my wells. There's no pressure on them. You know that, I know that.

I don't frac with millions of gallons of water. I frac with thousands of gallons, 10,000 on average. I need help here and you've got to help us. You're doing a good job. I have a nine-month-old daughter. And her mother cares for her and loves her, just as much as I do. And I would not do anything to put her in danger.

#### MR. WAITE:

Anyone else? Going once, going twice. This meeting --- this hearing is adjourned and it's precisely 9:00 p.m. Thank you.

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HEARING CONCLUDED AT 9:00 P.M.

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# CERTIFICATE

I hereby certify that the foregoing proceedings, hearing held before Chair Waite was reported by me on 1/15/2014 and that I Shannon C. Fortsch read this transcript and that I attest that this transcript is a true and accurate record of the proceeding.

Stall at

Court Reporter

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