COMMONWEALTH OF PENNSYLVANIA ENVIRONMENTAL QUALITY BOARD

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IN RE: PROPOSED REGULATIONS FOR OIL AND GAS SURFACE
ACTIVITIES

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BEFORE: MICHAEL D'MATTEO, Chair

HAYLEY BOOK, Member

KURT KLAPKOWSKI, Member

SCOTT PERRY, Member

BRIAN SCHIMMELL, DEP

JOHN POISTER, DEP

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WITNESSES: Raina Rippel, Robert Donnan, Mary Anna Babich, David Freudenrich, Judy Hughes, Joe Leighton, Cynthia Walter, Dr. Helen Hazi, Dana Dolney, Kathryn Hilton, William Thwing, Dorothy Bassett, Briget Shields, Douglas Shields, Gary Hovis, George Jugovic, John Peters, Barbara Grover, Chuck Hunnell, James Rosenberg, Dee Boyd, Jeff Walentosky, Veronica Coptis, Patrick Grenter, Ken Dufalla, Ken Gayman, Gail Neustadt, Louis Pochet, Steve Hvozdovich, Adam Garber, Anthony Berardi, John Walliser, Ron Slabe, Terri Supowitz, Robert Howard, Michael Graham, Joe Judeikis, Ron Gulla, Joni Rabinowitz, Pia Colucci, Lanie Zipco, Donald Henner

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PROCEEDINGS

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CHAIR:

Good evening. I would like to welcome you to the Environmental Quality Board's EQB Public Hearing and Environmental Protection Performance Standards at Oil and Gas Well Sites Proposed Rulemaking. My name is Michael D'Matteo. I am the representative of Pennsylvania's Environmental Quality Board. Joining me tonight are Scott Perry of DEP's Office of Oil and Gas Management, Kurt Klapkowski, also of the Oil and Gas Management Office, Hayley Book of DEP's Policy Office, John Poister and Brian Schimmell, both Community Relations Coordinators at the Southwest Regional Office.

at 6:05 p.m. At this time, please silence all cell phones. In the event of an emergency, there are exit located throughout the doors there. And if we do have an emergency, please exit in an orderly manner. The purpose of this hearing is to formally accept testimony on proposed regulations, Environmental Protection Performance Standards at Oil and Gas Well Sites.

In addition to this hearing, EQB will

hold two additional hearings on proposed regulations on January 23rd in Indiana, PA and on January 27th in Tunkhannock, PA. Information about the specific locations of these hearings is available at DEP's website at www.dep.state.pa.us. There are also copies available of the Citizen's Guide to DEP Regulations. Inside this document you will find descriptions of the environmental regulatory process in Pennsylvania, the Environmental Quality Board's role, how to submit comments and tips for submitting prospective comments.

The proposed rulemaking, which was adopted by the EQB on August 27th, 2013, would amend 25 Pa. Code Chapter 78 to update the requirements related to surface activities associated with the development of oil and gas wells. EQB adopted the rulemaking with the recommendation for a 60-day public comment period and at least 6 public hearings across the state. The EQB has recently added two additional hearings and has extended the comment period to 120 days --- 90 days. It will end March 14th, a total of 90 days.

This represents a heightened level of public participation, as there is usually only a 30-day public comment period held from the typical department rulemaking. Additionally, public hearings

are held on a basis of public interest and for some regulations, there are a few or even no comments or no hearings that are held if there is no interest or no request for hearings. Due to the increased public interest in this rulemaking, EQB has scheduled nine public hearings to allow ample opportunity for public comment on this proposed rulemaking.

The proposed regulatory amendments would address recent statutory changes in Act 13 of 2012 and codify existing practices. This rulemaking would allow for the implementation of key provisions of Act 13, including further consideration of impacts to public resources such as parks and wildlife areas, the prevention of spills, the management of waste and the restoration of well sites after drilling. The proposed rulemaking also includes standards affecting the construction of gathering lines and temporary pipelines and includes provisions for identifying and monitoring abandoned wells close to well sites.

In order to give everyone an equal opportunity to comment on this proposal, I would like to establish the following ground rules. Number one, 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. Number two, testimony is limited to five minutes for each witness. Number three, organizations are requested to designate one witness to present testimony on its behalf. Number four, each witness is asked to submit three written copies of his or her testimony to aid in translating the hearing. Please place two copies in the box marked public comments on the side of the podium and please hand one copy to our stenographer, right here, prior to presenting your testimony. Number five, please state your name, address and affiliation for the record prior to presenting your testimony. The EQB would appreciate your help by spelling names and terms that may not be generally familiar, so that the transcript can be as accurate as possible.

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Because the purpose of the hearing is to receive comments on the proposal, EQB or DEP staff cannot address questions about the rulemaking during the duration of the hearing, but may address any questions after the conclusion of the hearing. 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 EQB on or before March 14th of 2014. Comments should be addressed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA, 17105-8477. Comments may also be emailed to regcomments@pa.gov. That's regcomments, R-E-G-C-O-M-M-E-N-T-S @pa.gov or submitted online through the EQB's regulatory comments system, accessible from the DEP website.

Well as written comments received by March 14th, 2014 will be entered as part of the formal record and considered by the EQB and will be included in a comment response document which will be prepared by the Department and reviewed by the EQB prior to the Board making final action on this regulation. Anyone interested in receiving a copy of the transcript of today's hearing may contact the EQB at (717) 787-4526 for further information.

I would now like to call the first commentator. First commentator is Raina Rippel. You have five minutes; okay?

MS. RIPPEL:

Hello and welcome and thank you. I see

some people here tonight. Again, my name is Raina Rippel and it's spelled in my written testimony and it's R-A-I-N-A, R-I-P-P-E-L. I serve as Director of the Southwest Pennsylvania Environmental Health Project. Our address is 4198 Washington Road, McMurray, Pennsylvania, 15317. And that's also in the written comments.

Again, my name is Raina Rippel, the Director of the Southwest Pennsylvania Environmental Health Project. And on behalf of our team of researchers, public health experts, scientists and community organizing professionals, I am pleased to present the following testimony regarding public health concerns associated with proposed regulations for oil and gas surface activities. I would like to acknowledge, and some are here in the audience, and thank my colleagues, Jill Kriesky and Ryan Grode, for helping to prepare this testimony.

EHP, the Environmental Health Project, EHP was established to respond to individuals' and communities' need for access to accurate, timely and trusted public health information and health services associated with natural gas extraction. Our office, as I mentioned, is located in Washington County, and we primarily serve community members in this area.

I've submitted written testimony and provided additional details on the comments I will give tonight. In particular, it's important to note that all of our comments relate to the fact that EHP has documented significant health impacts associated with certain gas drilling operations including soil, water and air contamination. These are linked directly to many of the proposed regulations.

Health concerns documented by EHP include respiratory, dermatological and gastrointestinal symptoms. While short-term acute impacts are more readily obvious to us now in relation to current levels of gas drilling activity, we also have significant concern for the long-term chronic nature of exposure to health impacts. All of these concerns deserve to be acknowledged and permanently prevented where possible by strengthening regulations as we've noted in our comments.

Specifically, I would like to point out the following: Language in various sections appears directly contradictory to proposed regulations in other sections. I gave some details about that. Once instance of that refers to proposed regulations prohibiting the use of underground storage tanks because these storage structures are more susceptible

to corrosion. I don't think I have to comment too much about the fact that what has happened in West Virginia recently confirms that we are very concerned about containment of toxic chemicals. And that by nature is a public health concern.

And also, language in specific sections is not readily comprehensible, in terms of impacts to nearby residents and for the sake of industrial usage of specific facilities. Again, this is all in my written comments. But I think it's very important, again, from a public health perspective that we're very clear on our terminology.

Some other comments and I didn't take my time --- my timing device, but I want to repeat a couple of things or pull out some things from my written comments. The RCRA, Resource Conservation and Recovery Act, is very important and this is from the perspective of hazardous chemicals which we know the issue is the process and being fully health protective. Most importantly, I want to suggest and strongly recommend the use of brine and flow back water. That does seem to be causing health concerns in some of our patient population, our client population. And so we strongly encourage the use of brine and flow back water to cease in terms of dust

suppression, deicing and road stabilization.

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Also, a significant concern to us from a public health perspective is the land application of tophole water, pit water, fill or dredged materials.

And I want to add onto that, that public health concerns associated with the industry's practice of burying onsite waste pipes --- I'm sorry, onsite waste pits. The potential for toxic chemicals to leak from the burial sites into the ground water presents potential problems for the health of current and future residents.

In summary, I really want to wrap up by encouraging both the Environmental Quality Board and the DEP to take a different approach basically.

Routine federal and state regulatory action limits to police the industry has proven to be less than health protective in our opinion, and it does not adequately account for acute or even chronic exposures from one-time or ongoing releases, spills or accidents. If the DEP were instead to adopt a guiding philosophy of exposure to monitoring and reduction, many of the probable and/or worst health impacts might be avoided or minimized. And that concludes my verbal testimony. Thank you.

CHAIR:

Thank you. Next up is Robert Donnan.

After Robert is Mary Anna Babich and David Freudenrich is third.

MR. DONNAN:

I'm Robert Donnan, 107 Southview Court, McMurray, PA. I'm hoping the panel tonight keeps comments related to the topic at hand. The compressor station meeting up at Burgettstown was a joke.

Okay. You want to modernize the regulatory program. Move the DEP into the 21st Century by creating all documents in PDF format and posting them online. Convert archived paper documents into PDFs to save us all time. Be more transparent and representative of the citizens of Pennsylvania instead of the industry.

Okay. You want to practices to prevent spills and releases. Require tracers to be used in all frac fluid so that water contamination sources can be easily and readily identified, saving extensive lab expenses and legal fees. Provide full water tests results to concerned parties and the public.

You want to ensure the protection of public health safety and the environment. Add provisions for controlling the clouds of deadly silica dust that seem to billow from every frac job. Worker

protect public resources to minimize impacts. Do you remember Dunkard Creek with the decimation of over 20,000 fish and a unique mussel population?

Regulations need to be added to prevent the further spread of Golden Algae and you need to better enforce random withdraws from any stream. Next, put an end to all drilling wastewater dumping into drinking water sources. Tell the drillers, don't ask them.

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Air pollution knows no boundaries, crossing state and county lines from multiple sites. Aggregate air pollution sources when doing any further permitting. Well site restoration reports must include often omitted acreage details. Since our county tax office her in Washington County has had extreme difficulty removing Clean & Green classifications from many of these industrial well sites, some unchanged for as many as five years.

Ensure that all gathering pipelines are included in the ONE CALL 811 system to avoid future deadly accidents during excavation work. Further address bentonite spill prevention since they are such a common occurrence. Regulate and enforce better placarding of tank trucks for emergency responders and the public. Far beyond typical non-descriptive

on well pads and require all drilling waste to be removed and properly disposed of. The term freshwater is confusing and needs to be better defined and classified. Temporary fluid pipelines need much better regulation and inspection since sensitive watersheds in our county have been subjected to repeated spills and fish kills with tens of thousands of gallons in some instance. Increase fines to more appropriately fit the crimes when they occur. This will work as a great deterrent as well.

Road spreading of brine, don't allow even low levels of barium, lead and BTEXes to be applied to the roads since storm drains and culverts lead directly to streams. Finally, increase well bonding amounts from \$2,500 per well to \$250,000 per well and ensure that these bonds also work to prevent orphaned wells with no one left responsible for plugging them. Thank you.

CHAIR:

Thank you. Next up is Mary Anna Babich.

On deck is David Freudenrich and then Judy Hughes.

MS. BABICH:

My name is Mary Anna Babich and I represent Dawood Engineering. We're located 11

Grandview Circle in Canonsburg, PA. Good evening and thank you for allowing Dawood Engineering to provide feedback regarding the proposed rulemaking. Dawood, 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 control development and compliance.

The 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 Department of Environmental Protection's attempts 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 State Review of Oil and Natural Gas Environmental Regulations, the current regulations are well managed and meeting its program objectives. However, we are presenting today to express our concerns 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 our clients in the industry, Dawood works with the operators to ensure worker safety as well as to adhere to best management practices to protect the environment. For example, Dawood works with its operators to design sites that will lessen the area of surface impacts.

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 DEP be required to technically evaluate proposed regulations without pressure from the citizen's groups that may be unfamiliar with or unaware of the scientific facts. Dawood encourages Pennsylvania DEP to revise the proposed regulations in order to establish justified, tactical, scientific and cost effective 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, the quality of restoring or replacing the water supply will be deemed adequate if it meets the standards established under the Pennsylvania Safe Drinking Water Act or is 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 an operator impacts water quality, the operator is responsible for restoring or replacing the water supply. However, the operator should only be responsible for restoring or replacing an impacted water supply to the quality of the water supply before it was affected by the operator.

Section 78.52 states that --- which is abandoned and orphaned well identification, it proposes that the operator identify the location of orphaned or abandoned wells within 1,000 feet measured from the surface above the entire length of a horizontal well bore. Identifying abandoned and orphaned wells is acceptable, however, this requirement must not be open 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 added expense.

In closing, Dawood urges the EQB to recognize the proposed regulations. Modifying and revising the Oil and Gas regulations at this time without providing scientifically sound and clear language would be detrimental to the EQB, Pennsylvania DEF, industry and the citizens of the Commonwealth. Thank you.

CHAIR:

Thank you. First is David Freudenrich. Judy Hughes is on deck. Joe Leighton's in the hole.

MR. FREUDENRICH:

Good evening. My name is David
Freudenrich. I work for WPX Energy, located in
Canonsburg, 6000 Town Center Boulevard, Suite 300,
15317. I am the construction and regulatory manager
for WPX Energy in the Marcellus Basin. WPX Energy is
one of the largest gas producers in the United States.
I think we may be tenth. And is active in many of the
other basins across the United States. We've been in
the Marcellus since 2009. To date, we have drilled
approximately 100 wells in the Commonwealth of
Pennsylvania. Many of our employees have over 30
years experience in the natural gas industry. WPX is
founded on a set of stringent values and we want to be
difference makers in our industry and in the natural

gas industry. Building relationships with a variety of stakeholders while establishing and maintaining trust is a very important value to us.

Our team of experts has been involved actively from the beginning in the public review of the Chapter 78. I myself, personally, have at most of the TAB meetings. 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 of those who have given their time and energy and efforts in vetting the process and the proposed regulations.

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

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

In addition, potentially requiring industry to gain clearance for species of special concern may significantly limit our development opportunities and/or create costly 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 resources as they specifically relate to containing species or species of special concern, an industry has a 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 here the DEP proposed to the industry to replace water supplies to Safe Drinking Water standards. We're proposing that we restore it to existing conditions. In regard to the waste and water management at a well site, the natural

gas industry has been recycling and/or reusing water and minimizing fresh water use for quite some time now, and unfortunately, regulations are forcing operators to rethink this option. In order to increase the amount of water being reused/recycled in the Commonwealth, the regulations need to provide an avenue for the operator, either through permits or DEP approvals, to document, move or reuse water from one site to another. Perhaps, a permit by role. 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 or abandoned wells --- I see my time is up. Thank you for the opportunity to speak.

CHAIR:

Thank you. The remainder of your comments will be in your written testimony. The fifth speaker is Judy Hughes. Joe Leighton is on deck. Cynthia Walker is in the hole.

MS. HUGHES:

Good evening. I'm Judy Hughes, 1515
Yorktown Drive, Lawrence, Pennsylvania. Tonight I am speaking for the League of Women Voters of Pennsylvania, a grassroots organization that promotes

political responsibility and acts on selected issues such as natural gas operations in our Commonwealth.

We thank you for providing this opportunity for informed civic participation.

Our advocacy is based on our statewide positions on natural gas extraction from Marcellus Shale and pipelines. The League supports requiring the use of best practices, comprehensive regulation and adequate staffing across government agencies to provide the maximum protection of public health and the environment in all natural gas operations. We also act based on the Pennsylvania Constitution that provides each of us the right to clean air, pure water and the preservation of our natural resources.

This evening we address a portion of Section C Environmental Protection and Performance Standards beginning with Temporary Pipelines for Oil and Gas Operations. We commend the Department for including these pipelines based on the results of our study in Lycoming County. We recognize that pipelines are the safest way to transport hazardous liquids and gases if they are appropriately installed and monitored with adequate precautions taken. Strict accountability standards as well as monitoring and enforcement are needed by outside agencies, not the

operators. Relative to their construction and ongoing maintenance, we suggest the following changes.

Eliminate the word temporary, as these lines may be in place for decades before the well site is restored due to multiple wells and multiple refrackings on a given site. Replace the words, to the extent practicable with to comply with best practices at the time of installation so the joints and couplings are not incorporated in the crossing of watercourses or ponds into which toxic substances might escape. Shut off valves should not only be installed on both sides of temporary crossings, but also every 50 feet along the line to limit contamination in the event of a rupture. These locations must be included in an emergency response plan and monitored on an ongoing basis to assure working order.

Discharge limits of 1,000 barrels of fluid needed for a shut-off valve are too high, particularly in areas of exceptional quality and high quality streams. Because of varying pressures and the potentially highly toxic content in the lines, 100 barrels would provide greater protection for our waters. Highly visible flagging every 75 feet or less must be supplemented with motion sensitive devices

with light and/or sound to prevent damage by wildlife, off-road vehicles, cross country skiers, hunters and others.

Records of pressure testing and daily use must be available to DEP as well as repairs.

Monitoring the contents must be done to assure to public that flammable materials, even when mixed with other fluids, are not being transported through temporary pipelines. Restoration must be completed to the highest standards to the original state to mitigate degradation and prevent changes to the hydrogeology over the long term.

And finally, the location and contents of fluids transported through the pipelines as well as timelines for use must not only be provided to the Department on request, but automatically to all emergency responders in the area and County Conservation District personnel. At this time, our studies indicate that pipelines will have a far greater impact on our environment than previously assumed. Thus, we urge your thoughtful consideration and thank you.

CHAIR:

Thank you. Having some minor technical difficulties with the stenographer's equipment. Okay.

You're on the clock.

MR. LEIGHTON:

Good evening. My name is Joe Leighton,
300 North 2nd Street, Harrisburg, Pennsylvania. I am
the Associate Director of the Associated Petroleum
Industries of Pennsylvania, a division of the American
Petroleum Institute, a national trade association that
represents all segments of America's oil and natural
gas industry. Its more than 580 member provide most
of our country's energy.

apri is also a standard setting organization. For 89 years, API has led the development of the 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 the strong environmental safeguards and stewardship and commends DEP on the regulatory oversight program. However, we do have concerns with several provisions contained in the proposal rulemaking that we plan to outline in detail in our written comments. In the interest of time, I will highlight some general

comments that we have and provide comments that address control, storage and disposal of production fluids, including beneficial reuse of fluids.

In general, we suggest that language be added to clarify the effective date for new requirements that a well be constructed prior to the date of grandfathering. There are also a number of definitions and sections of text that refer the reader to other statutes of regulations. This causes the reader to search elsewhere to find other statutes or regulations and look them up before being able to understand what Chapter 78 requires. This is not user friendly and does not facilitate regulatory understanding and compliance.

For the purposes of Chapter 6, Section 78.57(c), (d), (f) and (g), it is not clear, at what point, if any, flowback water is to be considered brine or other fluids produced during the operation of a well. For the waste regulations, flowback waste is generated for 30 days after fracturing. After that, it's considered production fluids. The manifold and security requirements especially become cumbersome if intended to apply during the initial flowback period. The API suggest that Section 78.58 add language to encourage the beneficial reuse of fluids. The

language in my testimony will be included in the formal written comments that will be submitted to the EQB.

But to summarize, API suggests that the Department should authorize the beneficial use of what's generated upon the request of an operator as long as certain conditions are met. There are four conditions. One, the well site fluids where the fluids are to be reused is permanent and monitored. Two, the Department's given prior notice by the operator. Three, there is an approved water management plan that meets the requirements of Section 78.69 and the operator conducts processing in compliance with the approved plan. Four, the operator has prepared and maintained a site specific preparedness, prevention and contingency plan or PPC that meets the requirements of Section 78.55.

Likewise, API believes that an operator should be authorized to manage beneficial use fluids, stored and registered impact or above ground storage tanks, which meet relevant Chapter 78 requirements. When processing and beneficial reusing fluids at a well site, API believes that an operator should be deemed to have been --- to have a residual waste processing permit by rule under Article 9. However,

in the event that the Department terminates them, then the potential activity harms or threatens to harm the health, safety or welfare or results in pollution, API then believes the Department should be authorized to require that an operator obtain individual or general permits.

Again, thank you for the opportunity to testify this evening. API and its member companies will continue to engage policy makers as we work together to strike a balance between a strong regulatory framework, economic development and the continued safety and development of our natural resources. Thank you.

CHAIR:

Thank you. Speaker number seven is Cynthia Walter. Dr. Helen Hazi is on deck. Lisa Besantis is in the hole.

MS. WALTER:

My name is Cynthia Walter. I live at 916 Essex Drive in Greensburg, Pennsylvania, Westmoreland County. I am here to thank you for serving in this capacity. And I've handed out to each of you a diagram showing --- the rest of you can see --- the relative wealth of our state from various industries. You see on the lower side, \$22 million

associated with gas wells. We see on the right side \$329 billion associated with tourism, farms, dairy, great hunting, fishing, wildlife, et cetera.

So I have here a milk carton and I would like to draw your attention to why we are all here. We are here because the words environmental quality. We are not here for the words that we just heard a few previous speakers say. With regard to replacement of water, they said it would be an unnecessary --- I'm looking at abandoned wells, it would be an unnecessary burden. It would be an inconvenience. It would be a --- let's see if I can use phrases from previous speakers. It would be, you know, a burden. There was a couple of mentions --- the gentleman before me mentioned something about it being cumbersome. Well, okay, maybe these regulations that you guys have proposed are a bit of a burden, but look at what we have to preserve.

Pennsylvania is the fourth in the nation in its milk production. Any contaminations from the pipelines that we previously mentioned, any contamination from this, quote, beneficial reuse, if that is stored --- if that previously used frack water is stored with its contaminants of heavy metals, of possible radioactivity, heavy salts and so forth, if

that is stored in above ground wells, above ground pits, as is currently in the newest regulations, the ones you've proposed, this is at risk.

Right now we have no system for regularly measuring milk quality and quantity in relationship to gas well drilling activities, surface or underground. Your regulations now are addressing the associated surface activities. And I have 20 suggestions. And by the way, the earlier speaker who mentioned that are citizens groups are not scientific, all of my regulations are based on science. I have several scientific publications. I am peer reviewed published scientist. And my 20 regulations that are based --- 20 comments on the regulations are all based on science and engineering and those suggestions are all happening in the field now in other parts of the world and other parts of this country.

So I fully agree that we need to pay attention to water quality. I know that you guys will do your homework. I know you will think about milk. You will think about our drinking water. And you will look at those changes and regulations that you will make to make things even stronger. Thank you.

CHAIR:

Speaker number eight is Dr. Helen Hazi.

Lisa Besantis is on deck. Margaret Henry is in the hole.

DR. HAZI:

Good evening. My name is Dr. Helen Hazi and I am a resident of 1900 Triphammer Road, South Park, PA in Allegheny County. And what I want to address today is the specific provision of the Act that has to do with waste disposal. And I want to point out two items that are missing. One has to do with the handling, monitoring and storage of radioactive waste, which is a result of the fracking wastewater as well as the drill cuttings. And second, waste disposal in landfills, which is one of the industry accepted methods of disposal of this waste, this fracking waste into our water mains.

Current language under the Act calls this waste contaminated, this is found in 78.62, yet classifies it as residual waste. If you go up and down our highways on 43, on 79, you will see daily residual waste trucks that are hauling this material to other locations, including my landfill and I reside within a mile of that landfill.

Since fracking fluid and drill cuttings contain Radium-226, radioactive material, provisions should be made for safe handling and disposal.

Radium-226 has a half-life of 1,601 years and will forever remain to impact the health of the residents and the environment. The Act fails to mention Radium-226, TENORM or the radioactive nature of waste. In fact, radioactive is found once in the document in Section 28.123 regarding laws maintained on the well itself.

Radiation should be addressed since the Solid Waste Management Act, which is referred to in the document as Section 78.58(d), has limited provisions for handling radiation. In fact, the only provision that's related to radiation concerns the guidance on radioactive monitoring of solid waste processing and disposal facilities. That specifically is documented under 250-3100-001. And it was only offered by the DEP as a best management practice in the absence of any regulation. This guidance is dated, it was written in 2004, only handles small quantities of TENORM, did not anticipate the nature and volume of fracking waste disposed in landfills and carries no regulatory authority.

While an earlier gentleman indicated that the industry is recycling, not according to my landfill. Last year alone, the landfill took in over a quarter of a million gallons of fracking fluid and

thousands of tons of drill cuttings. So DEP regulates specific landfills in the state with the accepting of this radioactive waste. We also know that this radioactivity is not monitored at the well site, nor is it monitored before it goes into trucks for hauling away. The chemicals within this fracking fluid are hand monitored, but the radiation or radioactivity is not.

I have recommendations for two areas.

One in the area of radiation. This should include the monitoring and labeling of waste disposal of and stored onsite at well. First of all, one, temporary and permanent impoundments, storage tanks, pits and by other means and, two, to transport to permanent sites such as landfills and injection wells. Centralized impoundments should be monitored for Radium-226 and other markers of radiation. It should be listed with the other parameters in Section 78.59c(h)(6). Drill cuttings that are radioactive should not be disposed of, spread on, or incorporated into the soil as provided in 78.61(b) nor in the pits at 78.62 and 78.63.

CHAIR:

Okay. Thank you very much. Your time is up. Speaker number nine is Lisa Besantis. Is Lisa

here? Okay. We'll move to speaker number ten, which is Margaret Henry. No Margaret Henry? Move to speaker 11, which is Dana Dolney. After Dana will be Kathryn Hilton and then William Thwing.

MS. DOLNEY:

Thank you for giving us an opportunity to speak tonight.

CHAIR:

You're welcome.

MS. DOLNEY:

It is very difficult for me not to get emotional, and you would say, why would you be emotional at a hearing like this. But I work with affected families. And the reason, unfortunately, I work with affected families is because the DEP, and I'm not saying that they're not trying to do their job, but they are unfortunately unable to do the job that they should be doing, which is protecting the public health and safety.

Over the last three and a half years --and left me clarify something. I'm an individual this
evening. I'm a member of many organizations. I have
started two nonprofits in conjunction with some other
people in this area to help affected families. And
also, this should be great importance to you, to

provide independent air and water testing to families who are in harm's way.

And I have to go and provide independent --- note that word, independent, because they no longer trust the DEP. That's very sad that we're sitting here tonight talking about all of these regulations, but the facts on the ground here in southwest PA is that there aren't enough boots on the ground. For the DEP, they only have two people in the whole county to come and check on 30, 40, 50 different complaints. So you are in turn when it's your turn, not when the emergency dictates.

So when I started seeing these situations again and again and again and again and again --- and although I know this is not the norm of the industry, it happens more than anyone in the industry and anyone or the DEP is willing to admit. And so what we did to raise money to offset these various expenses, air and water testing, because, you know they're not cheap, is that we had to compile a storybook, because the people can't get their stories told. Now, many people are in litigation and their stories can't be told. But those brave souls that gave given us permission to share their stories did so with the knowledge that the money that we raised from selling these at five bucks a

piece here and there all goes towards providing for basic water and air filters for homes for providing air and water testing when they don't know what's going on.

So I want to share with you the story of the person who brought me into this in the first place. So the headpiece, which you --- and I'll give you any information you like. I will include it in the testimony, but if you would like to pull their DEP file, please do. I challenge you to pull this file on this home and then you will understand why so many of us are here tonight with the concerns that we have.

I'm going to share their story very quickly with you.
We've been residents of Fayette County for 28 years.
We had owned our current residence for seven years.
Our rural community in Springfield Township was a serene, safe, picturesque small town situated along the Monongahela and Cheat Rivers, nestled in the Allegheny Mountains. Life here was quiet. This was a beautiful place to live and raise our family far from the bustle of the city. This was before the drilling.

First, we noticed the gas activity when bulldozers invaded our main roads to build access roads for the well pads. It began only about six

weeks after we signed on the land, having bought the mineral rights, but without the oil and gas rights. They didn't know what was coming down the pike, like many of us.

Since coal mining was the issue around here and there has been little to no activity in the gas field, we were made not to worry about potential for development and moved ahead with the plans to build our dream home. This was before anyone knew the name Marcellus. Yet, in seven years time, the man who owns the rights has put four shallow wells and one Marcellus well and a pipeline across the property. We had no idea they could do this to the land or to us.

The truck traffic is constant. Land damages were, of course, immediate. Trucks, noise, dust and nomadic workers followed. Then came the pollution of our air and water, then deforestation, destruction of our fruit trees. They even managed to burn ten acres of ground with a brush fire set by used motor oil from a bulldozer's oil change. Every hour, once an hour it sounds like a landing jet visits our once quiet farm as the well sells.

We have even had multiple leaking wells for over a year, ignored by operators, and now we have a spring 200 feet from our house which is now so rich

with gas it can be set on fire. Doctor visits have become commonplace.

There's so much more to this, but I don't want to get --- because I know I only have five minutes here.

CHAIR:

Okay. Thank you because your time is now up. Okay. Thank you very much for your comments, and I'm sure your written comments will be taken ---.

Next speaker is Kathryn Hilton. After Kathryn is

William Thwing and Dorothy Bassett is in the hole.

MS. HILTON:

Kathryn Hilton, K-A-T-H-R-Y-N
H-I-L-T-O-N, Mountain Watershed Association, Melcroft,
Pennsylvania. The Mountain Watershed Association is a
grassroots membership organization dedicated to
protecting, preserving and restoring the Indian Creek
and greater Youghiogheny River watersheds. In 2003,
we became home of the Youghiogheny Riverkeeper,
expanding our vision into the larger Youghiogheny
River watershed. We have a unique approach in that we
pursue on the ground restoration of past damage while
also advocating on local issues as well as regional
and national issues that have a local impact. We
currently have over 1,000 members and submit these

comments on behalf of our organization and our membership.

First, we believe additional comment opportunities are necessary in order to spur significant public discourse regarding the topic of oil and gas regulations. Notices could and should have been sent to every township official in areas where drilling activities are occurring in order to heighten local awareness of the opportunity to comment. The Department has an obligation to ensure meaningful public participation in a way that is inclusive of those who are most affected. Additional public hearings in areas with heavy drilling activity should be scheduled and we appreciate that there are two more that are scheduled.

We would like to offer our support for the submittal of electronic permit applications. Our organization is located in Fayette County. Travelling to the Southwest Regional Office in order to conduct permit reviews is expensive in terms of staff time and resources. Electronic filed permits should be made available to the public upon request to limit the burden of public and interested organizations.

We likewise support the provision that will require permit applicants to consider the impact

of a well site on public resources. The Laurel Highlands, Greater Allegheny Bike Passage, the Youghiogheny River all draw visitors from across the world. The consideration of the state parks, protected species, natural amenities and tourism-generated features is quite welcome.

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Open storage pits of any kind should never be allowed. A pit lined with plastic has the inevitability of failure. For example, WPX contaminated the well waters of at least one family in Donegal Township, Westmoreland County with the tearing or forming a hole in a liner for wastewater. For over a year, the impacted family has been utilizing a temporary storage source of water and DEP has yet to issue its determination, in spite of having ample water tests that show an increase in barium after the drilling activity began. From our review of oil and gas compliance reports, including inspector comments from site visits and violations issued, problems with waste pits are very common. Eliminating these pits would allow inspectors to spend more time monitoring other areas of concern and would remove waste pits as a source of contamination.

A more complete suite of parameters must be established for baseline testing in order to

protect the health of Pennsylvania residents. This suite should be a standard used by all drilling companies across the Commonwealth. A pre-drill test for E. coli and chloroform will give the water user important data, but is not testing for parameters that will indicate contamination from industrial activity. Testing for radioactivity, barium and strontium and, commonly used chemicals in the drilling, hydrologic fracturing initial process of a well is critical for accountability. In a November 2013 meeting with the DEP, Oil and Gas staff in Harrisburg even acknowledged that water contamination cases are the most serious issue this Department faces. It's also a massive public health risk, and such the DEP should require operators to obtain ample baseline data.

Regarding the restoration of contaminated private water supply, any oil and gas company that has contaminated a water supply should be required to restore it to at least the State Water Drinking Act Standards. And if the water supply was exceeding those qualities, then they should also exceed those qualities when they replace it.

To take a company at their insistence of operating in good faith or being a good neighbor is not enforceable by either this Department or the water

consumer. And the track record of every single operator's actions in Pennsylvania shows that these statements are distractions that have no factual basis. We can take the fact of WPX's contamination in Donegal Township. For over a year, they had no concern for finding a permanent solution. And in meetings, they have obfuscated the truth by saying there has been no case of contamination by fracking, which is irrelevant in this case.

CHAIR:

Okay. Thank you.

MS. HILTON:

Additionally, unethical behavior by operator Chevron and Redstone's Springfield ---.

CHAIR:

Thank you. Sorry, your time is up.

MS. HILTON:

Thank you very much. I wrote too much.

CHAIR:

Next up is Mr. William Thwing. Dorothy Bassett and Briget Shields are up after Mr. Thwing.

MR. THWING:

My name is William Thwing. I live at 610 Luzerne Street, Johnstown, Pennsylvania. I am United Church of Christ Pastor and past President of

Pennsylvania Interfaith Power and Light. Interfaith
Power and Light is a nationwide organization with
14,000 congregations in 39 states. We work with Faith
Communities here in Pennsylvania and across America
solving the problem of climate change by advocating
for clean and renewable energy and using it.

Natural gas is a non-renewable fossil fuel and greenhouse gas which has a --- in the 20 year time horizon, is between 75 and 106 times more potent than carbon dioxide. It is already the second major contributor to climate change after carbon dioxide. The International Energy Agency predicts that natural gas production will triple by 2035 with over a billion wells drilled worldwide. One hundred thousand of those wells are scheduled to be drilled right here in Pennsylvania, in other words, ten percent of world production.

Pennsylvania is already the second largest producer of natural gas in the United States, and therefore, the second largest producer in the world. Gas production in other countries is still in its infancy. We invented the process for extracting unconventional shale gas here in Pennsylvania at Penn State University, and in many ways, our state was the guinea pig for new techniques and technologies related

to the development of natural gas nationwide and I 2 worldwide. What we do here in Pennsylvania will be copied all over the world. Therefore, it is essential 3 that we get it right. It is essential we get it right 4 and that we use the very best practices that are 5 available. If we get it wrong, then it's going to be 6 wrong all over the world. And we, Pennsylvanians, 7 therefore, are going to bear the primary 8 responsibility for creating a worldwide climate 9 10 changing catastrophe which will not only cripple our 11 nation, but will cause worldwide chaos, suffering and 12 death and which has a potential for literally destroying our civilization, causing mass extinctions, 13 14 possibly turning our whole planet into a wasteland. 15 It's a very big gamble with very big stakes of 16 biblical proportions, biblical proportions. 17 Therefore, if we do it at all, we better 18 do it right. Pennsylvania's Department of Environmental Protection is a linchpin and a primary 19 20 actor in that process. Doing it right means absolute rigorous adherence to best practices regulated by law, 21 22 promulgated and enforced by the Pennsylvania Department of Environmental Protection. 23

There are two resources for best practices which are immediately available to the

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Pennsylvania Department of Environmental Protection, which you've probably already seen and used. Both documents are readily available online. The first of these documents --- resource documents is the International Energy Agencies 2012 study entitled, Golden Rules for the Golden Age of Natural Gas. These best practices were formulated by energy experts and environmental experts across the world representing, among others, Exxon Mobil, Chevron, Shell, BP, American Petroleum Institute, U.S. Department of Energy, U.S. Environmental Protection Agency, all of whom are active --- currently active participants in Marcellus Shale right here in Pennsylvania.

The second resource for best practices is the Center for Sustainable Shale Development, CSSD, of the Appalachian Basin, based right here in Pittsburgh. The CSSD's performance standards released in March 2013 provide a number of measures which can and must be adopted by the DEP in the Environmental Quality Board's Proposed Rulemaking for Environmental Protection Performance Standards at Oil and Gas Well Sites. Although the proposed changes to Chapter 78 include some of the CSSD's 15 Water Performance and Air Performance Standards, they fall very short on many of the details.

As the International Energy Agency's study emphasizes, industry performance standards are 3 not enough to ensure compliance with best practices. Stringent government regulation is essential. Pennsylvania Interfaith Power and Light, which represents a growing number of congregations and 6 people across the Commonwealth of all faith traditions, urges Pennsylvania Department of Environmental Protection, get it right. We do not want an Administration or DEP controlled by lawless, wildcat drillers from outside of our state controlling our resources for the wrong --- financial gain and 12 then externalizing the long-term environmental impact 13 damages on the citizens of Pennsylvania. We want unconventional shale development in Pennsylvania done responsibly, lawfully, following the best practices, 16 again, towards the Constitution of Pennsylvania. Thank you very much.

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Thank you. Speaker number 14 is Dorothy Bassett, Briget Shields is on deck. Douglas Shields is in the hole.

MS. BASSETT:

Thank you. My name is Dorothy Bassett. I live at 5 Ida Street, Imperial, Pennsylvania. Thank you for giving me the opportunity to comment on the proposed Oil and Gas regulations. Having gone through them with a fine-toothed comb, I have more comments and questions than I would be able to cover in five minutes. This being the case, I'll touch on some major points right now and send a written follow-up document with my far more detailed questions and comments.

Having said this, given the number of questions that I have, and I'm sure that others have as well, I would recommend extending the comment period to at least 120 days, so that the DEP has a chance to review and respond to all of the questions and so that the public can respond from a place of fuller understanding of the document and its implications.

To begin, under definitions, I would also like to see definitions of freshwater, since this is not truly unadulterated water as might be assumed by the term itself. I would like to know what substances are and are not acceptable to be included in freshwater. Brine, since this is beyond just salt or salt water, I would like to have a clear articulation of the chemical composition of what the document is referring to as brine. Since I am

assuming that this will also apply to the other shale formations and not just Marcellus, there should also be definitions of the other formations in the area such as the Utica and Upper Devonian. In the section on pre-drilling, the preoperation survey, it should indicate that testing analysis should be done for the full array of drilling chemicals, heavy metals and other substances from below the surface both for the pre-drilling water test and for subsequent water tests. The full and complete results of these pre-drilling and subsequent tests should become public knowledge in general and shall certainly be provided to the residents living on the property for their consideration within 30 days.

Under the section on pits and impoundments, it indicates that at least two feet of freeboard space be allowed. This is only two inches more than two sheets of this paper placed end to end. This is not adequate space to prevent potential overflow of the impoundments nor of the standby tanks or pits. Even with a person continually present at a well site, a fence should surround all impoundments. Many of these impoundments are too large for one person to ensure that no wildlife or children get too close or fall in. Bird nests should also be mandatory

in order to keep wildfowl out.

Tests for liner compatibility. It is essential that it be demonstrated that liners will not be dissolved by the chemicals they contain. How will these be tested in advance when impoundments contain drilling chemicals, water, heavy metals and other substances from below the surface and when no one seems to know the chemical compounds and reactions that are formed among all of this and when impoundments are often used for chemicals from multiple wells and each well may have a different cocktail of chemicals used, which then produces yet more unknown compounds and chemical reactions? It seems inevitable that liners will eventually fail due to chemical assault, to say nothing of tears from equipment, wildlife and seam failure.

While the regulatory efforts in this document seem to be focusing on the prevention of water pollution, which is an excellent step, there needs to be as much, if not more, emphasis on air pollution from these impoundments. High levels of VOCs are common from these installations. Given their close proximity to residences, people will be exposed 24/7 to fumes coming off of these installations. This is clearly unsafe and unwise. Steps must be taken to

dramatically reduce or eliminate entirely the fumes being emitted from these impounds and pits. More to the point, however, impoundments should not be permitted at all in the Commonwealth of Pennsylvania. They're not industry best practice and they're not allowed in some other states. The risk that they bring to groundwater and also to the air is just too substantial.

Regarding the disposal of wastewater, sludge and drill cuttings, it should be noted that in addition to the toxic chemicals and heavy metals these contain, radioactivity is also a concern. To allow disposal of these materials 200 feet from a building or water supply or 100 feet from a stream is less than responsible and will result in unnecessary soil and water contamination. Given the toxic and radioactive nature of these materials, they should not be disposed of on or in the land or water and should be dealt with as hazardous, radioactive waste.

A couple of surface installations that are notable for their absence in this document are compressor stations and pig launchers. Both of these emit significant amounts of toxic fumes and, once again, are permitted close to occupied buildings and communities. The regulations should take these

compressor stations, pig launchers and similar facilities into consideration as well, sharply limiting the level of emissions permissible at any time, including spikes, and making continual air monitoring mandatory, with results available to the DEP and to the public real-time via the internet.

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Finally, I note that in the regulatory analysis, costs and benefits to the state government and to the industry are detailed. A key stakeholder group has been omitted from this analysis, namely the residents living in close proximity to oil and gas surface installations. A number of the costs of the drilling and processing activities have been thus far externalized to them, including, in many cases, their ongoing purchase of drinking water, the purchase of air purifying equipment for their homes, medical care in response to chemical or heavy metal exposure, loss of property values and, in some cases, their complete relocation. A complete analysis of these costs and benefits of the proposed regulations should also include those of these stakeholders as well. you.

CHAIR:

Speaker number 15 is Briget Shields followed by Douglas Shields, then Michael Arnold.

MS. SHIELDS:

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Hello, my name is Briget Shields and I reside at 2329 Tilbury Avenue in Pittsburgh, PA. You were introduced to the book that we have published about the harm to victims, and I'm just going to read a quote from our book, from Louis Allstadt, former executive vice president of Mobile Oil. He ran the company's exploration and production operations in the western hemisphere before he retired in 2000. Both horizontal drilling and fracturing have been around for a long time. The industry will tell us this over and over. It's been around over 60 years, things like that. That is correct. What is different is the volume of fracking fluid and volume of flowback that occurs in these wells. It's 50 to 100 times more than it was used in conventional wells. The other difference is that the rock of the target zone is not necessarily impervious the way it was in conventional wells.

To me, that last point is at least as big as the volume. The industry will tell you that liner in between the zone that's been fracked is not going to let anything come up. But there are already cases where methane has made it up into the atmosphere. Sometimes through old wear, well bores,

know how much gas is going to come up over time. It's a point most people haven't gotten. It's not just what's happening today. We're opening up channels for gas to creep into the surface and into the atmosphere, and methane is much more potent greenhouse gas in a short-term, less than 100 years than carbon dioxide. Because of the harms people have been --- that has been done to people, environmental groups have risen up across the world.

I think the main question is, how fast can these movements educate enough people about the dangers of fracking and its impact on global warming. It will take masses of people to mandate action from politicians to offset the huge amount of money that the industry is using to influence lawmakers, a world scale version of those standing room only town hall meetings. Something has to wake up the general public. It will either be education from environmental movements or some kind of climate disaster that no one else can ignore.

We've all been privy to the accident that happened recently in West Virginia. The train cars that are carrying the toxic chemicals are taking them through downtown Pittsburgh on a daily basis. I

am asking the DEP for regulations that we have put in in writing, to me, they don't make sense. And it's part of your job to protect the citizens. If they were and not protect the industry and their multimillion dollar corporations, I don't think any of us would be here tonight. So I would ask that each of you read our shale field stories starting to be released in 50 states on January 30th. And we would appreciate you extending the comment period and also making these hearings a little more accessible for larger areas than just down around Pittsburgh or Philadelphia and larger cities. Thank you.

CHAIR:

Douglas Shields.

MR. SHIELDS:

on the proposed regulations, it is important to point out to the Pennsylvania Environmental Hearing Board that consideration of any new regulations is inappropriate at this time. Since shale gas exploration and exploitation means by use of hydraulic extraction process, they have never been appropriately vetted for implementation from the start. The Commonwealth did not perform any meaningful due diligence by way of environmental impact studies, both

as built and natural environment, nor did they conduct any public health impact studies or any other due diligence designed to answer this question: How are the people of the Commonwealth of Pennsylvania impacted by virtue of the fact that Pennsylvania sits atop the second largest gas field in the world? No one answered that question. No one did anything to inform us as to what that --- the answer to that question.

Without answering any regulations promulgated by our institutions, the government cannot legitimately be responsive to the health, welfare and safety of the people. That is the primary function of our government. A government whose ultimate authority rests with us, we the people, you're not here to judge us, we are here to judge you.

The health, welfare and safety of the people is paramount throughout this process, but it was ignored in the legislative process. On December 19th, however, 2014, the Pennsylvania Supreme Court rendered a landmark decision requiring key provisions attached to Pa. 13 unconstitutional. The Court also remanded other crucial matters that have a direct impact on the regulations you're reconsidering back to the Commonwealth for hearings on the merits of the

cause of actions filed by a physician, challenging the gag order, and an environmental advocacy group in their effort to prevent clear harm to the community if drilling is allowed.

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Another quote that is notable to the opinion of the Pennsylvania Supreme Court states, by any responsible account, the exploitation of the Marcellus Shale Formation will produce a detrimental effect on the environment, on the people, their children and future generations, and potentially on the public purse, perhaps rivaling the environmental effects of coal extraction. That's not just talking at the bar over a beer. That's in a Pennsylvania Supreme Court Decision that you're going to have to abide by that you have not had the benefit of up until the 19th. These regulations were promulgated well before that and they were promulgated under the premise that Act 13, the guiding principal of the regulation, was legitimate. It is not. It is not right to consider the regulations.

And they also, not only rule on the zoning and other matters, but they also breathe life into the Pennsylvania State Constitution, Section Number 27 of Article 1, that asserts that, we the people, not only have political rights, but

environmental rights as well. Now, these are not legislative or regulated away from us. The Court's decision now clearly defines the important of this important constitutional provision that laid dormant for 43 years. It breathed life in it. It has a profound effect on everything that you're considering right now.

The proposed regulations that you've asked the people to comment on on this process are --- were developed on the premise of Act 13. We know that it is crippled as an Act.

We also know you are required by law the right to reject these regulations because they are not right. The PA DEP must go back to the drawing board and apply the provisions of the constitutionality of any proposed regulation. During the development of Act 13, the State Assembly did not seek public comment at all. There was no informational hearings. There were no notices to people like me or to elected officials about any of this stuff. No indication to do anything.

So here we are now. And now we'll look at this flawed regulatory comment process. The regulatory process is a very detailed and a complicated one. How is an ordinary citizen to

comment on something they have no information provided by their institutions on? This is a tough business, the regulatory side. I among Pennsylvanians have received no detailed information from our elected representatives, PA DEP, and there were no informational meetings sponsored by the Commonwealth to inform us what's at stake. How can we offer comments on something the government has yet to tell us about? It's impossible.

And in my conclusion, I have comments directed on point to the regulations you're considering. But the participation process is fatally flawed. Key omissions were made. The venues are in sparsely populated areas to miss the City of Pittsburgh and Philadelphia. Gee, how did that happen? You know, come on. I was a former elected official and president of a city council. I am well acquainted with the tactics employed by the oil and gas industry and other special interests to gain our system. I take great offense to that and I hope you do, too. And I hope you go back and tell them the Supreme Court ruled, go back and do it again.

CHAIR:

Thank you. Speaker 17 is Michael Arnold followed by Gary Hovis and George Jugovic. Is Mr.

Arnold here? Michael Arnold? Not seeing Mr. Arnold, we'll move forward to Gary Hovis.

MR. HOVIS:

Good evening. Thank you for the opportunity to present the following remarks from the perspective of a shallow conventional oil and gas operator, which the adoption of these new regulations will impair. And what I'm really saying is one rule doesn't always fit all.

Pennsylvania Crude, Penn Grade Crude. Most people think that crude oil was first discovered in Pennsylvania on August 27th of 1859 by Colonel Edwin Drake in a well that was drilled to 69 and a half feet deep. And it was a brand new mineral for the white man's use. However, crude oil has been seeping up through the crevices in the ground for eons before the white man came to America. The local Indians would skim it off the surface of the water on Oil Creek and then use it for medicinal purposes. So it wasn't just coincidence that Colonel Drake built his well where he did.

The Penn Grade Crude produced in Western Pennsylvania is also found in the western tier of New York, the eastern part of Ohio and in West Virginia,

but is unique. This crude is a paraffin based medium in comparison to crude oil found throughout most of the rest of the U.S., including the crude from Marcellus and Utica Shale and others and around the world, which is mainly an asphalt or a tar based crude. In addition to making excellent motor oils, lubrication greases, gasoline, kerosene, fuel oil and diesel fuel, Penn Grade Crude generates over several hundred different uses in different products, many of which are found in our homes for everyday uses. These include waxes, furniture polishes, hand and skin lotions, cosmetic creams and wax used in food items such as M&Ms and Hershey's candies to dilute and soften the chocolate and for many other products including a wide range of plastics we use in our everyday lives.

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In the early days of our country, most homes were heated with firewood, which was readily available from the surrounding ports. On the plains where trees were seldom seem, buffalo dung became a ready resource of fuel. As time progressed and the demand for nighttime lighting around town and cities increased, man came up with the idea of using whale oil for burning in street lights. This became quite an industry. But at the expense of killing off a

large number of whales in the world, today many of these are still endangered species. Of course, for home lighting, the primary light source was candles made from animal fat. Today, these candles are made from the waxes of Penn Grade Crude.

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So where does this leave us for the energies of the future? Wind and solar power can supplement major energy sources, but are problematic and inconsistent. Hydro power can also supplement, but it's not the total answer. Problems and concerns come with the nuclear power which was once considered the solution for our future. The problem is the challenge of what to do with the spent fuel. That leaves us, us, one of the major industrial nations in the world, with few options for the near future. We have low sulfur coal, we have fuel oil and one of the greener energies is natural gas as a viable answer for the foreseeable future, unless, of course, we want to go back to firewood and buffalo dung. By the way, how many people walked here this evening? Came in a horse and buggy? Okay. Thank you.

CHAIR:

Speaker 19, George Jugovic followed by John Peters and then Barbara Grover.

MR. JUGOVIC:

Good evening. My name is George Jugovic and I'm the Chief Counsel for PennFuture. I work out of our Pittsburgh office. We'll be submitting, you know, detailed written comments on the proposed regulations. I wanted to note that I saw that the Environmental Quality Board and Secretary Abruzzo extended the public commentary for these regulations from 30 days to March 14th and want to thank you for doing that. I think it will be better a better end product at the end of this process.

I've spent more than 25 years practicing energy and environmental law. And for seven of those years, I prosecuted environmental criminal cases for the Office of the Attorney General's environmental crimes section. And I've also acted as DEP's regional director for a period of time for the southwest regional office, so I do have background and experience for reviewing the regulations with a --- viewing them through the lens of enforceability. If the regulations, in my mind, aren't clear and concise and are not enforceable by the agency, then they're not worth the paper that they're written on. If they are, on the other hand, then they would provide a very strong basis for ensuring protection of our environment.

So let me recognize, first of all, that there are significant portions of the regulatory package that we, PennFuture, supports. For example, we support the requirement that any water, other than clean water, that's transported through temporary pipelines would be done so through pipelines that are located above ground rather than below the ground. We think that's a very positive regulation. We also support the prohibition on using what we call structures to store brine and other produced fluids. We strongly support the need for increased security to prevent vandalism and unlawful and unexpected discharges from storage tanks at the facilities. And we support the ban on disposal of residual waste generated during the fracking of unconventional gas wells at the well site.

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That said, there are concepts that need improvement and measure that can be improved in --- as we go through this process. Perhaps foremost on that list in our view is the Department's continued sanctioning of waste disposal at well sites. The draft regulations would allow well operators to continue disposing of the drill cuttings and residual waste in pits at the well sites as long as they comply with certain environmental protection standards.

While the Department is --- and we recognize that the Department has tightened and increased regulations on this practice, the Agency has provided insufficient evidence to support that these regulations, these improvements will adequately protect the environment.

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There is no public notice, for example, associated with disposal of residual waste at well sites. There is little public transparency about what is disposed at these sites and the location of these mini landfills. The sites are allowed to be located only 20 inches above fresh drinking water. And there's no long-term monitoring associated with these In our view, the protections are --- no other person and few other industries in Pennsylvania are offered this convenience. Even the power industry must dispose of its fly ash, in other words fuel waste, in double-lined landfills with long-term monitoring and closure plans. I have seen the state prosecute individuals for dumping and burying household trash in their backyard or constructing demolition and filling the landfills with that much debris from a torn down house. And yet, these regulations didn't propose to sanction an entire industry disposing of its waste on its back 40. There would be very little difference if the Agency were to

enact regulations allowing steel mills or dry cleaners to dig holes in their backyards and bury the residual waste at that time.

At the very least, let me just conclude by saying that we would encourage the Department not to continue to authorize the practice, but if they did, there are things that can be done to improve the enforceability of the requirements associated with the sampling, for example, of the waste. That is my written comments. So thanks for the opportunity to testify.

CHAIR:

Thank you. Speaker number 20 is John Peters followed by Barbara Grover and Chuck Hunnell.

MR. PETERS:

Good evening. I want to say to the Board I gain a new appreciation for the task before you and what you're doing here. God bless you. You can move forward with the wisdom to come up with the right decision.

My name is John Peters. I am a resident of Ross Township in the North Hills area of Pittsburgh. I have been a Pennsylvania resident since 1966. My wife Patty and I have three adult children. All were born, raised and reside in Allegheny County.

We have a six-year-old grandson and a three-year-old granddaughter, both born in and residing in the North Hills of Pittsburgh. I'm a sales representative for BioBlend Renewable Resources, a manufacturer of biodegradable lubricants for commercial and industrial use. Our products are made with environmentally-safe vegetable oils and additives, contain no regulated substances and are no more toxic than cooking oils.

The natural gas and oil industry is an important market for my company and we support the exploration and production in Pennsylvania and throughout the U.S. I'm also a member of Pennsylvania Independent Oil and Gas Association, but I have not been asked by nor am I speaking on behalf PIOGA or any of its other members.

environment. I live here. My children and grandchildren live here. I believe protecting the environment is the right thing for all of us to do. I'm the guy on the golf course when he finishes the water bottle and there's no recycling bin, I save that in my golf bag and take those home, so they can be recycled and repurposed. I also believe that the oil and gas industry and a healthy environment can coexist.

My observation is that the oil and gas producers are working hard to comply with the regulations and most take steps above and beyond state requirements in order to minimize their environmental impact. I'll give you an example. Why? Well, they live here, too, as do their wives and children and friends and neighbors. And those that have moved here from other states and bring their families with them, they live here. And they also want to be good corporate citizens. I see this and hear this.

The example I'm going to cite of them going above and beyond the state requirement is a product called a rock drill lubricant, which is used in drilling portions of the well floor. Traditional rock lubricants are made from petroleum oil and chemical, which are potentially harmful. However, most producers in Pennsylvania use vegetable oils like rock drill lubricant. The state did not mandate this. Rather, producers choose to use it. Why? It protects the groundwater. This is a voluntary decision on their part. This is an example of good corporate citizenship. Can we all agree to that?

There are other such examples. However, there are more opportunities to replace potentially harmful products with biodegradable, non-toxic

alternatives. But there is, however, a significant obstacle that I wish to present to the Board. The PA DEP does not formally recognize biodegradable or non-toxic or ultra-low toxic products as different or less of an environmental hazard. Therefore, there's no reduction in the civil penalty granted, at least not officially. An example of this is, a drilling contractor decided to switch a drill rig from petroleum oil-type hydraulic fluid to a vegetable oil-type, biodegradable, non-toxic hydraulic fluid. When they informed the DEP field representative of the change, they were told, it doesn't make any difference. If you spill it, your fine will be the same.

These are two quite different substances. Petroleum hydraulic fluid meets the definition of hazardous substance as found in the PA Storage Tank and Spill Prevention Act, Act 32. Most of these fluids contain a substance called zinc dialkyl dithiophosphate, don't ask me to spell it, what's known as ZDDP. It's common in many oils and other lubricants. It is a hazardous substance that's deemed toxic to fish, for example. On the other hand, vegetable oil is not a hazardous substance. It's not listed in Act 32, and vegetable oil based hydraulic

fluid, at least those produced by my company, contain no ZDDP or any other toxic substance.

So I ask the following questions. Which of these poses an environmental risk, the petroleum or the vegetable oil product? Then wouldn't it support the mission of the DEP to encourage the use of biodegradable products, rather than discourage their use? So why don't be people switch to the biodegradable products anyway? Why don't we all do it? Well, because one, it requires making a change and people by nature resist change. And the other is there's no certainty that it reduces their liability. The state, I believe, has unintentionally eliminated the second of these incentives, that being, reduced liability.

CHAIR:

Mr. Peters, your time's up.

MR. PETERS:

Is that it?

CHAIR:

Yes. Thank you. Sorry to cut you off,

but five minutes. Next speaker is Barbara Grover followed by Chuck Hunnell and James Rosenberg.

MS. GROVER:

Good evening. My name is Barbara

Grover. I live at 5526 Wilkins Avenue, Pittsburgh, 15217.

and oil industry is sorely needed and I will address three areas of your proposed regulations. Water, in my opinion, is the most critical issue, but has only a finite amount, the water suitable for human consumption and your regulations must ensure that the current, fragile water supply is available as safe drinking water for current and future generations. With respect to the source of the fresh water needed for drilling, I will repeat what several other speakers have already said. It is to define fresh water used in the oil and gas operations so that companies that mix contaminated fluids with clean water cannot avoid regulations on the use and disposal of polluted substances.

You need to require the water surrounding the proposed sites be tested prior to drilling, according to criteria you, the DEP, the Environmental Quality Board, establish. You need to require that toxic waste water be restored by the driller to Safe Drinking Water Act Standards and require all the pre-drilling data be available to the public. Please do not leave the water testing time

and place in the hands of the drillers. Do not allow them to restore the water only to the quality of the water prior to drilling. As you well know, 30 to 70 percent of toxic water remains underground. We need every drop that returns to the surface be safe for human beings.

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Another concern related to water is the storage of the toxic wastewater. You know from your own records, the violations that the liners in those pits leak because of inadequate anchorage or the pit overflows because of heavy rains or other reasons. The toxins in the wastewater will contaminate soil, streams, seep into aquifers. In addition, the toxins evaporate into the atmosphere before the wastewater's hauled away, which results in air pollution. I strongly suggest that your regulations prohibit drillers from using open pits for storage of wastewater, drill cuttings and all other substances that return to the surface with the fracking fluid and require drillers to use only closed system storage.

In addition to my water concerns is the disposal of brine, drill cuttings and residual waste. These carry known hazardous substances and I suggest that you prohibit onsite processing of the shale drill cuttings. Cuttings require through thorough analysis

a special handling of the drill cuttings. Apply regulations to --- formally to disposal of all drill cuttings, no matter where they were obtained. Prohibit onsite burial of waste pits. And prohibit the use of brine for dust suppression and deicing or road stabilization. Those are --- many people have mentioned them already.

Another issue is the identification of orphaned and abandoned gas and oil wells. I strongly support this measure. It's a significant step in reducing the chance of problems occurring from the intersection of new and old wells. And the regulations should include identification of all existing wells before a site is determined and new well construction and drilling occur. Please require that all these orphaned and abandoned wells, regardless of status, meet the State Safety Standard prior to new well construction.

My final recommendation, you've already addressed. I was going to say, I own a car, I could get here in an hour, it was convenient for me to come and speak, but many people didn't. So, thank you. You have extended the comment period and added more public hearings. I think that's a good thing. I certainly think more people --- you have to be as

informed as possible.

Strengthening our current regulations and enforcing them, that is a major point that is essential to meeting your responsibility as the Department of Environmental Protection. We are still living with and paying for the hazardous practices of the coal industry that were allowed in the past century. Please learn from that mistake and require the gas and oil industry to meet high standards to protect the water we drink that we need to survive, the air we breathe and the land we live on. Thank you.

CHAIR:

Thank you. Number 22 is Mr. Chuck
Hunnell followed by James Rosenberg and then Dee Boyd.

MR. HUNNELL:

Charles Evans Hunnell, 2248 Oak Forest Road, Waynesburg, Pennsylvania. Good evening. My name is Charles Hunnell. I am a retired high school teacher of U.S. History and Economics. My home is in Greene County. I own 136 acres of land, the property our family moved to when I was 12 years old. I have my own water system consisting of a spring and a well.

We're in trouble in our state and our local region of Washington, Greene and Fayette

Counties. Our leaders and regulators have welcomed in unconventional slick water drilling and have permitted them to proceed with outdated regulations and with less than strenuous oversight. Citizens in each of our counties have suffered from this rush to new jobs such as, for example, exposure to carcinogenic and other gases from well sites, condensate tank vents and venting associated with the increased number of compressor stations just starting to be constructed.

Family members have become sick due to exposure. Home potable water, both private and public, has been tainted by flowback and produced water. Water authorities have to face the problem of increased bromine and trihalomethane. Home water systems have been contaminated. Farmers have lost livestock and families have lost pets when farm ponds and streams have been tainted with flowback and produced water.

We're just at the beginning of this process and many of our citizens have suffered because of an apparent lack of concern for the safety and health of the people of Pennsylvania by our government and by the involved industries. I have read DEP lab reports that verify that four sites on Greene County streams have been polluted through mine discharges of

Alpha Resources' Emerald Mine and Cumberland Mine, not with typical mine discharges, but with excessive levels of bromine, strontium and chlorides, which are byproducts of unconventional slick water drilling.

DEP's Clyde Mine discharges the same excessive levels of the same chemicals. Greene County's Smith Creek, Whitely Creek, Frosty Run and Ten Mile Creek continue to receive the same unregulated discharges with no apparent concern for the health and safety of the citizens. How are unconventional slick water drilling flowback and produced water chemicals coming out of the mine discharges? Why is no one in our government or the industries concerned with this?

These discharges have already affected water quality of local authorities. Citizens have had to boil water and authorities have been out of compliance because of high levels of bromides and the increase of trihalomethane. We have no knowledge of what the long run problems for our citizens may be with continued exposures to these chemicals in our water. We need to be concerned with radiation associated with flowback and produced water. The Duke study released in October 2013 stated that radiation was a problem that was identified in sediment at Blacklick Creek in Indiana County. Why has the DEP

not responded to requests to come to Greene County hotspots and run radiation tests? Since the DEP has shown that flowback and produced water is being discharged through mine discharges, do we not have to be concerned with the health and safety of miners? Are miners being exposed to all the flowback and produced chemicals and radiation? How about the workers at the drill sites? Should we not be concerned with the health and safety of the gas and oil workers who may be exposed to flowback and produced water and radiation?

Our neighbors in West Virginia are experiencing the end results of a lack of active regulation and industry concern in the current water crisis that has impacted 300,000 citizens. Do we not have a potential water and air crisis ahead of us? Without government, industry and regulation concern, are citizens in our countries and the Monongahela Valley and Pittsburgh not potentially in danger? We need modern regulations written specifically for unconventional slick water drilling and applied equally to all forms of drilling.

The industry is here. We are going to keep our communities, our people in our communities and our culture by insisting that the process only

moves forward provided the health and safety of all Pennsylvanians are protected or will we relegate our children to a future in a state transformed into a green chemical wasteland? On specific proposed changes ---.

CHAIR:

Thank you, sir. Your time is up.

MR. HUNNELL:

Thank you very much.

CHAIR:

Speaker 23 is James Rosenberg. Followed by Dee Boyd and then Ron Alvarado.

MR. ROSENBERG:

James Rosenberg, 555 Davidson Road, Grindstone, Pennsylvania, 15442, from Fayette
Marcellus Watch. And thank you very much for the opportunity to testify in person on proposed 25 Pa. Code Chapter 78 Oil and Gas Rules. This testimony will reflect only some of my concerns, which will be spelled out in more detail in written comments.

First, let me express my strong support for the new provisions requiring those constructing an unconventional gas well to do a survey for orphan and abandoned wells. This is long overdue and commendable. The oil and gas industry's opposition to

this provision is disgraceful. There are, however, many defects in the rules as drafted. Section 78.1 definitions, the external definition of regulated substance is a problem. What is the actual workday operator of a well to know about just what is regulated? The word brine is a simple word that everyone can understand. Its replacement by regulated substance is unfortunate. Also, although there is a definition of freshwater impoundment, there is no definition of freshwater. Is water reclaimed from acid mine drainage fresh water? There is no definition of unconventional formation. This is a recipe for trouble.

78.66(b), replacement of five gallons of brine by five gallons of regulated substance as the criterion for a reportable spill is very problematic. Suppose a well operator spills 300 gallons of material, self-assesses that the material contains one percent regulated substance and thus, under the rules, is really only a spill of three gallons of regulated substance and, thus, not reportable. Is this allowed? There is nothing in the new rules that precludes this interpretation. This is a major loophole, which completely guts spill reporting.

78.51(c), exclusion of well site

construction from the rebuttal presumption of liability for contaminating a water supply is an outrageous loophole which must be stricken. This is contrary to the intent of the statute and the Environmental Quality Board is both exceeding its authority and making new and profoundly unfortunate law with this provision. Who determines whether well site construction or some other aspect of oil and gas operations was responsible for contaminating a water supply? What exactly is the boundary between well site construction and well construction? This provision is simply outrageous.

78.51(g), requiring the Department to consider the impact of a permit on optimal development of the oil and gas resources is profoundly improper. This turns the Department into the agent of the applicant. How is the Department supposed to evaluate what is optimal for the applicant? The word optimal must be stricken.

78.57(a), open top structures shall not be used to store brine and other fluids produced during operation of the well. This is commendable, but the well should be replaced by a well. Produced water from some other well should not be stored in an open top structure either. And this provision must

make it clear that a pit is an open top structure.

And hydraulic fracturing chemicals should not be put into open top structures either. Altogether, pits should only be used for actual fresh water.

There are several deficiencies of the rules as they affect other stakeholders. Consider the plight of a surface owner who is not the owner of gas rights. There should be a requirement that surface owners be notified of spills. There should be a requirement that the surface owners get consent for onsite waste disposal methods.

78.56(a)(11), determination that a pit bottom is 20 feet above seasonable high groundwater table, should be done by an accredited, independent professional, as is done with pre-drilling water tests. Or consider county emergency management personnel, there should be a requirement that they be given a copy of the PPC plan, since they are directly affected by it. Thank you.

CHAIR:

Thank you. Next speaker is Dee Boyd, followed by Ron Alvarado.

MS. BOYD:

Hi, my name is Dee Boyd. I live in Burgettstown, 149 Dinsmore Road. I'm also a retired

nurse. And I know I met many, many people here in PA that have been affected by fracking. Some of them are friends that have been affected and family members. And some of those family members are --- they have children that's been affected also. I've seen children with nosebleeds and GI problems.

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And then I've also lived on a farm about 20 years ago that has pristine well water with about ten other homes on this private land that also had pristine well water. And now, those homes do not have well water and the ones that do have well water, they do not drink it. And in fact, two of those homes have water hauled in now because they have no well water. And this has been like just recently. The original farmhouse, they were 100 years old and now it has no well water because it had nothing coming up in it. So they cannot have any well water and they had to drill another well.

I'm a little bit nervous, so I apologize. But with that being said, my concerns are --- so the bottom line here is that safety is not being practiced by the Industry. Not only that, but the citizens out of the state do not know the whole truth of this Industry, and therefore, they're --- in dangers that they and their loved ones are in.

If it's the cleanest fossil fuel, then why not expose the extraction process, or better yet, the 7,500 gallons of chemicals that are used per one well and the effects of said chemicals on the human body?

First and foremost, the most important thing is our precious resource; our water. It's being contaminated at alarming rates from the chemicals used, to the methane and other natural compounds that come up during the drilling process itself. How many citizens know to get their water tested prior to drilling? And unless an animal becomes ill or the animal becomes sick, it's too late. The burden of proof is on landowners. This needs to be changed.

New regulations need to be imposed on these companies to ensure over --- ensure our rights for clean, safe water. And once our water is affected, the well has --- if it has contaminated someone's water, should be shut down and find out what the source of that is. Also, what are these companies going --- are they going to do with this chemical radioactive laden water? Now, you're proposing we dump it on our roads, in our cities, towns and rural areas. Are we going to have this poison on our yards? Are we going to be breathing it in? It's going to be

on our cars and our children's going to be getting doses of poison every day from these chemicals and the radiation.

This is what I propose that you do.

Tell the public what's exactly in this water that you propose to dump on our roads. That the chemicals can cause confusion, anemia, rapid pulse, nervous system damage, leukemia and cancer, damage to reproductive systems, birth defects and more. Eventually, this dumping process will end up in all of our waterways. Why not let the public vote on whether or not they want this poison cocktail dumped on their roads?

This is our state and our country. We all live here. The Gas and Oil Industry will not be here forever and what will be left with it --- what will be left with the ---? I'm sorry, I'm so nervous. What will be left with it in its wake? It's up to us to inform the public so they know the truth of the process of the fracking and what it will do to our water and what it will do to the public and the citizens that live in this country and so that they're not being fooled by the propaganda that these individuals are telling us. And if people --- if one person --- if it was just one person that got ill, these industries should be shut down and find out why

people are getting ill. Thank you.

CHAIR:

Thank you. Next speaker is number 25, Mr. Ron Alvarado. Is Mr. Alvarado here? Okay. Not seeing Mr. Alvarado, we're going to take a five minute break. We've got approximately 20 more speakers registered to speak tonight. So I'm going to take a little five minute break to give you guys a chance to stretch your legs and do whatever business you may need to do. Okay? We'll reconvene in five minutes. SHORT BREAK TAKEN

CHAIR:

Okay. I'd like to call the hearing back to order. We will continue with the testimony.

Speaking now is number 26, Mr. Jeff Walentosky followed by Veronica Coptis and then Patrick Grenter.

Okay.

MR. WALENTOSKY:

My name is Jeff Walentosky,
W-A-L-E-N-T-O-S-K-Y. 5001 Julia Way, McKees Rocks,
PA. Once again, I appreciate the opportunity to be
here just to speak, appreciate the opportunity to be
in the --- I am here to testify as an interested
citizen of the Commonwealth, regarding the proposed
rulemaking of Chapter 78, Subpart C.

I'm a lifelong Pennsylvania resident, in Western Pennsylvania resident. I've been employed as a licensed professional geologist for over 23 years for a groundwater environmental consulting firm located in Western Pennsylvania, which acts as an unbiased third-party consultant to the Oil and Gas Industry. Our company maintains membership with the Marcellus Shale Coalition, the Pennsylvania Independent Oil and Gas Association. As a member of PIOGA, I currently sit on as the --- serve as the Well Construction Subcommittee Chair which is part of the Environmental Committee. As part of my chairperson responsibility, I had the privilege of attending and participating in the Oil and Gas Technical Advisory Board workgroup public hearings on the proposed Chapter 78 revisions this past summer on behalf of PIOGA.

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Departments, Industry representatives and interested parties for all the hard work and very, very long hours that's been expended to get these draft regulations in place to where we're at today. However, it is definitely apparent that there are significant improvements and modifications that need to be made to various portions of the rulemaking.

Like others here, I will be submitting a detailed comment letter prior to the end of the tentative prescribed commentary period.

Tonight, I do have a few general comments and a few specific comments to offer. First, my general comments. I do feel that there is a significant difference between the traditional/conventional and unconventional well drilling and stimulation operations. The land disturbance footprint, waste management activities and water usage on conventional well operations is significantly different and entails a small percentage of activity in comparison to unconventional operators.

Industry representatives did meet with DEP officials on a few occasions to discuss the fundamental differences in these operations and the impact the proposed regulations would have on conventional oil and gas operator; yet the Department, we feel --- I feel, has not really adequately addressed this issue.

The proposed Chapter 78 provisions proposed a significant, financial impact to the conventional and unconventional law rendered without adjusting environmental benefits. The review of the initial cost-benefit analysis regarding the extraction

provisions indicates the cost calculations were very much understated. And we've created far reaching impacts, especially to the traditional small conventional operator, was limited and understaffed. The Department references some forms for completion within the proposed regulations. These forms in --- these forms should be provided for the review as part of this comment period and throughout the draft process.

During the TAB workgroup meeting in 2013, there were four issues of concern and discussed; public resource protection, protection of water supply, abandoned and orphaned well identification and waste management on well sites. Although there were significant discussions between the work groups, there were no changes made throughout the regulations as a result of those meetings.

Three specific comments to end up on that I feel is --- that are very significant.

Protection of water supplies. In the past, the Department of State is one of the few in the United States that has no drilling and the 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's unreasonable for the Department to expect the Industry to be obligated to restore water supplies back to an applicable, safe drinking water standard if the supply did not previously meet these standards.

CHAIR:

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Thank you, sir.

MR. WALENTOSKY:

Thank you.

CHAIR:

Thank you. To the 27, Veronica Coptis, followed by Patrick Grenter and then Ken Dufalla.

MS. COPTIS:

I am Veronica Coptis. I live in Carmichaels, Pennsylvania at 408 Springtown Road, also called North 88 Road. And I live in a community, if anybody's familiar with Carmichaels, there's a lot of heavy shale activity going on there. I, myself, have an active rig 1,000 feet from my front porch, a completed rig 450 feet from my back porch and many more throughout in the area.

And we all have some questions about we

got here today, so I just want to ask a question of how many of you took a small drink of a glass of water? Today, how many of you took a breath of air? Which is everybody in this room. So if you don't have clean air and clean water to drink, it's really not going to matter what our type of transportation was to get here today.

So I really just want to commend the DEP for updating the oil and gas regulations, especially for those like me, who are living so close to this activity and holding a public hearing to our input because we really do care what's going to be done to better to protect us. And I think these changes are a step in the right direction, but I think they can go much further to protect the people from the impacts that are living in communities like this, really disruptive right now.

So here are some suggestions I have or maybe you can improve upon the suggested regulations that have been put in place. In terms of your pre-drill water testing and the restoration or replacement of contaminated water supplies, I think the DEP should require an operator to restore contaminated drinking water that meets the Safe Drinking Water Act Standards, no matter what the

quality of the water before. Everybody in this country has a right to community waters. All drillers should use a consistent list of parameters to pre-drill water tests, which DEP must establish before the proposed regulatory changes. Right now, it's kind of --- when, how and what technique they want to do to do a pre-drill water test. And that can deal with --- and this pre-drill data should be made available to the public.

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Standards for frack pits and impoundments. I think that we should prohibit operators from using open pits for storage of regulated substances including wastewater, drill cuttings, other substances like gels and cement that return to the surface after fracking or that are needed before fracking and storage. Many of these spills lead to other problems involving pits that have occurred statewide. This is one of the most possibly contaminated water resources in the region, as well as the air impacts and evaporation. It's happening with various communities here in Pennsylvania. And that waste should only be stored in closed systems. this is what is required in many other states in the country, so these operators are operating in Pennsylvania. They're operating in other countries

(sic), too. They're able to abide by --- states, sorry. They're able to abide by in those states and there would be no ---.

We should prohibit the onsite processing of drill cuttings, which often contain hazardous substances and radioactive materials. We should define freshwater and hazardous waste. When you're driving on a road and you see a truck carrying residual waste, residents have no clue if it's waste water, freshwater. There should be a way to identify what that is. If you take water from a tank that has a hazard placard, that other tank should not be ---when it goes through the hose to an individual waste tank. And there's a lot of unclear definitions that allow operators to avoid these regulations and the disposal of substance.

The only other thing I would add is if these regulations are passed and if we're not going to allow them to --- there's going to come in already constructed in this state. But those should not be grandfathered in under the old law and I think ---. A lot of people have talked about disposal of brine and those kinds of residual waste. I know a lot of what has been said before in the other testimony, the identification of orphaned and abandoned wells, I

think that it's great that you're going to make them identify the existing wells. I think they should have them --- these wells and they should do it more than just from the --- but as far out as well drilling.

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And then, all of these regulations are great only if they're enforced. And so I really want to state in here with some other people that we don't have enough movers on the ground to regulate the --that the Industry is going. So unless you hire more people to enforce it and use strong enforcement, we're going to have the best regulations on paper and the worst in effect. And so in Washington County, we've already seen way too many times the lack of enforcement from environmental regulations that was mentioned before. So I'm going to leave it on the fact that --- and what, in fact, we're supposed to be doing and I think we're making steps in that direction. And the Pennsylvania DEP's mission is to protect Pennsylvania's air, land and water from pollution and to provide the health and safety of its citizens for a cleaner environment.

CHAIR:

Thank you. Next speaker is

Patrick Grenter, followed by Ken Dufalla and then
Kenny Gayman.

MR. GRENTER:

Thank you for the opportunity to comment on the proposed changes to the Chapter 78 Oil and Gas regulations. My name is Patrick Grenter and I am an environmental attorney and the Executive Director of the Center for Coalfield Justice, which is located just down the road here in Washington on 24 South Main Street. First, let me start off by thanking you for extending the comment period and adding several locations for more comments. I think it's commendable by the many of the other previous speakers stating the value and the importance of significant and meaningful public input of these regulations.

The Center for Coalfield Justice was founded in 1994 by individuals organizing against the harm and destruction of resulting longwall coal mining. We have since expanded our mission to help folks impacted by the fracking industry as well. CCJ has more than 1,000 members and supporters, most of whom live here in the crosshairs of the fossil fuel extraction industry, Washington and Greene counties.

While I commend the Board for recognizing the need to adopt revised environmental protection from a performance standard, it is important to note that the proposed standards are far

weaker than what the law requires. Regrettably, it appears that the authors of the proposed rulemaking have ignored several fundamental issues related to oil and gas development. Rather they wrongly prioritize a narrow aim of fast tracking and accommodating the extraction of the Commonwealth's oil and gas resources.

The regulations related to residual waste are unlawfully inadequate. The DEP's own studies have shown extensive and significant environmental pollution and harm resulting from faulty pits. For some reason, despite all of this, the DEP has proposed allowing onsite burial of pits. In fact, the DEP only requires these very pits to be 20 inches above the seasonal high groundwater table. In New Mexico, very strict, that barrier has to be 25 feet; 20 inches here.

Also, the DEP is only proposing setback requirements for these very pits in regards to streams flowing year round, rather than protecting intermittent streams as well, which is contrary to the Clean Stream Law. Why the DEP would fail to recognize the persistent threat that these pits pose to the environment, we have helped --- to comprehend it. Clearly, all of these must be prohibited.

Also, under the proposed regulations,
DEP would allow brines and conventional gas wells to
be spread on roads with dust suppression and de-icing.
Brine spread on the roadways can make it's way through
storm water runoff, into nearby waterways and
wetlands. Brines have the potential to push salinity
loads far above any naturally occurring conditions,
which could impact the quality and uses of nearby
waters. The proposed regulations are not only
imprudent, but they are contrary to the existing
regulations.

The beneficial use of brine or dust suppression has never approved under the Solid Waste Management provisions. Furthermore, the Department has already attempted to issue a beneficial use general permit that would have allowed gas well brines to be use for both dust suppression and de-icing. However, as a result of concerns about health and water quality, the DEP withdrew that general permit. Now, the proposed revisions of Chapter 78 would allow brine to be used for both dust suppression and de-icing, precisely what was attempted with the failed attempt earlier.

MR. GRENTER:

BRIEF INTERRUPTION

In addition, these revisions would be unlawful if adopted because they would establish a permit by rule approval process, which is prohibited under Chapter 287 regulations. Another glaring deficiency in the proposed regulations is that the parties do need to investigate water pollution. The proposed Act 78 regulations require the Department to investigate a claim and determine whether the pollution or a diminution of a water supply was caused by well site construction, drilling, alteration or operation.

This is particularly alarming because this set of activities is much more limited than the activities defined in the oil and gas operations in the proposed regs. The Department wants to define oil and gas operations to include well location assessment, seismic operations, construction, drilling, hydraulic fracturing, completion, production, operation, alteration, plugging, site restoration, water withdrawals, residual waste processing, water and other fluid management and storage, construction, installation, use, maintenance and repair of oil and gas pipelines, natural gas compressor stations, natural gas processing plants, facilities performing equivalent functions. And I

could go on that list, but I'm not going to keep going though.

Despite the fact that all of those activities that are defined in oil and gas and may be relevant to the Department's investigation of water pollution, they are only limiting their investigation to those previous four that I listed. This proposed revision is fundamentally flawed and must be revised to include all of the activities including the definition of oil and gas operations.

Finally, to put this, Pennsylvania is pot-marked by old abandoned wells, some known and unknown. Now the existence of these wells presents a possible migratory pathway for harmful fracking fluids. While we appreciate the Department's efforts to address this issue --- or attempt to address this issue, it is important though that --- there are a lot of things --- regulation training. If the operator alters the abandoned well by fracking, then it must plug the well. And the written testimony will cover the rest.

CHAIR:

Thank you.

MR. GRENTER:

Sorry for talking so quickly.

CHAIR:

Mr. Ken Dufalla, followed by Kenny Gayman and Gail Neustadt.

MR. DUFALLA:

I'd like to thank you all for coming tonight, especially the DEP and everybody here from the --- and from the Conservation Services. We're all here to --- we all require and we all do business. Let me introduce myself, my name is Ken Dufalla. I am Vice President of the Izaak Walton League of America, Pennsylvania Division and President of the Harry Enstrom Chapter of Greene County. I reside at 46 Middle Street, Clarksville, Pennsylvania.

Proposed changes to the Oil and Gas regulations. The Izaak Walton League of America, herein referred to as the League, is the fourth oldest conservation organization in the United States. The League is a non-profit organization with over 48,000 members and volunteers across the United States. Our goal is to ensure that America's natural resources are protected, managed, and used in a sustainable manner for future generations to come. The organization has always and will always support the proper and safe use of our natural resources. The League has never opposed the proper extraction and use of our natural

resources.

natural resources must be accomplished in a manner that is safe to humans and the environment. The current extraction of the natural gas and oil supplies has failed to meet these qualifications of safety.

Numerous incidents of contamination and unsafe practices by the extraction industry have endangered both the health and safety of the people and the environment.

With these failures in mind, the League supports the proposed changes to the PA Oil and Gas Regulations as submitted by the groups from Berks Gas Truth, Clean Water Action, Delaware Riverkeeper Network, Earthworks, Clean Air Council, Damascus Citizens for Sustainability, Inc. and the Sierra Club, Chapter of Pennsylvania.

We the League have an additional recommendation to these proposed regulation changes. In Sections 78.60, 78.61, 78.62, 78.63, and 78.70, wherein the issue of disposal of brine, drill cuttings and residual waste is referenced, we recommend the DEP should include the following statement: Prohibit the disposal of any flowback water or any materials associated with the drilling industry into current

coal mines, abandoned coal mines, slurry impoundments, coal mine discharges and coal refuse piles.

With these new amendments in place, one must also consider the enforcement of these regulations. In October or November 2013, SourceWatch released a study entitled Pennsylvania and Fracking. The study was compiled from DEP reports and other sources that showed the number of new wells increase from 36,000 in 2000 to 71,000 in 2010, an average of 3,500 wells per year.

In response to this gas drilling upsurge, DEP increased its staff by 130 new employees, 65 of which were inspectors. Each of these new inspectors would be responsible for approximately 538 new wells. This number seems monumental for one person. The investigative group ProPublica reviewed records from 48 wells in 2011. They found that of these 48 wells, most were inspected, 42, at least once. Six of the wells were never inspected at all. That's 12.5 percent. None, zero percent, of the wells were inspected during the fracking process. If these numbers are projected to include the numbers of new wells since 2000 to 2010, it would mean that approximately 729 wells were never inspected. This does not include the wells drilled before the year

2000 or after 2010.

With these facts, one must conclude that more employees are needed to protect humans and the environment. Since 2009, the number of deaths to the gas field workers, current gas field workers, has increased by over 100 percent. This is an obvious need for both better regulations and better enforcement of these regulations. One other important factor is that when violations occur or are suspected by the public, the DEP must respond immediately. Too often the response is either not forthcoming or not investigated 'til days after the event.

Enclosed are several requests, which you have, made by the League's Harry Enstrom Chapter,
Greene County, PA that have fallen on deaf ears. The
League stands ready and capable of aiding the
regulatory agencies in any way. The Harry Enstrom
Chapter of the League has developed a water quality
monitoring program and has three years of water
testing data available upon request.

Finally, in support of the rulemaking process and the importance of the proposed new changes in the regulations, we recognize that the general public needs more time to be able to participate in a more meaningful way. We, the Izaak Walton League of

America, respectfully request the following; the public comment period should be expanded to 120 days minimum to allow for the public review and more hearings should be set up in the counties affected by oil and gas extraction. Thank you so much for all of your time.

CHAIR:

Thank you. Next speaker is

Mr. Kenny Gayman. Kenny will be followed by Gail

Neustadt and then Louis Pochet.

MR. GAYMAN:

Good evening. My name is Ken Gayman. I live at 112 Oak Drive, Jefferson, PA in Greene County. I have a farm in Washington County several miles from here. I am also the President of the Shawnee Washington County Chapter of the Izaak Walton League. And the reason why I'm here tonight, I want to see the proposed to be put into oil and gas. I'm the chairperson of the Historic and Ethics Program at the Shawnee Chapter of Washington County in the area of --- I also am a member of the State of Pennsylvania Archaeology Society. I'm a member of the Mon-Yough Chapter 3 Archaeology and History Club attached to California University. I'm a member of the Archaeological Conservancy for the state of

New Mexico.

Proposed changes to the Pennsylvania oil and gas regulations. All drillers make pre-drill available data to the public along with the placement of well pads and compressor stations and where the pipelines are going to be placed. Known as Chapter 78 of the Pennsylvania Code, 13, the Oil and Gas law passed in 2012, there are no provisions in the Oil and Gas Act to protect any archeological and historical sites.

The drilling companies should hire a certified archaeologist to do surveying before any well pads, compressor stations, impoundment ponds, pipelines and roads leading to the well pads to determine that they are not going to destroy any archaeological or historical sites.

There are several laws in existence right now that --- placing protection on all archaeological and historical sites. There are federal laws, state laws, the National Historical Code, Section 106 of that law, Grave Protection Act, Freedom of Religion Act and Burial Protection Act, House Bill 506 passed by the U.S. Senate protecting archaeological and historical sites in New Mexico. And the Pennsylvania Constitution in Fennsylvania

Article 1, Section 27 states in there protection of these sites for this generation and generations to come.

I recommend a provision to be adopted into the Oil and Gas Act to protect these sites, for myself and all the people of Pennsylvania. Refer to Section 78.51 and 78.52; all well pads, compression stations, impoundment ponds, pipelines and roads leading to the well pads be a minimum of 500 feet near these sites. And I am an American and I'm a combat veteran. So this is my right. And this is everybody's right here. It is our right to have these laws and regulations to protect these sites. Thank you very much.

CHAIR:

Thank you. Next speaker is Gail Neustadt. She'll be followed by Louis Pochet and Steve Hvozdovich.

MS. NEUSTADT:

Thank you. I'm Gail Neustadt. I live at 1503 Grand Cypress Lane in Presto, PA in Allegheny County. I want to thank Washington Jefferson for hosting this and thank you, the Board, for their efforts in drafting the proposed regulations. I'm not going to go over --- I have three pages which I timed

myself and it almost took five minutes. But what I have to say has been said repeatedly this entire evening. So I'm not going to belabor it.

But I do want to say that although I live in Allegheny County, and although Allegheny County has few if any unconventional wells and despite Pittsburgh's ban on fracking, we are surrounded by this developing new industry. Air and water, of course, you know, don't stay in the same place. Clouds form, they move and what develops miles away eventually is dumped as rain and dust elsewhere. We've seen in recent years, months, weeks and now also on a daily basis, repeated accidents. What happens in one place could cause a dire consequence in others and, in fact, globally.

When I sat down to write my comments I was going to start out by saying that the proposed regulations fall short in many respects. And I've been hearing all of these comments all evening long. So not only is each regulation lacking, but I think that there are others that are needed. For instance, I don't think anything was said, and correct me if I missed it, a lot of people are knowledgeable throughout this. But I don't think anything was mentioned about the well basins. These cement

casings, about 50 percent of them, already start out with cracks, which allow a methane migration. And so, that doesn't get serviced, the waters, and I don't need to ---.

Another thing is that really, really bothered me that was said repeatedly was the use of flowback water for recycling purposes. I don't think so. That's hardly recyclable. And we're taking all of the gunk that is coming back up out of the wells and releasing it because it's so highly toxic and we don't even know what all the chemicals are because it's a secret sauce. We're not allowed to know. And they're using it to salt our roads to product --- it makes no sense.

But ultimately, to say those things, really it doesn't speak to what my feelings truly are. Because what I should say hasn't been said here yet tonight and unfortunately, a lot of people are gone, but I don't think this is a difficult task. It's easy. Simply ban fracking. Have you ever seen the movie, The Gremlins? They let the cat out of the bag too early. They told us three things; you can't do this, this or this. And all three things happen and all these nasty things are happening without the regulations. And even with them, bad things are going

to happen. And it's just human, it's human accidents. So I don't think that right now we're ready for this type of energy.

I want to also restate Article 1,
Section 27 of the Pennsylvania Constitution. I'll
read the whole thing. We've got a little piece of it
tonight. Quote, the people have a right to clean air,
pure water, and to the preservation of the natural,
scenic, historic and esthetic values of the
environment. Pennsylvania's public natural resources
are the common property of all the people, including
generations yet to come. As trustee of these
resources, the Commonwealth shall conserve and
maintain them for the benefit of all the people.

Folks, this is not happening. We have unconventional gas industry being allowed to grow unrestrained. It's been given carte blanche access to our land, our homes and our health. It has fostered an unprecedented breakdown in the fabric of neighborhood cohesiveness. Our elected officials have turned their backs on the PA voters who entrusted them. And many citizens have been made sick by tainted water. Air pollution and with it lung conditions have increased. To say that our environment's scenic, historic and esthetic values are

being preserved is a lie. Rather they are being undermined, and I mean that both figuratively and literally. And how can our elected officials say that PA's natural resources are the property of all the people when division between mineral rights owners and surface rights owners is rampant? But I'm going to end now ---

CHAIR:

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Thank you.

MS. NEUSTADT:

--- with my two favorite songs,

CHAIR:

Thank you, ma'am. Your time is up.

MS. NEUSTADT:

The Answer is Blowin' in the Wind and Let the Sunshine in.

CHAIR:

Okay. Next speaker is Mr. Louis Pochet, followed by Steve Hvozdovich and then Kristen Cevoli.

MR. POCHET:

Thank you. My name is Louis Pochet. I live in Westmoreland County at 915 Essex Drive in Greensburg. You did a good job at pronouncing my last name. Most people butcher that. Anyway, I am a retired chemist and spent many years working with

companies in documenting and working with their waste management chain. What I find here in this industry is that there's a heck of a lot more laxity than I've ever seen in the manufacturing sector.

Frankly, I find myself concerned with the environmental laxity that DEP appears to have adheres to them, not so far in addressing, the potential issues of harm to the environment that can be collateral damage of the natural gas, fracking industry.

And I found something and I wanted to add this. I found something, first of all, it was in the paper, the Wall Street Journal. It says, for U.S. Drillers, Less Cash. Apparently in the last couple of years, last year, 2013, they spent \$50 million more in North America --- on this industry that they had to take in. And apparently the money is coming in from a lot of foreign sources and it's running dry, which is one of the reasons why this industry, if it's going to survive here in the state, has got to export stuff out of the state. So forget about the real ability to have chemical industry developments here in the State of Pennsylvania. That's sort of a joke, I think, from my standpoint as a chemist.

But anyway, to continue, the main

concern has to be our water supply. And particularly, after the really tough situation that occurred down in Charleston, West Virginia, we've talked about that several times. Today's Journal of Chemical & Engineering News, the Trade Journal, says about this, dated the 20th, toxicity unknown. Lack of hazard data hampers response to chemical spills in West Virginia. I see this, frankly, if we don't even understand what chemicals are being used, we scapegoats that are going to be seeing nothing but continued problems down the road in other --- it may take this generation and the following generation down the tubes.

Anyway, if we continue with this, the

--- we have to at --- for example, open pits and
wastewater impoundments, which were lacking,
obviously, in West Virginia, from the standpoint of
the impoundment capability, I wonder how frequently
does that happen here in Pennsylvania as well. They
all have a tendency to fail at some point in time,
either due to poor construction or by forces of
nature, rain, for example, tornadoes and whatever.
But we need --- it must be appreciated somewhere
between one million and seven million gallons of water
are needed to frack a single well. And that may be
fracked six to seven times in its lifetime to restore

it to some sort of life. Now, water obviously has been abundant here in Pennsylvania, compared to the Western part of the United States, but it still has to be considered a really valuable resource and it must be protected from inadvertent mishaps.

Now, I think it was mentioned here earlier today that one of the possibilities where we're going to see something like 100,000 wells in the state of Pennsylvania. PA is what; about 45,000 square miles. If you divide that, that's basically two wells every --- well, basically two wells every square mile, a little less than that. That's a lot of wells, a lot of potential for having problems developing with our water supply.

An additional concern has to be the radioactive waste that's generated from oil and gas operations. This is radon country and radon gas will be released in the drilling process as well as contamination of the shale waste. We all may recall that several years ago, Interstate 99, the portion between Altoona and Penn State, was held up for years because no one wanted to take the sulfur pyrite contaminated shale fill that was being produced in the road cuts. Eventually, they brought in some --- if you do a Bing on it, they brought in some companies

from across the U.S. that did help to mitigate that and they were able to continue eventually.

But the shale waste itself, the pyrite, is a source of sulfur and sulfur with water combines to form sulfuric acid. That's certainly not something you want to see in your water supply.

It is extremely important that EQB and DEP act solely not in the interest of the gas industry, but primarily in the interest of the citizens of the State of Pennsylvania and preserving our environment. This includes proper regulation ---.

CHAIR:

Thank you, sir.

MR. POCHET:

Oh, my time is up? Well, thank you very

much.

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CHAIR:

Next speaker is Steve Hvozdovich followed by Adam Garber, not Kristen Cevoli, and then Anthony Berardi.

MR. HVOZDOVICH:

Steve Hvozdovich. I am a Marcellus Shale Coordinator for Clean Water Action. Our Western PA office is located at 100 Fifth Avenue in Pittsburgh.

Good evening. My name is

Clean Water Action welcomes the

Department of Environmental Protection's decision to

update chapter 78 of the Oil and Gas Act and views it

as a potential step toward better protecting our

health, safety and environment. However, DEP needs to

strengthen many of the vital regulations being

proposed.

Prior to publication of the regulations, Clean Water Action worked with other organizations to provide feedback to the Technical Advisory Board, the Environmental Quality Board and DEP. We identified areas that we believe required additional focus, including those pertaining to the use of open pits and impoundments, identification and closure of abandoned wells, restoration or replacement of contaminated water supplies and pre-drill water supply sampling requirements. These areas are the focus of my comments tonight.

We learned in 2013 through a Scranton

Times news article that DEP issued determination

letters concluding that natural gas drilling

operations had impacted at least 161 water supplies

statewide. Note the water supplies in PA are being

negatively affected, is extremely important that

Section 78.51 addressing the restoration and

replacement of contaminated water be maintained to require that operators restore water supply to at least the quality that meets Pennsylvania Safe Drinking Water Act Standards, no matter what the quality of the water prior to drilling. If the quality of the water supply prior to drilling was above these standards, the operator must restore the water to meet the higher standards. Otherwise, good water supplies will be degraded.

DEP leaves it up to the drillers to decide when, where and how to conduct water quality tests before drilling starts. It is important that the provisions in Section 78.52 dealing with pre-drill water testing ensure that affected homeowners are treated fairly and that they and DEP have enough information to determine whether operators are responsible for any changes in water quality.

Under this Section, DEP should require that all drillers use a consistent list of parameters for pre-drill water testing, which DEP must establish. The parameters should, at minimum, max what DEP uses when it conducts full contamination investigations. A lack of data on contaminants like methane, ethane and benzene means that responsibility for contamination can be avoided and left unaddressed, as evidenced by

the resolution to some of the 161 water contamination cases. In addition, all pre-drill data collected should be made available to the public through an online platform while protecting individual homeowners' privacy.

The proposed regulations continue to allow the use of open pits and impoundments for temporary storage of regulated substances including wastewater, drill cuttings, and cement and gels that return to the surface after fracking. Open pits and impoundments have the potential to contaminate groundwater and surface water and many spills, leaks, and other problems involving pits have occurred statewide.

These mounting violations and potential for pollution have already led some companies to transition away from pits and standardize the use of closed loop systems, which utilize tanks to store wastewater. States like Illinois have seized on this movement and put into law requirements that hydraulic fracturing fluid, hydraulic fracturing flowback and produced water at well sites be stored in above-ground tanks during all phases of drilling.

Pennsylvania's continued acceptance of open pits and impoundments poses continued

environmental risks. According to Finding III.4 of the State Review of Oil and Gas Environmental Regulations report, known as STRONGER, the DEP's experience with pits has shown that although their use is decreasing, many liner failures still occur with pits. STRONGER recommends that DEP consider adopting regulations or incentives for alternatives to pits to prevent the threat of pollution to the waters of the Commonwealth. Sections 78.56, 57, 58 and 59 pertaining to standards for open pits and impoundments should be amended to prohibit operators from using open pits and impoundments for storage of regulated substances.

you have my additional comments on some of the specific statutes. But I also wanted to say that, given the in-depth nature and the importance of Chapter 78 provisions as well as the impact of the recent PA Supreme Court Decision upon Act 13 of regulatory provisions, we applaud the DEP for extending the public comment period and adding additional public hearings, which will provide an important aspect of the regulatory process which is public input. Thank you.

CHAIR:

Thank you. Next speaker is Adam Barber

2 --- or Garber, I'm sorry.

MR. GARBER:

No problem.

CHAIR:

Followed by Anthony Berardi and then

Maxine Fisher.

MR. GARBER:

And thank you for the opportunity in allowing me to make testimony. My colleagues are stuck in Philadelphia due to the weather.

CHAIR:

That's fine.

MR. GARBER:

My name's Adam Garber and the Field
Director for PennEnvironment, a statewide, citizen
based environmental advocacy group with over 100,000
supporters throughout the Commonwealth. Our office in
the Western part of the state is at 1831 Murray Avenue
in Pittsburgh, Pennsylvania. I will be submitting, as
many people have said also, a more detailed comments
of the Chapter 78 regulations. And I want to focus on
a few pieces. But before I do, I would like to thank
the DEP for extending the public comment period and
having two additional hearings, I think, as Steve just

said, that the comment public comment process is the most important part of this. We would urge you, concerning the momentous nature of the regulations, is the best opportunity to deal with the damages from the drilling industry to consider extending another 30 days to make a fuller and complete process.

Before I talk specifically about some key pieces of the regulation, as folks know, fracking in Pennsylvania is one of the biggest threats faced in Pennsylvania today. We've seen 700,000 acres of our public land leased, 161 documented cases of drinking water contamination, 1.2 billion gallons of wastewater produced in Pennsylvania containing toxic and radioactive chemicals, all putting our air and water and our public lands at risk.

In recent years, the gas drilling industry committed over 4,300 fracking violations in the state. And recently, even the Pennsylvania Supreme Court warned against the dangers of fracking stating by any responsible account, the exploitation of the Marcellus Shale Formation will produce a detrimental effect on the environment, on the people, their children and the future generations, in striking down large sections of Act 13.

The danger continues to mount more and

more. Pennsylvanians are speaking out against this dangerous process. And just this past year, over 100,000 Pennsylvanians called for moratorium on fracking until our environment and our public's health recover. Given everything we have seen, PennEnvironment firmly believes that this fracking frenzy has to end. And that the families who have been caught up in the wake of the Oil and Gas Industry, who have seen their drinking water contaminated and their health put at risk, any small measure to reduce the risk is welcome.

For my testimony, I'd like to specifically talk about the regulations and proposed language around the wastewater pits in the Commonwealth. During the informational webinars the DEP presented on the proposed regulations, they stated that the new proposals would prohibit the use of open pits for the storage of produced water, found in Section 78.1 and 78.56 to 78.64.

PennEnvironment fully supports the ban to the dangerous practice of storing fracking wastewater in open air pits. This wastewater contains toxic chemicals that have been linked to a variety negative of health effects. The chemical components of fracking fluids, for example, can lead to cancer,

endocrine disruption and neurological immune system problems.

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

Sadly, after a complete analysis of the proposed regulations, it is clear that the current language does not result in the elimination of the destructive and dangerous practice of open storage pits. Sections 78.1 and 78.59a to 78.64 of the proposed regulations, when taken in conjunction, continue to allow open, and even buried, storages of fracking wastewater, contrary to the statements of DEF. Allowing for the continued use of centralized

impoundment pits and temporary wastewater pits is allowing this dangerous practice to continue.

Well call on the DEP to completely ban the use of all pits for the storage of wastewater, drill cuttings, residual waste and other contaminated substances in these proposed regulations, whether it's permanent or temporary holding ponds. Instead, the DEP should be ensuring that produced wastewater, flowback and other contaminated fluids are stored in closed loop systems, with a secondary containment, and a leak detection system. And this must happen without exceptions in order to better protect our health and out environment.

We thank you, again, for the opportunity to testify tonight. And we'll be submitting additional comments on the rest of the regulations. Thank you.

CHAIR:

Thank you. Next speaker is

Anthony Berardi and he'll be followed by Maxine
Fisher, then John Walliser.

AUDIENCE MEMBER:

What number are we on?

CHAIR:

We're on number 35.

MR. BERARDI:

Hello, I'm Anthony Berardi. I live at 940 Northeast Drive, Irwin, Pennsylvania, 15642. And I have to apologize for everybody here, including myself; my wife is a stenographer and I know how fast people are talking, so I'm sure you'll have an interesting ---.

Anyhow, I have been in the industry the last four years and I'm an independent service operations landman. Every day I wake up grateful for this incredible resource below our feet. However, increased or a complex regulatory environment will hamper this entire industry and all of its cascading opportunities.

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

Our most important duty is to try to keep people informed and satisfied with our operations. We introduce ourselves to landowners as

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

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

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

construction, drilling and fracking is over, things will get back to normal. We pride ourselves on the fact that we may have to come back into the area in the future, so it is important that we maintain a positive relationship with our neighbors.

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

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

CHAIR:

Thank you. Next speaker is

Maxine Fisher. I'm not seeing Maxine here; we'll move
forward to the next speaker, John Walliser. And
following John Walliser will be Ron Slabe, followed by
Terri Supowitz.

MR. WALLISER:

John Walliser, Pennsylvania

Environmental Counsel. 2124 Penn Avenue, Pittsburgh, Pennsylvania. And I will also be speaking for Andrew Williams from the Environment Defense Fund, who was scheduled to speak after me, but wasn't able to attend because of the weather.

We appreciate the opportunity to provide brief comments on the Department of Environmental Protection's proposed amendments to Chapter 78; please note that we will be providing more comprehensive written comments as well.

We are nearly two years removed from passage of Act 13, a law that has since been partially invalidated by the Pennsylvania Supreme Court, directly affecting elements of this regulatory proposal. PEC recognizes the extensive challenge set before the Department in fulfilling new protections afforded by the law while also meditating on the Court's decision.

Nonetheless, we are far better off with promulgation of the expanded protections contained in this rulemaking than to further delay action. We urge the Department, after carefully considering public input, and with due regard to the Supreme Court's decision with respect to the import of the Environmental Rights Amendment, to finalize this

proposal. Without question, the Department will need to promptly revisit its regulations when the Courts conclude their adjudication of the law. But we should not sacrifice critical improvements that have been under review now for almost two years.

With that said, I'd like to offer a few quick observations on the proposed rulemaking. We commend the Department for taking the initiative to respect pre-hydraulic fracturing assessment under Section 78.52a and 78.73 of the proposal. We will need these provisions to be strengthened to expand the scope of the operator's analysis of potential fluid conduits and the impacted strata, and to require operators to verify avoidance or mitigation of identified hazards prior to hydraulic fracturing.

While we support the principle that use of mine influenced water can offset freshwater consumption when performed pursuant to proper safeguards, we believe Section 78.59b, which permits storage of mine influenced water in designated freshwater impoundments, fails that protection standard. At a minimum, the safeguards for storage of mine influenced water should equal those required for wastewater.

We recognize the Department may consider

allowing temporary storage of brines or produced water to facilitate recycling in future hydraulic fracturing. If so, storage should only occur at permitted and bonded well sites with robust leak detection, secondary containment, capacity and time limit measures.

For Water Management Plans, Section 78.69, in the Ohio River Basin, we urge the Department to follow the lead of the Susquehanna River Basin Commission's Low Flow Protection Policy to reduce adverse impacts to aquatic resources through better siting and timing of withdrawals.

The protection of Public Resources was directly addressed by the Supreme Court decision, and we believe Sections 78.15(f) and (g) should be redrafted. We maintain, as we have expressly advocated in the past, that the Department should expand upon on the list of, and analysis required for, identified Public Resources, and that there should be a presumption of permit conditions or denial where analysis determines probable impact. These standards should be mandatory for both conventional and unconventional operators.

As part of a broader examination of Act
13 and its implementation after the decision of the

Supreme Court, we again question basing the distinction between conventional and unconventional operations and the application of differing protection standards solely on a depth of extraction. The risks of hydraulic fracturing are arguably greater in shallow formations. While the Department may not have liberty at the moment to revisit this distinction in protection standards, we should be prepared for such reassessment pending resolution with a legislative or judicial of the law. Thank you for your consideration.

CHAIR:

Thank you. Next speaker is Mr. Ron Slabe, followed by Terri Supowitz and Florence Johnson.

MR. SLABE:

My name is Ron Slabe and reside at 516

Angelcrest Drive, Upper Burrell, Pennsylvania and I am here representing Upper Burrell Citizens Against

Marcellus Pollution. Let me begin by first asking that additional locations be designated for commenting as well as the comment period extended. The issues before us are too great for such a short period for public access and comment.

Let me start by saying that it is an

environmental travesty to allow the existence of open pits or impoundments, be they permanent or temporary, and all should be banned. These frack pits are a source of toxins and cancer causing agents that pollute through leakage, spillage and the evaporation into the air of volatile organic compounds, thus contaminating water, soil and the air we breathe. In so far as leakage alone, DEP's Alan Eichler describe these pits as, quote, the most serious issue we've encountered with pollution, end quote. And indeed, frack pits are one of the most dangerous environmental hazards and aspects of the oil and gas industry and to allow their continued existence in our Commonwealth is unconscionable.

The flowback and/or produced water stored in such pits contain the chemical pollutants used in the fracking process as well as strontium, barium, heavy metals and radioactive substances brought back from the shale layer. Such pits are uncovered and unfenced, allowing domestic animals and wildlife to wander into these cesspools or be attracted to them due to the heavy concentrations of brine within. Even fencing will do little to deter deer from entering the frack pit areas nor is bird netting a feasible means of keeping wildlife out. The

only solution is to ban frack pits completely.

In place of such impoundments, all gas drilling companies should be required to use some form of a closed loop system. New Mexico and Illinois have either banned the use of open storage pits or require closed loop systems. The U.S. Interior Department strongly encourages closed systems and tanks since they, quote, minimize waste, prevent entry by wildlife and fugitive emissions affecting air quality and reduce the risk of soil and groundwater contamination, end quote.

In the same vein, the burying of drill cuttings and their processing should also be prohibited since they often contain hazardous substances and radioactive materials. All such cuttings should be first tested for radioactivity and disposed of properly. Moreover, the burying of pit liners, a common practice, should also be prohibited and their proper removal and disposal strictly regulated.

Further, all orphan wells should first be identified and plugged before drilling can occur on a site. Such wells can be a source of methane migration and a form of groundwater contamination and must to first identified and monitored strictly

through DEP onsite inspections and assessment. There should be no residual waste such as brine and wastewater used on Pennsylvania roadways, even when coming from conventional drill sites. Such brine can contaminate ground water, streams, rivers, soil and vegetation.

Pre-drill water testing must be comprehensive with a baseline established for water quality. The proposed regulation fails to specify parameters for the pre-drill test of a resident's water quality and leaves too much discretion in the hands of the drillers rather than the hands of the DEP. Furthermore, contaminated drinking water must be restored to the Safe Drinking Water Act Standards and not just to pre-contamination conditions.

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 hydraulic fracturing methods, it is imperative that they also be included in all the DEP proposed regulations. Thank you for your time and your endurance. That's it.

CHAIR:

Thank you. Terri Supowitz followed by

Florence Johnson and Bob Howard.

MS. SUPOWITZ:

I will give you copies. You'll get e-mailed copies of this testimony.

CHAIR:

Thank you.

MS. SUPOWITZ:

I am Terri Supowitz. I live at 310 Hay Street in Wilkinsburg, 15221. The mission today for the Department of Environmental Protection is to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. And let me begin by saying that really, you can't protect the environment and frack at the same time. And I believe, from the bottom of my heart, that fracking needs to be banned and I believe it will be. Not today, maybe not tomorrow, but It Will be.

There will be no State of Pennsylvania left. The work that you are doing to revise these regulations is the most important work that you will do in your lifetime. You are saving Pennsylvania; it is possible. You are saving our nation and you are saving our land, and our planet, doing the best work that you have ever done.

The State of Pennsylvania does not belong to the oil and gas industry. The State of Pennsylvania doesn't --- politicians who owe their electoral offices to the oil and gas industry. The State of Pennsylvania does not belong to the frackers who want to make a quick buck --- to the residents. The State of Pennsylvania belongs to the people who live here, work here and raise their children here.

The oil and gas industry is not like any other industry. What you have learned here in relation to the regulations is really just the tip of the iceberg. It is so complex and --- I have been studying it through the years. I am not a scientist. I think there's scientists who have been studying this would say the same thing, that there are just so many unknowns. And we have to find out what those are. We can't do studies. The State of Pennsylvania doesn't want to be an experiment. People live here. This is not, you know --- nothing, you know, there's no life.

Fracking is a cancer spreading all over the state. It is more harmful than any other industry to everything around it, to everything that comes in contact with it. This is more harmful to the air, soil, water and the health of the people, animals and plants. We are talking about the health of the entire

planet. Pennsylvania is just one state out of the United States. All water is connected; all air is connected.

What other industry has a broad negative impact? And what is worse that it has been regulated less than any other industry with huge loopholes. How is that possible? Make that as --- from the beginning, oil and gas, they have their own rules. Just look what they have for a loophole. How many other industries do not have to comply with the Clean Water Act? We are suffering from the economic --- that the oil and gas industry would go elsewhere. Where are they going? This is where the gas is; they're not going to go anywhere else.

The regulation, in my opinion, need to go further and not just dealing with the tip of the iceberg. They need to benefit the residents and protect the environment, not protect and benefit the oil and gas industry. The oil and gas industry has had a free pass in Pennsylvania. We get that --- this thing of fracking is the next best thing to sliced bread. He's wrong. Fracking is morally wrong, it is terribly dangerous and the residents of Pennsylvania are suffering the consequences.

The regulations have to be titled with

no wiggle room; no exemptions, no exceptions. No wiggle room for the oil and gas companies to get out of their responsibilities to the community, the environment and the residents. The most rigorous oversight of inspection on a regular basis, which will mean hiring tons of additional people ---. The fines have to be raised up so they won't pay the industry to ignore regulations. Right now, the fines are probably so low that the oil and gas can afford to continue to pollute and just pay fines because they are probably lower than the cost of rectifying this problem.

I want to suggest that we have a hearing in every county in the state of Pennsylvania. That's how important it is. And that we set it back for 120 days and maybe 240 days.

In conclusion, the Pennsylvania

Constitution says that the people have a right to

clean air, pure water and the natural, scenic,

historic and esthetic values of the environment.

Pennsylvania's public natural resources are the common

property of all the people, including generations yet

to come. As trustee of these resources, which is you,

the Commonwealth shall conserve and maintain them for

the benefit of all the people.

CHAIR:

Thank you. The next speaker is Bob

Hayward.

MR. HOWARD:

Howard (corrects pronunciation).

CHAIR:

Howard, I'm sorry. It was handwritten, so I couldn't read it.

MR. HOWARD:

That's all right. Ladies and gentlemen, thank you for taking public comments related to proposed changes to Pennsylvania's oil and gas regulations. First, I am not a member of the gas or petroleum industry. I'm not a member of an environmental interest group. I am not being paid to address you. I am an average citizen that will benefit directly from lower costs to heat my home. I'm an average citizen that will benefit from the expanded economic activity supplying more jobs and community tax revenues.

I am here to request rational regulations based upon the facts and cost benefit analysis. I am here to ask you to resist any temptation to pander to special interest groups. I am asking you to respond to the needs of the average citizen for inexpensive energy, energy to heat our

homes and energy to create new job opportunities in Pennsylvania while protecting our environment.

I am here to ask you not to be bullied by zealots asking you to believe the worst that can happen, will become the average. We citizens realize that economic activity has risks associated with it. It was really not that long ago that our great-grandfathers were warned that George Westinghouse's alternating power and light were much too dangerous and that people would be electrocuted daily in the streets and that on a daily basis, homes heated with natural gas would blow up and burn to the ground. Do people get electrocuted? Yes. Do homes blow up? Yes they do.

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

Now is not the time to over-regulate with new regulations that will make energy more

expensive for the average citizen, curtail job creation, and continue our dependency on imported energy from a volatile Middle East.

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

Now is not the time to establish new barriers to economic development and job creation. Unnecessary and expanded regulations related to special concerned species raises questions about the list generation and efforts to mitigate impact. We need reasonable regulations and not a full employment act with a legal professional. Regulation needs to consider the human cost of destroying jobs that will deprive thousands of trained apprentices and workers low on the totem pole a chance at a decent wage.

Regulation must consider the impact on the individual's mineral rights and the owner's ability to optimally develop his or her own gas rights. We the citizens do not benefit from the illegal taking of private property rights by over

regulation. Class action suits by the citizens deprived of their property rights do not --- are costly to the public and stall economic activity.

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

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

CHAIR:

Thank you. Next speaker is Florence Johnson.

AUDIENCE MEMBER:

She's gone.

CHAIR:

She left? okay. Debbie Lamber? Is
Debbie Lamber here? We'll move forward to
Robert Smetzer. Robert Smetzer? Mike Graham.

MR. GRAHAM:

I'm Michael Graham. I'd like to thank you for the opportunity to present here this evening. I live at 7880 Steubenville Pike, Oakdale, PA. The conventional oil and gas wells I own and operate are located in Armstrong, Butler, Allegheny and Washington counties. Some of the wells I own and operate were drilled before 1900. These wells have provided a valuable, economic resources to owners, operators, employees and associated 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 on behalf of the Pennsylvania Independent Petroleum Association and is to express our opposition to the passage of these regulations as published in the Pennsylvania Bulletin.

Shallow oil and gas wells, conventional wells, have operated in this state for over 150 years

and regulations governing those wells have been more than adequate to protect the environment while allowing producers to operate profitably through most of those years. Be assured that the legacy wells that produce small amounts of oil and gas will not withstand the cost of the individual regulations.

Issues such as reference to Act 2 procedures for cleanup of spills at oil and gas well sites will impose excessive and unnecessary costs to the oil and gas operator and are not justified by a clear environmental benefit. Secondly, the obligation to return land to approximate original condition that existed prior to well site construction disregards the ability of operators and land owners to agree on site restoration.

Third, the requirement for PPC plans creates an unnecessary burden for small operators. Plans would be similar for each well site, yet frequent updating would be required for the plans to be meaningful. Most of these old legacy wells are hardly noticeable today. And the sites after being in existence for 50 to 100 years are water sites in most locations.

Fourth, the pit requirement for a slope no steeper than two horizontal and one vertical for

conventional wells, which are small and contain less than 100 BBL of fluid, and are used for a short period of time, one to two days, results in substantial larger areas of disturbance and greater costs without benefit. Five, the requirement for conventional wells to retain soil scientists for certification of pit bottoms relative to the seasonable ground water table adds a significant cost for operators. A performance standard would be appropriate.

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. Seven, the obligations related to special concern species result in a process which could be never ending, costly, and possibly without authority or benefit.

Eight, the protection of tanks from unauthorized acts of third parties is nearly impossible when that unauthorized party decides to vandalize equipment and tanks. Measures that fit the circumstances, tank sizes, location secondary containment signing, and locks where appropriate, need applied at the operator's discretion rather than

mandated by regulation.

Given the number of tanks, manways, plumbing and valves that have been installed during the existence of the industry a regulation cannot address all the variables without resulting in the need to replace tanks and tank containment facilities and in many instances --- tank containment facilities in many instances. Modifying tanks by drilling or welding to secure locking devices would require expensive cleaning, use of inert gases to secure lock in devices to prevent explosion at a substantial cost.

CHAIR:

Thank you, sir. Your time is up. Thank

14 you.

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MR. GRAHAM:

All right.

CHAIR:

Thank you. We'll read the rest of it

19 into the record.

MR. GRAHAM:

You will?

CHAIR:

Yes.

MR. GRAHAM:

Thank you.

CHAIR:

John Brunner? Not here? Oh, okay. Ron
Brunner --- John Brunner?

OFF RECORD DISCUSSION

CHAIR:

Next name is Joe Judeikis.

MR. JUDEIKIS:

My name is Joe Judeikis,

J-U-D-E-I-K-I-S. I live at 105 Mingo Church Road, Finleyville, PA, part of Washington County. And I don't represent any special interest here.

Regulations are necessary to ensure industries are provided the necessary governmental guidance to conduct themselves in a responsible manner.

Regulations are typically written in blood, so to speak, in that they are intended to prevent the reoccurrence of negative events having already occurred or those having an extremely high probability of occurring.

Over-regulation is a dangerous phenomenon that occurs when regulators, through totally honorable intentions, raise the noble purpose of regulations beyond their legitimate need to that of creating a perfect world. This dangerous departure from real regulatory needs has a much more detrimental

effect than no regulation at all as it can literally kill an industry.

As such, I ask the Environmental Quality Board and DEP to revisit their proposed regulatory package and subject each section to the litmus test of Reality versus Perfect World. If there is adequate past history to support a section, then so state this specific history and adjust the measured regulatory response as deemed appropriate. However, if the basis for requirements in each specific section serve rather to create a perfect world as opposed to a measured response for preventing reoccurrence of a negative event, then these sections must, by definition of a truly needed regulation, be deleted.

Propaganda regarding the environmental effects of drilling are rampant in both camps. It is the role of good government to seek out the truth and act on the facts, not emotions of a vocal few. Thank you for the opportunity to share my assessment and suggestions. Thank you.

CHAIR:

Thank you. Next speaker is Ron Gulla.

MR. GULLA:

Good evening. My name is Ron Gulla. I live at 302 Linden Creek Road, Canonsburg,

Pennsylvania. I am here tonight as a concerned citizen, dedicated to the protection of public health and the environment from impacts caused by oil and gas drilling.

Before raising a number of substantive issues, there are two procedural points. First, the comment period established by the Board currently is 60 days. This is grossly inadequate. The comment period should be extended to at least 120 days to afford the public adequate time to comment. Second, additional hearings should be held so that there is at least one hearing in each county that has been or will be impacted. It is unconscionable to us that there are no hearings in several of the most heavily impacted counties such as Bradford, Butler and Susquehanna. The best way for this Board to learn that negative impacts may occur is to hear directly from those heavily impacted to date.

Turning to the substantive issues, I want to highlight four important aspects of the proposal. First, the protection of drinking water supplies requires further revisions. Documents obtained from the Oil and Gas Division of DEP show that through 2012, at least 161 drinking water wells have been contaminated by oil and gas development

activities. What must be required is that existing water quality be documented before any development activity takes place. Pre-development water testing should involve a comprehensive and consistent set of parameters. The required parameters must be far more inclusive than merely the primary and secondary Safe Drinking Water Act Standards. Both DEP and agencies and other states have identified hundreds of different chemicals that have been used in hydraulic fracturing fluids. Drinking water wells should be tested for the broadest spectrum of chemicals known to be used in fracking operations.

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When contamination of drinking water wells does happen, the oil and gas well operator must be required to restore that drinking water to at least the water quality standards required for public water supplies. If the pre-construction water quality was better than these standards, then the operator must be required to restore that quality at a minimum.

Secondly, it is well known that there are hundreds of thousands of orphan and abandoned oil and gas wells spread across the Commonwealth. Each of these wells is a potential conduit for contamination. Before any development should be allowed, the applicant for a permit should be required to conduct

an onsite survey extending at least one mile from the edge of the proposed site, one mile radially from any horizontal well bore and one mile from the end of each well bore to identify orphan and abandoned wells. The permit application must document that such a survey has been performed and any wells identified have been properly plugged.

Third, the regulations should prohibit the use of open pits or impoundments for storage of fluids, drill cuttings and other wastes. Anything less than closed loop fluid management should not be allowed. These restrictions should not only apply to new operations, but be applied to continued use of existing pits and impoundments as well.

Fourth, the regulations should include a comprehensive waste management system such as that adopted under Subtitle C of the Federal Resource Conservation and Recovery Act. Although the RCRA program now has limited application to the oil and gas industry at the federal level, there is no restriction in federal law that precludes a state from applying more stringent waste management requirements. It is essential that there be a true cradle to grave waste management program applicable to oil and gas development.

Five, as it considers these proposed regulations, this Board should apply standards for its review and a policy for a decision that is fully faithful to its trust responsibilities under the Environmental Rights Amendment of the Pennsylvania Constitution.

As the Supreme Court recently stated in striking down parts of Act 13 as unconstitutional; the benchmark for decision is the express purpose of the Environmental Rights Amendment to be a bulwark against actual or likely degradation of our air and water quality.

As trustee, the Commonwealth has a duty to refrain from permitting or encouraging the degradation, diminution or depletion of public natural resources, whether such would occur through direct state action or indirectly because of the state's failure to restrain the actions of private parties.

CHAIR:

1.8

Thank you. Next speaker is Joni Rabinowitz.

MS. RABINOWITZ:

My name is Joni Rabinowitz and I live at 7721 Edgerton Avenue, Pittsburgh, Pennsylvania, 15221. I believe this current horizontal gas drilling is the

most serious issue facing our state, in fact facing all of humankind, that I have ever experienced in my lifetime, which is 72 years. People are dying all over the world and we're turning a blind eye to them because we didn't seek the probability.

changes in your procedure. First that the public comment period be extended to 120 days at a minimum and second, that more hearings be held in all the affected counties. Two, for the purposes of these regulations are to ensure the protection of public health, safety and the environment and to protect public resources, to minimize impact from gas and oil drilling. I think we would all agree that extending extraction of fossil fuels doesn't do either of these. And by and large, these regulations are relatively weak and DEP doesn't have enough staff to enforce them.

Regarding the issues in the first place of my concerns about the amount of water available all the way around the planet. It is finite and I'm worried about this. I've studied all across the world and the United States to see how lucky we are here in Pennsylvania. Water is the only thing required to keep life going.

One of my concerns is the section which prohibits fluids from within 100 feet of certain bodies of water. Intermittent, ephemeral streams, streams which do not run all year long, also need to be protected under the Clean Streams Act. Wildlife and plant life are volatile are not protected by these regulations.

Another one of my concerns is wildlife and forests. Our civilization has developed over hundreds of thousands of years. There's a growing rapid relationship between all beings here on earth. Each has a purpose and a relationship with others. When we mess with that, we're messing with the geology and we're messing with the geology of the deep earth, we take a big chance at ---.

Already, massive drill cutting has devastated huge sections of our old forests. Planted grass, even planting trees does not substitute for an old grown forest. Fortunately, having spent much time in the woods, marveling at all the plant life and the details of the environment, I don't think it's possible to mitigate the growth of this industry perpetrates on that environment. I don't see anything in these proposed regulations to adequately extend our wildlife, our low lands and their residents. Also, I

don't think regulations apply to our state parks and conservation district, but we use up all of our ---.

Many aspects of this gas industry are not being discussed and addressed by these regulations as far as I know. These include the amount of freshwater they're using --- how long it's taking for the condition of the workers, the lack of training as well as emergency workers, compressor stations, the containment tanks --- and more. Here are a few issues. Still nothing. We don't hear nothing about that.

They give the word to the DEP, but when you ask the DEP for copies of them, they say they don't have them --- whether we request, we're not getting them. We hear about it --- but nothing more. Shouldn't the company be responsible for fixing the problem and ensuring that doesn't happen again? This incident has a 5 to 14 percent failure rate in the first year. Any other industry with such a failure in the first would be out of business. A recent document --- shows that the main resources completely failed in the operation, despite being required to do so by the industry's own standards. DEP demands it unless we get this. And lastly, according to a recent study by the --- we are one of the few states, along with

Atlanta, we're totally --- regulations and inspections, mainly because of the law that people are not in --- we need to fix that.

In closing, I want to say that I haven't completely studies this document and I don't necessarily understand all of it either. I'm just a regular citizen with no special --- in any of these areas. I have learned, though, about the destruction from this industry. When I'm on my deathbed, I want to be able to say that I did my best to save the planet from annihilation. Thank you.

CHAIR:

Next speaker is Pia Colucci.

MS. COLUCCI:

I think everybody recognizes this bottle. This is Periot (phonetic); it comes from France. France has banned fracking ---. And I, an average citizen, and my gas prices in my house have never --- so I don't know. My name is Pia Colucci. I'm at 4725 Wallingford Street, Pittsburgh, 15213. I thank you, Pennsylvania Environmental Quality Board, for holding this hearing today. But I was sadly surprised that the nearest meeting place to Pittsburgh was an hour away. I am confident that the meeting --- had it been held in the city, we could have had more

participants.

But be assured, that each of us that were here and are still here, against fracking, are speaking for hundreds more. We are their voice tonight and we take that responsibility very seriously.

We do ask that you extend this hearing time to 240 days and increase it to every county in the state. Because as a realtor, I know that people move around and we are not just in Allegheny County or just Washington County. Maybe next year, I will move to a county that is affected. So we should have in every single county a hearing so people can be informed as to what's going on.

nightmare come true, that the timing of this water hearing is in the middle of an ongoing crisis where 300,000 West Virginians are struggling with a chemical spill polluting the water. I cannot imagine the horror to find out that my family and myself would have been drinking toxic water for a week before it was announced not to touch it. And I reiterate, not to touch it. Only use it to flush the toilets, which is what I think about this industry. Flush it down the toilet.

Stop for a second and imagine that you're looking at your child, knowing they drank that polluted water for a week and that you didn't know it. Now what? No one is really sure what that chemical in question will do to the human body, which brings me to the fact that no one knows what chemicals are used by frackers as they pump millions of gallons of toxic brew, under pressure, into our Earth, in order to extract natural gas that is then sold and shipped abroad. Frackers will not divulge the poisons they're using, citing proprietary formulas.

This is why it is paramount to protect our streams, weather or not they will continuously year round, our creeks, rivers, natural depressions that include vernal ponds, which are a seasonal wetland used for spawning, lakes, wells, ponds and any other natural or manmade body of water. The toxic brew used by frackers is lethal to human consumption. When contamination occurs to wells, waterways or any other water source, frackers response always leaves the likely possibility that humans that consume that water before that water ban is announced or toxic laden water is discovered.

It is no secret that trucks dump their water loads, their wastewater loads into creeks in the

cloak of night. That is documented. It is human nature to take an easy road versus following the law. And the laws are flawed, in any case. Holding ponds are breaking the law of our state in my and many people's opinions.

The Constitution of the State of

Pennsylvania states in Section One, Inherent Rights of

Mankind, possessing and protecting property and

reputation, and of pursuing their own happiness. In

Section Two, as we have heard multiple times tonight,

that people have a right to clean air, pure water and

to preserve preservation of the natural, scenic,

historic and esthetic values of the environment.

Another notable timing event is the release of Rich Fitzgerald's Live Well Allegheny campaign of January 21st. He states, and I quote, this is a new day and a new Allegheny County. Our residents are seeking an active, health lifestyle and are taking proactive steps to improve their health.

Not only are they focused the physical health, but on their general well-being. We want to do everything that we can to encourage that interest. Under the leadership of Dr. Hacker and the Board of Health, the Live Well Allegheny campaign will stimulate our community and make better decisions for the health and

well-being of all of our residents, end quote.

None of that is possible without clean, reliably safe water. It is our job as citizens to demand it and the job of our government to enforce it vigilantly and strictly. There is no room for fracking in this right. Fracking is and always will be an inherently dangerous and destructive practice, in an industry that is outdated and toxic. The day of the fossil fuel is over and the dawn of renewable energy is here. Let's protect our one and only spaceship as if our lives depended on it because they do. Thank you.

CHAIR:

The next speaker is Beth Wallace.

Beth Wallace?

AUDIENCE MEMBER:

Just left.

CHAIR:

Not here, okay.

AUDIENCE MEMBER:

No.

CHAIR:

At this time, that is the last of the registered speakers. At this time, I would like to open the floor up to anybody else who would like to

provide any additional comments or testimony. Is anybody here that would like to provide any other testimony? Can I get your name? Laney Zipco?

MS. ZIPCO:

Yes. My only request is that you address the fact that the oil and gas industry would not reveal the chemicals. A lot of people have said that we need to have pre-drilling water testing. You cannot do that if you don't know what chemicals there is. Because water companies, testing companies don't go out and drill for every --- they have like 500 chemicals they use. You can't afford to do that.

So what they need to do is either address that and tell the landowners what they're using. And you should want to know because they're disposing of that. And if they won't tell them, then they have to pay for the water to be tested. They'll tell them after a couple of tests because it's very expensive.

CHAIR:

Could you please state your name for the

record?

MS. ZIPCO:

Lanie Zipco (phonetic).

CHAIR:

Okay. Thank you.

MS. ZIPCO:

I'm a landowner also. But I'm also a public official. I just need to address this.

CHAIR:

I

Please state your name for the record, sir.

MR. HENNER:

My name is Donald Henner (phonetic).

Tell you how I kind of got involved here. I found out that Range Resources was going to put a well about 300 feet from my house. So I started with DEP and I'm really happy about the changes in Act 13. But as you can imagine, I often have opposition from Range and various sources. Ultimately, I was successful in getting them to move the well site a thousand feet after much ado.

Now, this was in the middle of my farm. So this was in the middle of a farm, so why it has to be next to a row of houses' property lines is beyond me, but that's where they decided to put it. They ultimately may move it. It has not been drilled yet. I probably will move before that happens. At least, I hope I do.

In review of the regulations that were

currently regulations, they were completely inadequate. They were clearly based on an old drilling style, things that were not updated, most of them weren't. But even some of the fundamental things, you would say, okay, is this the guy that has a pond here or whatever. Do you have that pond?

Well, I don't use that pond. Nobody even knows what it was going to be. There was all kinds of problems with the regulations, tons of problems. The townships were completely inadequate to handle it. They didn't have the expertise to handle it. I'm telling you the zoning board members don't have the expertise.

I've been involved in aviation safety for almost 50 years. I'm the director of safety for a major helicopter company, the world largest. I know a little bit about regulations. I deal with one of the most regulated industries in this country, aviation. And by the way, we have a lot of regulations and some days I hate them, but what do we also have, a very safe industry. You don't even give a second thought when you get on an airplane, do you? Don't even give it a second thought.

You folks really need to --- you work for us. You really need to look at this very, very

seriously. The regulations that most of these townships have are completely inadequate, so we rely on you. You're the next step up, so please take this seriously. It is a problem. It is a very big problem. And if you think drilling sites and some of those things are a problem, visit one of these compressor stations. They have five or six diesel locomotives running full steam completely outside of PA regulations. And they will be here forever, for as long as gas is coming out. So what about those compressor stations? They're going to be there for a long, long time making a lot of noise. A thousand feet from my house I had a coal shaft that ran for years. It finally got shut off when they closed the 84 Mine. I could just imagine having a compressor station in my backyard. Thank you for your time.

CHAIR:

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Is there anybody else who would like to provide any testimony for tonight's hearing? Seeing none, I'd like to just remind everybody that the public comment period has been extended to 90 days.

And the public comment period now closes on March 14th, 2014.

UNIDENTIFIED SPEAKER:

What about location, new location?

CHAIR:

Two new locations and I was getting to that. The next two hearings, February 12th is in Warren County at the Warren County Courthouse. And February 10th in Bradford County at Troy High School. Two additional hearings, public hearings. One is Warren County at the Warren County Courthouse on February 12th. The second is on February 10th in Bradford County at Troy High School. If there's no other commentators present, on behalf of the EQB, I hereby adjourn this hearing.

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HEARING CONCLUDED AT 10:00 P.M.

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CERTIFICATE

I hereby certify that the foregoing proceedings, hearing held before Chair D'Matteo was reported by me on 1/22/2014 and that I Barbara J. Jones read this transcript and that I attest that this transcript is a true and accurate record of the proceeding.

Barbara of Soms