BEFORE THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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IN RE: ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

AT OIL AND GAS WELL SITES - DRAFT FINAL RULEMAKING

PUBLIC HEARING

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BEFORE: Laura Edinger, Chair

John Ryder, Member

Kurt Klapkowski, Member

Kelly Burch, Member

HEARING: Monday May 4, 2015

6:01 p.m.

LOCATION: Pennsylvania College of Technology

1 College Avenue

Williamsport, PA 17701

WITNESSES: Mark Cline, Sr.; Nathan Sooy; Dan Alters;

John Trallo; Stephanie Wissman; Jack Miller; Bryn

Hammarstrom

Reporter: Lindsey Deann Powell

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WITNESSES (cont.): John Augustine; Deb Nardone; Beth Powell; Paul Hart; John Stewart; Tyler Martin; Gary Metzger; Tammy Bonnice; Robert Deering; Timothy Eriksen; John Ryan; Matt Henderson; Thomas Gillespie; Melissa Troutman; Diane Ward; Mark Fischer; Charles Amer; Harvey Golubock; Barbara Jarmoska; Rich Adams; Derek Soyke; Emily Krafjack; Todd Harman; Donna Christianson; Dale Howard; Maryann Heston; Senator Scott Hutchinson

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PROCEEDINGS

CHAIR:

I'd like to welcome you to the

Department of Environmental Protection's public

hearing on the Environmental Protection Performance

Standards at Oil and Gas Well Sites draft final

rulemaking. My name is Laura Edinger. I am the

Regulatory Coordinator with DEP's Policy Office, and

I'm chairing tonight's hearing.

Joining me tonight are Kurt Klapkowski,
Director of DEP's Bureau of Oil and Gas Planning and
Program Management, and Kelly Burch, Executive
Director of the Office of Oil and Gas Management. As
well as John Ryder, with the DEP's Office of Oil and
Gas Management North-Central Regional Office. Also
joining us tonight are Liz Nolan, with DEP's Office of
Chief Counsel, and Dan Spadoni, Community Relations
Coordinator for DEP's North-Central Regional Office.

I'm officially calling this hearing to order at 6:02 p.m. At this time, I'd like to request that everyone please silence your cell phones. The purpose of this hearing is to accept testimony on DEP's recommended changes to the Environmental Protection Performance Standards at Oil and Gas Well

Sites proposed rulemaking. The primary goal of this rulemaking is to ensure that oil and gas operators employ effective measures that prevent pollution, while allowing flexibility for the optimal development of this natural resource.

These rules focus on performance over process and a commitment to responsible environmental protection for oil and gas extraction activities in this Commonwealth. The amendments are designed to strengthen the environmental controls employed by this industry to ensure the protection of public health and safety and the environment. This rulemaking modifies and updates existing requirements for surface activities at conventional and unconventional oil and gas well sites, implements Act 13 of 2012, and it codifies existing policy.

The revisions include separate chapters to address conventional and unconventional development - Chapter 78 for conventional wells and Chapter 78A for unconventional wells. The amendments are offered to improve protection of water resources, add to the public resources considerations, protect public safety, address landowner concerns, enhance transparency, and improve data management.

DEP is requesting that commentators

focus their comments on language that is changed from the proposed rulemaking.

In order to give everyone an equal opportunity to comment on the proposal, I would like to establish the following ground rules: I will first call upon the witnesses who have pre-registered 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. And just a quick note, we have two microphones here. I'd like to invite you up to the podium to speak, but if you have any issue with stairs or stages, please feel free to use the floor mic.

We currently have 33 witnesses registered to testify this evening. I will call your names three at a time, so you can make your way to the microphone. After your name is called, please come to the front, so you're prepared to testify once the person before you has finished with their testimony.

Testimony is limited to five minutes for each witness. I ask that you please be respectful of the people that come after you and end your sentence once your time is up. We have a timekeeper that will raise a yellow warning card when you have one minute left, and a bright pink card when your time is up. If

you run out of time for your spoken testimony, please don't worry. Written and spoken comments carry the same weight. That's why we requested written copies of your testimony. So if you do run out of time, we will read the rest of your comments in the written testimony. On that note, please make sure that your name and address are clearly marked on all copies of your written testimony. Also, providing an e-mail address is helpful.

Organizations are required to designate one witness to present testimony on its behalf. Each witness is asked to submit three written copies of his or her testimony to aid in transcribing the hearing. Please place two copies in the box marked Public Comments, which is right next to the stenographer. And please hand one copy directly to our stenographer prior to presenting your testimony.

Please state your name, address and affiliation for the record, prior to presenting your testimony. DEP would appreciate your help by spelling names and terms that may not be generally familiar, so that the transcript will be as accurate as possible.

Because the purpose of a hearing is to receive comments on the proposal, DEP staff cannot address questions about the rulemaking during the

duration of this 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. Again, written and verbal comments hold the same weight when considered in the finalization of this rulemaking. All comments provided become a part of the official public record.

All comments on this draft final rulemaking must be received by DEP on or before May 19th. Comments should be addressed to the Department of Environmental Protection, Policy Office, P.O. Box 2063, Harrisburg, PA 17105. Comments may also be e-mailed to RegComments --- that's R-E-G-C-O-M-M-E-N-T-S --- @pa.gov, or submitted online through the Environmental Regulatory Comments System, accessible from DEP's website.

All comments received at this hearing, as well as written comments received by May 19th, will be considered by DEP in the finalization of this rulemaking, and will be included in a Comment/Response document, which will be prepared by the DEP and reviewed by the Environmental Quality Board prior to the Board taking its final action on this regulation.

Please note, there are copies available

14 of the Citizen's Guide to DEP's Regulations at the 1 2 front table as you were coming in this evening. 3 Inside this document you will find descriptions of the Environmental Regulatory Process in Pennsylvania, how 5 to submit comments, and tips for submitting effective 6 comments. Anyone interested in receiving a copy of the transcript of today's hearing may contact DEP at 8 9 (717) 787-4526 for further information. 10 I would now like to call the first 11 commentator. The first three names on our list 12 tonight are Joseph Thompson. Second, Mark Cline, Sr. 13 Three, Nathan Sooy. If I say any of these names 14 wrong, please correct me on the record. 15 Thompson? 16 AUDIENCE MEMBER: 17 I don't see him. 18 CHAIR: 19 Okay. Mark Cline, Sr.? 20 MR. CLINE: 21 Mark Cline, 1 Longfellow Avenue, 22 Bradford, PA, 16701. I am President of the 23 Pennsylvania Independent Petroleum Producers. I am a 2.4 member of the Conventional Oil and Gas Advisory

Committee. There are important differences between

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the storage tanks used by small, independent conventional operators and the storage tanks used by large, billion-dollar corporations in unconventional operations. There are four basic types of tanks used in conventional operations: One is an oil storage tank, which ranges from 50 to 210 barrels. Two is an oil and water separator tank, which ranges from 1 to 20 barrels. Three is a water production tank or brine tank which ranges from 100 to 210 barrels. And four is a gas well condensate tank, which ranges from 10 to a hundred barrels.

The chemistry/salinity of conventional brine is also much different than that of unconventional brine. The Pennsylvania Grade Crude Oil Coalition estimates that there are approximately 175,000 storage tanks in use in conventional operations. When compared to the size of the tanks used in unconventional operations, there simply is no comparison.

The additional restrictions the

Department is seeking to impose on storage tanks used in conventional operations are a solution looking for a problem. According to the Department's online compliance reports, the Department conducted 13,445 well inspections in 2014, a 78 percent increase over

2008, while there was an 83 percent decline in new drilling. Of those 13,445 inspections, only 8 revealed leaking tanks in use in conventional operations. This represents a mere .00059 percent of all well inspections conducted in 2014. It also represents just .000045 percent of the approximately 175,000 tanks in use in the conventional industry. This is hardly justification for tougher regulations governing the use of storage tanks in conventional operations.

In its regulatory analysis form, the Department acknowledges that conventional operators are much smaller in scope and they generate far less waste than unconventional drilling; therefore, the potential impact to the environment is significantly less. Despite this acknowledgement, the sections 78.57 and 78.57A are virtually identical for conventional and unconventional operators, with one exception relating to site security. It is obvious that all the Department did in response to Act 126 of 2014 was cut and paste the language. Clearly, Pennsylvanians who rely on conventional operations to put food on the table deserve more of an effort from the Department.

Make no mistake, application of sections

78.57 and 78.57A, as contained in the draft final rule, will result in the extinction of small, independent conventional operators in Pennsylvania.

In section 78.57A, the Department seeks to impose a complex and costly set of new rules governing the permitting, bonding, insurance, siting, design, performance standards, use of design engineers and mandatory reporting. The term centralized tank storage site is not defined, presumably making it applicable to all storage tank sites, regardless of their size. Clearly, this section was intended for temporary, million gallon brine storage tanks used in unconventional operations and should be removed entirely from Chapter 78.

In section 78.57, the Department requires that all new, refurbished or replaced production fluid tanks meet corrosion control requirements. Aside from the fact that the Department's own data does not demonstrate the need for such a requirement, implementation of this requirement would add an average of \$933 to the price of a storage tank. With an estimated 175,000 storage tanks in use by the conventional industry today, this will add an additional \$163,000,000 in costs to our industry. When you factor in the cost of cathodic

protection at \$350 per tank, which comes to \$61.2 1 2 million for our industry, and monthly inspections at 3 \$30 per tank, it comes to \$5.2 million annually for the industry. It's not difficult to see how this 5 section could easily cripple our industry. Under the Regulatory Review Act, the

Independent Regulatory Review Commission is required to consider the impact on public interest of exempting or setting lesser standards of compliance for individuals or small businesses when it is lawful, desirable and feasible to do so.

At PIPP, we are small business. We are individuals. I urge you to exempt my members from these new rules and preserve our way of life. you.

CHAIR:

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Sooy?

17 Thank you, Mr. Cline. Next up, Nathan

19 MR. SOOY:

20 Sooy (corrects pronunciation).

CHAIR:

22 Sooy (changes pronunciation).

MR. SOOY:

Sooy.

25 CHAIR: My apologies.

MR. SOOY:

My name is Nathan Sooy. I'm the Central Pennsylvania Campaign Coordinator for Clean Water Action. We're actually an environmental organization here in Pennsylvania. We have about 120,000 members.

We would like to congratulate Governor Wolf's initiative on the oil and gas regulations. We think that it's going in a basically good direction. While Clean Water Action is not as optimistic about the ability of the gas industry to maintain good and clean standards for the long term, we do think that this is all going in a good direction.

Now, having said that, we have something very specific to say about a couple different items. Standards for frack pits and impoundments, Sections 78.56, 78.57, 78.58 and 78.59. Mounting violations and the potential for water and air pollution have already led some companies to transition away from pits and standardize the use of closed loop systems for the storage and treatment of waste. Issues with frack pits have led to contaminated water and resulted in the largest state fines ever against a driller in Pennsylvania, over \$4 million, to Range Resources and XTO for water contamination due to leaking.

The DEP should amend the final regulations to, one, prohibit regulators from using any open-air pits and tanks, regardless of size or location, for storage and treatment of regulated waste, including wastewater, drill cuttings, and substances like gels and cement, that return to the surface after fracking. The new provisions prohibit the use of production pits at shale gas well sites. And that's an important change that should be supported. But the use of huge impoundments to service multiple wells would still be allowed. Waste should be stored and treated only in closed, aboveground systems.

Two, require all waste impoundments to be properly closed immediately after the effective date of the regulations. The revisions give operators three years to either properly close their existing impoundments or bring them under compliance with the construction requirements in residual waste permits. This is an improvement, but still puts nearby residents and the environment at risk.

And three, require that tanks used for the storage of waste be completely enclosed. The revisions give operators the option of using tanks without lids to store waste on the well sites, making

it more likely that polluting spills and emissions will occur.

On the question of the definition of public resource, Sections 78.15, 78.57, 78a.15 and 78.7 --- .57a, we want to note that we are for ---. To improve the protection from pollution, noise and light and safety from traffic accidents and explosions, the DEP should require, at minimum, a one mile setback of oil and gas wells, waste storage facilities and any other infrastructure from the property boundary of any school facility. This setback should also be applied to locations where other vulnerable populations reside, including nursing homes, hospitals, daycare centers and communities at a disproportionate risk of health impacts.

We call for --- as well, for ---. We know that through the use of these regulations, that there's a separation of unconventional and the conventional regulations, but we think, once again, that the DEP should require all operators of all wells to use --- to end the use of open-air production pits for the storage of waste and the immediate conversion to closed tanks, and to develop water management plans and to prohibit the road-spreading of brine. Thank you very much.

CHAIR:

Thank you, Mr. Sooy. Next up is Dan Alters, followed by John Trallo and Stephanie Wissman.

MR. ALTERS:

My name is Dan Alters. I live at 585
Broadway Street in Hughesville, Pennsylvania, 17737.

I'm here today commenting on my own behalf, as a citizen of Lycoming County. I have reviewed the most recent draft of the proposed Chapter 78a regulation and I have some comments.

The extensive revisions to Chapter 78a are a tremendous improvement over the existing regulations. Significant to me are the following:

The protection of critical public resources that exist near gas well development, the requirement to mitigate noise associated with gas well drilling and production, the more restrictive erosion and sedimentation controls and the inclusion of stormwater management requirements, the tighter restrictions on the use of unpermitted pits and other structures for the storage of regulated substances, the improved provisions for containment systems and practices, and well site restoration requirements that are more specific. I applaud the agency and its staff for considering the many comments previously offered and

incorporating many of them into this final draft.

In my review, I did find a few things I didn't like so well. DEP makes use of electronic filings for well permit applications, centralized tank storage applications and notification of onsite processing, just to name a few things. In addition, DEP also utilizes the terms, quote, on forms provided by the Department, unquote, without specifying whether paper or electronic submissions are involved.

The public must have reasonable access to all of the information submitted by a well operator, whether this information is submitted on paper or electronically. How can the public determine what information is available? How does a person conduct a file review of DEP records, determine if all the information is made available to them? Does DEP intend to make electronically-filed information available electronically? Easy and timely access to information by the public is necessary to ensure agency transparency and operator accountability. All of these concerns should be addressed in a final version of these regulations.

Section 78a.19 specifies fees for permit applications. These fees are far too low to provide for adequate staff to fully review the complex permits

involved, and these fees need to be multiplied by three or four times the values currently proposed.

Section 78a.51(c) requires DEP to investigate complaints of domestic water well contamination by a gas well operator, but gives the agency ten days to do so. This is far too much time to initiate an investigation if someone has lost their water. And I recommend that the time be shortened to one or two calendar days.

Section 78a.56 authorizes and sets standards for temporary pits that may contain regulated substances, including brines, while 78a.57 prohibits the construction of open top structures and phases out existing ones. 78a.57a provides for centralized storage facilities to service multiple well pads. I think these three sections are confusing to operators and the public and clarification is needed. The oil and gas industry has for far too long enjoyed using substandard facilities to store hazardous materials and this practice must stop.

Storage of all regulated substances should be prohibited in open top structures or pits, and the storage of regulated substances should be limited to enclosed tanks or structures that are

designed and engineered specifically for the storage of those regulated substances. These designs need to be subjected to a rigorous review by DEP prior to any written permit issued. The standard for an oil or gas industry storage facility of regulated substances should be no less stringent than one for any other industrial facility in the State of Pennsylvania.

Sections 78a.59a and .59b set certain criteria and requirements for freshwater impoundments. Monitoring of all water placed in such a freshwater impoundment must be required to ensure no water tainted with regulated substances is mixed in with this fresh water. Perhaps sampling of the contents is appropriate. If a well operator desires to mix fresh water with flowback or any of the polluted water, the storage structure must meet every permitting requirement required of a storage structure for regulated substances.

Overall I strongly support more stringent regulation of the oil and gas industry and urge these regulations, strengthened in keeping with the above comments, be adopted as soon as possible. I trust that the current administration will also provide DEP with the staff and other resources needed to fully and timely implement these regulations.

Thank you for your time and the opportunity to make these comments.

CHAIR:

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Next up is John Trallo.

MR. TRALLO:

Thank you. My name is John Trallo. I am a resident of Sullivan County, Pennsylvania. I'm also on the Board of Directors of the Pennsylvania Community Rights Network and the National Community Rights Network. Before I begin, I would like to thank you for holding these hearings and giving the people of Pennsylvania a chance to speak and have their voice heard.

While I certainly would fully support any measures that can better protect, improve and mitigate the damage this industry has already caused in areas that have already been drilled; however, I cannot, in all good conscience, comment on, or support regulations that will essentially allow the further expansion of this extreme, dangerous and destructive practice that will ultimately put other people and other communities at risk.

By approving, or agreeing to establish more regulations is, in fact, a form of consent to allow more harm to our environment, the ecology and to

the people who live in the sacrifice zones of shale extraction. The risks are simply too great. Too much damage has already been inflicted on too many people, and I believe it is irresponsible to attempt to regulate any activity when there is no remedy for the most predictable things that can, and do, go wrong.

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Many communities and grassroots organizations are currently working tirelessly to end the practice of extreme fossil fuel extraction in Pennsylvania and beyond, and for good reason.

I consistently hear from our elected officials and regulatory agencies that we must make our decisions based on science. However, they have failed to produce any scientific evidence that suggests this can be done safely, while they continue to ignore the mounting evidence that it can't.

regulatory model that has successfully worked anywhere, in any state, or anywhere in the world, perhaps Pennsylvania would be able to emulate that model. However, to date, no one has been able to produce that model, and there is no indication that one exists.

We are long past the tired, misleading, and worn out oil and gas industry's talking points

and propaganda. We know in Pennsylvania, the DEP has publicly admitted to at least 256 documented cases of ground water contamination directly attributed to unconventional shale gas extraction. And there are hundreds more pending. We know that initially seven percent of all well casings will leak, and that over time they all will leak. We know that the waste disposal is going to be an ongoing problem, and that there is no environmentally-safe solution for it.

We know we can't undo the damage and the harm that has already been done, but we also know we can prevent it from continuing.

The gas isn't going anywhere.

Therefore, the only prudent and responsible thing to do would be to allow --- to follow the examples set by Vermont, New York, Maryland, and even more recently parts of Texas and Colorado, and enact moratoriums on all new permits and unconventional drilling operations until independent, comprehensive, environmental and public health studies could be completed, peer reviewed, publicly --- and publicly discussed. Then and only then can we decide what regulations, if any, could be established to protect the environment and ensure public safety. And if it can't, then we need to stop this dangerous, volatile and extreme

industrial practice, for the sake of our children and our children's children.

After all, at the end of the day, we are human beings, not test subjects. Thank you.

CHAIR:

Next is Stephanie Wissman.

MS. WISSMAN:

Good evening. My name is Stephanie

Catarino Wissman. I am the Executive Director of the

Associated Petroleum Industries of Pennsylvania,

located in Harrisburg, 300 North 2nd Street, Suite

902, Harrisburg, PA, 17101.

Good evening. API-Pennsylvania is a division of the American Petroleum Institute, a national trade association that represents all segments of America's technology-driven oil and natural gas industry. Its more than 625 members provide most of the nation's energy and are backed by a growing grassroots movement of over 25 million Americans. The industry also supports 9.8 million U.S. jobs and 8 percent of the U.S. economy, and since 2000 has invested over \$3 trillion in U.S. capital projects to advance all forms of energy, including alternatives. Many of our members, who own and operate conventional and unconventional wells in

Pennsylvania have a direct interest in this notice of proposed rulemaking.

applying also a standard setting organization. For over 90 years API has led the development of petroleum and petrochemical equipment and operating standards. These standards represent the industry's collective wisdom on everything from drill bits to environmental protection, and embrace proven, sound engineering and operating practices and safe interchangeable equipment and materials for delivery of this important resource to our nation.

API maintains more than 650 standards and recommended practices. Many of these are incorporated into the state, federal and international regulations. API encourages and participates in the development of state regulations that provide environmental safeguards and stewardship, and commends DEP on their regulatory oversight program; however, we have concerns with several provisions contained in the draft final rulemaking. As such, we are providing comments on the Advance Notice of Final Rulemaking for Chapters 78 and 78a at the three public hearings.

My comment tonight applies to Chapter 78a. API-Pennsylvania has numerous additional comments beyond those presented during these public

hearings. They will be presented in writing.

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Section 78a.41, noise mitigation. ΑPΙ has many questions and concerns regarding this section. If this section were to ultimately take effect, questions regarding preemption of local noise control ordinances need to be specifically addressed in the Comment Response Document. As DEP is aware, noise control is already regulated through county and local ordinances. We are unaware of the specific statutory authority upon which DEP relies to trump county or local ordinances, especially in such a subjective manner that singles out one particular industry for noise mitigation oversight. We believe citing the specific statutory authority likewise should be specifically annotated in the Comment Response Document.

DEP has stated publically that this section will not be removed from the regulation, and that it requests recommendations from the public on how to implement it in terms of how to measure noise, length of time impacts can occur, and how to determine background noise quality. In light of those statements and in light of the subjective nature of the draft final regulation, we offer the following recommendations:

First, DEP should develop, with the input of stakeholders, a manual of best management practices, or BMPs, for noise mitigation and example descriptions of situations under which they could be applied. Second, program Technical Guidance should be developed and vetted through the public comment process to assure that all parties are aware of the nature and intent of DEP in program implementation. Third, DEP should develop and implement an educational outreach program to assist DEP field staff and operators to recognize situations where BMPs should be applied. And fourth, only after the program is shown to be necessary and effective should it be included in the regulations.

API will be submitting additional questions and concerns regarding this section in our written comments. We believe that DEP reviews both testimony and written public comments in a serious manner; nevertheless, we request that DEP pay particularly close attention to our written comments regarding this section and respond to our concerns with specific detail in the Comment Response Document. And we urge DEP to take our concerns into account when finalizing its submission to the Independent Regulatory Review Commission.

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

CHAIR:

Next three commentators will be Jack Miller, Bryn Hammarstrom and John Augustine. Jack Miller, you are up.

MR. MILLER:

My name is Jack Miller. I am a resident of Center Township in Snyder County. I am testifying to urge that the strongest possible regulations be placed on the gas industry. I have concluded from all that I have read that fracking cannot be done safely and there should be a moratorium and all new fracking until the industry can demonstrate without question that it can be done safely. Over 400 studies alone have concluded that fracking has human health consequences. It causes pollution of water and air.

The first and only duty of the

Department of Environmental Protection is the

protection of the biosphere and all its inhabitants,

including humans. It has no duty to protect the

profits of the gas industry. While the industry wants

to externalize its cost to the citizens of our state, protecting the environment should be a legal and moral cost of doing business. If the industry cannot do this, then they should not exist.

While I would hope that there would be a moratorium on fracking, until that happens we should have the strongest protections possible. The industry in no way should determine what those regulations are. Their only legal obligation is --- to their shareholders is profit, and they pursue profit by dumping their costs on us and the environment. As Barbara Kingsolver has written, global commerce is driven by a single conviction: the inalienable right to earn profit, regardless of the human costs. The carbon extractive industries have proven this again and again. Their cries that the regulations cost too much should fall on deaf ears.

I support strong regulations on the gas industry: Operators should be prohibited from open air pits or tanks for the storage and treatment of any regulated wastes. They are known to leak. This should be applicable regardless of the size or location. These regulations should apply to all drillers, including conventional drillers.

All waste impoundments must be properly

closed immediately on the effective date of the regulation. Because of all the potential risks involved with all oil and gas wells, waste storage facilities and other infrastructure, there should be a minimum setback of one mile from any school property. The current setbacks are insufficient.

All abandoned and orphaned wells must be identified before site construction, well construction and the beginning of drilling. Conventional drillers must also develop waste management plans. All gas operations require large volumes of water and there is no logical reason why conventional drillers should not be required to plan and document water use.

Because Brine contains harmful chemicals and salts, it should not be used as a de-icer or a dust suppressant regardless of the type of drilling.

All those who have had their --- all those --- excuse me. All those who have had their water supplies affected by drilling should have clean, potable water supplied immediately.

Noise controls should be required.

People living near well pads should not have their quality of life deleteriously affected so that others can profit.

DEP should require all permit

applications of the gas and oil industry to be filed electronically. These applications should be made available on DEP's website on the day the application is deemed to be complete.

Again, protecting the environment should be the only duty of the Department of Environmental Protection if its name is not to me meaningless. It is the duty of the State of Pennsylvania, under Article I, Section 27 of the Pennsylvania Constitution. Thank you.

CHAIR:

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for comments?

Next up, we have Bryn Hammarstrom?

MR. HAMMARSTROM:

Thank you. Bryn Hammarstrom, 39 Chatham Valley Lane, Middlebury Center, Chatham Township,
Tioga County, Pennsylvania. My notes are rough. I
will not be providing a copy of them, but I will
e-mail them to whatever address is provided.
Hopefully, it's in this brochure, the e-mail address

CHAIR:

Yes.

MR. HAMMARSTROM:

Okay. So, I have not read through the whole Chapter 78 --- 78a. I want to make some ---

state some main concerns.

I'm an RN. I'm also Vice President and Treasurer of the Pine Creek Headwaters Protection Group in Wellsboro. But this is an oral statement. I believe the group will be submitting a statement on its own behalf.

My main concerns are the drilling return, the drilling return, its quality and its eventual disposal and/or reuse. Number two, the onsite storage facilities for this return, mud or consolidated water fluid. And three, air quality issues. On air quality, these regulations are prefracking. I realize these have to do with well drilling itself, with the mounting evidence of respiratory distress near frack sites, which increases the closer one lives to a well pad. Obviously mandate greater distances from population concentrations, whenever a well pad is allowed, particularly those which eventually may be horizontally fractured.

On number one, the drilling water return, I strongly object to any permission --- or permission or allowance for any continued ground pit storage --- above ground storage for any solid, fluid or mixture thereof. For the safety of both our communities and our water, drilling returns must be

contained, enclosed, in leakproof containers.

The DEP has a basic obligation, under the Pennsylvania Constitution, to guarantee citizens of the Commonwealth both clean air and clean water. The oil and gas industry, despite their polished presentation by the woman from API, has enjoyed an exemption from U.S. Clean Air and U.S. Clean Water Acts, the Halliburton exemption, pushed through by Halliburton Executive, Dick Cheney, and the fact that the industry willingly uses that loophole shows that the industry is completely unwilling to guarantee human health to maximize its profits. Thank you.

CHAIR:

Next we have John Augustine?

MR. AUGUSTINE:

Good evening. I am John Augustine,
Community Outreach Manager in Eastern Pennsylvania for
the Marcellus Shale Coalition, located at 24 Summit
Park Drive in Pittsburgh, PA.

Our association works with regional partners since 2008 and is currently comprised of nearly 250 exploration and production, midstream and service companies. In 2014 our members were responsible for 96 percent of the natural gas produced here in Pennsylvania.

Responsible shale development has been among the most transformative turning points in our Commonwealth's history. And indeed, natural gas development can serve to enhance and improve our natural resources.

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

Partnerships with conservation groups are examples of our industry's willingness and commitment to voluntarily protect and preserve our natural resources. In fact, more than 33,000 acres were added to the state forest system thanks to revenues from shale development which assisted in the ability of DCNR to obtain this additional acreage.

And our industry has raised the bar for shale development further with practices designed specifically to lessen the impact on surface disturbance and provide strategies to improve habitat and landscapes.

The benefits do not end there. Take, for example, the fact that the Commonwealth accounts for over 25 percent of the nation's natural gas production in recent months, according to the EIA.

This has led to more revenue. The

natural gas industry has paid over \$2.4 billion in taxes since 2008 and \$850,000,000 over four years to communities, counties and the state in impact taxes.

More than 200,000 new hires in Pennsylvania are supported by industries associated with shale development, like our friends in organized labor.

And despite the rhetoric, these are, myself included, lifelong, tax-paying residents of the great Commonwealth.

In addition, there is a great cost reduction in residential fuel. My monthly budget for natural gas, which I use to cook with, heat my water with, and most importantly, heat my home, is \$70 a month. That is a \$1,800 per year savings for senior citizens and those with lower incomes.

Natural gas is a clean burning fuel source, accounting for nearly 25 percent of our electric generation supply and heating homes of over 5,000,000 Pennsylvanians and half of the United States. It has contributed to improved air quality in Pennsylvania as well. And thanks to natural gas, U.S. CO2 emissions are at a 20 year low. And according to the EPA, the toxic air pollutants across the Mid-Atlantic region are down nearly 14 percent.

These benefits, unfortunately, are at

risk. Pennsylvania has a complex regulatory environment and an uncertain fiscal future. These two issues have made doing business in Pennsylvania very difficult. Pennsylvania already has world class environmental regulations that have been a model for states across the nation. These regulations have been reviewed and praised by the independent STRONGER board, a national nonprofit organization. And for that we applaud both the General Assembly and the Pennsylvania DEP.

With these powerful regulations already in place, and billions paid in taxes, we need to firm up the uncertainty to do business in this great Commonwealth.

At the same time, many of the DEP's proposed regulatory changes to Chapter 78 stretch beyond legislative intent and will undercut the Commonwealth's ability to compete for capital, while providing little or no additional benefit with regard to safe and secure oil and gas development and threaten Pennsylvania jobs and low energy prices.

We are, therefore, very concerned about regulations which seek to hold the natural gas industry to different standards than any other industry; that seek to impose vague and inconsistent

standards; which exceed the authority granted to the Department by the General Assembly and the courts of Pennsylvania. And which place Pennsylvania businesses at a competitive disadvantage without a commensurate environmental benefit to our communities or natural resources.

Our overarching message is straightforward: PA should be a world leader in producing safe and responsible clean energy. So instead of undermining the strong, consistent and predictable regulatory framework that already exists, we should work cooperatively to revise these proposals to maintain a balance between strong environmental protection and a competitive economic climate. It does not need to be a false choice between the two, and we urge the DEP to continue working with our industry and stakeholders across the Commonwealth on a reasonable, competitive path forward.

Please don't set our economy backwards, and threaten good paying jobs and affordable energy for all Pennsylvanians. Thank you.

CHAIR:

Our next three witnesses will be Deb Nardone, Audrey Gozdiskowski and Beth Powell. Deb Nardone?

MS. NARDONE:

Good evening. Thank you for the opportunity to provide comments on Pennsylvania's Chapter 78 rules. My name is Deborah Nardone. I'm a resident of Centre County. I'm here representing the Sierra Club, where I serve as the Sierra Club's Associate Director for our campaign called Keeping Dirty Fuels in the Ground.

understand that fracking has an inherently dangerous --- it is an inherently dangerous process. It is occurring in Pennsylvania with inadequate regulations and enforcement, while harming public health in Pennsylvania in many instances and communities that I work with all over the country. I do welcome the improvements to this new draft of the Chapter 78 rules proposed by the Pennsylvania DEP. And it is imperative that the DEP step up and be willing to address the numerous pollution problems that have resulted from this highly industrial process that's occurring in thousands of people's backyards all across the country.

In 2014, the Pennsylvania DEP found that there were 243 private drinking water wells that had been contaminated by the drilling and fracking

process. And these are just the cases that we know about, where landowners have not been gagged by industry lawyers, from allowing to have these records be publically accessible. And many of the times these people are gagged so that they can have their personal, private water wells reinstated or restored.

And so if you were to travel to Dimock,
Pennsylvania, or many other places across the state,
you would see that residents still don't have potable
drinking water. And so, as, you know, people are
worried about energy supply prices, as people are
worried about good, clean energy and the kinds of jobs
that are created by clean energy, not more dirty
fossil fuels, there are still communities and
residents around the state that don't have potable
water, because the impacts fracking have had in their
community. And to me this is outrageous and
inexcusable.

So just a few weeks ago Pennsylvania DEP also announced that records from the --- from 2013 show increases in emissions and contaminants from fracking and associated infrastructure. Toxic levels of things like sulfur dioxide, known to cause respiratory problems like asthma, have increased 57 percent in one year. And this is at the state's

production sites. And while air quality is improving across the country and in Pennsylvania, due to the decline in use of other dirty fossil fuels, Pennsylvania shale gas emissions have continued to increase.

So it's apparent that it's time to reign in the rogue oil and gas industry in Pennsylvania.

And there are smart decisions (sic) across the country that have taken the time to assess the impacts of fracking before allowing it to happen in people's backyards. Maryland's Governor is about to sign a two-and-a-half year moratorium on shale gas development. This process has been banned entirely in places like New York and Vermont, due to significant concern over the long-term public health impacts that come along with fracking.

So while the best place for dirty fossil fuels is to keep them in the ground, including fracked gas, I applaud the DEP for taking some important steps to better protect public health and the environment.

Until we have the political power to end this dirty process altogether, it's urgent that the DEP quickly adopts very strong rules, along with making some needed improvements, as I've outlined in my submitted written comments.

Some of these improvements include:

Adoption of no open pits or tanks for storage or

treatment of wastes. All tanks should have proper
lids and emission reduction technology installed.

A mandatory one mile setback of all new wells, waste storage facilities and other downstream infrastructure for the production or transport of dirty fracked gas from schools, playgrounds, daycares, hospitals, in order to protect the public health of our children and at-risk populations.

Industry must also identify, plug and seal abandoned and orphaned wells prior to allowing new construction or drilling.

DEP should require all oil and gas development, whether conventional or unconventional, to comply with these rules.

And last, DEP must prohibit the land application or surface spraying of brine or other oil and gas production wastes.

Additionally, after these important recommendations are adopted by the Pennsylvania DEP, I urge the DEP to further engage on implementing many other public health protections, which include, rigorous methane control requirements at the well head

and for associated downstream infrastructure, such as compressor stations.

We urge the Wolf Administration, the Pennsylvania DEP and the Department of Health to fund and conduct a rigorous public health study that identifies what the impacts are of fracking on public health. And that all public lands, and including the Delaware River Basin, should continue to remain off limits to drilling until the public health study can be done, and can determine whether fracking can be done safely or not in Pennsylvania. Thank you again for the opportunity to provide comments.

CHAIR:

Next, we have Audrey Gozdiskowski? We have Beth Powell?

MS. POWELL:

I'm Beth Powell. I'm speaking on behalf of New Pig Energy, which is located at 201 Jefferson Avenue, Tyrone, Pennsylvania.

My name is Beth Powell. I am a ninthgeneration rural Pennsylvanian who lives in Centre

County. I have a chemical engineering degree and an

MBA from Penn State. And I work for a Pennsylvaniabased company, called New Pig Energy, which is a

wholly-owned subsidiary of New Pig Corporation, which

is based in Tipton, Pennsylvania.

New Pig Corporation employs 350

Pennsylvanians and New Pig Energy employs 32. Our parent company is a world leader in liquid secondary containment for more than 30 years, and it provides leak and spill products to over 200,000 industrial sites in 70 countries.

My company, where I'm the Vice President and General Manager, was spun off of New Pig in 2013 and it's dedicated to helping oil and gas operators protect streams and surface water. We provide secondary containment for drilling and hydraulic fracturing throughout the United States and overseas. And secondary containment is an impermeable barrier designed to prevent releases into the environment. Basically it's a safeguarding method if the original container fails.

And I would like to make five points in this testimony. The first point is: Pennsylvania has the toughest secondary-containment regulations of any state for oil and gas. Other states rely on the federal Spill Prevention, Control, and Countermeasure rule, also known as SPCC, for the regulation of oil. Beyond oil, Pennsylvania DEP also requires secondary containment for flowback water, a decision unique to

Pennsylvania.

Second point: According to Pennsylvania regulations, a spill occurs when oil or flowback makes contact with soil. At the federal level, which the other states regulate against, a spill occurs when oil makes contact with water. This is one of the reasons that the state violation rate was so high a few years ago. Operators either reported all spills to soil or all spills five gallons or greater, no matter where they occurred. And they still do, but the sites are now in secondary containment to prevent contact with soil.

The third point: Chapter 78a draft is confusing in regards to primary containment versus secondary containment, since the general term containment is used for both. Aboveground storage structures, mud tanks, open tanks are all primary containment. Secondary containment is the safeguarding around the primary containment. And I have included proposed clarifications in the written copy that I dropped in the box. They affect 56, 57, 58, 64, 64a, 65 and 66.

Fourth point: New Pig Energy's business relies on helping operators comply with regulations.

This puts us in a unique position. Increased

regulation provides opportunities for new products and new customers. But too much regulation, however, and our customer base moves out of Pennsylvania. Having worked with our parent company in a number of diverse industries, such as electric utilities, manufacturing, powerwashing, and pharmaceuticals, oil and gas operators are not bad actors. They are just another industry where spills sometimes occur due to handling large quantities of liquids.

Fifth point: I would like to thank the Pennsylvania Department of Environmental Protection for accepting a number of comments on the last round of review. Establishing chemical compatibility for temporary secondary containment at 72 hours allows time for cleanup, but keeps material costs under control. Allowing operators to test rainwater for release, which is the requirement for all other industries in the state, allows secondary containment systems to be utilized through numerous stages without having to be landfilled.

In conclusion, regulations are needed.

Businesses, jobs and opportunities are also needed.

It is not easy bringing the two together, but the oil and gas industry has made tremendous strides in the last four years. Thank you.

CHAIR:

Our next three witnesses are Paul Hart,

John Stewart and Tyler Martin. Paul Hart?

MR. HART:

My name is Paul Hart. I reside at 754

Nibert Road, Indiana, Pennsylvania. I'm making these
comments primarily personal. Any additional comments
on behalf of my business will be in more detail in the
future.

I have been providing water treatment services for the oil and gas --- and natural gas industry for 30 years. I attended Lycoming College and my wife grew up here in the Williamsport area. I own two farms in Pennsylvania that have natural gas wells on them. I also have water wells on my property for domestic water. All this means is I am local, I have experience, and I know firsthand the impact oil and natural gas development has. In my experience, on my property, it does not hurt the land, the air or the water, if, and I repeat if, the existing laws are enforced.

I am a part owner of Fluid Recovery

Services. We have four water treatment facilities in

Pennsylvania. We have been in business for decades

prior to the Marcellus development, because the energy

industry needs to manage water, and because we have reasonable permits from the state that determine how we manage that water. We have continuously made changes to our process and services over the years, to ensure we are compliant with our permits while still providing a good service for our customers. We have effectively treated over one billion gallons of water in the last 30 years, allowing Pennsylvania resources to be developed and delivered to all of us in this room to heat our homes and power our lives.

to renew our permits and install new technology to meet the current 500 Total Dissolved Solids requirements implemented a couple years ago. It should be noted that only the natural gas industry is held to this standard in Pennsylvania and all other discharges in Pennsylvania do not have to meet this same high standard. In order for us to invest in new technologies, we need cooperation with the state. The new technology is very expensive and takes over a year to design, manufacture and install. To make this investment, we also need a healthy industry, able to afford the higher costs associated with the higher quality treatment.

The Chapter 78 Final Rulemaking, if

implemented, as currently written, will have little or no benefit to the Commonwealth, but it will risk ongoing investment in the Pennsylvania oil and gas industry and will cause the loss of jobs.

In 2013, DEP did not include most of the recommendations from the Technical Advisory Board.

Any revisions to Chapter 78 should include recommendations from the Technical Advisory Board, and the newly formed Conventional Oil and Gas Advisory Committee. The State should continue to abide by due process, as it followed in the past, by involving all stakeholders and by engaging this Conventional Oil and Gas Advisory Committee. The Chapter 78 Final Rulemaking should not be rushed, otherwise we risk the loss of both new energy production and the Pennsylvania-based service companies that depend on a healthy oil and gas industry.

The economic challenge the industry is currently experiencing, due to extremely low prices for oil and natural gas, should be factored in.

Drilling is at a record low. Hundreds of industry staff are being laid off. Many of them are my friends. And I have personally talked to numerous ones who have left or are planning to leave, one just a week ago, in my office, saying that he had to take

his family to another state to find a family-sustaining job, due in large part to the uncertainty associated with today's policy climate in Pennsylvania.

The state must make a full technical and economic evaluation to justify the benefit of additional requirements before causing additional economic hardship. The state must consider the impact to small business, instead of amending the regulations in a vacuum. Thank you for this opportunity to comment.

CHAIR:

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Next up, John Stewart?

MR. STEWART:

Good evening. My name is John Stewart.

I am the owner and President of a locally owned resource company located at 796 Jackson Avenue in Warren, Pennsylvania, 16365. My degree is in Physical Geology. I am a 26-year-old resident of Northwestern Pennsylvania, where I work full time for a locally owned and operated conventional oil and gas well production company. In my spare time, I also operate my own conventional oil and gas well production company, which I started three years ago, consisting of 19 wells, myself, and one part-time employee, and

from which I draw no salary. It is a true labor of love.

As I previously stated in testimony provided at a public hearing regarding the 2013 version of these regulations, what the DEP proposes is far out of context with what is necessary for our industry. In fact, although required to by law, the DEP completely fails to provide a statement of need for new regulations for the conventional industry. Without conducting a careful analysis of research, documentation and data on the industry in order to provide this required statement, showing a necessity for new regulatory power, how can the DEP even expect to come close to proposing meaningful regulations?

In addition to the failure to provide an analysis of the need for regulatory change, the DEP also fails to fulfill another requirement of the law, which is special consideration for small businesses. According to the Pennsylvania Small Business Act, before new regulations can be imposed, they must be analyzed specifically for the effect they will have on small businesses. The Act states that small businesses bear a disproportionate share of regulatory costs and burdens, and that agencies should seek to achieve statutory goals as effectively and efficiently

as possible without imposing unnecessary burdens on small businesses.

The DEP has not offered any special consideration for small businesses in the form of alternative, more relaxed performance standards, or otherwise. In addition to their impact on small businesses, such special considerations are meant to be analyzed for their ability to remain true to the stated objective of the proposed regulations. Again, how can the DEP expect to analyze the effectiveness of considerations for small businesses, when it has already failed to state the necessity and objective of new regulations?

Despite widespread testimony describing the multitude of ways that the 2013 proposed regulations were wildly out of context for the conventional industry, these 2015 revisions are in many cases even further from the land of practicality. For instance, the new requirement that drill sites be returned to original contours does not make any sense for our industry. We drill well sites on slopes where the contours absolutely must be changed in order to have flat ground to operate on. With perhaps the exception of sites that were originally flat or very nearly flat, not only will this requirement be

extremely costly, it will in many instances be simply unattainable.

As another example, the new requirement for site-specific PPC plans is out of touch for an industry which is composed of hundreds of thousands of highly similar sites producing and storing small amounts of the same materials. Under existing regulation, the lack of variation between sites has allowed for the efficient use of generic PPC plans containing the pertinent information required in case of emergency. What advantage will site-specific PPC plans provide when individual sites are virtually identical? As with many other examples which I could list, the DEP fails to consider the enormous cost of implementing such regulations, while simultaneously failing to demonstrate the benefit.

With all of these failures, the lack of demonstration of necessity for new regulations, lack of consideration for small businesses, and lack of cost versus benefit analyses, how can I hope for anything but failure from these proposed regulations? When it comes to conventional oil and gas, all the DEP has demonstrated is disregard for proper procedure and an unwillingness to consider the operational practicalities of a long-established industry. I ask

the DEP to regulate my job and my business, not destroy them. Thank you.

CHAIR:

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Next, we have Tyler Martin.

MR. MARTIN:

Good evening. Tyler Martin, 126 Red Fox Lane, Russell, Pennsylvania, 16345, Warren County.

I'd like to speak to section 78.65. It contains many new provisions, among these the site-restoration provision would now require compliance with the Post Construction Stormwater Management provisions found at section 102.8(g). The stormwater analysis and construction that would be required are expensive and complex. These requirements are traditionally associated with larger construction such as a Wal-Mart parking lot.

In the past, the timber industry and the conventional oil and gas industry have not been included in the requirement because of their small footprint.

I can understand why the proposed regulations would call upon Pennsylvania's new unconventional industry to comply with this stormwater analysis obligation. A typical Marcellus pad and access facilities are more than five acres in size and are usually constructed of impervious materials.

However, conventional oil and gas sites are much different. They are only 2 to 3 percent the size of Marcellus facilities. And nearly all of the conventional area achieves a vegetative state, thus making it quite different than the impervious area at a Marcellus facility.

I was at Thursday's hearing in Warren, and I was shocked to hear some of the numbers from the cost estimate to comply with the stormwater requirement. I obtained a copy of the cost estimate. I want to quote some numbers from it:

Engineering services to prepare PCSM Plan alone ranges from \$10,000 to \$15,000.

Engineering services for NPDES permit application, \$2,000 to \$5,000. Construction cost for stormwater BMPs, \$10,000 to \$50,000. The total cost for a new conventional well ranges between \$20,000 and --- \$20,000 and \$70,000.

To put that into perspective, the current total cost for a new conventional well site is a little over \$100,000. The new stormwater cost, ranging between \$20,000 and \$70,000, would be an increase of 20 to 70 percent for a new conventional well. A 20 to 70 percent increase would be a staggering number to any industry's bottom line. But

the conventional industry is already struggling under the cost of added regulations and lower commodity prices. New conventional wells in Pennsylvania have been dropping for several years, from 5,000 new wells in 2008 to less than a thousand wells last year.

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The new cost of \$20,000 to \$70,000 for stormwater analysis and construction is especially troubling since there is no justification for the increased stormwater regulations on the conventional industry. In fact, I want to testify about the Allegheny National Forest. There are about 12,000 conventional wells in production on the Allegheny, and the national forest makes an excellent laboratory to study the impact of conventional oil and gas In 2007 the Forest Service operations on stormwater. characterized the water quality on the ANF as among the highest in the state. In November 2014, the Forest Service released five year Monitoring and Evaluation Report for the period from 2008 through It focuses on oil and gas development and concludes that the majority of the streams on the ANF are meeting state water quality standards. Of the 2,126 miles of mapped streams within the ANF, 72 percent are rated high quality or exceptional value streams for water quality. The report concluded that

these macroinvertebrate studies did not detect a negative impact to water quality from this development.

In contrast the DEP has not stated any need for imposing the stormwater and construction requirements. Where is the DEP's study? How does the DEP answer the finding of excellent water quality contained in the Allegheny National Forest study?

I decided to make the 3 hour drive to Williamsport because the financial information about the new stormwater requirement is so compelling. Right now, with the current price of oil and gas, there is virtually no conventional well drilling in Pennsylvania. And if prices return to a higher level, there will still be no new conventional drilling if the new regulations are adopted. The stormwater analysis and construction provision alone will prevent new conventional well drilling.

But the stormwater provision is only one part of the story. The proposed conventional regulations would impose tens of millions of cost for several other sections. The total new costs are hundreds of millions of dollars on small business --- a small industry that only generated a few hundred million dollars per year. The scope of the new

regulations is grossly out of balance with the scope of the conventional industries.

I know about that scope. At Slippery

Rock University I studied Geographical Information

Technology and Environmental Geoscience. I chose that career because I care about water quality, sound management of trees and wildlife.

I urge the EQB to vote no, and for the DEP to start a new and truly separate process for conventional regulations.

CHAIR:

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Our next three commentators this evening are Gary Metzger, Tammy Bonnice and Robert Deering.

Gary Metzger?

MR. METZGER:

Good evening. My name is Gary Metzger.

I'm a lifelong resident of Lycoming County. I live at

315 Mountain Brook Lane, Montoursville, Pennsylvania,

17754.

I'm here to offer testimony this evening on behalf of the Lycoming Audubon Society. Our Board of Directors voted unanimously to have me testify on behalf of our 425 members in Clinton and Lycoming Counties.

I have reviewed the revisions to 78a

regarding nonconventional wells in the Commonwealth, the new standards and almost uniformly they represent an improvement on the existing ways of governing this industry. We, Lycoming Audubon, recommend that DEP adopt, as part of the rulemaking, this package of 78a revisions. If rerevisions were necessary, they should enhance the requirements and protections, not lessen them.

We here in Lycoming County and in Clinton County, we live in the very heart of the Marcellus gas. You can't throw a stone without hitting someone who has some kind of horror story about the gas industry or has some newspaper article about a problem with contamination resulting from the industry. I think the industry is here to stay. I think that it needs better regulations. And I think these regulations take a step in that direction.

There was a recent article in the Sun-Gazette. It had to do with a study that USGS and Penn State had just done on a stream near Hughesville, Pennsylvania. They found methane in the stream, in measurable quantities. It turns out that methane came from a well drilled three years ago, by Range Resources. The methane contaminated five drinking water wells and migrated through that water into the

stream. So we have toxic methane, a flammable, explosive chemical in the stream, in our atmosphere and no remediation in sight. It seems that that kind of occurrence indicates that the industry's practices are not totally accurate and that we need better regs to prevent this kind of thing from happening, or to remediate instances when it does happen.

I'll mention a few of the things ---.

I'll mention a few of the things that I really like

about the new regulatory package. The requirement for

noise mitigation. I and my wife live eight-tenths of

a mile from a drill pad in Upper Fairfield Township.

At eight-tenths of a mile, the noise during the

drilling, fracking and flaring operation was

considerable. It was unbelievable, really, to us. We

have neighbors who live much closer to well pads and

it is a window-shaking, wall-rattling experience, that

they go through. So some noise mitigation is a good

thing.

There are better and more specific requirements regarding affected water supplies. Those supplies under the new regs have to be replaced in kind. And the new regs establish deadlines for the industry to notify DEP of a problem and for DEP to investigate. There's a requirement that the industry

do more to identify old, orphaned, abandoned wells.

Near the vertical drill sites and along the course of the horizontal bore of the new wells. These old wells have found to be sources of problems with gas mitigation and other instances. Identifying them beforehand is a good thing.

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There are better stormwater management and E and S controls required. Good thing. Open pits on individual drill sites, as was mentioned before, would be a thing of the past. A good thing. Those open pits leak. They are not safe for wildlife or for humans. There are better requirements for the containment structures, for toxic drill materials and flowback materials at centralized drilling sites and those are very good things.

I have several additional items that I'm recommending that were in my written comments. Let me just finish with one last comment. Thank you. Our presumption is that DEP will see fit to maintain adequate staffing levels, to see that whatever regs are in place to adequately implement them and enforce them. So thanks for the opportunity to come.

CHAIR:

Next is Tammy Bonnice?

MS. BONNICE:

Hi, I'm Tammy Bonnice. I live in

Montrose, Pennsylvania, 18801. I am a mother and

President of the Montrose Chamber. Born and raised in
a small town in Susquehanna County.

I'm speaking on behalf of two important parts of my life, my children and my community. I can tell you the same things that you have read and you have heard tonight. Well over 20,000 (sic) jobs have been created in Pennsylvania. We now produce over 25 percent of the United States' natural gas supply. Which in turn lessened our dependency on foreign countries' energy. Natural gas is a clean burning fuel. It has improved our air quality. Over \$2.3 billion in additional tax revenue has been generated by shale development. I can read facts and statistics all day on how the production of natural gas is beneficial. But let me now tell you how it affects me as a parent and a community leader.

As a parent, we want our children to have the opportunity to stay in our area. If they choose another corner of the world to call home, that is fine. But with the production of natural gas, great opportunity has been given to our next generation. As a mother of two boys, one stayed in the area and one didn't. The oldest one who stayed

local owns a bluestone quarry that produces bluestone. He is able to support his family because of the industry indirectly buying his products. My youngest son went on to further his education and became an engineer. But because of the gas industry and the summer internship that he was offered, he graduated with little debt and has a job with a very promising future in a field that continues to grow. Because of the gas industry our children and our grandchildren can choose their own future.

I am the President of the Montrose
Chamber, a board member of the Wyoming County Chamber,
a very active committee member of many, many nonprofit
organizations located in both counties. I have lived
in this area my entire life. I actually grew up on a
farm in Susquehanna County ---. That is my home. And
this is my investment. And I am very excited about
the opportunity that natural gas brings to this
region. I have seen many different trends of income,
farming, stone quarry and now the gas industry.

I've seen a lot of hard times for many, many, many residents. I've seen people sell off parts of their family farms because the milk check is a lot smaller than their feed bill. Family-owned stores going out of business because of the lack of consumer

spending. People living paycheck to paycheck and trying to make ends meet. Parents taking out huge student loans to give their children the education and opportunity that they didn't have.

Because then --- but then the Marcellus Shale development began in the northeast and production of natural gas became part of the everyday lifestyle and economic growth for the natural gas production has translated into increased income for families and local businesses. Both the nonprofit and the profit world have benefited from this industry in our area. Family farms are now running full force and being passed down from generation to generation.

Families are taking vacations together. Residents are more involved in the community and donating time and money to nonprofits. The privately-owned trucks that used to work --- are working year round, not just seasonal, and many increasing their fleets to build well pads.

There has been over \$800 million in impact taxes distributed to local communities and environmental programs, and over \$2.2 (sic) billion in additional tax revenues that has generated by shale development.

Pennsylvania already has regulations in

place. These regulations have been reviewed by the State Review of Oil and Natural Gas Environmental Regulations board. The changes to Chapter 8 --- 78 are targeting now only the oil and gas industry. Why single out just one industry? And because of this, Pennsylvania will become less competitive with other shale basins. This would be devastating in Pennsylvania, which has experienced an impressive economic growth.

So as a mother, a resident, a community leader, I strongly suggest that you reconsider the changes to Chapter 78. The natural gas industry is a positive force for our environment, our economy and the future of Pennsylvania.

CHAIR:

Next is Robert Deering?

MR. DEERING:

I'm going to put this in a little bit different perspective than the last person. I live in the midst of gas drilling. I live on Pine Creek Valley, at the top of Okome Mountain. Most people deal with only one or several well pads at a location. However, the permitting process on state forest and state game lands seems to be different. There are many well pads, wells, retention ponds, collector

pipelines, access roads, and now compressor sites in one area. The conversion of ground use and water use in our area is unprecedented in my lifetime.

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There are three coffer dams in Pine Creek, with two more approved, within about a six mile range. This used to be a recreation area. All the ground in this area was classified as forest reserve. Now it's nothing more than an industrial site on top of a mountain. As of today, we have 12 well pads with a hundred wells, four 15,000,000 gallon freshwater ponds, an open pit used flowback storage pond, a truck and equipment storage area, and miles and miles of collector pipelines and access roads. This is just on state forest ground, which borders my house to the south side. Now they're starting on the north side. Where was or is the cumulative analysis of the issues of this much development and pollution on untouched forested ground and headwater streams?

One of the concerns is noise. If the well sites were located at greater distances from residents, or in my case, mostly hunting camps, the noise would be mitigated just by distance. They are now able to drill a mile --- over a mile horizontally. There is no reason to place a pad closer than a half a mile to somebody's residence. Part of the noise is

on-site massive generators. These run 24 hours a day, seven days a week, almost from the time of pad development until the pad is complete with pipelines, dehydrators, evaporators and whatever else they put on the pad. This does not even consider the truck traffic, which is also 24/7.

Easter Sunday, clanging pipes, equipment, backup alarms and loud roars of diesel motors. Pad creation doesn't happen overnight in a forested area. Start to finish it takes over six months to develop a pad on a wooded site with eight to ten wells on it. And add to that, you get into the routine maintenance on the pad, more truck traffic. Some of the pads in our area have been here for over six years and trucks continue to go down almost daily. Besides the noise, we're also getting the dust and diesel fumes, which gets into my second issue.

Air quality in our area used to be great. Everybody wanted to go outside and just smell the pine. Now, at times we don't even want to go outside because of the dust and the odors, not just diesel fumes but chemical smells. It even gets down to the welding of the pipes and the stink from the welding and the generators on the welding trucks.

Besides that, we have a central waste impoundment adjacent to our house. This was not permitted on state forest, so they bought a thirty-one-and-a-half acre private property adjacent to the state forest and adjacent to hunting camps. They got a county variance to place a central waste impoundment and a staging area for equipment.

More trucks 24/7. There's an open pit that holds three-and-a-half million gallons of wastewater. More trucks and noise 24 hours a day. You can do the math, figuring out how many truck trips it took at 3,500 gallons per truck. It has been filled and emptied at least three times. Plus, all the trucks bringing equipment for storage, gas pipes, inter-duct, water pipes, stone and other equipment on the staging area.

More consideration is given to the gas companies and the residents that live adjacent to it have to put up with it. The philosophy from our executive people are that if you just don't like it, move.

In my opinion, part of the planning process for permitting of gas drilling should also be a contact and evacuation plan, should there be a fire, chemical release, spill or explosion. There's nothing

in place in our area to contact the local people. There is basically one good route in and one good route out from the drill sites and houses.

In conclusion, more consideration is given for gas drilling jobs, which in our particular area are mostly out-of-area people and special interest money than the environment you folks were put in place to protect. Where is the relaxing atmosphere for the future generations? I had personally enjoyed coming here and moved here years ago prior to any of the gas drilling. We don't have any quality of life left in our particular area. Thanks for your time.

CHAIR:

Our next three witnesses this evening will be Timothy Eriksen, John Ryan and Matt Henderson. Timothy Eriksen? Timothy Eriksen, John Ryan and Matt Henderson are our next three.

MR. ERIKSEN:

My name is Tim Eriksen. Though I am a current resident of Tioga County, New York, I was born and spent most of my life in Pennsylvania. I am a Professional Geologist licensed to practice Geology in the Commonwealth of Pennsylvania. I am employed by a Pennsylvania groundwater consulting and contracting firm. Groundwater is what I do for a living. I do

have a couple of general comments.

The general --- current draft revisions of Chapter 78 seem to have been developed based on fear, rather than the best available science. The fear of oil and gas development, especially unconventional development, otherwise known as the Marcellus and Utica Shales, has been a moving target over the last seven years and is endemic of bad science, disingenuous print, online and television media and a general misunderstanding of industry processes. I am intimately familiar with some of the private water supplies that have been impacted and --- allegedly impacted, an argument mentioned by other witnesses prior to me. Like I said, groundwater is what I do for a living. I do it every day.

An example of some of those moving targets, and there are many. One, hydraulic fracturing will consume too much fresh water.

Incorrect. In the Susquehanna River Basin, the most fresh water that the industry has used in any single day is approximately half of what flows through the basin in 1 minute. That is less than one half of one percent of the surface water available. Additionally, one of the combustion products of methane is water.

Some studies suggest that the combustion of methane

has created and added more water to the water cycle than what is consumed by the oil and gas industry.

Moving target number two, of many.

Hydraulic fracturing will contaminate drinking water supplies. That is incorrect. Anyone who has taken a structural geology or rock mechanics course knows why this is the case. Furthermore, after nearly 1.5 million frack jobs since the 1960s, neither the United States EPA nor the regulatory agencies of the 30 plus states who take advantage of this resource can identify a single instance of this happening.

Moving target number three of many. The industry will further contribute to the release of fugitive methane and thereby increase greenhouse gases to the atmosphere. Once again, incorrect. Methane and CO2 concentrations in the atmosphere have decreased over the last decade, despite record production of natural gas.

Number four, development of oil and gas resources will increase human exposure to radioactivity. Incorrect. The DEP's own study rejects this notion.

It appears that the current set of regulations, in many instances, is based on some of these manufactured fears. Of the 30-some states that

regulate the oil and gas industry, Pennsylvania is currently the third most expensive to drill in on a cost per foot basis. The misplaced fear that has been promulgated into this draft regulation will surely drive Pennsylvania to the top of that list and there will be little or no environmental benefit, and there will be absolutely no financial benefit to the Commonwealth or its citizen.

For a good example of that, look about 90 minutes north of here, for an example of missed opportunities, based on fear and misinformation. For these reasons, the draft Chapter 78 revisions should be withdrawn and reconsidered. In the event that these draft revisions are not withdrawn, I offer the following specific comments.

78.51, protection of water supplies. If an operator causes a change to the water quality of a private water supply, the water must be replaced with like quality water or to the standards established under the Pennsylvania Safe Drinking Water Act, whichever is better. No domestic water supply is subject to this standard throughout the state. It is unreasonable to consider this regulation when there is no domestic water well construction standards available to the Commonwealth. Rather, the proposed

restoration standards should be made to meet predrilling water quality.

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78.52, predrilling or prealteration survey. The revisions in this section require the operator to submit a copy of all predrill or prealteration samples to the Department within ten business days of assignment of an API number for the gas well that is the subject of the survey. Though I absolutely understand the Department's reasons for doing this, I would propose a different reporting milestone, such as ten days prior to spud.

Section 78.66, reporting and remediating spills and releases. This is going to require operators enter a voluntary program that was to create --- to encourage the use of blighted lands and making it mandatory for oil and gas operators. In addition, this section proposes timelines for specific actions that do not exist in the Act 2 program. And this is a bit of a misuse of the program. That concludes my remarks. Thank you to the Environmental Quality Board and the DEP allowing me to comment.

CHAIR:

Next up we have John Ryan.

MR. RYAN:

Good evening. My name is John Ryan. I

am Regional Manager for McTish Kunkel & Associates,
located at 1500 Sycamore Road, Montoursville,
Pennsylvania. McTish Kunkel & Associates is an
engineering and environmental services firm with three
offices in Pennsylvania, Allentown, Pittsburgh and
Montoursville. The Montoursville office was
established 13 years ago and provides numerous
services to clients throughout Central Pennsylvania,
as well as natural gas related clients in
Pennsylvania, Ohio and West Virginia.

In 2008, prior to the onset of the natural gas exploration and development in Central PA, we employed approximately 20 people at the Montoursville office. By 2012 we had grown to 90 employees, as a direct result of our involvement in the natural gas industry. These are good jobs, filled by local people, and include engineers, surveyors, biologists, environmental scientists, technicians and construction inspectors. More than 50 of these positions are filled by people who were educated locally at the Pennsylvania College of Technology.

Today, although there has been a substantial reduction in gas development in Central PA, we employ 70 at the Montoursville location, where most are still employed by the natural gas industry.

This work is performed in Central and Southwestern PA, Ohio and West Virginia. Our firm has benefited greatly from the development of natural gas and we hope to continue this relationship for a long time to come.

In addition to our personal benefits in the shale gas development, it is also positively impacting Pennsylvania and our country.

Shale gas development is supporting and has made more secure over 200,000 Pennsylvania jobs. \$830 million in impact taxes will be distributed to local communities and environmental programs, and over \$2.3 billion in additional tax revenue has been generated by shale development.

Pennsylvania now produces 25 percent of the U.S. natural gas supply, which has lessened our dependence on foreign energy sources.

Pennsylvania residents are benefitting from energy prices which are more than 40 percent lower than the onset of significant shale gas production in 2008, saving homeowners and businesses billions of dollars annually.

Natural gas is a clean burning fuel source, accounting for nearly 25 percent of our electric generation supply, heating homes of over

5,000,000 Pennsylvanians. It has contributed to improved air quality in Pennsylvania due to significantly less CO2 emissions.

Pennsylvania already has world class environmental regulations that have been a model for states across the nation. These regulations have been reviewed and praised by the independent STRONGER board. Additional and more stringent regulations are not necessary and will only inhibit the further development of this valuable resource and hinder what should be the goal of every resident of Pennsylvania and our country, which is energy independence.

However, if you must develop more stringent or additional regulations that will impact the development of natural gas, I implore you to base your decisions on fact rather than emotion, on science rather than arbitrary information and be well defined rather than ambiguous.

Deficiencies of the proposed rulemaking are as follows: It appears that DEP has failed to conduct a cost-benefit analysis for the proposed changes to this rule. They have not conducted an analysis of the impact on small businesses, both of which are required by law. It appears that DEP is sidestepping the ability of the legislative oversight

committees and the Independent Regulatory Review

Commission to formally comment on the sweeping

regulatory changes proposed in the Advanced Notice of

Final Rulemaking.

It appears that this rulemaking will result in significant compliance costs at a time of historic downward commodity price pressures, making Pennsylvania less competitive with other shale basins, while providing little, if any, commensurate environmental benefits. It appears that the rulemaking contains standards applicable only to the oil and gas industry. There is no justification for singling out one industry for burdensome rules that do not apply to other industries. This includes wastewater treatment, noise standards, new storage tank standards and waste reporting. Thank you for the opportunity.

CHAIR:

Thank you, Mr. Ryan. Next, we have Matt Henderson.

MR. HENDERSON:

Thank you. Matt Henderson, 76 Hoffman Road, Mountoursville, PA, 17754. I'm here this evening as a lifelong Lycoming County resident, private citizen and also I reside among natural gas

development here in Lycoming County. While oil and gas development is not new to the Commonwealth, shale development is new to our part of the state. I can say confidently this development has had an enormous positive impact in our community. We have benefitted locally with the creation and growth of many businesses, numerous jobs, improved infrastructure, increased philanthropic giving and a cleaner environment.

Shale development has placed

Pennsylvania in the national spotlight and now

accounts for 25 percent of the U.S. gas supply, which

has helped us reduce our dependency on foreign energy

sources. Shale development has led to lower energy

prices, down nearly 40 percent, allowing businesses

and homeowners to reinvest the billions of dollars of

savings back into their community.

The last eight years of my professional career have been positively impacted by the natural gas industry, from helping local businesses capitalize on this opportunity by starting and growing businesses, to working for an academic institution focused on community education and outreach, to currently working for a local operator that has invested tens of millions of dollars into this

community and looking to invest millions more. And as members of this community, who drink the well water and breathe the air, no one has a more vested interest in making sure that we protect our environment. My family and our livelihood is directly affected by the decisions you make in Harrisburg.

I am concerned that this tremendous opportunity we have been afforded is in jeopardy. The Department is proposing a series of requirements that may read well out of a book for those who do not need to live with the consequences of your decisions, but which threaten my livelihood and that of my family. Because of what you are proposing to do, you have my full attention.

You are proposing brand new standards very late in the regulatory process. Despite claiming to be going above and beyond, with respect to public input, what the Department has actually done is effectively sidestep the legal requirements you are supposed to adhere to. For example, this regulation has no compliance cost estimate, it has no costbenefit analysis, and it fails to consider the impacts to small businesses, as required by the General Assembly. It does not apply environmental standards consistently across industries. You have proposed new

standards for noise mitigation, which does not fulfill any of your environmental obligations, and instead intrudes on the decision-making process of elected officials here in Lycoming County. You have new standards for storage tanks, site remediation and waste handling and reporting, which treat the natural gas industry differently than every other industry in the Commonwealth. Other standards are vague and inconsistent, such as requirements for considering other critical communities, and make it difficult, if not impossible, for an operator to know how to comply with the law.

In my various roles of helping to create small businesses, educating the public about shale development, and now working to safely produce Pennsylvania's energy resources, I have seen a commitment to protecting our environment. I believe in high, strong and consistent environmental standards because it's the right thing to do and because it protects my family. But the Department must correct its course here. However well-intentioned some of these provisions may have been, they simply continue to strangle the opportunities available for myself and my neighbors here in Lycoming County.

I was born and raised in Lycoming County

and hope to live my whole life here. I want the same opportunities, should they choose, for my children. Respectfully, you have put that future in danger. On behalf of them, I ask you to reevaluate these rules and come back with more sensible changes that work for the citizens of this community. Thank you.

CHAIR:

Our next three witnesses this evening will be Thomas Gillespie, Melissa Troutman and Diane Ward.

MR. GILLESPIE:

Once again echoing what everyone else has said, thank you for your interest in our comments on the proposed regulations. I'm very pleased to be here. My name is Thomas Gillespie. I present my testimony tonight as the Director of Regulatory, Health, Safety & Environment at Inflection Energy, here in Williamsport, at 49 East 4th Street.

I am a Pennsylvania licensed

Professional Geologist. I am actually on the

Pennsylvania licensing Board for Professional

Engineers, Land Surveyors and Geologists. I'm the

outgoing President of that State Licensing Board. I

also represent Pennsylvania in the National

Association of State Boards of Geologists, where I am

the President elect on the executive committee, the subject matter expert in structural geology and hydrogeology.

Over the past 30 years I have had very close ties with the Pennsylvania DEP and its regulations in many, many different fields. I've worked in just about every field a geologist can work in within this state. And I've worked very closely with the Department. My experience in all that time has been that, at least until now, the Department has been able to fulfill its charges to ensure public protection, protection of the environment, without suppressing economic opportunity and the public weal. That has been possible because the Department has operated under balanced statutes and regulations which ensure that we can have economic prosperity and a clean, healthy environment.

The regulations proposed by the current administration's newly minted DEP and Technical Advisory Board would be a divergence from that history of well-balanced regulations. The cooperative relationship between the Department and the private sector, which has catapulted Pennsylvania to the forefront of an energy and economic revolution, would be in jeopardy. Because those proposed regulations

are vague, broad, expansive and internally inconsistent. For example, under the guise of protecting biological species, the proposed regulations provide that rocks, soil, water, air and even entire geographic --- geologic formations can be classified as Critical Communities, requiring special protection, such as a species might get. The regulations would also result in redundant but not overlapping requirements with other agencies, but would add little in the way of additional protections above that which we have already. Such regulations invariably result in inconsistent interpretations within the Department, a burden on the regulated industry, an uncertain regulatory climate, and they provide opportunities for frivolous legal actions.

Simply put, an increased regulatory burden for little in the way of increased protection will drive operators to other states. If the Wolf administration's objective is to do just that, there are few better means to achieve that goal than the one-two punch provided by the tax proposal and these proposed regulations.

Such an outcome would be detrimental to the Commonwealth and the entire country. It's also contrary to the overarching mandate of government,

which is to provide for the health, safety and public welfare of all citizens. Frankly, despite what might occur tonight, a citizenry whose basic needs of heat, electricity and jobs are not met does not have the luxury to enjoy a pristine environment. That's all there is to that.

The ostensible need for the proposed regulations, the so-called controversy over hydraulic fracturing, is a chimera, a delusion of smoke and mirrors. My graduate school research topic in 1980 was hydraulic fracturing. It's a long-established technology which has been and is being practiced safely and it has been for 65 years. It is no different than oil and gas development in conventional reservoirs in which 90 percent of all wells are hydraulically fractured to enhance recovery - nearly two million hydraulic fracture treatments in over 27 states with not a single instance where the hydraulic fracturing resulted in any environmental impact.

There is nothing new that requires new regulation. Pennsylvania, the very first oil and gas producer in the world, and now the world leader in natural gas, already knows how to produce energy while simultaneously ensuring a clean, healthy and safe environment. Which we do, indeed, enjoy despite the

hue and cry of doom and gloom. In its ability to ensure a balance between economic prosperity and clean environment, the existing DEP does not need to be fixed, as it is not broken. The existing regulations do not need to be amended, as they are not broken. What would be broken if these regulations pass as proposed is Pennsylvania's economy, the job market, and America's ability to achieve energy independence within the next six years, which is in our grasp and it's under a threat.

On behalf of all Pennsylvanians, I urge our legislators, our Environmental Quality Board and the Pennsylvania DEP to reconsider the provisions in these regulations which basically hinder, swallow and even threaten to shut down the industry which provides the lifeblood of our current and future society, the natural gas producers of Pennsylvania. Thank you.

CHAIR:

Next we have Melissa Troutman?

MS. TROUTMAN:

My name is Melissa Troutman. I am a resident of the Commonwealth. I'm going to refrain from giving my exact address. In 2011 I cofounded the investigative news nonprofit Public Herald, and I began this work to investigate this agency. Public

Herald produced the documentary Triple Divide, which Scott Perry personally told me was well done. In Triple Divide we began to unveil how DEP has only pretended to protect the public.

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For those of you who believe that the human impacts are doom and gloom, you can tune out Because I'd like to dedicate the rest of this to now. the people who've been harmed by this industry and this agency. Terry Greenwood, may he rest in peace. Carl Stiles, may he rest in peace. Judy Eckert. The Carr and Headley families. The Sethman family. Jenny Lisak. Jennifer Goorelly. The Brown, Geary, and Latin families. Carolyn Knapp. The French family. These people probably don't matter to you. Carter and Pepper families. The Kretschman family. The Barndts, Penni Lane and her The Richardsons. children. And the countless others whom the DEP has harmed by issuing permits that led to the destruction of their lives. Those are facts, friends, not just emotions.

It's time this agency stop pretending it can protect us, and that it is not a shadow of the oil and gas industry, for all its boohooing. And you need to stop pretending you can replace water supplies that have been contaminated, for instance. I challenge

everyone who works at DEP to wake up tomorrow morning and tell the truth, that the true job of this agency is not to reduce pollution, but to increase it and then sometimes try to clean up --- clean the mess up afterward.

Your authority is castrated as soon as a company decides they want to deny responsibility.

They tie you up in legal negotiations for months or years, and meanwhile people are living on bottled waters, and they have to move, not because they need to find a new job, but because their house might explode. And then, at the end, you ask them to sign a Consent Order.

Fact. Right now, DEP admits to 256 cases of water contamination related to fracking, unconventional operations. I have a question. Do you have to drill to frack? If you do, and the drilling that you require for fracking causes water contamination, that's fracking. I can't believe people are still saying that there's not one case of water contamination related to fracking. You are lying. I'm baffled how ---. Sorry.

Of those 256 cases of water contamination, how many water supplies have been restored? I've looked at hundreds of your water

contamination investigations. Guess how many restored water supplies I found? That's right. Zero. Because a \$20,000 filtration system is not a restored water supply, it's a filtration system. It's very expensive. It requires constant maintenance, electricity, replace parts for the lifetime --- however long those people need to live there.

I don't even know why Section 76.51 is being reworded. I mean, what's the point? The icing on the cake is that while companies deny responsibility, you issue them more permits. Same company bucking your authority, just give them more permits.

John Quigley has said this about these regulations. These proposed revisions focus on the need to protect public safety and the environment while enabling drilling to proceed. I prefer the wise, courageous words of Martin Luther King, Jr., who is a civil rights leader. You guys might have heard of him. He said, quote, in the end, we will not remember the words of our enemies, but the silence of our friends. And I'd like to think that the Governor and this agency are friends of the public, who will not just continue to be silent. Terry Greenwood, Carl Stiles, their blood is on this agency's hands.

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Next up we have Diane Ward.

MS. WARD:

My name is Diane Ward. I live in Hi. Wysox, PA, in Bradford County, in a nonconventional drilling area. First of all, I'd like to thank you for the opportunity to come in. And also, I was a commentator at other events in the past and provided input, and I do want to thank the DEP for taking some of the input. I know I worked really hard for about 40 years to try to get some action on the issue of drilling near legacy gas wells. And the current regulations have definitely made an improvement. I truly, you know, from the bottom of my heart, I want to say thank you, because if we don't work on these things, you do not see an improvement. If we do work on these things, we will make improvements on issues we are having.

However, although there were a number of shining stars, I guess, in the current draft regulations, you need to persevere and ensure that these positive changes that you have made go through to the final approved rulemaking. If they don't, it will be all for nothing.

My five minutes today are to express a

strong concern that is generated in the regulations. And unfortunately there is something in there that deeply undercut the strong progress that you were making forward elsewhere in the regulations. And that particular issue is the inclusion of a definition of abandoned water well and the use of the newly-defined term in determining gas well site compliance with Section 321 --- 3215(a). The existence and location of water wells is an important consideration in the siting of new gas wells. The regulations in Section 3215(a) determine critical well location restrictions. And I've shown that in my handout that I'm going to give to the --- for your written input.

The inclusion of the new abandoned water well definition constitutes a unilateral, heavy-handed decision on the part of DEP that a large portion of our state's water wells are abandoned water wells and not of consequence relative to the placement of new conventional or unconventional oil and gas wells. So in other words, the setbacks won't apply because someone is deeming that this well is not important because by your new definition it is not worthy of being set back from. Okay?

This is a very, very important setback.

This proposed definition is fuzzy. For example, the

wording on the proposed definition for an abandoned water well is --- it includes something that says it's abandoned when its use on a regular or prescribed basis has been discontinued. What does that mean? How will that be interpreted? More importantly, the definition presumes that someone other than the property owner is making a determination about the value of our current and future uses of a property's assets.

The process for making this designation of abandoned water well is not specified in the proposed final regulations, which is another issue.

And I have a basic question. Where did this whole thing about abandoned water wells suddenly come up?

Who brought this up? Because it does, indeed, put a back door into the gas companies to get closer and closer to our assets.

All water wells, used or unused, are doorways into our aquifers. Whether an aquifer is currently used or not is of little consequence relative to your agency's charge to preserve the purity of the waters of the Commonwealth. All water wells are paths to the possible migration of methane or chemical pollutants under the less than ideal drilling and transporting realities of the gas

industry. And the older the water wells are, the more likely that they might be a vehicle to methane migration to the surface, maybe in the outdoors, maybe in your basement, in some unused well.

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The drilling industry should put a priority on avoiding abandoned water wells via setback, rather than looking to get a broad brush definitional waiver, the worst kind of waiver, to --- so that they don't have to set back from the water wells.

Looking at my own properties, I can see that there are probably way more abandoned water wells in this state than there are active ones. B11 t. consider that these abandoned wells are possibly a future outside water use, water in a town where municipal water allows, given the ordinances, that you could use a separate well versus the town water. Some type of use in the future, when a property is subdivided. May be associated with a property that needs to be rehabilitated and inhabited in the future. There is piecemeal development of parcels, due to limited funds on the part of residents. Sometimes you're just waiting for the next trailer to come in. So don't use our well. Okay?

So we do not want any of our wells

classified as abandoned by any proposed definition. Take it out, get it out. And get out the part where it says that it's going to determine the compliance with Section 31 --- 32.15.

Please don't give the industry a backdoor to sneak in, creep in closer to our residents and towns. They already have much more latitude in there than their environmental --- in their decision-making than environmental behavior warrants. And don't sign a death warrant on the future of low cost private water that meets drinking water standards in PA. Thank you.

CHAIR:

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Thank you, Ms. Ward. Our next three commentators this evening are Mark Fischer, Charles Amer and Harvey Golubock. Mark Fischer?

MR. FISCHER:

Hello. My name is Mark Fischer. I'm with LW Survey. My address is 1725 Oregon Pike,
Lancaster, Pennsylvania. LW Survey provides
professional survey, mapping and routing services to
the oil and gas industry. We're the country's largest
pipeline survey firm. So to say that we have our
finger on the pulse of the midstream sector is an
understatement. We track, monitor and pursue nearly

every pipeline project in the U.S., Canada, Russia and Australia.

My job in business development is to ensure our professional survey crews stay employed. In the past three months alone, I have witnessed an unprecedented amount of uncertainty among my clients and prospects, which has led to projects being delayed, rethought or canceled entirely. All of this from the mere uncertainty of the fiscal and regulatory climate in Pennsylvania. We have laid off survey crews since the downturn began. Couple that with Harrisburg's intent to further tax the industry and now the DEP's move to change the rules, Pennsylvania could effectively create a perfect storm, one that will most certainly kill the golden goose that remains one of the brightest spots in our Commonwealth's economy.

I am among the 340,000 Pennsylvanians employed by the oil and gas industry. That number should only grow, as some estimate we are only 15 years into a 150-year process. But we will never get the chance to realize those numbers, those jobs, and the economic benefits for all Americans, not just Pennsylvanians, if we continue to single out an industry with burdensome rules that don't apply to any

other industry.

I had dinner the other night with two of your colleagues, actually, from the DEP. These two are personal friends and we rarely discuss business. However, I felt compelled to share with them the reality that, to date, there is only one operator in the entire Marcellus Shale play that is currently cash flow positive. One of them. After eight (sic) --- some odd years, only one is cash flow positive, primarily due to the lack of infrastructure to move this product to market. My friends were astounded. They had no idea, and I wonder if you realize just how tenuous this situation really is.

Extraction, production, transportation and distribution is a long and complex process, no doubt, but one that has been further stressed by regulatory oversight that many believe is overreaching. PA already has world class environmental regulations. Protecting the environment is in everyone's best interest. But why should we pay an unfair price? Some of these proposed standards, like new limitations regarding public resources, are literally unlawful. Why?

Just seven years ago we were in near panic over our reliance on foreign energy imports.

precarious position for sure. Today, thanks to

American ingenuity, that was developed by Americans,

produced and delivered by Americans, and that benefits

every American, is in jeopardy. Piling on additional

regulations would be crippling. I, along with my

hundreds of thousands of colleagues, implore you to

work with us on these proposed standards that,

frankly, have little to any commensurate benefits.

Bottom line, rigs are mobile. They've got wheels. If they move to other basins around the country and globe, PA will have lost out on one of the greatest economic stimulators we witnessed in our history. Hundreds of thousands of jobs are on the line. The ball is in your hands. Our loss is the Middle East's gain. Please don't drop the ball on this game-changing opportunity. Thank you for the opportunity to comment.

CHAIR:

Thank you, Mr. Fischer. Charles Amer?

MR. AMER:

Good evening. I'm Charles Amer, and I'm coming to speak here tonight as a citizen of Sullivan County, in support of the jobs and opportunities that the natural gas industry has afforded this area, this state and this country.

I'm a lifelong resident of Lycoming

County. I was born and raised there in Hughesville.

I got a degree from Bucknell University in Chemical

Engineering, and a Master's from Penn State University
in Environmental Engineering. I'm a Professional

Engineer. And based on that education, as well as my
professional experience, I feel as though I'm amply
qualified and well-versed in the fields of water
treatment and water quality.

I have 29 years of consulting engineering experience and I have worked in the gas industry for the last six years. Presently, I live in Sullivan County, near Laporte. And I have entered into four gas leases with three different energy firms. And these leases also include a 30 inch diameter pipeline --- it's an interstate pipeline, that goes through my one property. So I have firsthand knowledge of the impacts of drilling and leases and pipelines, as I have to live and breathe and deal with them all the time.

But on the flipside what I've seen is through the impact fees, lowering my taxes, improved roads and the rehabilitation of Sullivan County's courthouse. So there are many benefits that come with oil and gas development.

I've been fortunate to be able to work in North Central PA. That's only been for the last 10 or 15 years. Prior to then, I was working in other parts of the country. My brother works for a large exploration and production firm. My nephew is a well driller. My wife teaches at a local high school and many of her students have gone on to serve many aspects of the oil and gas industry.

So it is from my heart that I feel as though that this industry has created lots of opportunity and I would like to see the Department continue to support the industry.

I agree with DEP's goal of protecting human health environment --- human health and the environment. And it's also my job to help these energy companies to secure permits through DEP, the Susquehanna River Basin, the Army Corps of Engineers, Conservation Districts, local municipalities and such. So based on that and my knowledge, I feel as though that in order to eliminate or minimize the threat to human health and the environment, whatever rules you're considering and contemplating, they should not be onerous or overly burdening. This industry has lots of opportunities and I would like to see those opportunities continue on for my family and my

children.

And to sum it up, as I stated earlier, I feel as though that your regulations are very satisfactory and --- otherwise I wouldn't have entered into the oil and gas leases and jeopardize my drinking water supplies and the health and welfare of my family. Thank you very much.

CHAIR:

Thank you, Mr. Amer. Next is Harvey Golock (sic)?

MR. GOLUBOCK:

It's close.

CHAIR:

I tried.

MR. GOLUBOCK:

Good evening. I'm Harvey Golubock. I am representing two companies here tonight. I am President of ARG Resources, located in Highland, PA. And I'm also Vice Chairman of American Refining Group that owns and operates a refinery in Bradford, Pennsylvania. ARG Resources owns and operates approximately 1,500 conventional oil wells in Highland, PA. It's a waterflood operation with approximately half the wells as producers and half as injection. All wells are hydraulically fractured and

have been for at least the last 50 years.

American Refining Group, or ARG, as it is commonly known, owns and operates the oldest continuously operating crude oil refinery in the world, located in Bradford, Pennsylvania. The refinery dates back to 1881. ARG acquired the refinery from Witco Corporation in 1997. I was President of ARG from '97 until my retirement in 2011. Most of the industry gave us six months before we would be out of business and yet here we are 18 years later, still a viable operation, employing over 360 people, up from about 160 in 1997.

The refinery is unique, in that it can only process a certain type of crude oil, principally what is generally termed Pennsylvania Grade crude oil. This crude is found in Pennsylvania, Ohio, West Virginia and New York State. There are some locations, such as Michigan, and some from the Utica formation that produce small quantities of acceptable crude oil. When we acquired the refinery in 1997, about 60 percent of the crude supply came from Ohio and 40 percent from Pennsylvania.

Over the years we managed to reverse that percentage, until two occurrences in recent years. First, there was the ANF litigation that shut

down production in the Allegheny National Forest for a year until the lawsuit was ultimately settled in favor of the industry. Just when we were seeing a renewed interest in conventional well development, the Marcellus Shale was rediscovered and investment that might have gone into shallow well production was shifted to Marcellus development.

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Today only about 50 percent of the refinery crude comes from PA, and that percentage continues to decline. Increasingly stringent regulations and increased enforcement has resulted in a dramatic increase in the cost of drilling conventional wells. Today it can cost anywhere from \$115,000 to \$150,000 to drill a shallow well and about \$15,000 to plug a shallow well. These events have all worked to reduce the number of conventional wells being drilled in Pennsylvania, most of which are drilled by small, independent producers. resulting decline in this legacy crude has made it more difficult for the ARG refinery to operate at its target rate.

The proposed Chapter 78 regs will place new pressure on the local supply and will ultimately have a negative effect on refinery operations. We see the new proposed Chapter 78 regs as introducing a new

requirement to perform a stormwater analysis on every new well. The industry had previously been exempt from this requirement. This change will require a certified expert to examine and report on every site. This is expected to add thousands of dollars of costs to each well.

The new regs will be introducing a new requirement to restore new well sites to original contours. The term original is new in 2015 and is without statutory authority. It is also unattainable in most cases. At the very least it will add substantial additional cost, expressly making the area of review burdens applicable to conventional oil and gas operations. The 2013 DEP analysis stated that these burdens did not apply to conventional operators, yet the 2015 version applies these burdens to conventional operations. The new version is also much more complicated.

The foregoing is just a brief excerpt of the onerous new burdens being placed on conventional producers. The overwhelming conclusion is that DEP has failed to analyze the financial impact of these burdens, as required by statute. The financial analysis cannot be an afterthought. The law requires that the financial analysis and the consideration of

alternatives for small business all be a part of the consideration during the drafting of the regulations. The financial analysis is fundamental to the development of reasonable regulations covering an industry that has been the backbone of the economy of Northwest Pennsylvania since the late 1800s. To fix this problem, and to fully comply with the existing statutes, the DEP needs to start the process over again. It has to begin by identifying, with supporting documentation, what, if anything, needs to be changed in the existing conventional regulations and why such changes are necessary. Thank you for your attention.

CHAIR:

Our next three commentators this evening are Todd Stager, Rebecca Roter and Barbara Jarmoska.

Todd Stager? Rebecca Roter?

MS. JARMOSKA:

Good evening. My name is Barbara

Jarmoska, of 766 Butternut Grove in Montoursville,

Lycoming County. Thank you for the opportunity to

present testimony at this hearing. I am testifying

tonight on behalf of RDA, Responsible Drilling

Alliance, a 501(c)3 based in Lycoming County. I will

go over some points in the proposed rulemaking by

number.

First of all, 78a.1 definitions. RDA supports the definition of critical communities, as outlined. Act 13 required DEP to consider the impact of drilling on critical communities, a number of which exist in the largest remaining tract of unbroken forest in Lycoming County. Prior to this rulemaking, the pitcher plants, rattlesnakes, spadefoot toads, and iconic boulders would not have been considered.

Without the definition provided in 78a.1, these, as well as other critical communities, are afforded the recognition and protection that they deserve.

Regarding 78a.15, application requirements. In section (b.1), we strongly support the inclusion of the term watercourse as proposed. In addition to sudden intermittent flows, water continues to flow underground and near to the surface whether watercourses are running openly or not. Their presence, value and risk of contamination must be considered during the application and permitting process.

In section (f)(1)(IV), we see again the mention of critical communities. RDA supports this inclusion, lest bulldozers destroy irreplaceable bird, mammal, reptile, amphibian and plant habitat or

millions of years of culturally-valued geology.

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In section (f.1), regarding limit of disturbance notification, RDA is not in agreement with Roman Numeral 7, requiring notification of a permit application for a well pad within a mere 200 feet of common areas on school property or playgrounds. We support expanded notification up to one mile in all directions. Traffic, noise and other impacts frequently travel at least that far from well sites.

Regarding 78a.41, noise mitigation. agree with the necessity of mitigating the noise pollution of gas development. The noise of site preparation, drilling and fracking operations is frequently egregious to nearby residents. We also ask DEP to include the term gas operations in this section, which by definition set forth in this document would include compressor stations. our members have experienced diminished quality of life when living in proximity to compressor stations. Here in Lycoming County, the zoning setback for compressor stations is a mere 25 feet. No one should be forced to live with continual disturbing noise. is clear from other regulations that DEP does have the authority and the experience to address the full spectrum of noise control.

Regarding 78a.51, Protection of Water Supplies. Section (d)(2). RDA supports the restoration and replacement of drinking water quality to pre-pollution standards if higher than the Safe Drinking Water standards. We are often told that water supply contamination rarely --- and we are also told that it never happens. If so, this regulation should not be burdensome to the industry. It is a simple, common sense regulation. If you ruin their water, you make impacted residents whole again.

Section 78a.53, Erosion and Sediment
Control and Stormwater Management. RDA strongly
supports the addition of stormwater management to the
language, as well as the additional specifications and
requirements that language carries. In drilling
operations, erosion and sediment control are shortterm concerns. In post-construction standards,
stormwater management must be considered for decades
to come.

Section 78.a57a, Centralized Tank

Storage. In section (b), RDA fully supports 100

percent of the wording in this section. In section

(d), we support bonding. In short, tanks do leak.

Here in Lycoming County we had a nationally-publicized incident. The need for bonding, insurance and

restrictions is common practice in other arenas, and regulatory power in such matters has been fully established by both OSHA and RCRA regulations.

Because of the potential risk, DEP needs the full scope of regulatory powers outlined in this section.

78.a65, Site Restoration. RDA
appreciates and supports DEP's efforts to strengthen
requirements for post-drilling restoration. We are
not in agreement with the omission of regulations
regarding site restoration for post well plugging.
DEP has not developed adequate standards or criterion
to ensure that well sites will be restored with
respect to what is referred to as ecological services.

I'm almost finished. By omitting this crucial aspect of restoration, DEP remains focused primarily on stormwater requirements. The inclusion of ecological services could and should require DEP to adopt technical guidance for post-plugging restoration plans. DEP (sic) requests that ecological services be included in this section of the proposed rulemaking.

One more. Thank you for your patience.
78a.66, Reporting and Remediating Spills and Releases.
RDA supports a change in the language of this proposed rule, thereby expanding the notification requirements to landowners. We contend that landowners have a

right to be informed of any and all spills and releases that occur on their property, with no exceptions.

I want to thank the DEP for the opportunity to express these concerns. This is an edited version. We will be submitting written comment. Thank you.

CHAIR:

Our next three commentators this evening are Rich Adams, Derek Soyke and Emily Krafjack. Rich Adams?

MR. ADAMS:

I'm Richard Adams, 1720 Sycamore Road, Montoursville, PA, 17754. Good evening, everybody. And members of the panel, thank you for the opportunity to testify tonight at this very important juncture for Pennsylvania's oil and gas industry, and the Commonwealth as a whole.

I am the Environmental, Health, and Safety Director for Chief Oil and Gas, LLC, a natural gas producer in Northeastern Pennsylvania, with offices in Dallas, Pittsburgh, Wyalusing, and in Williamsport here, where I have worked in environmental protection for over 40 years, at both DEP and now at Chief.

PIOGA, which as you may know, stands
for the Pennsylvania Independent Oil and Gas
Association. And my testimony tonight is on PIOGA's
behalf. PIOGA is a principal nonprofit trade
organization representing Pennsylvania's independent
oil and gas producers, marketers, service companies,
and related businesses. For decades PIOGA has worked
with DEP and other regulatory agencies to achieve
workable, effective and sound environmental practices
and policies for oil and gas operations, mainly
through our excellent lines and continuous lines of
communication and cooperation.

My testimony tonight is principally to say that, at this critical point in time, in the face of these tough economic situations that the industry faces, those lines of communication must be kept open, effective and trusted. We must engage now in truly collaborative processes to achieve workable rules and policies.

Now, you've heard tonight, in previous testimony, some of the facts and statistics about the economic and community benefits that have come about because of the Shale Gas development, and as the 31st presenter here tonight, I won't repeat them, but I can

tell you that they are real. Having lived and worked in this area here for over 40 years, raising a family, developing friendships, participating in local, county and state government functions, I have personally observed these benefits at the ground level.

I have a group of close friends whose businesses and jobs span a diverse variety, from welding to waste collection to consulting. And I have seen how their businesses have flourished over the past seven years because of the Shale Gas development in Northeastern PA, enabling them to hire dozens of kids who needed good jobs. And I am also proud to say that with Chief, over the past five years, I myself have hired seven young men and ladies from the greater Williamsport area to serve on our Environmental and Safety staff. So, we do create jobs and we do hire locally.

On the community side of things, I could spend hours detailing the road improvements, donations, assistance on recreational and environmental projects, youth education initiatives, and multitudes of other projects and causes that the energy companies have funded or directly performed. I can tell you that when these companies develop this amazing resource that we have been blessed with in

this Commonwealth, they become active and sincerely helpful members of the community. This community spirit and obligation to help is inherent in all of our internal missions and policies and it is not just idle rhetoric. We live it. We work it.

Now of course this hearing is about the newly proposed Chapter 78 regs, so I will switch over to that vein. And again, I am not here tonight to get into painstaking detail about each individual section of the proposed regulations. The Department will receive detailed comment from PIOGA on each new section of the regulations. I would instead relate some general thoughts and impressions, oriented at problem solving, with the theme that, unless DEP and the industry maintain open and sincere communications through the promulgation process, we may end up with regulations that are not optimal, neither for the industry to follow and understand, nor for the Department to fairly enforce.

And compliance is hugely important to both DEP and the operators. We emphasize compliance, good environmental practices and cooperation with the Department to our staff every day. And as one who has worked for DEP for 35 years, and having practiced compliance assistance to a multitude of industries, it

frustrates me to see some of the sensationalistic reports and blogs about the noncompliance stories of this gas industry. To be fair, we need to tell the compliance stories of this industry, because that is what is really happening, through our environmental practices and missions.

I'm going to skip real quickly to two points, recommendations on the new regulations.

Number one, I would ask the Department to consider whether some of the more prescriptive sections of our proposed regulation would be more effective if delivered as policy or guidance. In the past, DEP has had much success with writing more general regulations and providing detail in subsequently-developed policies or guidance. The DEP Erosion and Sedimentation Control Manual, and the Special Protection Stream Implementation Handbook are examples of that.

Number two, you will receive some pointed comment from PIOGA concerning the need to perform an economic impact analysis of the new regulations. We urge the Department to take a very hard look at this and involve the industry to the greatest extent possible. Thank you.

CHAIR:

Next up is Derek Soyke.

MR. SOYKE:

I'm Derek Soyke. Bradford,

Pennsylvania. I work a full-time job for a small independent oil company with operations in

Northwestern Pennsylvania and Western New York. I also own and operate a handful of wells in McKean

County. For the last five years I have had an annual production of less than 200 barrels a year. I am just one of many small operators that rely on a few wells for extra income. My wells help cover household expenses, such as real estate taxes, orthodontist bills, groceries and gasoline.

I'm here tonight to tell you how the proposed Chapter 78a regulations will affect my family, my community and the shallow oil and gas industry. The proposed regulation regarding tanks and secondary containment could mark the end of my lease. A tank replacement and a secondary containment system other than an earthen dyke would cost more than the lease could produce for the next two to three years. This economic forecast will affect all other small operators with leases just like mine.

Small leases play a big part in keeping stability in the local economy. As the local

refineries are already facing troubled times, crude oil shortages from the area's disappearing leases will have a devastating effect. Costs associated with the proposed Chapter 78a regulations of drilling and well pad construction are such that my employer may not be able to withstand. With no new drilling, my employer will cease to exist. My employer is just one of the many oil and gas companies facing possible ends.

Western Pennsylvania could be facing unimaginable unemployment levels and a mass exodus from the state. The remaining employed Pennsylvanians will have to pick up the tax burden. Thank you.

CHAIR:

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Emily Krafjack?

MS. KRAFJACK:

Good evening. My name is Emily

Krafjack. I am President of Connection for Oil, Gas &

Environment in the Northern Tier, 1155 Nimble Hill

Road, Mehoopany, Pennsylvania, 18629. We are a

regional advocacy organization based in the Northern

Tier focusing on unconventional oil and gas resources

within Bradford, Sullivan, Susquehanna, Tioga and

Wyoming counties. Our primary quest has been to

advocate for better regulations for gas industry

operations near our homes and schools.

I want to talk briefly about the promise versus the practice. Land-men began traipsing around our countryside as early as 2005. Those early and more recent conversations all revolve around promises A promise that we were guaranteed to receive a minimum 12-and-a-half percent royalty, when, in fact, the practice is many royalty owners are receiving far less than their negotiated due royalty. A promise that we do not have to be concerned about our water, when the practice is dozens and dozens of families have either impaired water or water restored at a quality less than predrill tests would indicate. A promise that the next door neighbor to a well pad would only hear a hum; when the practice is to not use any or very little noise mitigation which results in nearby families having volumes of intermittent noise that interferes with basic living. And these are just a few of promises that fail to meet the practice.

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Industry trade groups attempt to lead people to believe that this rulemaking now up for public comment was crafted in a vacuum. That is far from the truth. These regulations have been moving forward since 2011, when we were advocating for protective measures with our assembly members. During 2013, TAB convened four subcommittees which included

stakeholders from industry trade groups, operators,

NGOs, an environmental coalition, and we were included

with a seat during these four subcommittees which met

several days discussing various proposed provisions.

During this process, assignments were given.

Opportunities were taken to submit proposals for

discussion.

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Part of what came out of this process was the concept of centralized tank storage facilities. It was noted that a new permit was needed and the assignment was for certain industry stakeholders to submit for the next meeting a proposal of what they would suggest for a permit. A proposal was submitted, two pages long, using the word tank only twice. The proposal included no description for a permit but rather was a permit by rule. continued discussion at meetings regarding this concept. During the public comment period last year we submitted comment what we'd like to see in a centralized tank storage permit. Thus, for those of us participating in the process, these new provisions should not come as a surprise. They were not created There was plenty of opportunity to in a vacuum. provide information and be part of the rulemaking process.

As mentioned previously, this rulemaking began in 2011. In these years since, Colorado, Ohio and West Virginia have all moved forward with, adopted and implemented upgraded regulations and we are still struggling to do so. Whether it is the United States or internationally, eyes are upon the Marcellus Shale, promise versus practice versus performance. The lack of a clear and predictable regulatory framework in Pennsylvania has been instrumental in New York and Maryland's moratoriums, along with those of the provinces of New Brunswick, Nova Scotia, Labrador, Newfoundland and Quebec, many of whom have visited here and perhaps failed to like what they saw being they also instituted moratoriums.

Now, we at C.O.G.E.N.T. have never advocated for a moratorium nor would we. At this point in the play such an action would be devastating to our region. However, we can readily see that lacking common sense, reasonable regulations are essentially much needed in order to reach a delicate balance where all stakeholders thrive. It is obvious that these regulations are very much needed. We strongly urge the proposed rulemaking package moves forward without further delay.

We plan to submit our written detailed

written comments on the new draft revisions. Thank you for the opportunity to submit testimony this evening.

CHAIR:

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Our last two preregistered commentators this evening are Todd Harman and Donna Christianson.

MR. HARMAN:

My name is Todd Harman, New Freedom,
Pennsylvania. I'm the founder and President of
Hallaton, Incorporated. We're an environmental
contracting company. We've worked with the
impoundables, secondary containment and the pads.
We've been installing for 22 years, and most of those
years installing landfills. The containment systems
that have been used in landfills have been working
fine. Before the impervious linings, compacted clay
was your source of containment. Not a great source.
The changes that have happened in the last 20, 30
years have made it where you can contain those things.
It's spelled out in our attachments.

I'm also the President of the Board of IAGI. IAGI stands for International Association of Geosynthetic Installers. That's a group of all the installers around the world. On the Board are people from Australia, Panama, Canada. And there's a couple

in the U.S. And we've worked with other organizations that manufacture materials, with designers, the engineering partners, GRI, GMA, and worked with them to help set the standards for requirements that are used in installing materials. So you don't have what's happening in this industry in the last few years.

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When I first started out ---. weren't in it until four years ago, but the jobs of being an installer were hard. They're coming in with material, throwing it in, hey, it's flat. It looks great. That's not containing. That's why it didn't That's why you had contamination in the soil. work. If you went to a landfill-type design, a primary, secondary, an interstitial, a cushion layer, impacted subgrade, it would probably --- you would have a good site, a properly designed and installed lagoon that can be tested at any time. And when I say tested, that means doing a leak location test. Put a current underneath. There's a conductive layer on the sheet. Walk the top, and you can find a hole --- a pin could be pushed through it and you'll find that hole.

Repair it and go back. Do it on the secondary, do it on the primary. You can come back at any time through the year and test and do that again.

We have installed these landfills, like I said, for 22 years. The oil and gas industry isn't where the worst materials are. You know, the Army Corps has hired our company to work with the mustard agent disposal in Colorado ---. They're using lagoons. They're using impoundments. That's what containing the mustard agent. I think that's a little more of, you know, like a specific need.

The air protection. I've heard tonight talking about, you know, what about the VOC, or the gas coming off. With impoundments you can install a floating --- you can contain a hundred percent of what's in that impoundment.

Problems with aboveground tanks. Not to say that you're going to get away from either one, impoundments or aboveground tanks completely. That's not going to happen. But don't exclude, through revision, the impoundments. Last year the Elk River chemical spill in Charleston, West Virginia, that happens often. There are problems with the aboveground tanks as well.

Source of information, Drexel University has two of the best doctors down there. George and Bob Koerner are incredible in this field. I don't know if anyone has heard them talk before or not.

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That is

They have been to Harrisburg and presented to DEP. 1 2 They're one of the suppliers of GSE. They're 3 incredible. If there's a problem around the world, 4 they get called. They'll go to Chile. They'll go to 5 Peru. They'll go wherever. And they're 6 troubleshooting. They're going in and evaluating what happened, helping to come up with a plan to make it work in the future. 9 After the inspection, do the leak 10 location, do the test, design it properly. Get your secondary containment. Test the interstitial. 11 Put a 12 sensor in there. If it leaks, you'll know it 13 instantly. The way the specification is written right

primary, secondary. To go to the new system

completely takes away the use of impoundments. So for

now, it works, if you do the double line.

one impoundment, you might have to put ten one-million

gallons aboveground tanks. To me you're increasing

19 the risk, not reducing it. Thanks.

CHAIR:

Thank you, Mr. Harman. Donna

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MS. CHRISTIANSON:

Good evening. Am I close enough?

AUDIENCE MEMBER:

Yeah.

MS. CHRISTIANSON:

Okay. I came cold turkey, because at 4:30, I got my mail from DEP, said it was tonight. So I'm from Snyder County. I was born and raised in the old Evan (phonetic) hospital ---. My father had a business there. And in 1973 I moved into the present home I own, an old homestead. Half mile lane back on the bush from the south side of Jack's Mountain. I'm about 20 miles, as the crow flies, from the corner of Lycoming County. I like it out there. Clean, pristine, how Forksville (phonetic) used to be, from what I'm told. I don't even like to come up here anymore.

First I thought it was just me. Okay?

Not too strong, but three times, in January, and I didn't mark it down, because I thought it was just me. January 2012. Three times it was strong, very strong. In my home, in February 2012 I thought it was the old freezer I smelled there. I have a little gas stove there I only use in the summertime. I have a wood fire, very --- in the bush. I turned the gas stove off, and I smelled outside. Nothing outside. But my home was filling up with gas. Like I said, it's probably just me.

Then a lady up in Bedford County,

Southwestern PA, a doctor, she twice had weird

symptoms that she couldn't put a finger on. And she

went home and the door was open and she smelled gas.

They didn't smell it anymore. And if you smoke, you

don't smell it either, or it would be kind of a ---.

I used to work with ---. I'm a health freak. Sorry.

So I knew the body going down.

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Monday at 5:00 p.m. somebody told me to This is how I logged it. The strength and take ---. type of smell, time of day, weather and temperature, wind direction, duration. When I tried to hold it to that ---. I was a home school mom. Sorry. 5:00 p.m. Monday, the 9th of April, 2012, smelled gas outside. Tuesday, 10th of July. 5:00 p.m. Okay. Okay. p.m. Gas was pouring in from the west living room window from the swamp and the spring. Thursday, the 26th of May --- it's not all ---. It's just my scratches and I have it better on another log here. Okay. I put it out, because it came 50 times over the whole year.

And when I realized it wasn't me, that it wasn't my freezer and it wasn't the gas stove ---.
I can do this. I can do this. I wasn't feeling good.
And I kept taking more vitamins and whatever, night

and day. And then I was just going like this, down.

And so I got a hair analysis. And she let me gibber,

and I talked and talked. And she finally slapped that

down. After I calmed down, she said, where are you

getting all your arsenic?

So study section, where do I get all my arsenic? So I studied --- Charles Walters' book, Minerals for the Genetic Code. And a woman --- to have a baby boy, you must have some good arsenic, natural arsenic, like in asparagus, or the baby boy will abort. But in India, the WHO, the World Health Organization was advised they don't need water wells, but they did. And what came up with it was all the arsenic. And there were many cancer cases because of it.

here, I lost my place. It burned on the back of my throat. Arsenic smells is in the cabbage family. So when I cook or have cabbage on the stove, it would freak me out because I couldn't tell if it was me or if it was the cabbage. And then I'd go outside, I'd go to the swamp to smell it out, literally. Okay.

Not seemed to be in the basement. At 10:20 p.m., gas in the home. Wednesday, 1st of August, gas in the home. Okay. 12:30 a.m. Okay. Sunday, the 19th,

August, 2012. Strong enough. 9:30 a.m. through 9:50 a.m., I was dizzy, stressed ---. My left spine spatula --- scapula pain. And I know that's, at this point, in hindsight here, I know that's an arsenic thing, the pain.

CHAIR:

Ms. Christianson. I understand you ---. Please write in the letter ---.

MS. CHRISTIANSON:

Well, I have a lot more. And I don't even have to look at it.

CHAIR:

Well, sure. We welcome your written comments. So we can read the rest. Thank you. Is there anyone else in the audience tonight who would like to speak? And I'd remind you, please give your name for the record.

MR. HOWARD:

Good evening. My name is Dale Howard.

I live at 27 Eckhart Street in Hazel Hurst,

Pennsylvania. I am a hunter, I'm a fisherman, I'm an outdoorsman. I am an environmentalist. I live and play in the great outdoors of McKean County in the midst of the Bradford oil fields. I get to see firsthand the impact the oil and gas industry has on

our area. It is a positive impact. I have worked in the local oil and gas industry for 34 years. Many of my friends and neighbors also depend on the local oil and gas industry for their income. Those who don't, have friends and family who do. Oil and gas is truly vital to the economic well-being of our area.

In regard to the proposed regulations for conventional oil and gas producing, I would like to request that the Department return to the regulations set forth in Act 223, known as the Oil and Gas Act of 1984. Until the Marcellus industry arrived, the conventional producers operated under Act 223. The environment was protected and producers could economically operate. As I try to read the proposed regulations, I am boggled by the additional paperwork and reporting requirements that would be necessary.

The proposed regulations appear to be a cut and paste version of regulations designed for the new nonconventional drilling industry, not for an industry that has been operating in Pennsylvania for over 150 years. Why now, would there be any benefit to producers reporting where the stone came from to fix well roads? What is the benefit of reporting where the fresh water came from to cement a string of

casing? Why require a soil scientist to determine if the bottom of a pit is 20 inches above the seasonal groundwater when that determination is currently made by DEP inspectors who are not soil scientists? Why require site-specific PPC plans when the current control and disposal plan requirement has adequately served the industry and environment? Why require three days notification before constructing a pit when there are times that an operator does not foresee the need for a pit prior to commencing servicing or plugging?

The situation can arise when a pit quickly constructed and lined is necessary to control a changing situation. Is it really necessary to hire a registered professional engineer every time a producer constructs a tank battery? What is the additional cost to equip tank batteries with alarms and monitoring equipment? Properly constructed secondary containment provides more environmental protection than any monitor or alarm.

On another note, there was recently an article in the Pittsburgh Post-Gazette regarding these proposed regulations. It contained pictures that were supplied by the DEP to justify the need for more regulations. One picture showed a newly cemented gas

well with a fire beside it. The rig crew was burning plastic thread protectors on site. The DEP identified it as an oil fire. As I looked at the other pictures, I wondered how they showed the need for new regulations. All of the incidents were violations under the old regulations, Act 223.

I am somewhat puzzled as to why we are going through this public comment process again. The public provided input to the Technical Advisory Board last year regarding the proposed regulations. When the Technical Advisory Board suggested that the DEP not adopt the regulations as proposed, they were terminated. It appears as though the DEP has no intention of listening to the public nor considering the impact that the proposed regulations will have on the conventional oil and gas producers nor the economic impact to our communities. Thank you.

CHAIR:

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Thank you, Mr. Howard. Do we have additional ---?

MS. HESTON:

My name is Maryanne Heston. I am from Potter County. My address is 179 Leech Hill Road, Sabinsville, PA, 16943.

CHAIR:

Spell your last name.

MS. HESTON:

Heston. H-E-S-T-O-N. I would like to thank the Pennsylvania Department of Environmental Protection for providing this second opportunity for public comment on the revised Chapter 78 regulations. And the question that came up tonight is who is the public?

I know that there are many people who depend on the oil and gas industry for their livelihoods. And we also heard from many people who have been adversely affected by activities of the oil and gas --- the oil and gas industry. Public participation in this process, drafting and advising the regulations, governing oil and gas operations in our state, is essential, because it is the public who must live with the impacts of drilling. It is the public who will continue to experience the long range impacts after the drillers have left.

I am not an expert. I came to this meeting primarily to listen, because I found the first hearing very instructive. And, as I said, listening tonight has made me realize, there are real people on both sides who depend on sound regulations, but reasonable regulations. There are some who say this

cannot be done safely and should not be done and then there are others who depend on this. So I don't pretend to know, but I do want to say that I am thankful that Emily Krafjack made the point that this is not a momentary process or a process that has not been ongoing over a period of years and the industry has definitely had input.

I went to several of the meetings of DEP with the Technical Advisory Board and observed how the language was carefully reviewed. And the Technical Advisory Board does represent the industry. So there was plenty of opportunities for that input.

Decause unconventional drilling operations are so widespread, and your activities are so disruptive, and potentially harmful to our air quality, our land, our natural resources, our farms and our communities, it is imperative that the Department of Environmental Protection provides the best protection possible. You represent the experts and the defenders of the environment that sustains us all. The Technical Advisory Board, as I've said, has had numerous opportunities in the past few years to weigh in on these regulations for the industry. The Pennsylvania legislature has also had and will continue to represent the various interests of their

constituents. But the public relies on your Department to use your expertise to stand firmly for the best oversight and protection as possible.

I urge you to speak strongly at the negotiations still to come for the benefit of us all. We've heard from some of the victims. We know that their concerns are real and painful. And the last speaker was a real reminder of that. You know, there are human faces on both sides. Please use your best judgment as you proceed in these decisions. Thank you.

CHAIR:

Thank you, Ms. Heston. Anyone else who would like to speak tonight?

SENATOR HUTCHINSON:

My name is Scott Hutchinson. I'm the State Senator for the 21st Senatorial District, which covers a portion of Northwestern Pennsylvania. And I did have the opportunity to address the hearing last Thursday. I wanted to reiterate the things I said there, and to, again, step up to the plate for the conventional oil and gas producers in Pennsylvania.

Yes, I do have a key interest in production of safe, affordable energy for all Pennsylvanians, but I'm particularly interested, as we

go through this process, that DEP and the rule makers recognize that there is a major difference between conventional and unconventional drilling in Pennsylvania.

I'm also proud to say that I was born, raised and live today in Oil City, O-I-L. We are the birthplace of the oil industry, something that's gone on for 155 years and done in a clean way. We also have the best fishing streams and the cleanest water in the state, although there has been 155 years of production in Northwestern Pennsylvania.

I do believe that DEP has undermined the spirit as well as the letter of the law in making these proposed regulations as they pertain to the conventional oil and gas industry. They have ignored Act 126, which called for separate regulations. And our intent, in the legislature, in making that law, was that the new set of regulations would be developed from scratch, from that point forward. And that has not been done.

These regulations also have ignored the Small Business Regulatory Review Act (sic), which other folks mentioned tonight, which mandates that a thorough, cost-effective analysis be looked at, and how new regulations can impact small producers. And

let me tell you, most of these producers we're talking about are small family businesses, family, mom and pop, one and two, maybe five-employee companies, we're talking about. So they are very small. They deserve that law that says special accommodations should be made for them. And I think that's important.

So I ask and implore you to again recognize the difference between conventional and unconventional. Go back to the drawing board, ask what is our intent? And work to sustain all the families that rely on these hardworking oil and gas producers in the conventional area, and everything relating to that, including two refineries that need Penn Grade crude in order to sustain their jobs. So thank you for this time this evening.

CHAIR:

Thank you, Senator Hutchinson. Do we have anyone else who would like to speak tonight?

Okay. With no other commentators present ---. First, before I wrap up, please, if you did speak tonight and you didn't submit your testimony or you didn't have it with you, please feel free to e-mail it to us. The e-mail address is regcomments@ga.gov. That's

R-E-G-C-O-M-M-E-N-T-S @ pa.gov. Again, the written comments carry equal weight as testimony provided

CERTIFICATE

I hereby certify that the foregoing proceedings, hearing held before Chair Edinger was 4 reported by me on 05/04/2015 and that I Lindsey Deann 5 Powell read this transcript and that I attest that this transcript is a true and accurate record of the proceeding.