BEFORE THE

ENVIRONMENTAL QUALITY BOARD

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IN RE: PROPOSED ENVIRONMENTAL PROTECTION PERFORMANCE
STANDARDS AT OIL AND GAS WELL SITES

(25 PA CODE, CHAPTER 78)

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PUBLIC COMMENT HEARING

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BEFORE: ADAM PANKAKE, Chair

Kurt Klapkowski, Member

ORIGINAL

Scott Perry, Esquire, Member

Hayley Book, Member

John Poister, Member

HEARING: Thursday, January 23, 2014

6:00 p.m.

LOCATION: Indiana University of Pennsylvania

Kovalchick Convention and Athletic Complex

711 Pratt Drive

Indiana, PA 15705

Reporter: Cynthia Piro Simpson

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PROCEEDINGS

CHAIR:

Good evening, everyone. I'd like to say welcome to the Environmental Quality Board's public hearing on the Environmental Protection Performance Standards at Oil and Gas Well Sites, proposed rulemaking. My name is Adam Pankake. I am a representative of the Pennsylvania Environmental Quality Board. Joining me tonight are Scott Perry; Kurt Klapkowski, with DEP's Office of Oil and Gas Management; Hayley Book, with DEP's Policy Office; and John Poister, Community Relations Coordinator for the Southwest Regional Office.

I officially call this hearing to order at 6:00 p.m. In the event of an emergency, exits are located to my left, to my right and straight ahead. At this time, please turn off all cell phones.

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

In addition to this hearing, the EQB will hold three additional hearings on the proposed regulations on January 27th in Tunkhannock, February

10th in Troy, and February 12th in Warren.

Information about the specific locations of this hearings is available on DEP's website at www.dep.state.pa.us. There are also copies available of the Citizen's Guide to DEP Regulations. Inside this document you will find descriptions of the environmental regulatory process in Pennsylvania, the Environmental Quality Board's role, and how to submit comments and tips for submitting effective comments.

The proposed rulemaking, which was adopted by the EQB on August 27th, 2013, would amend 25 Pa. Code, Chapter 78 to update the requirements related to service activities associated with the development of oil and gas wells. EQB adopted the proposed rulemaking with the recommendation for a 60 day public comment period in at least six hearings across the state. This represents a heightened level of public participation, because there was usually only a 30 day public comment period held for typical Department rulemaking.

Additionally, public hearings are held on the basis of public interest. And for some regulations there are a few or even none that are held if there is no request for hearings. Due to the increased public interest in the rulemaking, EQB has

scheduled nine public hearings to allow ample opportunity for public comment on its proposed rulemaking.

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

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

In order to give everyone an equal opportunity to comment on this proposal, I would like to establish the following ground rules. I will first call upon --- I'm sorry. I will first call upon the witnesses who have preregistered to testify at this hearing. After hearing from these witnesses, I will provide any other interested parties with the opportunity to testify as time allows. Testimony is limited to five minutes for each witness.

Organizations are requested to designate one witness to present testimony on its behalf. Each witness is asked to submit three written copies of his or her testimony to aid in transcribing the hearing. Please place two copies in the box marked public comments to my left. Hand one copy to our stenographer, who's to my left as well, prior to presenting testimony. Please state your name, address and affiliation for the record prior to presenting your testimony.

The EQB would appreciate your help in spelling names and terms that may not be generally familiar so the transcript can be as accurate as possible. Because the purpose of the hearing is to receive comments on the proposal, EQB or DEP staff do not address questions about the rulemaking during the duration of the hearing, but may address any questions after the conclusion of the hearing.

In addition to or in place of verbal testimony presented at today's hearing, interested persons may also submit written comments on this proposal. Written and verbal comments hold the same weight when considered in the finalization of this rulemaking. All comments provided become part of the official public record. All comments must be received by the EQB on or before March 14th, 2014, which has

been extended from the original comment period end date of February 12th, 2014.

Comments should be addressed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA, 17105. Comments may also be e-mailed to regcomments@pa.gov or submitted online to the EQB's regulatory comment system accessible from DEP's website.

All comments received in this hearing, as well as written comments received by December 14th, 2014, will be entered as part of the formal record and considered by the EQB and will be included in a comment and response document, which will be prepared by the Department and reviewed by the EQB prior to the Board taking its final action on this regulation.

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

I would now like to call the first commentator, Mary Anna Babich. And after her will be Susan Oliver. Mary Ann --- Anna, I'm sorry.

MS. BABICH:

Hello. My name's Mary Anna Babich.

24 OFF RECORD DISCUSSION

MS. BABICH:

Hello. My name's Mary Anna Babich. I'm with Dawood Engineering, 11 Grandview Circle,
Canonsburg, PA, 15317. Good evening, and thank you for ---. Good evening, and thank you for allowing
Dawood Engineers to provide feedback regarding the proposed rulemaking. Dawood is a Pennsylvania-based corporation, is a civil engineering and environmental consulting firm, which provides numerous services to the oil and gas industry, including delineation, erosion and sedimentation controls, development and compliance geotechnical permitting, hydrostatic testing, to name a few.

A majority of Dawood's employees are native Pennsylvanians who have been raised to appreciate and enjoy the vast resources within the Commonwealth. Therefore, as a company, we appreciate the Pennsylvania DEP's attempt to protect our natural resources by regulating the environmental effects of the oil and gas industry. Pennsylvania has been recognized as having some of the nation's strongest regulations on oil and gas development, providing greater certainty for companies seeking to do business here, and we support that. According to STRONGER, the current regulations are well-managed and meeting its program objectives.

However, we are presenting today to express our concern with some of the proposed revisions presented by the Pennsylvania DEP. Our company and its employees have firsthand experience with the extraordinary efforts made by the operators to comply with the regulations which protect our natural resources, the Commonwealth and its citizens. As a trusted advisor to the clients and industry, Dawood works with the operators to ensure worker safety as well as to adhere to the best management practices to protect the environment. For example, Dawood works with its operators to design sites that will lessen the area surface impacts.

According to the Energy Information
Administration, the Commonwealth is currently
producing 18 percent of the nation's natural gas.
To continue to develop domestic energy and eliminate
our dependence on foreign fuel, Dawood strongly
suggests that the EQB requires the DEP to technically
evaluate the proposed regulations without pressures
from the citizen groups. Dawood encourages the PA DEP
to revise the proposed regulations in order to
establish justified, practical, scientific and costeffective regulations.

Among our many concerns with the

proposed regulations, we would like to highlight the following, which pose a particular burden to our business and the oil and gas industry.

Section 78.51 states that the quality of a restored or replaced water supply will be deemed adequate if it meets the standards established by the Pennsylvania State Drinking Water Act, or it's comparable to the quality of the water supply before it was affected by the operator if that water supply exceeds those standards.

Dawood agrees that if the operator impacts water quality, the operator is responsible for restoring or replacing the water supply. However, the operator should not be responsible for restoring or replacing an impacted water supply to the quality that the water --- I'm sorry, to the quality of the water supply before it was affected by the operator.

Section 78.52a states that abandoned and orphaned well identification proposes the operator identifies a location of orphaned and abandoned wells within a thousand feet measured from the surface around the entire length of the horizontal well bore.

Identifying the abandoned and orphaned wells is acceptable, however, this requirement must not be opened-ended. In its current form, this

regulation is unclear as to what requirements will be placed on industry and has the potential for undue and unnecessary expense.

CHAIR:

Ms. Babich, you have one minute.

MS. BABICH:

In closing, Dawood urges the EQB to reconsider proposed regulations. Modifying the revised oil and gas regulations at this time without providing scientifically sound and clear language would be detrimental to the EQB, Pennsylvania DEP industry and the citizens of the Commonwealth. Thank you.

CHAIR:

Susan Oliver is next, followed by Sherene Hess.

MS. OLIVER:

Good evening. I'm Susan Oliver. I'm the Manager of Community Relations for WPX Energy in the Marcellus Basin at 6000 Town Center Boulevard in Canonsburg here in Pennsylvanía, 15317.

WPX is one of the largest natural gas producers in the United States and is active in many of our nation's basins. We've been in the Marcellus since 2009 and we've drilled a hundred wells in the

Commonwealth. Many of our employees have over 30
years experience in the natural gas industry.

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

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

Recognizing the voluminous nature of the Chapter 78 regulations, I will only make a few comments on items that we believe are the utmost importance.

Initially, Section 3215(e) of Act 13 requires the Department to develop regulatory criteria that protect public resources while ensuring optimal oil and gas resource development, and respecting oil and gas owner property rights. However, the proposed

regulations in Chapter 78, Section 15, do not adequately implement or address those 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 or create costly mitigation solutions, which would be in conflict with Section 3215(e) as it pertains to ensuring oil and gas development and property owner rights. If the Department's goal is to protect the Commonwealth's resources as they specifically relate to Threatened, Endangered or Species of Special Concern, then industry has the right to know the locations of such resources in order to avoid or mitigate any potential impacts.

Another significant issue is water replacement. The main concern is the DEP proposes the industry replace a water supply to Safe Drinking Water Act Standards or better, even when the results of

predrill testing of the water supply show the water did not meet these standards in the first place. There's a challenge in the Commonwealth in regard to private water wells, especially the lack of construction standards. Our experience with predrill testing in several studies, independent of natural gas development, demonstrate that a large number of private water wells are poorly constructed, many contain iron, manganese, coliform and methane, and many do not meet the criteria of the Safe Drinking Water Act. Until the Pennsylvania legislature passes legislation to require property owners to properly construct private water wells and ensure they meet the SDWA, it's unreasonable for the DEP to require the industry to restore private water supply to better standards than originally listed. We are requesting that the operator that may impact a water supply, that the DEP requires replacing the water supply to the predrilled testing results.

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Regarding waste and water management at a well site, the natural gas industry has been recycling or reusing water and minimizing fresh water use for quite some time, and unfortunately the new regulations are forcing operators to rethink this option. In order to increase the amount of water

being reused or recycled in the Commonwealth, the regulation needs to provide an avenue for the operator, either through permits or DEP approval to document new or reused water from one site to another. In addition, Oil and Gas Division must have its own regulations concerning water management, and not be conflicted with or confused with that of the Waste Management Division.

Regarding orphaned and abandoned wells, identifying active, inactive, plugged, abandoned and orphaned wells prior to hydraulic fracturing is something the industry can work with the DEP, but not to the level ---

CHAIR:

One minute. One minute.

MS. OLIVER:

--- of the proposed regulations, as they lead to never-ending obligations on the part of the industry for wells that are not even ours.

We thank you for your efforts and desire to continue to work and seek better and efficient ways to regulate our industry and safeguard Pennsylvanians environment. WPX is committed to this regulatory review process and we appreciate and respect the communities in which we operate and are dedicated to

protecting Pennsylvanian's environment. We look forward to continuing to work with the DEP and other interested parties to finalize the Chapter 78 provisions. Thank you.

CHAIR:

Next is Sherene Hess, followed by Jan Milburn.

MS. HESS:

Good evening. I'm Sherene Hess at 234
Geesey Road in Indiana. As President of the Indiana
League of Women Voters, I'm proud that, as a result of
our work and consensus by members throughout the
Commonwealth, we have a position from which I speak
this evening on behalf of the League of Women Voters
of Pennsylvania.

The League is a staunch supporter of our Constitutional rights to clean air, pure water and the preservation of our natural resources. We further advocate for the use of best practices, comprehensive regulation and adequate staffing across government agencies to provide the maximum protection of public health in the environment in all aspects of the operations associated with the development and distribution of oil and natural gas.

Tonight we address water management

plans. We advocate that the implementation requirements adopted by the more stringent regulations of the Delaware River Basin be imposed on the Susquehanna and Ohio Basins and the Great Lakes Consortium. In addition to serving as important aquatic habitats and tourist attractions, all of these rivers and lakes are sources of drinking water for millions.

Withdrawal and reuse plans need to be addressed both individually and cumulatively to determine environmental impacts on the waters.

Because of recent weather extremes and the large volumes of water withdrawn by unconventional natural gas drilling, the expiration date of such plans, we believe, should be introduced from five years to two years.

To underscore water protection, suspending and revoking a water management plan should be triggered by any violation without warning and without a chance to comply. Reason for denials by the Department should also include cumulative impact of withdrawals within the basin.

Further, the industry should bear the burden of proof that a plan will not adversely impact water quality within the basin. And operators must be

site-specific in their plans and be held accountable for their actions.

The League believes that the road spreading of brine for dust control, road stabilization and the prewetting and anti-icing and de-icing operations should be prohibited. While using natural brine may be more appealing than adding rock salt to fresh water, it does come with significant liabilities.

First, its salt content is variable. As defined, brine content can range from three-and-a-half percent to 26 percent sodium chloride.

Secondly, salt stays in the soil for years until leached out by water. Soils with high salinity dehydrate roots and prevent absorption of necessary nutrients. Salt can act as an herbicide.

Thirdly, brine from conventional wells may contain other chemicals, like corrosion inhibitors, whose safety may be untested. The regulations only require that free oil be separated from the brine before spreading. Without comprehensive testing and treating of brine to meet established safety standards, the risk of poisoning is too high.

Fourthly, because of increasing needs

and the cost to dispose of brine, there is a natural tendency to overuse brine on road surfaces that may not need treatment. This creates unnecessary hazards. While such brine has been limited to conventional wells, this may be difficult to monitor and enforce based solely on the required paperwork and/or notice.

Fifthly, specific to de-icing, the brine should not be mixed with coal ash that creates additional hazards, and those that use brine for such purposes should not be deemed to have a residual waste permit by rule.

Finally, annual plan approval, rate and frequency of application and other requirements are not adequate to allow this practice. And it seems highly probable, given the magnitude and cumulative impact of such brine spreading, that it will enter bodies of water or water forces or eventually infiltrate our groundwater, which we consider to be the life source of future generations.

We urge you to err on the side of caution. And we thank you for your consideration of these comments.

CHAIR:

Thank you. The next commentator is Jan Milburn, followed by Joe Leighton.

MS. MILBURN:

Marcellus Citizens' Group. I represent an organization of over 350 residents, primarily in Westmoreland County. The proposed standards do not serve to sufficiently protect the environment or the health of the citizens of Pennsylvania. Over 1,600 residents thus far entered their names onto the List of the Harmed, avowing that after drilling operations began in their area, they or their families became ill. Several doctors are trying to determine causation of health problems and found chemicals used to frack in the blood of their patients.

Research corroborates all the facts. A Colorado School of Public Health study indicates that people who live within one half mile of frack operations have an increased risk of disease due to exposure to toxic chemicals, both cancerous and noncancerous. They found chronic health risks were great, in order of prevalence, for neurological, hematological, respiratory disease and developmental effects.

Dr. Currie of Princeton looked at PA birth records of infants born within 2.5 kilometers of frack sites. Their likelihood of low birth weight

increased by more than half. Their chances of a low apgar score doubled.

23.

Researchers Bamberger and Oswald list instances of animals with neurological, reproductive and acute gastrointestinal problems after being exposed to frack chemicals. They report that scores of animals died over several years. In Northern PA, 140 cattles were exposed to wastewater when an impoundment was breached. Seventy (70) cows died, the remainder produced only 11 calves, only three of those survived.

Mead, of the Academy of Natural Sciences, found that as the density of well pads increases, the types of insects in the stream decrease.

The University of Missouri just recently found that water samples collected from drilling beds in regions of Colorado exhibited anti-estrogenic, anti-androgenic and estrogenic activity.

Disrupting the endocrine systems of our born and yet unborn children is a serious business with the potential to lead to a multitude of diseases and developmental disruption, yet in the State of PA we have well sites located within two miles of at least 190 daycare facilities, 223 schools and five

hospitals.

Water. Predrill data should be made available to the public. Contaminated drinking water should be restored to the quality as tested prior to drilling, including if it was superior to the standards of the Safe Drinking Water Act. The proposed amendments state the presumption of liability does not apply to pollution from well construction activities. Presumption should apply to those activities.

Over 161 letters of determination have been sent out by the DEP, indicating that those water sources were contaminated by fracking. In just two years DEP reported 241 violations of environmental regs at well sites within two miles of our daycare centers, 40 violations within two miles of our schools.

Pits. Temporary or permanent, storing waste of any form, including flowback water or contaminated drill brine should not be permitted anywhere in the State of Pennsylvania. Standards state that residual waste, including contaminated drill cuttings, may be disposed of onsite.

The U.S. Department of the Interior advises of pits. Open production pits are to be

discouraged. Closed tanks and systems minimize waste, entry by wildlife, fugitive air emissions, and it reduces the risk of soil and water contamination.

Costs may be reduced with the use of tanks.

Waste pits are banned in New Mexico.

Antero, Chief and Rex have moved to closed loop.

Andarko uses closed loop in PA. The EPA Star Program recommends a closed loop system. But these newly-proposed regs allow the continuance of the use of frack pits. This invites further pollution and contamination of waters.

Presently DEP permits leakage of potentially toxic chemicals from the pits. There should not be any legally allowed leakage of fluids onto surrounding land areas.

The proposed regs will not prevent the flooding, spills and leak violations that are commonly occurring in Pennsylvania.

Stating a required footage of freeboard provides very little protection. Violations due to the overflow of freeboard are occurring on a regular basis. Companies repeatedly are charged with the same violations. The fines are limited or nonexistent.

The American Nurses Association passed a resolution stating that the frack chemicals in our

water supplies are linked to cancer, kidney, liver and neurological damage. These operations are not limited to industrial areas in most of the state. This is occurring on farms, woodlands, parks and next to our homes, schools, hospitals and daycare centers. PA communities are divided between those who easily seek wealth and those fighting to preserve the quality of life in their communities. Frack pits, toxic chemicals, heavy metals, radioactive cuttings do not belong in the areas where people live and raise their families.

CHAIR:

Ms. Milburn, you have one minute.

MS. MILBURN:

These regs will have a direct affect on the health of our children and our grandchildren. Please do not allow the state to be lowered to the status of Kanawha's cancer valley or Louisiana's toxic land state. The gas industry wants exemptions from sections of the Clean Air, Superfund, RCRA, Safe Drinking Water and Clean Water Act, plus Right to Know and Toxic Breathing Inventory, putting millions of dollars into fighting health and environmental regulation. We encourage you to provide meaningful changes in performance standards that were written

decades prior to the advent of the hydraulic fracking process, which is nothing like the drilling of shale and gas wells. Thank you.

CHAIR:

The next witness is Joe Leighton, followed by Gary Hovis.

MR. LEIGHTON:

Good evening. My name is Joe Leighton.

I am the Associate Director of the Associated

Petroleum Industries of Pennsylvania, Commission of the American Petroleum Institute, a national trade association that represents all segments of America's oil and natural gas industry. It's more than 580 members, providing most of our nation's energy.

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

Many of these are incorporated into state and federal regulations.

API supports strong environmental safeguards and stewardship, and commends DEP on their

regulatory oversight program; however, we do have some concerns with several provisions contained in the proposed rulemaking that we plan to outline in detail in our written formal comments. In the interest of time, I will highlight a few areas.

In Section 78.66, API believes that clarification is needed regarding Act 2 requirements for spills onto pad material versus off pad onto native soils.

Section 78.66(b)(5), we believe that any responsible party should also be able to decontaminate equipment. The current language suggests that decontamination is limited to an operator. API-PA suggests that the language be revised to state that a responsible party is also able to decontaminate equipment.

Throughout Section 78.66, the timeline is indicated as 15 business days. We suggest that 78.66(c)(3)(ii) be revised to be consistent with the other 15 day notification provisions within the section.

In regard to borrow pits. Section 78.67(a) requires an operator of a borrow pit to operate, maintain and reclaim the site in compliance with the environmental performance standards of non-

coal mining regulations and with the erosion and sedimentation control regulations and other applicable laws. It is suggested that either these, quote, other applicable laws, be identified or that this all-encompassing reference be deleted.

In Section 78.67(c)(2), it's very confusing and seems to create an elaborate methodology in determining what type and when certain permits may be required for restoration. It seems to require the operator of a borrow pit that no longer meets the well permit/registration and bonding requirements of the Oil and Gas Act to obtain a non-coal surface mining permit unless an exemption applies.

Eurther, they can get a two-year extension on the restoration requirements approved, if there's a borrow pit along with the well site in nine months of completing drilling. Supplies and equipment can also stay at the site if the land owner approves and the supplies and the equipment are maintained within the containment system that meets the very detailed restricted requirements of an unconventional well site.

This construct seems to be required. Section 3273.1 of the law says that they do not have to comply with the non-coal mining law if they have a

well permit/registration and bonding and comply with those Chapter 78 regulations. It is strongly recommended that this process and requirements be simplified.

In regard to pre-wetting and anti-icing. Section 78.70a(q) requires the Department to be given at least a 24-hour notice prior to roadspreading. Weather events, such as freezing rain, are difficult to predict. There are many instances where the Department has years of experience with operators who conduct roadspreading operations and does not need to inspect all activities. It is recommended that the prespreading notice be modified to allow the Department to waive this requirement.

Section 78.73(d), this section requires an operator who alters an orphan well during hydraulic fracturing to plug it. Section 3203 of the Oil and Gas Act of 2012 defines alteration as an operation that changes the physical characteristics of a well bore.

CHAIR:

Mr. Leighton, one minute.

MR. LEIGHTON:

Thank you. While hydraulic fracturing into a nearby unknown orphaned well or abandoned well

may cause fluids to appear at the surface, the definition is not consistent within the regulations; therefore, API suggests that this section ought to be deleted or modified.

In addition, other issues in this section should include the radius of influence and responsibility, if there is one other nearby operator.

Again, thank you for the opportunity to testify this evening. API and its member companies will continue to engage policy leaders of all levels to work together in order to strike a balance between stronger regulatory framework, economic development and the development of our natural resources. Thank you.

CHAIR:

I

Thank you. The next speaker is number six, Gary Hovis, followed by Mark Cline.

MR. HOVIS:

Good evening. My name is Gary Hovis,
President of the Pennsylvania Independent Petroleum
Producers, located in Bradford, Pennsylvania. Thank
you for the opportunity this evening to present the
following remarks from the perspective of the Shallow
Conventional Oil & Gas Industry of Pennsylvania.

Our organization was founded in 1985, 29

years ago, in response, at that time, to the State's legislative Act 223. Our type of well has been continuously produced since 1859 in the western counties of Pennsylvania.

Beginning several years ago, a new energy formation was discovered deep below the surface in Pennsylvania, extending across the state from the northeast to the southwest. An exploration frenzy began and after several years of development the state legislature realized they needed to develop new regulations to cover the cost, development --- to cover the development and production of this new-found source of energy from the Marcellus and Utica Shales.

The drilling stimulation and production is much more involved than that of the conventional stripper wells already in existence across Central and Western Pennsylvania. Consequently, new procedures and regulations were generated to cover these new and nonconventional wells and that effort became law in Act 13 in February of 2012.

This legacy class of conventional shallow wells is an entirely different animal than the deep conventional --- unconventional well that this Act 13 set out to regulate. Here are some of the major differences. Shallow wells can be drilled and

stimulated in a number of days; require a fraction of the surface area disturbance; require less than .6 percent of the frack water, and uses minimal truck traffic to the well site of that required by the Marcellus-type well. It doesn't require stoned and topped access roads due to excessive truck traffic. And well sites can be restored in a matter of days.

Let's comment more specifically to a couple of these points. Surface area disturbance, a typical well pad for a shallow well can be 50 by 50 feet, or in some cases, 50 by a hundred feet. So we're talking 2,500 to 5,000 feet. Typical Marcellus well sites are five acres or somewhere in the neighborhood of 200,000 square feet or greater than roughly eight times as much area. And that doesn't include the space required for storing frack water.

Another typical comparison here is the water requirements for fracking a shallow well.

Typically it's around 25,000 gallons. The minimum water required for a Marcellus well is at least 4,000,000 gallons, more than 160 times that of the shallow well. And the shallow well can be fracked in less than a day, where a nonconventional well might take weeks or even months.

One of the most onerous threats to the

shallow stripper well industry today is a proposed change of Chapter 78 regulations under the new Act 13. These regulations are now out for comment and being considered in these series of hearings across the state. This is a case where one size doesn't fit all, and I stress that. One case doesn't fit all. We recommend several regulations for these two very different types of wells.

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The new Chapter 78 regulations can apply to the unconventional deep gas and oil wells, and the previous Chapter 78 regulations can apply to the conventional oil and gas wells as they have for years. If this doesn't happen, it could sign the death warrant to our conventional shallow oil and gas industry and have a far-reaching impact on other related industries. This would affect our refineries, fracking companies, seismic logging companies, well service companies, water trucking companies, water treatment facilities, oil field supply companies and many secondary and tertiary companies, like restaurants, hotels, insurance companies, banks, freight companies, hardware stores. And the list goes on and on. Thank you for your attention and your time.

CHAIR:

Thank you. The next commentator is Mark Cline, followed by Lisa Besantis.

MR. CLINE:

Good evening. My name is Mark Cline, 1 Longfellow Avenue, Bradford, PA. I am a fourth generation oilman. The first thing I want to do is read the first sentence of the DEP handout given at these hearings.

In 2012, Governor Corbett signed the 2012 Oil and Gas Act, Chapter 32 Act 13 of 2012, which significantly revised Pennsylvania's oil and gas laws to address unconventional well development in the Commonwealth.

all. The conventional operators are not meant to be in these regulations. The unconventional and conventional industries are completely different in many ways. The site of our locations are different. The amounts and types of waste products are different. The areas underground affected by the wells are different. The truck traffic and amounts of water used for frack jobs in both industries are extremely different. I believe the biggest difference is the amount of money the unconventional industry has to build their roads, make their locations and drill

their wells.

We in the conventional industry just don't have that much money available. We have to work with small budgets, but then again, we don't need the wide limestone covered roads, the five acre locations, the huge drill rigs that can drill not only deep vertically, but also horizontally for great distances.

I have seen some of the Marcellus locations after the wells have been put into production. They do a great job of reclaiming the land. When we get done drilling and fracking one of our conventional wells and reclaim our locations, you can drive down the road right beside them and not even know they are there. We leave a very small environmental footprint. We try very hard not to disturb any more lands or trees than possible.

At the hearing in Meadville last
Wednesday, there was a lady there from the Oil City
Water Authority. She was concerned about drilling too
close to the watershed. Does she not know that there
were already hundreds of wells drilled there many
years ago? Their water is still high-quality water
despite the old wells.

The City of Bradford watershed is covered with old wells. One reservoir has at least

two dozen old wells under the water. Bradford has some of the best drinking water in this state. Since 1986 there have been over 300 new wells drilled on the Gilbert Lane reservoir's watershed without any problems. Our industry works very hard to be environmentally safe.

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During the time that I have been going around the City of Bradford to talk to people about what is going on with these regulations, and why we need them to get letters written to have them exclude the conventional operators, I have heard many people tell me how the decline in drilling the last couple of years has already hurt their businesses. I am not just talking about the obvious stores, such as oil field supply stores. I'm talking about auto part stores, places that service company trucks, stores that sell tires, the owners of restaurants and small diners that used to count on the oil men and his family to come and eat, the corner stores where the oilmen used to stop for coffee and the morning paper. They all have already been hurt because of the decline in drilling. If these regulations pass the way they are now written, these businesses will suffer even more. Pennsylvania needs every single job it can get. While talking to all the oil and gas

companies around the Bradford area, they have all told me that they have had to let people go. There are more people out of work with no new jobs available for them. Pennsylvania needs all the jobs it can get.

The steel mills, coal industry,
manufacturing businesses, small family farms and
timber have already been regulated so heavily that
they have a very small presence left in our state.

Tuesday morning of this week I received a phone call from the teacher of the petroleum production class at Bradford High School. His students have heard about what is going on with these regulations and are concerned for their future of working in the oil fields.

CHAIR:

One minute, Mr. Cline.

MR. CLINE:

They asked what they can do to help us save our jobs and the jobs for their futures. There are 50 students in these classes that may not have jobs when they graduate. Not everyone is suited to go to college, and some people just love working outdoors and doing hard labor.

The same teacher told me he has 40 students at the University of Pitt at Bradford in oil

and gas-related classes that have been voicing the same concerns for their future. Are they also to become unable to find employment as most college graduates these days?

I am asking the Environmental Quality Board to rewrite these Chapter 78 regulations, leaving the conventional oil and gas operator out of them. Thank you.

CHAIR:

The next commentator is Lisa Besantis, followed by Margaret Henry. Lisa Besantis? Okay. Is Margaret Henry here? Number ten is Joanne Kilgour. Is Joanne here?

MS. KILGOUR:

Yes.

CHAIR:

And after Joanne will be Kathryn Hilton.

MS. KILGOUR:

members of the Board and DEP for scheduling the hearing, and also for your recent decision to add two additional hearings next month, one in Troy and one in Warren. And further, I would like to thank you for extending the public comment period an extra 30 days with a new deadline of March 14th.

My name is Joanne Kilgour. I'm the Director of the Sierra Club, Pennsylvania Chapter. And I just want to say that I think these hearings provide a very important opportunity for the Board, DEP and the general public to hear local perspectives on the proposed regulations and firsthand how the proposed changes would impact those living day to day with the harsh realities of natural gas activity.

We appreciate the additional hearings in these vital locations, and the additional time for the public to develop technical comments on the regulations. These are dense and technical proposals, and the extra time will enable us to be as specific and thorough in our recommendations as possible.

Again, thank you for recognizing the important role of the public in this regulatory process.

I'm here today on behalf of the Sierra Club's more than 24,000 members in Pennsylvania. Many of our members are directly impacted by natural gas exploration, extraction, distribution and production. And many others are engaged in advocacy on behalf of our public lands that are exposed to threats from increasing natural gas wells.

The EQB was established, in part, to formulate, adopt and promulgate rules and regulations

as necessary to accomplish the Department of Environmental Protection's work. It is the stated mission of the Department of Environmental Protection to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment.

The EQB is therefore charged with promulgating regulations to help carry out this mission to prevent pollution and restore our natural resources. Similarly, it is the mission of the Sierra Club to explore, enjoy and protect the wild places of the Earth and this Commonwealth. It is through this shared lens that I provide you with the following comments on these proposed regulations for what is known as Chapter 78 of the Pennsylvania Code.

First, while not directly related to natural gas activities, we cannot ignore the implications of the tragic and avoidable situation in West Virginia. When dealing with industrial activities, especially those of the extractive industries, it's essential to ensure that our residents are protected by strong regulations. While Section 78.55 of the proposed regulations requires a Preparedness, Prevention and Contingency Plan to prevent and address pollution events, I appeal to you

to strengthen this section by including a requirement that these plans fully disclose all chemicals, including their amounts and mixtures, as well as any potential harm they may cause and to disclose this to all agency landowners and first responders.

Similarly, Section 78.56 and 78.57 strengthen the standards for the storage of liquid and solid waste, but do not set forth the regulatory scheme that will adequately protect the residents and resources of the Commonwealth from the risks associated with contaminated waste products. These sections should require DEP to apply US RCRA Subtitle C standards to regulate hazardous materials contained in pits and should prohibit the use of any pits and open tanks. The bottom line is that the use of pits and open tanks is an irresponsible practice that must not be allowed to continue.

In addition to contamination events resulting from widespread use of pits and open storage tanks, the residents of this Commonwealth have been forced to endure accidents, blowouts and pollution events from the intersection of new wells with unidentified orphaned or abandoned wells. I commend the Board and DEP on its effort in Section 78.52(a) to require the identification of orphaned or abandoned

wells, but I appeal to you, again, to go further in the interest of protecting landowners and local resources in areas around the estimated 200,000 abandoned wells statewide.

CHAIR:

One minute, Ms. Kilgour.

MS. KILGOUR:

Thank you. To adequately prevent harm associated with new wells, intersecting orphaned or abandoned wells, the abandoned wells must be identified before site development and well construction and drilling and not just the fracturing stage. In addition, these wells must be plugged and sealed prior to new well site construction. Without taking these additional measures, simply identifying the orphaned or abandoned wells before fracking will not adequately protect Pennsylvanians or our resources from harm.

For too long the natural gas industry has been allowed and enabled by the Commonwealth to engage in harmful, irresponsible practices that run contrary to the mission of the Department of Environmental Protection and this Board. The process for updating the oil and gas regulations is an opportunity for us to stand up for that which it is

our shared mission to stand up for, a cleaner environment, better health and safety for the citizens of Pennsylvania. I thank you very much for the opportunity to comment.

CHAIR:

The next speaker is Kathryn Hilton, followed by William Thwing.

MS. HILTON:

K-A-T-H-R-Y-N, H-I-L-T-O-N, Indian Head, Pennsylvania. And while I do work with Mountain Watershed Association as a community organizer, today I'm speaking for myself. Yes, I did take a gasoline-powered vehicle to get here and I do drive a four by four that runs on 87 octane.

To take a company at their insistence of operating in good faith and being a good neighbor, it is not enforceable by anyone and does not protect any citizens. And the track record of every single company operating in Pennsylvania shows that these statements are distractions and have no factual basis. I can use the example of WPX in Donegal Township and their contamination of a water source for over a year, which I know you all are currently in litigation for this, and in a public meeting, having a representative say that fracking has never caused an instance of

water contamination, which is irrelevant in this case because it was a frack pit that caused the contamination.

I have found similar examples of unethical behavior by the operator, Chevron, and Redstone, Springhill and Dunbar townships in Fayette County. And additionally, I attend a lot of meetings, whether I'm invited or not, that are industry. And in one recently in Delmont Township, Westmoreland County where a company had a land man talking to a room of prospective lessors, he said that if they did not fill out --- or if they did not sign a lease to fill out public company's units, they were going to take the gas anyway. Well, there is no force-pulling in Pennsylvania's Marcellus formation, so this is not only misleading and coercive, but downright intimidation.

These are just a few examples of behavior exhibited by companies profiting from this extraction. Public health and being a good neighbor is particularly not a priority. And it's clear that anything interfering with their profit margin is an undue burden.

I'd like to now address some of the beneficial use policies that the DEP has, specifically

for allowing drill cuttings and residual waste to be solidified and used as odor cover in municipal landfills. Allowing toxic materials admittance to municipal landfills will most certainly have a negative health impact for residents on adjacent properties.

There have already been a plethora of complaints about this in Belle Vernon and German Townships in Fayette County, which are very close to where there are these municipal landfills accepting this waste. Another concern with this is the leachate lines that are underneath the landfills that are taking ---.

Excuse me, I lost my place. All right. These leachate lines don't have --- going to these municipal water authorities is the waste treatment facilities that don't have the equipment to filter out these contaminants. It's unsafe for public health. It really needs to be reconsidered in what we consider a beneficial use. Hazardous material needs to go to these places that are qualified to accept hazardous waste.

I don't want to take up any more time than necessary, so I'll try and conclude. The southwest region of the DEP encompasses ten counties.

In those ten counties there are 12 oil and gas inspectors. If you consider conventional and unconventional gas drilling, there are almost 30,000 wells that these 12 inspectors are supposed to effectively monitor. That's impossible. So until the DEP can effectively monitor existing operations, it should immediately call issuance of a new permit and suspend drilling on existing sites.

that the same folks who are commenting for their organizations yesterday are repeating the same comments today. I thought it was very clear that one organizational person was allowed to represent their organization in one meeting, because I actually asked on the phone if I could represent my organization at two hearings and I was told no. And for all of us who are having to sit through 40 people's comments, we all have better things to do than that, and especially when it's the same comments that we heard yesterday.

You know, I think the rest of it has been written out and that other people are adequately saying some of it, so I'm going to sit down. Thank you.

CHAIR:

Thank you. Next commentator is William

Thwing, followed by Jack Milburn.

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REVEREND THWING:

My name is Bill Thwing. I am a Pastor in Johnstown, Pennsylvania, 610 Luzerne Street, Johnstown, Pennsylvania. I had already spoken, related to the air quality issue, at a previous hearing, but I want to speak a little bit about water tonight. And I'm speaking as a private citizen, not as the past President of Pennsylvania Interfaith Power and Light.

Our family cottage is in Ogletown,
Pennsylvania, which is one of the recharge areas for
the Mauch Chunk Aquifer in the Clear Shade Watershed.
We have drawn our water from the Mauch Chunk, which is
one of the largest, purest aquifers in the Eastern
United States. 9,000 citizens of Windber draw their
water directly from the Mauch Chunk in seven wells, as
do everybody from Jim Thorp all the way down past the
West Virginia border on the Allegheny Front where the
Mauch Chunk runs.

It takes 40 years ---. We are a recharge area. It takes 40 years for the water to percolate down into the Mauch Chunk and recharge the Mauch Chunk. One gallon of diesel will contaminate 750,000 gallons of water.

We have a neighbor in Windber whose water well went bad. Over the hill from him, 2,700 feet away out of sight was a shale well being developed. This was two years ago. He's in litigation now. I can't say too much about it. But he went up there every single day with a camera and a notebook and took photographs. He noted diesel tankers and diesel fuel apparently going into the well. Just before the drillers packed up, he noted a flowback pit there. And then the next day the flowback pit was gone, covered over with dirt.

Okay. How long will it take diesel fuel and toxic flowback to percolate down into the Mauch Chunk? Once the Mauch Chunk is polluted, where are they going to get their water? How many truckloads of water bottles can you bring in to 9,000 people, not including everybody else on the Allegheny Front? The same principle applies to aquifers all over the State.

Both the Center for Sustainable Shale
Development in Pittsburgh, in their 2013 performance
standards, and the International Energy Agency in the
Golden Rules for the Golden Age of Gas report mandate
that diesel never goes into a well, and that a
thorough geological and hydrological baseline
background study should always be conducted on all

areas of operation before any drilling is even permitted. Neither of these best practices is mentioned in your regulations for some reason or other, except briefly under one section in the general centralized impoundment, but not for the whole process, just for the impoundments.

Water is essential for life. Without clean, pure water, we die. All of God's creatures die. The Earth will die. Pennsylvania has some of the best water in the world, except, perhaps, for that which was spoiled by the unregulated coal industry a little while back.

Why risk our aquifers, too? We've already risked a lot of surface water and we've lost a lot of surface water. It takes a long time to get that stuff back. And we just spent about \$9 million of Rosebud out of one of the 15 major pollution sources in the Little Conemaugh. And, you know, it's going to take a lot more to bring that river back.

The same thing applies to air. The same thing applies to soil. Pennsylvania has some of the best soil in the world. Agriculture is our number one industry. Tourism is our number two industry. Both depend upon fresh air, clean water, good soil. God has given us these assets that have nourished the

citizens of Pennsylvania for the last 350 years and the previous native population for over 10,000 years. Why risk these natural, God-given assets unnecessarily in the mad rush for wealth for a few, you know, unprincipled politicians and their out-of-state wildcat driller managers at the risk of disease, suffering, poverty for our children and for all the generations that follow it? What kind of a legacy are we leaving for the generations that follow?

Let me just quote the Pennsylvania

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

We want a rule of law in Pennsylvania.

We want a rule of law by the people, of the people and for the people. We want a rule of law which is constitutional, bound by the Constitution of Pennsylvania. Therefore ---.

CHAIR:

Mr. Thwing, your time has expired.

REVEREND THWING:

I say, best practices or nothing. Best practices or nothing.

CHAIR:

The next commentator is Jack Milburn, followed by Dr. Cleghorn.

MR. MILBURN:

Good evening. My name is Jack Milburn from Ligonier, Pennsylvania, 114 Mountain Road. Researchers at Duke and the University of Texas found that water wells within one mile of fracked gas wells had 17 times the methane as reference sites, and that methane is six times higher and ethane 23 times higher if a home is within one kilometer of a gas well.

Schug of Texas found elevated levels of arsenic and selenium in water close to gas extraction sites. Vengosh of Duke found that treated brine from Marcellus Shale contains bromide and radium.

Fracking industry truck drivers have been blowing the whistle for some time, saying that radioactivity alarms are going off, quote, all the time, and that the radioactivity levels are sky high, even in empty trucks that have already dumped their load of drill cuttings in landfills.

According to the DEP data, radiation alarms went off more than 1,000 times in 2012 from oil 2 and gas waste, according to the Tribune Review. 4 Therefore, disposal of brine, drill cuttings and any residual waste should meet the standards of the US 5 Resource Recovery and Conservation Act (sic). 6 Marcellus Shale is, of course, more radioactive than 8 other shale, as evidenced by alarms activated at waste 9 disposal sites and the high measurement of 10 radioactivity in a study downstream from the Josephine 11 Treatment Plant right here in Indiana County, which 12 treats wastewater from oil and gas drilling.

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Radium levels of sediment samples collected in Blacklick Creek, downstream from the plant, were 200 times greater than background samples. The storage of contaminated frack waste onsite, including radioactive drill cuttings, should be prohibited. There should be no processing or burial of drill cuttings onsite, nor should cuttings be stored in pits. No brine from hydraulically fracked wells should be used for road application, due not only to the salinity loads, but to the possible presence of toxic chemicals and radioactive particles that may come in flowback water.

No wastewater or drill cuttings should

be applied to land areas. A confidential EPA draft document on the environmental impacts of Marcellus drilling was obtained by the New York Times. It shows that federal authorities are concerned about drinking water near Marcellus Shale operations. According to the EPA, quote, as oil and gas development encroach on suburban and urban areas, human health and environmental impacts are expected to escalate. The study shows that dilution of drilling waste doesn't always solve the problem. This study is relevant because right here in Pennsylvania regulations --- regulators are saying the same thing, that dilution will effectively remove the risks.

Condensate tanks. All gas facilities, including tanks, pits, wells and compressor stations, should have monitors designed and operated by a third party functioning 24 hours a day and recording findings that are directly available to the DEP and public. The gas industry should not be responsible for conducting this monitoring, but should be responsible for the costs.

The term fresh water should no longer be used to define uncontaminated previously unused water and wastewater left over from fracking that has been recycled and reused.

Abandoned wells in PA must be identified and sealed prior to any Marcellus gas wells being drilled. Drillers should be financially responsible for protecting the waters through this identification and plugging process.

wildlife. Contamination of deer meat may be yet another issue related to drilling for natural gas in the Marcellus Shale. This is of great concern to me as a hunter and it soon will be to over one million Pennsylvania deer hunters. I say that this may be an issue because it is not being studied or even monitored in Pennsylvania, according to the Pennsylvania Game Commission.

The well flowback held in open frack pits contains large quantities of salt brine, which, as all hunters know, attracts deer. Unfortunately, the brine also contains heavy metals and sometimes radioactive materials that come from deep within the Earth, along with other extremely toxic and carcinogenic chemicals, but those are, of course, kept secret by the gas industry, according to the Halliburton loophole.

The salt that attracts the deer could come from spent wells, frack ponds, contaminated streams, spills, leaking trucks, on and on.

Pennsylvania needs to thoroughly study this issue. If the gas industry, Pennsylvania agencies or our politicians say there's no problem here, then they should be willing to approve it. What are they worried about, finding something wrong with our deer herd?

In closing, virtually all of the issues I've discussed can be mitigated or, indeed, eliminated by the use of currently available technologies and alternative operating procedures by drill companies. Closed-loop systems, for example. With the incredible amounts of money generated by natural gas operations, some of which with multinational oil companies, the cost of such technologies and operating procedures are fair and reasonable. Pennsylvanians deserve nothing less. Thank you very much.

CHAIR:

Thank you. Our next speaker, which should be number 14, is Dr. Cleghorn, followed by Bruce Grindle.

DR. CLEGHORN:

Good evening. I'm Dr. Stephen Cleghorn.

I own an organic farm up in Jefferson County at 2771

Paradise Road. I have a kind of unique easement on that property that asserts and defends the rights of

nature on the surface and below the surface from violation by any sort of extreme industrial activity, as fracking for natural gas.

We're here tonight to talk about primarily proposed regulations on shale gas extraction to better control activities at the surface. But there's a problem with that. The problem is that the Earth is One. It's above us in our climate, under our feet and around us as an ecosystem that sustains our lives, and below us in a deep and, indeed, a living biosphere. To limit these hearings on regulations to what happens at the surface of the Earth for an activity whose very nature requires penetration far below the surface truncates all too much the discussion we should be having.

So before addressing the proposed legislation in some specifics, I'd like to speak about what happens from below that will affect surface living for generations to come. Given that the oil and gas industry data show that well casings can fail at a rate of up to 50 percent over 30 years. And given that these casings must hold up in perpetuity to protect our groundwater aquifers under Pennsylvania. And that the gas industry plans to drill more than 100,000 wells for the next 50 years across half the

land mass of Pennsylvania. Therefore, DEP should require immediately that casings of the type and engineering that are failing now be prohibited and cause the following things to happen.

All casings henceforth shall employ failsafe engineering that will prevent the degrading and failure over time so that they cannot leak gases and fluids from below. Chemical markers and visible monitors should be going down at every single well that's drilled to provide evidence of such leakage and who caused it. All gas companies should provide a bond adequate to pay in full for whatever is needed, whatever is needed, to remediate groundwater supplies or replace water supplies where wells leak.

To do anything less than this is to risk irreparable harm to the water sources of our Commonwealth and the human, animal and plant life that depend on that water.

And as you heard, water is life, and this industry poses an existential threat to that source of life because it will inevitably --- in my opinion, inevitably ruin, through failed casings, the aguifers below half the land mass of this state.

Okay. That's it. I do support some of the other recommendations you've heard here tonight.

You heard about maybe having two more additional hearings. I would suggest you still need to have hearings in every single county where the fracking is going on. People need a chance to come out and talk to you. No more open frack waste pits, no more burying the waste pits all up onsite. Identify all preexisting wells and put those wells up on a publicly available web platform for the people to study. Operators must restore contaminated drinking water to a quality that meets Safe Drinking Water Act standards, no matter what the quality of the water was before, because, after all, it is contaminated by the activity, therefore it should be restored to Safe Drinking Water Act standards.

Okay. I'm done with that. Now I'm going to look you each in the eye and talk to you and say, please, take your bureaucratic hats ---. You don't have any hats, but take your bureaucratic hats off for a moment and understand that the Earth is One, and that these regulations for surface-only activities of deep drilling deny that essential fact. The notion that we can define ourselves as touching nature only in part and not affecting nature and our environment in the whole is wrongheaded. It's gotten us into a lot of trouble, of which I don't even need to detail.

Surely all of you who sit here today, because you pursued in your education and your career as environmentalists a dream of keeping our living ecosystem safe from irreparable harm at our own hands as human beings, I want to ask you to dream that way again before you decide on any new regulations that allow fracking to proceed. At least dream that way again for a little while, like you did when you were young. Thank you for listening.

CHAIR:

Thank you. The next commentator is Bruce Grindle, followed by Doug Jones.

MR. GRINDLE:

Good evening. My name is Bruce Grindle. I live and work in Mount Pleasant, Pennsylvania, where my company is located. I'm here tonight to testify as Co-Founder and President of my company, Oil & Gas Management, and also as a board member for the Pennsylvania Grade Crude Oil Coalition. I'm also a petroleum and natural gas engineer. I've worked as a drilling and completion consultant for numerous companies in the oil and gas basin, Appalachian Basin, over the last 35 years.

The Pennsylvania Grade Crude Oil Coalition was formed in the summer of 2013 by 20

producers and refiners of conventional oil and gas to advance local economies and energy independence by promoting conventional oil and gas production in a safe and environmentally sound manner. The founding members, just like myself, were concerned about the burdensome new regulations that were being proposed by the DEP and the effect it was going to have on their businesses.

We founded our company in 1991 and we now own and operate 300 conventional wells here in Southwestern Pennsylvania with a staff of only seven people. We strive to be good environmental stewards and corporate citizens. Most of the land we have drilled on in the last six or seven years are lands that we own in fee and on which we have ongoing land development operations.

It would make absolutely no sense for us to operate in a manner that would diminish the value of our own property or our neighbors. Quite to the contrary, we have strived to improve the lands in which we drill. The vast majority of conventional operating wells in this state are drilled and operated by small, local, young companies just like ours. In many cases they are also family-owned businesses.

Prior to and after Act 13 was passed,

the conventional operators like myself were told that the Act would have little or no effect on us. Now, in an effort to regulate a new and quite different unconventional industry, we are being forced to comply with regulations that were crafted to deal with unique, challenging issues associated with the drilling and development of unconventional wells.

These proposed regulations will impose a disproportionate regulatory and economic burden on small businesses such as my own and other conventional operators. As one gentleman said here earlier, in oil and gas regulations, one size does not fit all.

Suffice it to say, if the DEP does not provide for separate, appropriate regulations for conventional wells, the majority of conventional operators here in Pennsylvania will be forced to shutter their businesses, to sell or plug and abandon their wells. If that occurs, it will not only affect the owners of those businesses, but their employees, suppliers and subcontractors will also suffer unnecessary negative economic impact.

In addition --- and I can say this with great certainty --- tens of thousands of lessors will no longer receive monthly royalty checks or be provided with free gas for their homes. And I know

this for a fact because we have three or four ladies that are neighbors and if we're one or two days late with their royalty checks, I can guarantee you they will be on the phone with my wife. They depend on that. It may be a hundred dollar check, but it's a grocery bill.

When the proposed revisions of Chapter 78, C, came out last summer, it was readily apparent the regulations did not take into consideration the stark differences between the conventional and unconventional wells. Another gentleman pointed out some of them are ---. Like he said, a typical convention well pad is probably 20 to 30 times smaller than that of an unconventional well. This is why there's a disturbance of less than a half acre on most of these conventional well pads and five acres or more on an unconventional. It's likened, perhaps, to the difference between the construction of a house and a shopping mall.

The wellbore of conventional well stimulation extends a few hundred feet into the oil and gas bearing strata that is stimulated rather than thousands of feet involved in unconventional well stimulation. This accounts for the quantitatively different equipment and water requirements of the

unconventional industry.

Lower commodity prices coupled with ever-increasing regulatory costs and uncertainty of regulations has already resulted in a dramatic decrease in conventional well development. The number of conventional wells in Pennsylvania has declined steadily from a high of 4,836 wells drilled in 2007 to less than a thousand wells drilled in 2013.

CHAIR:

One minute, Mr. Grindle.

MR. GRINDLE:

Please bear in mind that most of these conventional wells are drilled by small Pennsylvania businesses that don't have the option to pack up and move to the Permian Basin or the Gulf Coast where the economics may be better.

To finish here quickly, in the long history of the oil and gas production in Pennsylvania the overall environmental impact of conventional wells, construction through production and plugging have been minimal. Look around this community. There are wells in the school yards, parking lots, in the parking lot of the hospital not too far from here, and also on golf courses. Conventional operations, however, get caught in the crossfire of increasing

unconventional drilling activity in Pennsylvania, public anxiety about the potential impacts of hydraulic fracturing and the rush or the impulse to regulate this new, unconventional development activity. Thank you very much.

CHAIR:

The next commentator is number 16, Doug Jones, followed by Valessa Souter-Kline.

MR. JONES:

My name is Douglas Jones, 508 North
Perry Street, Titusville, Pennsylvania, representing
Catalyst Energy, Incorporated. I am Vice President of
the Catalyst Energy, Incorporated, one of the most
active oil and gas development companies in terms of
new wells drilled in the shallow oil fields of
Venango, Warren, Forest and McKean Counties in
Northwest Pennsylvania.

My company has brought nearly one quarter billion dollars in investment money into that region over the last 20 years, much of it from out of state. We put that money to work in Pennsylvania, buying goods from Pennsylvania companies and services from Pennsylvania contractors. This money translates into real Pennsylvania jobs. My company employs over 90 people and provides millions of dollars to those

companies and contractors who, in turn, provide hundreds, if not thousands, of jobs to Pennsylvanians.

Over the past ten years, DEP regulations have resulted in increasing costs to my company.

Location costs have risen 400 percent, primarily due to the imposition of stricter erosion and sedimentation controls. Permitting costs have increased dramatically, in some instances as much as 1,000 percent due to the imposition of Erosion and Sedimentation General Control Permit and additional engineering costs associated with that permit.

As a result of these severe cost increases due to the changing regulations, the rate of return which we have provided to our investors has shrunk to the point where it is now difficult to raise money to bring to Pennsylvania to drill our wells. While we understand the need for some changes in these regulations for the development of unconventional wells, due to the larger disturbance areas of these wells and the impacts on local infrastructure, we feel that these regulations are not appropriate for the conventional well development industry due to the relatively small size of the disturbance and the small profit margins of conventional wells.

While similar in some ways, the

industries are vastly different in terms of impact on local infrastructure and in terms of impact on the land and other resources. Our well pads are typically .1 acres in size. Almost 50 of our well pads could easily fit on one unconventional well pad.

The new Chapter 7 revisions further erode our economic viability as a company by imposing even higher costs to comply with added regulations. I do not feel the Department has adequately investigated the impact of these regulations on the small conventional operators who are almost totally small businesses. The Department is required by law to assess the impact to small businesses and to provide alternatives which address these costs to those smaller industries. They have not done so. Because of past cost increases due to regulation and the cost imposed by this new round of regulation, my company must now consider moving our investments out of Pennsylvania.

This will result in direct loss of jobs to those who work for us, devastating many families. There will also be a ripple effect loss of jobs for those who provide goods and services to us.

My company is also one of the largest suppliers of crude oil to American Refining, which has

struggled for several years with declining crude oil production. They and hundreds of families in the Bradford area will be adversely affected if Catalyst leaves Pennsylvania.

The Regulatory Review Act requires a thorough review of regulations and the possible adverse impacts of those on small business. The proposed regulations are rife with profound adverse impact on those small businesses.

CHAIR:

One minute, Mr. Jones.

MR. JONES:

Nearly all conventional oil and gas operators are small businesses. Something as simple as requiring a two to one slope on conventional well pits will increase costs by as much as \$5,000 per well or construction, raising pad and road construction costs imposed by the Department over the past ten years to 560 percent of our 2004 costs.

I urge the Environmental Quality Board to vote no on approval of these regulations. And I further urge the Department of Environmental Protection to develop entirely separate regulations for the conventional oil and gas industry. Thank you.

CHAIR:

Our next speaker is Valessa Souter-Kline, followed by John Hardesty.

MS. SOUTER-KLINE:

Good evening. My name is Valessa
Souter-Kline, and I am the Western Pennsylvania
Outreach Coordinator for PennFuture. I work out of
our Pittsburgh office. For those who don't know,
PennFuture is a statewide public interest membership
organization that works to ensure a just future for
nature, communities and our economy.

I appreciate the opportunity to speak to the proposed Chapter 78 oil and gas regulations. And I would like to note that PennFuture will submit a comprehensive written comment before the new March 14th deadline. I appreciate the extension.

First, I would like to state PennFuture supports significant aspects of these regulations.

Among the changes that we support is the requirement that all wastewater be transported in above-ground pipes, and the ban on storing produced liquids in open facilities.

That said, there are many opportunities to strengthen these regulations that must be taken if they are to provide effective and enforceable protections for our natural resources. Those are

clean air, land and water, as protected under the Pennsylvania environmental rights amendment. The two opportunities that I will present to you tonight are buffers, proposed buffers for streams, as well as endangered species protection.

The current regulations provide a core buffer for between drilling activities and solid blue line streams, as defined by the U.S. Geologic (sic) Survey. Protecting solid blue line streams only is not enough. The National Wildlife Federation states that more than half of Pennsylvania's 83,000 miles of streams are either intermittent or headwaters, which is to say that these water bodies are not insignificant.

Existing laws, such as the Clean Streams
Law, protect all water bodies in the U.S. That
includes ephemeral and intermittent streams. Chapter
78 should do the same. Also, because they carry ---.
Oh, sorry. Intermittent streams ---. Let's back up.
The intermittent streams provide important and unique
habitat. Also, because they do carry less water, they
are more easily harmed by smaller amounts of
pollution. So they're very sensitive.

Furthermore, when flowing, intermittent streams are connected to the same hydrologic system as

the solid blue line streams. Allowing natural gas drilling close to intermittent streams essentially allows natural gas drilling within a hundred feet of solid blue line streams during certain times of the year, threatening our health and our waterways.

Another section of the regulations fails to adequately protect Pennsylvania's threatened or endangered species. The regulation currently obligates the operators simply to consult with Pennsylvania Natural Diversity Inventory process and provide that information to the DEP. The operator has no further obligation to mitigate harm, unless the DEP determines the proposed well site will negatively impact endangered species.

As required by federal law, DEP regulations must ensure that operators are fully responsible for ensuring that their activities will not harm a species or critical habitat. The protection of threatened and endangered species should not be dependent on the state making and on-the-ground determination. That conduct completely undermines the premise of the federal and state protections for endangered species and removes responsibility from those who are most capable of knowing what's going on and what would be harmed on their land from making a

72 proper decision on whether the activities will harm 1 2 species or critical habitat. 3 That's all I have for tonight. 4 appreciate your time. And I also appreciate your work 5 to protect our natural resources. Thank you. 6 CHAIR: Thank you. The next commentator is John 8 Hardesty, and following Mr. Hardesty is David Clark. 9 MR. HARDESTY: 10 Good evening. I find that I'm back in 11 grade school. I did not come completely prepared 12 tonight and I do not have copies to turn in. May I 13 proceed? 14 CHAIR: 15 Go ahead. 16 MR. HARDESTY: 17 Okay. Thank you. 18 COURT REPORTER: 19 Can you spell your name? 20 MR. HARDESTY: Pardon? 21 22 COURT REPORTER: 23 Can you spell your name? 24 MR. HARDESTY: 25 H-A-R-D-E-S-T-Y. My name is John

Hardesty of 448 Morris Street here in Clymer, PA. I'm an inside salesman for Miller Supply Company, a supply company of pipe valves and fittings, soap, rope and dope. I'm here for one reason. It is not to diss any of the oil and gas drilling. That would be biting the hand that feeds us. I'm here to make my concern known on the regulations as they affect what I see is two separate entities. As some have said, one size does not fit all.

I feel that these regulations that can be construed to be for the shale place, both the Utica and the Marcellus, do hurt the shallow folks that are doing the drilling and have done it. The majority of wells in the State of Pennsylvania, certainly the ones here in Indiana, PA, have been shallow or conventional or traditional.

A little bit about the company and myself. I've been in the business since 1979 and working in supply stores here in Pennsylvania since '81. The company that I've been with in the last 13 years has had a high of 17 employees and right now is a low of 12. And I attribute that to the lack of traditional business that we've had that has been falling off over the last several years.

I'd like to make it very clear, once

again, I'm not for or against either of them. I'm just for natural gas and the sale of the equipment that goes with it. It's also been said, most of our conventional producers are small companies. My understanding is permits are down for traditional wells 80 percent. I also believe in talking on a daily basis with the producers, the family members, the owners of these smaller production companies. They are struggling.

Our business has sold much less footage of pipe, valves and fittings. Head separators, tanks and other items are very much down. One of our major suppliers of pit liners and poly tanks from nearby Jefferson County, their business from 2012 to 2013 is down 30 percent. If they take out the oil field supplies of tanks and liners, their overall business is up 40 percent. Another supplier pulls poly tanks out of West Virginia for use in the --- mostly in the shallow field. In 2012 and a few years before that, three 53-foot trucks a day was coming from Barber County, West Virginia. In early to middle of last year it was one to two trucks. Now they're lucky to have one driver to go two days in two weeks.

They also fabricate pit liners. And they were running three shifts up in Punxsutawney and

that has --- or excuse me, two shifts, contemplating three shifts in 2008. And now they're struggling to keep one shift in business.

CHAIR:

One minute, Mr. Hardesty.

MR. HARDESTY:

Thank you. Again, one does not fit all. I believe that the FFA has a different set of regulations for a piper cub out of Jimmy Stewart Airport versus a 767. What I'm requesting is that applicable regulations be to the two separate parts of the business. Thank you and good evening.

CHAIR:

Thank you. Next is David Clark followed by Maurice Fey.

MR. CLARK:

My name is David Clark. My family has been in the conventional oil and gas business since 1965. We supply natural gas to the surrounding homes and businesses and supply crude oil that powers our industries. Our company has an impeccable environmental record and we maintain positive relationships with local, state and federal officers and regulators.

I started in our business in high

school. I'm very privileged to work in the beautiful forest and near world class trout streams every day.

I believe that in our conventional oil and gas industry we have already found a balance that protects our forests and waters, and it allows responsible conventional oil and gas operations to be done in a safe and environmentally friendly manner.

Therefore, I'm speaking to express my opposition to the passage of Chapter 78 regs as proposed. I urge you to vote no to these regulations that allow conventional wells to operate under regulations that are separate from the regulations that govern the unconventional oil and gas industry. I have drilled many conventional wells and I believe strongly that the drilling and producing of conventional wells must not and cannot be regulated by the same set of regulations as those used in the deep, unconventional oil and gas industry.

In addition to the need of separate regulations, I believe there's also a need to change proposed regs that govern both conventional and unconventional. One of these common areas is the new term, special concern species. The DEP's proposed regulation would create new and unauthorized obligations without an adequate basis in fact or in

law. DEP and other resource agencies have acknowledged that the term special concern species has no generally accepted standard definition, either by law or in the scientific community. In fact, special concern species are generally understood as meaning all categories of species, whether threatened or endangered, which are protected under the Endangered Species Act and comparable state laws and even undetermined species that are simply of interest to the scientific community.

written, leaves entirely open-ended the questions of what currently constitutes this designation and what will constitute its designation in the future. Also left unspecified is any process for future inclusion on the list and substantive criteria for that inclusion. Also left open-ended is the criteria used for determining and measuring impact and what standards would be employed to ascertain the desired mitigation measures. DEP cannot and it must not recklessly wade into species law without any statutory authority or the consensus of the scientific community.

Next is the development of new well sites and the management of oil and gas operations on

or in the vicinity of public resources. DEP's proposed revisions would result in needless, significant costs related to public lands because the revisions don't comply with Pennsylvania law. And they don't contain any process for respecting the private property rights of oil and gas owners, specifically in split estates. Not only is this a remarkable usurpation of private property rights in the face of Act 13's express protection of the same, but the proposed regulations are without any limit as to what concerns the resource agencies might submit. What constitutes and defines a harmful impact under these new regs? What are the limits of any proposed mitigations by a resource agency? The proposed regulations aren't even tied to the standard of reasonable use, which has been part of Pennsylvania Common Law for over a hundred years and which, by virtue of extensive practice in the conventional oil and gas fields, are marked by established practices that protect and have protected our beloved environment and provided thousands of very needed jobs.

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One minute, Mr. Clark.

MR. CLARK:

Finally, I would like to talk about the Regulatory Review Act, which requires DEP to consider alternative regulations for small business. Virtually all conventional oil and gas businesses in Pennsylvania are small business. Despite this fact, the proposed regulations don't contain any alternative for a small business. Moreover, the due diligence to comply with the statute is not done. The Regulatory Review Act requires a specific flexibility analysis, including less stringent compliant requirements, alternative performance standards or an exemption altogether.

The DEP's analysis is remarkably incomplete. Not only does this analysis fail to discuss these items required by law, it overlooks many cost components that would be imposed by the proposed regulations.

CHAIR:

Mr. Clark ---.

MR. CLARK:

The overlook costs in total over hundreds of millions of dollars. I urge the Board to vote no on this basis on these oversights alone.

In closing, I urge the Board to vote no in order to take into account the significant

differences between conventional and unconventional oil and gas. A no vote will help ensure that the final regulations take into account the different qualities of conventional operations and the financial impact that the regulations will have upon the conventional industry.

CHAIR:

Thank you. Maurice is not here, so the next one in line would be number 21, Eric Cowden and then Jeff Walentosky.

MR. COWDEN:

Good evening. My name is Eric Cowden.

I'm here with the Marcellus Shale Coalition, 24 Summit Park Drive, Pittsburgh, Pennsylvania, 15275. I'm the Community Outreach Manager in Central Pennsylvania for the Marcellus Shale Coalition, an association working with regional partners since 2008 and currently comprised of nearly 300 exploration and production midstream and service companies committed to developing clean-burning natural gas resources. In 2012 our members were responsible for 96 percent of the natural gas produced here in Pennsylvania.

Energy Development has an incredible

history in the Commonwealth. And, indeed, natural gas

development can serve to enhance and improve our

natural resources.

Significant investments have been made across the Commonwealth by our industry to provide needed habitat and restore lands and watersheds.

Partnerships with conservation groups are examples of our industry's willingness and commitment to voluntarily protect and preserve our natural resources. And our industry has raised the bar for shale development further with practices designed specifically to lessen the impact on surface disturbance and provide strategies to improve habitat and landscape.

The benefits do not end there. Take, for example, the fact that the Commonwealth accounted for 18 percent of the natural gas production in recent months, according to the EIA. This has led to more revenue. The natural gas industry has paid over \$1.8 billion in taxes since 2008, and \$406 million over two years to communities, counties and the state in impact fees.

More than 200,000 new hires in

Pennsylvania are supported by industries associated

with the shale development, according to our L & I.

And despite the rhetoric, these are, myself included,

lifelong tax-paying residents of this great

Commonwealth.

In addition, there is a great cost reduction to residential fuel. My grandparents, married 63 years, saw their monthly budget for natural gas heat be reduced by \$150 a month. That is an \$1,800 per-year savings to senior citizens on a fixed income. These benefits, unfortunately, are at risk. Pennsylvania has a complex regulatory environment and an uncertain fiscal climate, which has resulted in the Commonwealth falling behind.

And there is even less certainty in the wake of the decision of the Pennsylvania Supreme Court to reject portions of Act 13 of 2012 that established a statewide standard for oil and gas development.

Moreover, a plurality of the Court ruled to roll back many of the environmental protections under Act 13, including more stringent well setbacks. Nevertheless, our industry will voluntarily comply with these setbacks at the Governor's request.

When discussing agriculture issues, the reach of the Marcellus Shale has gone much further and touches a wide variety of agricultural businesses, both large and small, all across the Commonwealth. It is not restricted to solely the areas where Marcellus is evident. The overall benefits include decrease

heating and electricity costs, increased sales of seed and fertilizer, and companies retrofitting agricultural structures such as bins, tanks --- and tanks to accommodate the needs of the shale companies.

The Marcellus Shale Coalition will provide detailed written comments on the Department's proposed regulations in weeks to come. Our overarching message, though, is straightforward. Instead of undermining our strong, consistent and predictable regulatory framework, we should work cooperatively to revise these proposals to maintain a balance between strong environmental protection and competitive economic climate. It does not need to be a false choice between the environment and economics. And we urge the DEP to continue working with our industry and stakeholders across the Commonwealth on a reasonable, competitive path forward. Thank you for the opportunity to provide this testimony.

CHAIR:

Next up is Jeff Walentosky, and then following Jeff, number 23, is Darlene Marshall.

MR. WALENTOSKY:

Thank you for the opportunity to speak this evening. My name is Jeff Walentosky. My address is 5001 Julia Lane, McKees Rocks, Pennsylvania. I'm

here to testify as an interested citizen of the Commonwealth regarding the proposed rulemaking of Chapter 78, subpart C. I'm a lifelong resident of the Commonwealth and Western Pennsylvania. I've been employed as a licensed professional geologist for over 23 years for a groundwater and environmental consulting firm located in Western Pennsylvania.

Our company maintains relationships with the Marcellus Shale Coalition, Pennsylvania
Independent Petroleum Producers and the Pennsylvania
Independent Oil and Gas Association. As a member of PIOGA, I currently serve as the Well Construction
Subcommittee Chair, which is part of the Environmental Committee. I'd like to commend the Pennsylvania DEP, industry and other interested parties for all the hard work and long hours extended to get these draft regulations in place to this point. However, it's very apparent that there are significant improvements and modifications that need to be made to the various portions of the proposed rulemaking.

I will be submitting a detailed comment letter prior to the end of the prescribed comment period. I'm here to offer a few of my general and more specific comments.

A few of the general comments. There's

a vast difference between conventional and unconventional well drilling and stimulation operations. The land disturbance footprint, waste management activities and water usage on conventional well sites is significantly different and entails a small percentage of activity in comparison to unconventional operations. Industry representatives met with Pennsylvania DEP officials on numerous occasions to discuss the fundamental differences in these operations and the impact the proposed regulations would have on the conventional oil and gas operator, yet the Department has not adequately addressed this issue.

The proposed Chapter 78 revisions pose a significant financial impact on conventional and unconventional well operators without a justified environmental benefit.

The Department references forms for completion within the proposed regulations. These forms should be provided for review as part of the comment period.

During the Technical Advisory Board workgroup meetings in 2013, there were four issues of concern that were discussed, public resource protection, protection of water supplies, abandoned or

orphaned well identification and waste management of well sites. Although there were significant discussions between the work groups, there were no meaningful changes made to the draft regulations as a result of those meetings.

Specific comments to offer. One in regards to protection of water supplies. The Commonwealth is one of the few states that has no drilling and construction standards for new and existing residential water supplies. Past proposed legislation in Pennsylvania has not been successful in affording the residents of the Commonwealth assurance that proper practices and guidelines are followed to minimize the risk of drinking water contaminants.

Without this legislation in place, it is unreasonable for the Department to expect industry to be obligated to restore water supplies back to applicable safe drinking water standards if the supply did not previously meet these standards, or possibly an improved water supply. The proposed restoration standards should be made to meet predrilling or baseline water quality.

In regards to abandoned and orphaned well identification. The identification procedure in this section of the proposed regulation outlines a

very difficult process. Traditionally, the operator has completed its due diligence in order to avoid potential environmental impacts and communication with abandoned wells. The introduction of a map finder identification tool will be helpful to the operators.

CHAIR:

One minute.

MR. WALENTOSKY:

However, the use of a questionnaire with adjacent property owners will likely cause some issues from the standpoint of property access issues or the lack of accurate knowledge regarding existence of abandoned wells.

One last point on reporting and remediating releases. Even though the Oil and Gas Spill Policy was established last year, there are still significant consistency issues. Some common oil and gas-related contaminants do not have established standards that need to be met to ensure proper measures have been taken in accordance with the professional opinion of the Department representatives. Without clear guidance, the standards that follow this section of the proposed regulations could create inconsistencies between regional office and unclear expectations of what

remedial obligations an operator will have following an unexpected release, resulting often in lengthy legal debate and an unresolved site remediation issue.

I'd like to thank you for the opportunity to speak this evening.

CHAIR:

Thank you. The next commentator is Darlene Marshall, followed by Donald Lancaster.

MS. MARSHALL:

Good evening. Thank you for the opportunity to speak tonight and comment on updating the oil and gas regulations. We agree there is a need to better protect our water resources and environment, and the comments I will present cover the specific regulations found in Section 78.51 to Section 78.62.

Highland Street Extension residents have worked with community leaders in three municipalities, along with our Representatives and Senators to present over 2,000 comments to the Environmental Protection Agency, which I'll refer to as EPA, to stop a proposed disposal injection well near the City of DuBois. Many residents fear a disaster similar to the recent West Virginia incident could happen if the proposed disposal injection well were permitted to be placed within our residential area. The history of

Pennsylvania waste disposal injection wells show that effects can be seen up to five miles away and at least five cases of Pennsylvania disposal injection wells had violations or contaminated water supplies. And I'd like to note that we only have a handful of waste disposal injection wells in Pennsylvania due to our geology and our past history of drilling.

Leaders of our community requested we submit all the information collected on the disposal of waste and the protection of our water sources, including municipal and private water wells. A binder is being provided with all the information that was collected, which is extremely relevant to protecting Pennsylvania's water sources.

We request the DEP get copies and review all the public comments collected by the EPA for December 2012 and September of 2013 to aid in the decision on the future regulations dealing with waste disposal from oil and gas activity to protect our water supply. Some information was provided by engineers.

The EPA deals with underground sources of drinking water and residents found no way to protect above ground water sources. Our local coal mines are of great concern, which are located near the

proposed site and extend under the City of DuBois into Sandy Township and into many other municipalities throughout our area. Residents' concerns dealt with protection of water supplies, cost to check water sources regularly, roads, air quality, soil, loss of property values and much more. DEP and the EQB need to review all this information collected by private citizens on potential hazards to Pennsylvania water supplies from the waste disposal of the oil and gas industry since it has a direct impact of over a two-mile radius --- and we found up to a five-mile radius --- at least. Anything happening underground really is an unknown and loss of water to homes is one of the most important items to homeowners and to protecting the homeowners' property values.

Please make sure the regulations prohibit these seven items. Especially the use of disposal injection wells in Pennsylvania, but also use of open pits for storage or regulated substances; onsite processing of drill cuttings due to hazardous substances; burial or land application of drill cuttings; onsite burial of waste pits; use of brine for dust depression, deicing and road stabilization; land application of top hole, pit water, fill or dredged material. And again I say, use of disposal

injection wells. Due to the abandoned history of ---.

Due to the history of abandoned and orphaned wells,
ensure that the regulations will identify existing
wells, which include old and abandoned oil and gas
wells. We found very --- a whole bunch in our area
and they are in the binder enlisted. Make sure that
the regulations plug and seal old, abandoned and
orphaned wells appropriately prior to new well
construction to prevent pollution from happening. And
again, I'm talking about waste disposal, not just your
general conventional and unconventional.

And I have learned a lot as I've been doing this process. I'm a librarian and I have learned a lot of information. The operators should be required to do predrill water quality testing and make this data publicly available. If contamination of a water source should happen, the operator should be required to restore the supply to predrilling quality.

CHAIR:

One minute, Ms. Marshall.

MS. MARSHALL:

We urge you to include the Geisinger
Health Study findings being done on the oil and gas
industry, especially since the list of harmed
individuals has been compiled, along with 5,000

individuals in Pennsylvania, being affected due to oil and gas activity. The list is included in the binder.

As a property owner, I've become active in this issue due to the disposal injection well from my area. I know we need energy resources, yet we need to alleviate any risk of contaminating our water sources. I've had friends lose water due to contamination from an open containment pond.

As a librarian, I've tried to sort through all the information. Protecting our water resources should be our first priority with all the news of water shortages. My first question to a Penn State engineer and author was, what could happen if a disposal injection well dumps waste? And he demonstrated, when you pressurize anything, something eventually has to give. In our area we found old abandoned gas wells near our homes with the potential to leak waste, coal mines in the proposed disposal injection well sites connect under many surrounding areas, and other geological findings that you'll see in this binder that this is too risky.

CHAIR:

Okay, Ms. Marshall, your time is up.

MS. MARSHALL:

Thank you.

CHAIR:

We do have your comments for the record.

MS. MARSHALL:

Yes.

CHAIR:

Thank you. The next speaker is number 24, Donald Lancaster, followed by Eleanor Horvath.

MR. LANCASTER:

I don't have anything.

CHAIR:

Then the next speaker is Eleanor Horvath and then we'll take a five-minute break. Is Eleanor here? No. All right. Then we'll do the five-minute break.

15 SHORT BREAK TAKEN

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CHAIR:

break. We're going to continue with the hearing. The next commentator is Richard Calabuig followed by Linda Spar. Richard? He's not here? Then we'll go to the next commentator, Linda Spar. If there's no Linda, we'll go to the next speaker, which is Denise Garrott who will be followed by Tracy Lassiter.

MS. GARROTT:

I'm afraid of a lot of things. My name

is Denise Garrott and I live on a farm in the middle of nowhere in Armstrong County, outside of a town called Cowensville. I live in a really beautiful place today.

My focus is on the lack of DEP regulations to protect public schools from Marcellus Shale activities. Pennsylvania's Act 13 covers the regulations that guide the gas and oil industries drilling and fracking into the ancient radioactive Marcellus Shale. This highly industrial activity imposed statewide by Act 13 should not be allowed to put our children in harm's way.

In 2011, Governor Tom Corbett and the General Assembly cut a billion dollars from state education funding, leaving district education budgets on shaky ground and clouding judgment. Gas lease deals can promise replacement of that missing money. And we are seeking gas drilling --- and we are seeing the gas drilling corporations getting DEP permits to drill next to public schools.

But can you believe that DEP does not have a single regulation that deals with drilling or fracking near schools, daycare centers, hospitals, senior living centers or any vulnerable population?

No special monitoring or testing is required. Nothing

about the soil where the children play sports and roll in the grass. Not for water that's especially susceptible to methane and chemical migration. Not the air from the diesel trucks or equipment or well flaring. And not for any possible chemical contact by students or the teaching staff.

Thousands of industrial compounds have never been tested for their risk to human health. No driller is required to reveal what chemicals they're using or when. No one is required to warn parents. No one has to monitor or test. Risk assessments haven't even been performed.

We know that many of these chemicals are carcinogenic or neurotoxic. The Marcellus Shale layer itself is radioactive. Radon can escape at any time you punch a hole in the ground and a well is drilled. And radon is the second most common cause of lung cancer says the American Lung Association.

You can drill next to a school. No trained health expert is required. No toxicologist or even special training for school nurses. Nothing's mandatory. No school safety protocols or evacuation plans are suggested or discussed. But who would provide lifelong care for teachers or children if they are harmed?

Our most vulnerable populations should not be used as a shield by the drilling concerns.

Neither the Health Department or hospitals are providing public health information on fracking. We don't send our children to school to expose them to industrial chemical risks.

Currently, drillers can follow the same rules for fracking near my outhouse or barn that they use for fracking right next to an elementary school.

CHAIR:

One minute, Ms. Garrott.

MS. GARROTT:

A setback of a few hundred feet, nothing to protect our children, not one single rule. But according to PennEnvironment's study in 2011, there are over a hundred daycare centers, 14 schools within a mile of current drilling activity. And from January 2008 to June 2010 alone DEP reported 241 violations of environmental regulations at Marcellus wells within two miles of a daycare facility, and 40 of those violations were within two miles of schools. And that's not counting even the trucking and traffic violations.

The largest checks I write every year are for my property taxes and my school taxes. And I

wonder why you would permit endocrine destructors and radiation and carcinogenic exposure to harm our children.

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Ms. Garrott ---.

MS. GARROTT:

It certainly also shows a link to toxins, exposures in autism, diabetes, asthma, heart attack and even psychotic behavior.

CHAIR:

I'm sorry, Ms. Garrott, your time is expired. We do have your comments for the record.

MS. GARROTT:

I'm sorry. We could establish a one15 mile setback.

CHAIR:

The next speaker is Tracy Lassiter, followed by Tina Palmer. Tracy?

MS. LASSITER:

My name is Tracy Lassiter. I received my Ph.D. here at IUP and my research is on the oil and gas industry. I didn't prepare remarks. I'm speaking sort of extemporaneously, which means hopefully therefore a lit bit more briefly. But what I wanted to talk about today was my concern about the

alternative storage of fracking material.

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COURT REPORTER:

Can you spell your name for me, please?
MS. LASSITER:

Lassiter, L-A-S-S-I-T-E-R.

COURT REPORTER:

T-R-A-C-Y?

MS. LASSITER:

Yes. I can understand why industry is resistive to regulation. And one only needs to look to history to see the consequences of that lack of regulation. Well, we don't need to look very far back in history to see what happens when industry has no regulation. We can look at my home state of Ohio, which recently, in Youngstown, suffered a series of earthquakes due to deep well injection of fracking material. After a panel was convened to study the impact of the deep well injection and the correlation to earthquakes, one can determine that there was no regulation against causing earthquakes. And so Ohio resumed deep well injection of fracking material. So of course one would expect a company to be resistant to regulation when it would put that things like earthquakes were occurring.

But part of the concern, part of the

worry is that we don't really know what we're up against. It's hard to trust industry rhetoric when they say they're working for the interest of the national security, yet they sell our resources for international consumption and don't stockpile it for domestic future use. It's hard to trust that the industry is not working with other organizations like the Fish and Boat Commission that have worked out a way to sell Pennsylvania lake water in the use of fracking industry practices.

It's hard to trust the rhetoric that says that this is okay and safe, and there has never been an accident when we don't know what chemicals are even used in the fracking process due to industry secrets of what recipe is actually in the fracking chemical compound. It's hard to trust industry rhetoric that everything will be okay when physicians have gag orders on them for what chemicals people --- patients were exposed to that they then in turn must treat.

So until organizations like the Southwest Pennsylvania Environmental Health Project and other medical organizations have determined what are safe levels of exposure to these contaminants and carcinogens, until we know what we're actually up

against, how can an open pit full of chemicals possibly be something that is safe? Because the rhetoric of the industry says so? Thank you.

CHAIR:

her.

Thank you. The next commentator is Tina Palmer, followed by Martin Resick. Is Tina here? Is Martin here? Martin? Okay. The next commentator is Victor Gressick, followed by Melissa Troutman. Is Victor here? Is Melissa here?

MS. TROUTMAN:

I am.

CHAIR:

Okay. Then Joshua Pribanic will follow

MS. TROUTMAN:

the fish. I was born and raised in Potter County,
Pennsylvania and I currently reside in Allegheny
County. So I grew up where the Allegheny River starts
as a bubble out of the ground and now I live in the
county where it ends, so that's kind of cool.
I'm going to be talking --- focusing mostly on water,
surface water, but also groundwater a little bit just
because they're all the same in the water cycle.

But first I'd like to comment about

1 surface development in general, given the welldocumented impact of oil and gas drilling and 2 3 hydraulic fracturing and the expansive nature of the unconventional industry in the Commonwealth. I once 4 5 heard Dr. Terry Engelder, the Godfather of the Marcellus Shale, say that the full scale 6 implementation of this oil and gas rush over the next 7 8 decade or so will consume about 50 percent of our 9 resource-rich commonwealth, 50 percent, and yet --- at least I'm not aware of any comprehensive plan about 10 how the state will orchestrate this consumption of land and also of water, soil and our fossil fuel 12 13 resources.

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No overall plan. But, hey, who needs a plan when you have world class regulations. quote from the proposed new rules for a second. A person who wishes to document the quality of a water supply to support a future claim that the drilling or alteration of the well affected the water supply by pollution may conduct a predrilling or prealteration survey in accordance with this section. And that's Section 78.52.

This regulation in particular needs to be clearer about what a predrilling or prealteration survey is. For example, is it one test? Is it two

tests? Is it four tests taken throughout the year, given that seasonal high groundwater tables fluctuate? I spent two years interviewing Pennsylvanians whose water has been contaminated since nearby oil and gas drilling. I did so professionally, as a journalist, for an investigation that led to the documentary, Triple Divide, which I will provide.

Let's see where I was here. Oh,
evidence from our findings, also in the film, deals
with all of the key provisions of this proposed
regulation. And here's what we found regarding
predrill testing and surface water protection.
Predrill tests conducted on private water supplies by
operators before drilling and fracking have been
allowed to be dismissed during water contamination
investigations by the state.

The documentary covers two such cases, but our investigations found others. In one case, a predrill test was dismissed because it was a one-time test rather than a series of tests. And another predrill test failed to protect a water supply owner because her complaint came six months after the new well was drilled.

The industry has been allowed to provide an alternate source of water for some impacted

homeowners off the books, so to speak. DEP, in other words, makes a determination that the company is not responsible for the polluted water supply, and the case is not counted as part of the total number of water contamination cases in the state, even though they have a predrill test that shows their water was clean before and the company did provide an alternate source of water.

Predrill testing is all the documentation there is to protect Pennsylvania water supplies and the proposed regulations under Section 78.52 needs to be made more specific and robust.

As your summary for these regulations aptly points out, Pennsylvania has more water resources than any other state except Alaska. That's right, we do. I mean, we don't learn that in school and I can't remember where I first heard it, but Pennsylvania has more fresh water resources than any other state except Alaska. But that's kind of like Canada, it doesn't sort of count in my book.

Anyway, America is rapidly losing its fresh water sources as demonstrated by California Governor Jerry Brown's recent drought ordinance declaration and the chemical spill in Charleston, which is contaminating its way down to the Gulf of

Mexico. We live in a time when water is going to become the reason for war across the world. And here in Pennsylvania fresh water bubbles out of the ground all over the place so much that I think we kind of take it for granted.

of this regulation is to protect the vast water resources throughout Pennsylvania. But in my opinion, this regulation, as it's written now, no more protects the vast water resources throughout our Commonwealth than like a heavy-duty cardboard box may protect donuts from a black bear.

Finally, I'd like to submit this copy of Triple Divide as evidence of the gross mishandling and blatant negligence, in some cases, afforded our water resources, and of the characteristic inadequacy of the proposed updates to our Commonwealth laws.

And I can't leave without failing to mention that right now DEP and the administration of this state are fighting to prevent citizens from deciding where oil and gas drilling and fracking happen in their own communities. The state is literally trying to usurp our right to regulate development where we live. This is the worst abomination of all; a totalitarian attempt to limit

the freedom, democracy and independence that was
fought for and drafted into the U.S. Constitution
right here in Pennsylvania. And to that I say,
Citizens, it's time to rewrite our Constitution in the
Commonwealth to include the inalienable rights of all
communities to govern themselves and to establish the
rights of Nature herself, without whom we do not
exist.

CHAIR:

Ms Troutman, that's it.

MS. TROUTMAN:

Sorry. Natural gas may be touted as a bridge to renewable future, but who needs a bridge if there's no water. Thank you.

CHAIR:

The next speaker is Joshua Pribanic.

Did I say that right?

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MR. PRIBANIC:

Yes, Pribanic.

CHAIR:

A guy with the last name Pankake, I try to make sure I get it. Following Joshua will be Ron Slabe.

MR. PRIBANIC:

Good evening. My name is Josh Pribanic

and I'm here to submit comments as the Editor-in-Chief of <u>Public Herald</u> and as the co-director of the documentary on fracking, Triple Divide, which my partner, Melissa Troutman, had mentioned. <u>Public Herald</u> is an investigative news nonprofit. And while we advocate for truth and justice for all, we are not an activist organization, academic institution or political entity. We are for truth and creativity in the public interest.

My comments here are mostly my own editorial, but also part of what's in the 90 minutes of Triple Divide, where myself and Melissa Troutman try to find how DEP and the industry are handling the negative impacts of fracking.

I want to first comment on the background and purpose of the proposed regulations. In hindsight, the purpose of the proposed regulations are first an overall admission to the public that fracking is a new technology which needs to be regulated differently --- and I agree with the conventional drill ---.

And secondly, the DEP regulations used to protect the public resources from fracking for the past ten years have been pathetically out-of-date. In fact, the proposed regulations talked about tonight

are stated by DEP to, quote, be on the forefront of the curve for how the Department protects

Pennsylvania's resources. This really does deserve an applause. And you guys have done a fantastic job to put yourselves in the forefront of the curve after the last ten years. However, after what I know about researching DEP's GMI case files, or what's riddled throughout DEP's complaint files, these regulations are nothing more than a freshman level attempt to regulate fracking.

abandoned oil and gas well section. The proposed regulations would require that an operator identify an abandoned oil and gas well within 1,000 feet of their vertical or horizontal well boring, report the findings, then use sensory monitoring of the abandoned wells to alert DEP when and where a problem may occur. So I had to check my calendar on this one just to be sure that we're still in the 21st century, since the sensory monitoring proposed is not something from a mechanical measuring device, but is instead akin to a sniff test by industry workers. A sniff test. Not an air monitoring device. Not a water monitoring device inside the abandoned well, but a sniff test.

It's a proven fact that abandoned wells

of Pennsylvania act as a pathway for both biogenic and thermogenic gases. EPA research dating back to a 1989 study on Class II injection wells found that abandoned wells often communicate with nearby injection wells, resulting in the transmission of contaminants to the surface. These are not problems that can be effectively monitored by sniff tests, even with the great nose of Scott Perry. Gases are invisible. There are 250,000 abandoned wells with cracked casings and cracked cementing along the well annulus. When gases from nearby fracked wells communicate with an abandoned well they'll release into the atmosphere undetected by the new, highly trained visual monitor guy.

The public deserves to have regulations that are, in fact, on the forefront of the curve.

This proposed regulation is nothing more than a hangman solution. I feel it's a reactionary measure and will cause further contamination.

The regulatory solution here is simple. When an abandoned well is located, DEP should plug it. Afterward it can be monitored using the best science available for detecting gas emissions on the surface.

Before I finish I want to read this beautiful passage under Section 78.62 on disposal of

residual waste or pits. It says, disposal of residual waste --- pits. The proposed amendments to this section clarify --- such and such ---. The most important part is; however, residual waste, including contaminated drill cuttings can be disposed of in a pit on the well site.

I repeat for all homeowners in the room with well pads on their property or for wells on public lands, residual waste, including contaminated drill cuttings, can be disposed of in a pit on the well site, aka, it's buried, it's buried without your permission or you knowing about it. But it's fine, since these are required to be buried 20 inches above the seasonal high water table.

So what is it? What are these contaminants. If you look at Triple Divide and we fast forward to Judy's chapter, we find that there is things like iron. You know, it's no big deal.

Manganese is probably in toothpaste; Barium; Benzene; Strontium; Arsenic; Thorium; Uranium or other naturally-occurring contaminants like the good --- you know, that produce radon. So everything's fine. It's not like ---. It's a naturally occurring contaminant, it's no big deal.

So where we have cases where a pit is

1 buried like this and someone finds these --- I'm sorry. What I want to say is this whole chapter in 3 Triple Divide is about Judy Eckert's water supply being contaminated after drilling, and the company 4 illegally buried the waste pit. DEP found out two years later. They didn't issue a fine. They found 6 the same contaminants in the water supply that would 8 be in the waste pit, and had a precrill test showing 9 that Judy's water supply was clean before drilling. 10 So what happened? DEP's investigation 11

didn't do anything, left Judy with the contaminated water supply. And they couldn't hold the gas company liable because her complaint was outside of six months.

CHAIR:

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16 I'm sorry, Mr. Pribaric. Time has 17 expired.

MR. PRIBANIC:

This is American soil, American resources. People deserve better than sniff test regulations. Thank you.

CHAIR:

The next speaker is Ron Slabe, followed by Gerald Smith.

MR. SLABE:

My name is Ron Slabe and I reside at 506
Angelcrest Drive, Upper Burrell, Pennsylvania. And I
am representing Upper Burrell Citizens Against
Marcellus Pollution. Thank you for extending the
comment period, but there still needs to be more
locations added, as the issues before us are too great
and need to be given an adequate hearing.

At Washington's hearing yesterday, as well as today, I was struck by the industry's frequent demand that they not be over-regulated. In so hearing, the recent words of Chief Justice Ronald Castille came to mind, telling us of Pennsylvania's history of environmental degradation, and which he also predicts will surely occur with shale gas extraction. He notes the deforestation and coal mining era, where there was little or no regulation and how the taxpayers of Pennsylvania continue to pay the price today for industry's callous disregard for the environment.

I myself recall how the strip mining industry once said it would be driven out of business if they were forced to restore the soil to its original contour. But forcing the industry to do so did not drive it out of business, and today such restoration is commonplace due to law and regulation.

Henny Penny squawking that the sky will fall with greater regulation. For we know that such industries are concerned first and foremost with the bottom dollar and not about negative environmental impacts. Regulations and additional regulations are an absolute necessity if we are to control the outward manifestations for financial gain at the expense of the health and welfare of the Commonwealth's environment and its people.

In regards to onsite waste storage, we've heard the gas industry again claim that the use of closed-loop systems would be too much of a financial burden. But what is the industry's alternative? Its solution is the existence of open impoundments called frack pits, filled with toxins and cancer-causing agents that pollute through leakage, spillage and evaporation into the air of volatile organic compounds contaminating water, soil and the air we breathe. A member of the DEP has described this as, I quote, the most serious issue we've encountered with pollution, end quote. Both New Mexico and Illinois have either banned the use of open storage pits or required closed-loop systems. The U.S. Interior Department has also encouraged the use

of closed systems and tanks.

Why, therefore, cannot Pennsylvania also be on the cutting edge in banning the frack pit? In spite of the evidence, the DEP's proposed regulations allow for their continued existence and have no provision for banning or even phasing out such cesspools. This is a huge mistake and an unacceptable capitulation to the gas industry. You must correct this and ban forever the frack pit and all its hazardous ramifications.

As I stated yesterday, the burying of drill cuttings and their processing should also be prohibited and cuttings first tested for radioactivity and disposed of properly. Moreover, the burying of pit liners should also be prohibited and their removal and disposal strictly regulated.

Orphan wells should be identified and plugged before drilling can occur, as such wells can be a source of methane migration in the form of groundwater contamination.

There should be no residual waste, such as brine wastewater used on Pennsylvania roadways, since brine can lead to environmental degradation.

Predrilling water testing must be comprehensive. The proposed regulations fail to

specify the parameters for the predrill test of a resident's water quality and leaves too much discretion in the hands of the drillers.

CHAIR:

One minute, Mr. Slabe.

MR. SLABE:

And lastly, all such regulations should apply not only to unconventional drillers, but to conventional drillers as well. Since more and more conventional or shallow well drillers are using horizontal hydraulic fracturing methods which bring them closer to the groundwater, it is imperative that they also be included in all DEP regulations. In this particular case, one size does fit all. Thank you.

CHAIR:

Thank you. The next speaker is Gerald Smith followed by Paul Hart.

MR. SMITH:

My name is Gerald Smith and I'm a resident here in Indiana Borough. Thank you for the opportunity to speak tonight. In 2010 I had the opportunity to lead a coalition of local, state and national environmental groups and over 400 individual supporters on a campaign here in Indiana County to limit gas drilling in some of our county's natural

areas. The coalition formed in response to a Marcellus well that was being dug on one of our closed natural areas just outside of Yellow Creek State Park.

Shortly after our formation, Indiana County formed the Indiana County Natural Gas Task Force to inform the county on best practices and to specifically address the issue of gas drilling in and around places like Yellow Creek State Park. Several members of our coalition were on that task force and are here today.

Through our county Commissioner's office, this task force heard from experts in the natural gas industry as well as folks who study environmental health impacts of energy extraction in general and the fracking industry, unconventional gas industry in particular.

In the end our coalition is pleased that the Indiana County Commissioners issued what I call a gentleman's moratorium on drilling in these areas, the specific natural areas zoned for recreation. Our Commissioners also vowed to get it right. We hope that they do and we're glad to see that provisions from Act 13 that would have tied their hands on getting it right have been declared unconstitutional so that our county can go about the business of

protecting our natural areas. I hope the DEP at some point will see the wisdom of those provisions in Act 13 being declared unconstitutional and drop their suit against it. That's where our county really is and needs our hands to be untied.

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what I knew, people who work in the industry and in our agencies are good folks who care about the health and environment as much --- the health and environment as everyone. One of those speakers of the task force at the time was Chief of Operations of the Beaver Run Reservoir site. That's in Westmoreland County and it sits right on top of the Beaver Run Reservoir. The number of pads, I'm sure you're all familiar with it. It's a pretty large site. It sits right on top of the reservoir drinking water for over about 100,000 people, about 400 yards or less from shore. An operation like it may not have been allowed under Act 13.

When I asked him what concerned him the most about the operations, where a rare but possible catastrophic failure could lead to major health consequences, environmental consequences, proposed downstream, what he said was what happens to the waste fluid. There at that operation, Consul operation

team, they were following best practices and I hope they continue to follow those best practices, particularly under the watchful eye of DEP and actually the folks in this room.

But I've also learned that there are bad players in the industry who might skirt those best practices to save a buck. What we need is clear regulations, strong regulations, from you and strong enforcement of those regulations. Some of the things that need to --- appreciate the effort of regulations that you've started. The open water frack pits are a clear concern for both the industry and folks in health fields across environmental fields. Abandoned open water frack pits seems to be the right idea.

The issue of onsite burial of cuttings and waste pits, it seems to be, you know, this industry comes into an area and they tell us that they're going to leave it better than they do. And on the surface a lot of times that's what happens. We've seen lots of recovered sites that they look great. However, under the surface they were allowed to bury these drill cuttings and it's a real problem. So those need to be transported offsite.

And, of course, identify abandoned --- open abandoned gas wells. We have upwards of 200,000

unidentified orphan gas wells across the state. These cause major problems for future gas drillers. And so these things need to be identified and plugged or sealed and that responsibility would be on this industry.

Thank you much. Some comments are submitted here online and I appreciate the time.

CHAIR:

Thank you. The next speaker is Paul Hart, followed by Burt Waite.

MR. HART:

opportunity. My name is Paul Hart and I'm residing at 754 Nibert Road here in Indiana, Pennsylvania. I have 28 years of experience providing wastewater services for the natural gas and oil industry. I currently manage four facilities in Pennsylvania that provide recycling and disposal services. We're the only business in Pennsylvania that has successfully processed natural gas well wastewaters into distilled water salable salt products.

The proposed revision to Chapter 78 has not complied with the laws of Pennsylvania. It does not address the needs of small business. DEP has not conducted the required determination of impact on

small business. Most of the conventional oil and gas operators in Pennsylvania are small businesses within the scope of Act 76 of 2012. The regulatory analysis fails to address the requirements of the Act, which amended the Regulatory Review Act to require an economic impact statement and regulatory flexibility analysis for any proposal, proposed regulation, that may have an adverse impact on small businesses.

I have spoken personally to many of the operators. And their internal review indicates that these proposed revisions will have a dramatic impact to their businesses. It would also negatively impact a billion dollar investment and over 20,000 jobs, as well as domestic energy production.

A few natural gas operators have told me proposed regulations will cause them to not only stop drilling new wells, but evaluate continued operation of existing wells. This Act expressly recognizes that small businesses are critical to Pennsylvania's economy, and that uniform regulatory and reporting requirements can impose unnecessary and disproportionately-burdensome demands, including legal, accounting, consulting upon small businesses with limited resources.

DEP is required to consider the

establishment of less stringent compliance requirements for small businesses, performance standards to replace design of operational standards, as well as an exception of small business for all or any part of the requirements contained in the proposed regulation. The proposed changes to Chapter 78 do not adequately address the significant differences between conventional and unconventional exploration and production.

The industry met with DEP on numerous occasions to address this issue and is willing to provide information resources necessary to develop best management practices appropriate for the unique conventional industry.

Recently the Technical Advisory Board conducted workshops. No changes to the proposal were made at the TAB workshops that included recommendations in the following areas based upon their technical merit: public resource protections associated with the species of special concern; waste management well sites as it concerns centralized impoundments on the onsite processing; prehydraulic fracturing assessment, including identification of abandoned, orphaned wells, and water supply restoration standards.

The proposal unreasonably impacts conventional oil and gas operations without a compelling environmental justification. The State should conduct a reasonable cost-benefit analysis to determine if the cost to the industry is justified by real and known benefits of compliance with the Chapter 78 revisions. It is my opinion that the cost far exceeds the value of real benefits versus perceived benefits.

CHAIR:

One minute, Mr. Hart.

MR. HART:

The Commonwealth will suffer the result of these requirements. Provisions will likely lead to dramatic reduction of investments, exploration, dramatic reduction in production of natural gas, lead to an increase of plugging or abandonment of wells. Provisions will likely lead to dramatic decrease in jobs associated with the conventional wells.

My recommendation is simple, that the state authorities stop the approval of the current revision of Chapter 78, require DEP to conduct the necessary review of expert testimony to make changes to Chapter 78 that are in the best interest of the Commonwealth. Thank you for your time.

CHAIR:

The next commentator is Burt Waite, followed by Mike Graham.

MR. WAITE:

East Adams Street, Cochranton, Pennsylvania, and I thank you for holding these hearings to allow open and public comment on the proposed changes to Chapter 78. This is an important part of the regulatory process, And the Department, on behalf of the EQB, has more than met their obligation in this regard. Well done. And I thank you for adding two more hearings and extending the comment deadline to March 14th of this year.

We have an almost unbelievable opportunity in Pennsylvania to become a leader in energy development. Marcellus Shale and other unconventional gas plays have an opportunity to reinvigorate our economy and our ability to compete on a global scale by developing relatively clean, domestic natural gas. And I say relatively clean, because all energy sources, be they fossil fuels or so-called renewable energy sources, come with an environmental cost.

Pennsylvanía can, again, compete as an

industrial manufacturing center. The jobs that have been sent overseas because of our desire to pay American workers a fair and sustaining wage, has crippled our ability to compete for many manufacturing jobs. And the opportunity is now before us to bring these jobs back to the U.S. and back to Pennsylvania, not by cutting wages and benefits, but by offering safe, reliable and affordable energy. This is a glimmer of hope I see for our children and grandchildren to deal with the dept legacy of my generation and we must not miss this opportunity.

But, and this is important, but we must not squander this opportunity at the expense of clean air, clean water and a healthy environment. And that requires a strong and protective environmental regulatory program which I believe now exists in our Commonwealth. And I firmly believe the development of this vast energy resource, both from conventional and unconventional wells and the protection of the environment are not mutually exclusive.

Because the Marcellus Shale with the emerging technology to drill long, horizontal well bores was new to Pennsylvania, it was right and appropriate and necessary to generate new environmental regulations to manage this monster we

call the Marcellus Shale. But the regulations must not go so far as to hinder our ability to compete with other states and the rest of the world. We must not drive those that are willing to invest in energy development in Pennsylvania to other parts of the country. We cannot afford to lose this opportunity.

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

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

Section 78.51, water replacement. The

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

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

Section 78.62 drilling pits. The regulations of a conventional drilling --- of a conventional shallow oil drilling pit that is often less than a tenth of an acre in size in the same manner as a holding pond at an unconventional site that often exceeds several acres is inappropriate. This section alone demonstrates the overwhelming need for separating the regulatory requirements of conventional and unconventional wells.

I have other comments that will be provided in written comments in the future. And thank you for letting me speak.

CHAIR:

Thank you. The next speaker is Mike Graham, who will be followed by Rich McComb.

MR. GRAHAM:

I'm Michael Graham. I reside at 7880
Steubenville Pike, Oakdale, Pennsylvania. The few conventional oil and gas wells I own and operate are located in Armstrong, Butler, Allegheny and Washington Counties. Some of the wells I own and operate were drilled before 1900. These wells have provided a valuable economic resource to the owners, operators, employees and associated businesses for a substantial period of time. Some of these wells still provide free gas to homeowners in accordance with the original leases.

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

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

produced small amounts of oil and/or gas will not withstand the cost of additional regulations.

Regarding shallow conventional oil and gas wells. The concerns I have are the references to Act 2 procedures for cleanup, spills, at oil and gas well sites, and that these procedures will impose excessive and unnecessary costs to the oil and gas operators and are not justified by clear environmental benefit.

The obligation to return land to the approximate original condition that existed prior to well site construction disregards the ability of operators and landowners to agree on site restoration.

The requirement for PPC plans creates an unnecessary burden for small operators in that plans would be similar for each well site, yet frequent updating would be required for the plans to be meaningful.

The pit requirements for slopes on drilling sites for conventional oil and gas wells, that they be no steeper than two to one --- two horizontal, one vertical --- are for sites that contain a small amount of fluid --- less than a hundred barrels generally --- and are used for a short period of time. And the requirement of the two to one

slope would result in a substantial --- larger area of disturbance, greater costs without benefit.

The requirement for conventional operators to retain soil scientists for certification of pit bottoms relative to the seasonal groundwater table adds another cost for operators. A performance standard would be more appropriate.

The reporting and remediating of releases is respected to protect the environment. However, modifications are required to eliminate unnecessary costs to the operator. The quantity of releases and various alternatives for remediation need to be considered.

Underground or partially buried tanks that store brine, according to the regulations, have to be identified and an exemption is required to be requested to preclude the removal within three years. This is a significant concern, given the reason that most buried or partially buried tanks exist. These tanks have been sited in this matter to accept gravity flow production storage tanks, provide resistance to freezing and for surface right-of-ways. Removal of these tanks results in many additional costs, including tank removal, likely replacement damage during removal, new tanks, secondary containment,

larger use of the surface and concerns over how the production water is kept from freezing.

CHAIR:

One minute, Mr. Graham.

MR. GRAHAM:

The electronic notification submittals and reporting creates a burden for small producers which do not have access for such transactions. Hard copy submittals need to be permitted over time. Most producers at their own discretion can choose to submit information electronically. The small, independent producers have been subject to an avalanche of changing regulations over the past several years, such as the revisions in Chapter 78 in 2010, the passing of Act 13, the attempt to raise bonding amounts, raising permitting fees, expansion of permit application requirements for ESCGP 2 --- 1 and 2 --- no land disturbance until a permit is issued, mechanical integrity assessment, spill policies and now Chapter 78 regulations for oil and gas wells, Subpart C.

The ability to drill new conventional wells will be reduced due to increased (sic) resulting of these regulations. Existing wells will be less profitable to operate and abandoned early. The result will be a loss in crude supply to the refineries,

which currently operate at less than capacity. Jobs will be eliminated. Affiliated business, free gas consumers and royalty owners will be impacted. Thank you.

CHAIR:

Thank you. The next witness is Rich McComb, followed by Samuel Taylor.

MR. MCCOMB:

My name's Rich McComb. I'm a fifth generation oil producer from 2240 McComb Road in Stoneboro, Pennsylvania, 16153. I've worked my entire life in the oil fields of Pennsylvania. I've pumped conventional rod line wells with powers to rapid wells to Marcellus wells with electronics and automated valves and monitoring equipment. And other than the fact that they're both a hole in the ground, that's about the only thing that's in common between the two, from the drilling to the production to the size of the companies that are operating wells are totally different.

I respectfully ask this Board to recommend that either a separate set of regulations, or if that's undoable, a subsection within the new regulations, be established to separate conventional from unconventional wells. There are thousands of

conventional wells already drilled here. Some of the wells I've produced are close to a hundred years old. They're here, they're drilled, they're fracked, they're shot and they're in production. In many cases the operators of these wells have produced countless barrels of oil and mcfs of gas.

It makes no sense to crush the operators of these wells with added costs associated with regulations that are unnecessary and in many cases complete overkill. If anything, making these existing wells unprofitable would actually be doing more harm than good to the environment, as many of these wells would fall into disrepair or be abandoned. The citizens of Pennsylvania have an interest in keeping the existing wells that we have here operating and profitable.

Secondly, we all know the elephant in the room here tonight is the responsible disposal of production water. It's my belief that this issue, along with many others facing operators and the Department, can only be resolved by both parties working to come up with responsible solutions that both parties can live with.

Furthermore, I'd request the Board recommend a Pennsylvania Grade Crude Development and

Advisory Council be established. This group should be comprised of conventional well operators and Department people who will be charged with developing plans to increase Pennsylvania crude production in order to more adequately supply our refineries, and to explore and develop responsible, economically-viable production water disposal options.

Third is my belief that the Board should advocate an onsite disposal of drill cuttings for conventional wells, in the drilling, and in particular, the reworking, of existing wells. By sand pumping or reworking an existing well we're able to extend the life of that well with minimal environmental impact. The pit size and slope need to be smaller for conventional wells. And in my opinion, there's no reason for the changes that are being proposed.

In conclusion, I believe it is critical for Pennsylvanians to protect their own. People working on conventional wells live in the state. And the notion that we are polluting is misinformed, ignorant of the facts and offensive to people who work in the industry. Our industry's over 150 years old, and the area in which it was started was drilled without any regulation. More crude was spilled than

was shipped to the market, yet today it's a magnificent state park, enjoyed by many.

Now, no one is suggesting that no regulation is needed, however, people in this industry only request we have a set of regulations that allows us to stay in business and produce Pennsylvania crude for another 150 years. Thank you.

CHAIR:

Thank you. The next speaker is Samuel Taylor, followed by Tom Miller.

MR. TAYLOR:

Thank you. I don't need a microphone. I'm sure everybody will hear me fine. I'd like to thank you for this time. I don't represent an oil company. I am not a Ph.D. I am not politically-correct. I am a roughneck. I work on the drilling rigs. All right? I've drilled conventional wells since 1988.

I lost my job when this gentleman over here got his moratorium for fracking. It had nothing to do with me, but I don't have a job. What I want, my comment to you, what this I thought was is, let's get our act together, get something passed and figure out what's what. Quit comparing apples to oranges and go apples to apples.

Conventional drilling is not fracking. We're punching holes straight down in the earth, usually about 4,200 to 4,400 feet and coming right out. We do it in a week. We're not there for 18 months or nothing like that. I want my job back. I've been out of work for two-and-a-half years, you know. I don't want to lose my home. I love being a roughneck, you know. That's what the life is about and that's all I want is you guys to get your acts together and let me get back to work. Thank you. That's it.

CHAIR:

Our next speaker is Tom Miller, followed by another Tom Miller. Two Tom Millers in a row.

MR. MILLER:

I'm the Tom Miller that lives at 309

Station Avenue, Indiana, PA. And my remarks will take us in a different direction from what we've been hearing tonight, because it involves another party of influence not really mentioned here before.

In order to minimize the risks of damages incurred from unconventional gas and oil operations and to require restitution for any mishaps be made only by the parties benefiting directly from the activity's profits, it is proposed that both

parties to the lease agreements, lessee and lessor be held accountable for resolving problems, fines and penalties and remediation expenses on a proportional basis, fractional basis. Currently only the operators are held responsible for any damages while lessors continue to be treated as mere sideline spectators with no accountability for what happens.

In support of this second party, the lessor, be made responsible for sharing in these expenses, we should recognize that they are the ones benefiting financially from the operations, that's A. B, enabling the operations to occur in the first place, along with selecting the operator. C, they're in a position to set the contract terms for how best practices are to be implemented. And D, they're in the best position to monitor operations and report any problems promptly, or as an alternative, permit others access to their property to do the same on their behalf.

There's nothing new or unique or novel about this. Just as established law holds certain parties, for instance business partners, lawyers, landlords and homeowners, just as the law holds these people liable for the actions of those they have dealings with, the same principle can be put to good

use here. For instance, since lessors would want to minimize their exposure to the potential risk and losses from shale gas activities, they would have a strong incentive to be more cautions and conscientious about addressing items B, C and D, you know, who they retain as the operator, who they sign a contract with, what are the terms of the contract, and paying attention to the operations, B, C and D.

Whatever amendments the EQB recommends to DEP for improving the safety of unconventional shale gas and oil development, these amendments will be made more effective with the active support and cooperation of those property owners. Just as an addon to my prepared remarks for purposes of negotiations to get negotiations started, what type of percentage, proportional amount, provided amount, that the property owner should be held liable for, for fines and damages to start the negotiation, we could start at 12-and-a-half percent. For those property owners who don't want to negotiate, start at 50 percent.

Thank you.

CHAIR:

Thank you. The next speaker is Tom Miller, followed by Lee Schweitzel (phonetic).

MR. MILLER:

My name is Thomas A. Miller. I am a fourth generation oil producer. I live at 560 Route 16 South, Olean, New York. I am from New York, but the Pennsylvania oil field extends into New York State. If the refineries and supporting industries go down, I go down, too.

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

The oil produced by this industry, Penn Grade Crude, found only in Pennsylvania and 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, as well as high-quality lubricants.

Besides being direct employment for

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

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

When applied to conventional wells, many of the rules are actually environmentally counterproductive. For example, why is it necessary to carve a highway into a well location when not much

more than a cow path is needed. The enforcers appear to be driven more by the desire to issue citations and show who is boss than anything to do with actual environmental benefit. The purpose of the DEP should be to help the industry to operate in an environmentally-sound, efficient and productive manner, not to harass them to death.

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

When the big corporations were no longer in the picture and 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 the hard-working little guy trying to

make a living is a felon for discharging gallons of produced water, which is often beneficial to the vegetation, by providing traces of nutrients.

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

If the Penn Grade Crude production industry is destroyed, not only will it be the loss of employment and prosperity to many, but a tremendous source of the valuable resource will be lost that may never be regained.

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

Quality Board, I ask that you base your decisions on truth and justice and not on narrow-minded opinion.

Thank you.

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24 25 CHAIR:

The next speaker is Lee Schweitzer, followed by Richard Bloom. Is Lee here? Is Richard

MR. BLOOM:

My name is Richard Bloom. I'm from 181 Cole Road, Ebensburg, PA, and I'm here as a private landowner. And I want to thank you for the chance to testify and I apologize for keeping you up so late. am both a citizen deeply worried about our changing climate and a landowner anguishing about whether or not to accept a gas lease.

As a retired school teacher, I have studied and read about these issues for years. I believe that we need natural gas, not as an additional fuel that we can waste, but as a clean fuel to reduce air pollution.

And this should be coupled with a plan to increase our use of renewable energy. I also believe that fracking is not a danger to the groundwater in our area where the Marcellus Shale is located 5,000 feet below our aquifers, although I do think that the handling of the wastewater at the surface has created problems. Although I'm not as

sure that the fracking is as safe in shallow formations to the west, but around here it is.

On the other hand, while I think that most companies are trying to do a good job, many have cut corners or relied on older techniques in order to help make a profit. And that has created problems with wastewater spills, contamination of streams and wells, as well as an erosion of public trust.

I think that the companies that have held those strict set of guidelines, like the performance standards put forth by the Center for Sustainable Shale Development, that they could safely drill, bore and produce natural gas profitably in our state. This would benefit our local economy as well as our state.

I worked for DEP back when it was called DER, and I know the state inspectors are mostly hard-working people trying to do a good job, but they need clear rules and regulations to enforce. I also believe that gas companies are mostly trying to do a good job, and they also need clear rules and regulations to help them stay within the law and to keep less careful companies from having an economic advantage.

The DEP has proposed these changes and

I'd like to comment just briefly on a few. First, I hope that these changes will strengthen requirements for predrilling and post-drilling testing and reporting for the water sources. Past reporting problems have led to the appearance of a cover-up. There needs to be more transparency in this area.

Secondly, there seems to be a lot of variation how fracking wastewater, drill cuttings and other potentially hazardous materials are handled. I note that these changes will standardize the rules for handling these materials.

Open pits seem to invite public perception of problems, whether or not it is real. And there's always chance of leakage in an open pit. The rules should require that all waste handling be in closed systems, including brines that might otherwise be spread on roads.

And processing these wastes should be required to follow best practices in a transparent manner that ensures the public's confidence.

Materials that are toxic should be handled according to federal regulations for hazardous substances, even if the federal law exempts this industry. Tightly regulated handling and processing and treatment of these wastes in the long run save the companies money

and increase the public trust of an industry that has often been viewed as untrustworthy.

Third, I believe the DEP needs rules that will help them properly identify and monitor all of the orphaned and abandoned and active wells in the state, not only to reduce the chance of accidents when old wells interfere with new wells, but to help identify old wells that might be sources of pollution and potentially any that might pollute the natural gas, both as a safety issue and to help contain a powerful greenhouse gas.

Finally, I also hope that the DEP is proposing standards on the amount of methane that is allowed to escape during the drilling and production phases of these wells. It seems ridiculous to allow valuable fuel to escape, especially when it's a powerful greenhouse gas that severely reduces the clean image that this industry is trying to uphold. Thank you.

CHAIR:

Thank you. The next speaker is Brian Cope. Is Brian here?

MR. COPE:

Hello. I'm Brian Cope. I'm from White Township, 1020 Old Route 119. I'm from here. I'm a

fourth generation Western Pennsylvanian, love this place, grew up skiing on bony piles and not questioning the types of industry here.

I came back in 1997 and realized that I want to try to protect this place that I loved, you know. That's what we're doing here this evening. I'm part of the Coalition for a Healthy County as well as I was also on the Marcellus Shale Task Force.

Just share with you a couple of the good things that have happened since people have been concerned over the deep well Marcellus drilling. Well, one really, really good thing is that up until 2010, I believe that water was being fairly regularly diluted.

Wastewater was being basically diluted into Two Lick (phonetic) around the Josephine Plant. And, you know, since they found that there's high levels of radium in there and such. And there's still, I think, a lot of radium ---.

And so that's a huge problem. And I think that became ---. There was a gentleman's agreement to no longer do that after that period of time, after there was a public uproar. So I feel that, you know, very, very strong regulations are needed. I feel that a lot of ---. There's a lot of

good people in the industry. There's mostly good, hardworking people in the oil and gas industry. But there are bad actors. And I think, you know, the DEP needs to use the strong reg --- I'm sorry. The DEP needs to act strong on regulations as possible, okay, because of the bad --- the bad actors, the few bad actors that can contaminate water supply.

I want to give you an example of a story that someone told me outside of Bi-Lo here in Indiana. He told me that back in the ---. It was actually back in the '80s, drilling operation was drilling a well up above his house. And he walked up one day with his dog and he noticed they were draining the settling pond and they were spraying the water down into the adjacent hillside. He said a couple of months later ---. His wife drank a lot of water, spent all day at home and drank lots of water. And the water was --- had this foamy stuff in it. And it turned out his well was bad and had chemicals in it and such.

And, you know, he kind of feels that it was directly related to them spraying the hillside, draining the pond. And so that's just ---. And a year later his wife --- you know, her belly became distended and it turned out she had stomach cancer and she died. So, you know, two children lost their

mother and he lost his wife as well. So that's just one of the horror stories. And there are horror stories people are enduring right now up in the northern counties and such. And I think we need to take all of those into account.

And thank you so much. I appreciate you making the effort to come here and propose these regulations. I really appreciate it.

I am going to ---. I would like to just submit the proposed changes to Pennsylvania's oil and gas regulations that are supported by Berks Gas Truth; Clean Water Action; Delaware Riverkeeper Network; Earthworks; Clean Air Council; Damascus Citizens for Sustainability; Sierra Club, Pennsylvania. So thank you so much.

CHAIR:

Thank you. He was the last registered commentator. Is there anybody else here that would like to speak?

20 OFF RECORD DISCUSSION

MS. LOOSE:

Hi, thank you. My name is Michele. I live in Homer City, Pennsylvania, a few miles up the road. I'm here on behalf of my family. I am an environmental advocate, but I'm also an advocate for

the industry. My husband works in the coal industry, and I live by a coal plant and stuff, I mean, I see both sides of this. And I think it's important that all of you ---. There's a lot of bitterness tonight on behalf of the industry people, anti-environment, and you're not anti-environment, but, you know, I hear a lot of snickers and comments and laughs and stuff whenever --- when people are coming up here and talking about the environment, because environmentalists can be really silly sometimes and not really considering some of the benefits of the industry. So I think if we all can work together, that would be really great.

And I don't understand the whole, you know, Chapter 78. I didn't read every single word and I don't get all the technical jargon, but I do know that clean air and clean water is very important. I have some ideas about the impacts on our health due to deep well drilling. You know, we are so lucky. We're so blessed in the state to have the water resources that we do, but the problem with that is that so many of our waterways are already contaminated by previous industry.

You know, we live in Homer City. Our Yellow Creek that runs right through our town, I mean,

I won't even let my dog drink out of it. I won't let my son play in it. He's like mommy, I want to go look at the fish and bugs and let's go catch bugs. And I'm like, there aren't any bugs, the water's dead, the water's sick. You know, then it makes me sad. They do, you know.

And you look around at our natural environment here. We live in a beautiful state. We live in adjacent counties and we see such a history of industrial abuse, whether just by negligence or ignorance or by the will of uncaring energy corporations. But coal has left its indelible mark on our waterways and on our air. And taking great strides to remediate these impacts are lots of environmental organizations that, you know, while we can get a little bit fundamental sometimes, we do mean well, and we do care about people, too.

You know, I just think if we allow the open wastewater pits --- from fracking, you know, all these painstaking conservation efforts are going to be in vain and then we're going to have to --- you know, my son is going to have to tell his children and his children and their children, I'm sorry, you know, you can't even stand by this water because you could die from being exposed to these chemicals.

I mean, it's not even --- you know, that's no joke; right? There are ways to manage wastewater. Open pits and natural depressions, even used for temporary contaminants should not be allowed, plain and simple. There are certainly ways to get rid of or recycle the water using more sustainable onsite and offsite methods than open pits or direct surface disposal. These pits can leak and they've been known to contaminate groundwater supplies, as well as soil for very long periods of time.

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I have a hard time forgetting the immense revenues and money that's being brought in by gas exploration and production while regular people are being poisoned on the sidelines. I also have a hard time with the, quote, unquote, economic benefits to Pennsylvania that this gas boom is supposed to bring. A lot of people that I've met working in the Marcellus industry are from Oklahoma or Texas or Arkansas. You know, it's different places out west, which I'm glad they have jobs, I really am. And I've met some great people and made some friends out of the deal. But what benefits, may I ask you, is this bringing Pennsylvanians, specifically in the long run, especially if our water resources are degraded to the point of being toxic, as in the case of the extreme

radium concentrations in the Blacklick Creek Watershed.

On the flip side of this is energy production. Like I said, we need the jobs. You know, do we all use energy? Absolutely. We have a plug in and turnon lifestyle and we want to support but there are ways to take care of that, take care of our environment as well as support the adequate energy production that we want and need.

An applicable philosophy founded by the American Indian League of Nations should apply in any situation dealing with our resources of the land.

Quote, in every deliberation, we must consider the impact on the seventh generation, even if it requires having skin as thick as the bark of a pine, unquote.

We must be tough, practical and considerate, not only to people now, but for our future generations. Thank you very much.

CHAIR:

Thank you. Would anybody else like to speak? State your name.

MR. STIAGLITZ:

Joe Stiaglitz, S-T-I-A-G-L-I-T-Z. My name is Joe Stiaglitz. I'm from Pleasantville. I can't speak for everyone here, but I'm chasing the

same dream, hopefully, as everyone else in this room, the American Dream, of course. What is your definition of the American Dream? Peace, prosperity, freedom, the dream to go to school, to a college like this, to get a job, get married, buy a house, have a minivan with a soccer mom sticker on the back window. Everybody has a dream and it probably varies a little bit.

The company that I represent employs six men. We drill wells. We frack them. I plug them. I pump them. I attend them. Ninety (90) percent of our work is oil-related shale. These guys that work for me work today. It's ten degrees out. I ask them to go out and they go out. They're dedicated. They work an average of 50 to 70 hours a week. They've got kids to feed. They've got mortgages to pay. They've got loans on their minivans. They've got dreams, too.

regs, will my employees still be able to chase their dreams? Last week I had four young men call me wanting a job. Let's face it, it's not that great out there. If the EQB and the DEP go through with these regs, will the men I currently employ be out on the street looking for jobs like these four guys and the young man you heard from tonight?

I'm a second generation oil man and am currently working on the third. My father has worked very hard to build our company, and I hope to carry on the legacy of operating our shallow oil wells. If the EQB and the DEP go through with these regs, there will be no legacy for my kids to carry on.

A couple quick comments. I realize there's been no studies on the effect of fracking on the deer population, but the deer that I harvest over my brine pits tastes pretty good. And for you folks that want to end the road spreading, I bet you don't live on a dirt road like I do, where my wife has to dust every day.

I'd like to end with a quote from Ayn Rand. When you see that in order to produce, you need to obtain permission from men who produce nothing, you may know that your society is doomed. Thank you.

CHAIR:

Is there anybody else that would like to speak? Seeing none, with no other commentators present on behalf of the EQB, I hereby adjourn the hearing at 9:21 p.m. Thank you, everyone.

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HEARING CONCLUDED AT 9:21 P.M.

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CERTIFICATE

I hereby certify that the foregoing proceedings, hearing held before Chair Pankake was reported by me on 1/23/2014 and that I Cynthia Piro Simpson read this transcript and that I attest that this transcript is a true and accurate record of the proceeding.

gort Reporter