COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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IN RE: IN RE: PROPOSED CHAPTER 78 ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

AT OIL AND GAS WELL SITES

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BEFORE: PAMELA WITMER, Chair Elizabeth Nolan, Member Jessica Shirley, Member Kurt Klapkowski, Member Lisa Kasianowitz, Member HEARING: Thursday, January 16, 2014 6:03 p.m.

LOCATION: Good Hope Middle School Auditorium 451 Skyport Road

Mechanicsburg, PA 17050

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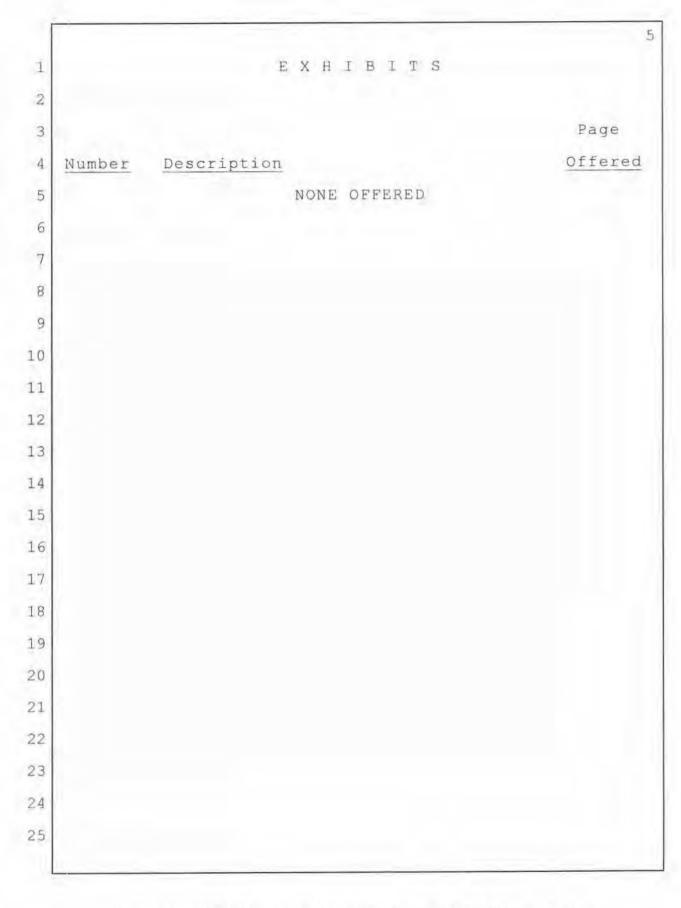
Reporter: Tyler S. Rhoads

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WITNESSES:	Jim Rodgers, Stephanie Wissman, Ella
	Forsyth, Jeffery Zimmerman, Tara Howey,
	Nathan Soy, Jennifer Quinn, Teresa McCurdy,
	Tanya Wagner, Bill Schneider, Richard
	Martin, Wendi Taylor, Amanda Gruenbaum,
	Gary Hovis, Kevin Moody, Eric Cowden,
	Barbara Sheffer Rooney, Heath Strock,
	Steve Brady, Robin Mann, Michael Mark

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1	PROCEEDINGS
1	PROCEEDINGS
2	
3	CHAIR:
4	Good evening. Before I start with my
5	official script, which is really very long, I want to
6	just give a friendly reminder to turn off all your
7	personal devices, so we don't have any ringing, any
8	buzzing, you know, hearing, overhearing other people's
9	conversations. So if you could do that, I'd
10	appreciate it.
11	I'd like to officially welcome you to
12	the Environmental Quality Board public hearing on the
13	Environmental Protection Performance Standards at Oil
14	Gas and Well Sites proposed rulemaking. My name is
15	Pam Witmer. I'm a representative of the
16	Pennsylvania's Environmental Quality Board, Joining
17	me are tonight are Kurt Klaplowski with the
18	Department's Office of Oil and Gas Management, Jessica
19	Shirley and who is with DEP's Policy Office, and
20	Elizabeth Nolan with DEP's Office of Chief Counsel.
21	And also Lisa and I won't mispronounce your name.
22	MS. KASIANOWITZ:
23	Kasianowitz.
24	CHAIR:
25	Kasianowitz. Thank you. With DEP's

1	7
Ì	Office of Communications. And I officially call the
2	hearing to order at it's we'll go with 6:03.
3	In the event of an emergency, the exits are located at
4	the exit signs to your left and to your right.
5	The purpose of this hearing is to
6	formally accept testimony on the proposed regulations,
7	Environmental Quality Protection Performance Standards
8	at Oil and Gas Well Sites. In addition to this
9	hearing, EQB will hold three additional hearings on
10	the proposed regulation on January 22nd in Washington.
11	And for those of you who are not from Pennsylvania,
12	that's Washington, Pennsylvania, not Washington, D.C.
13	OFF RECORD DISCUSSION
14	CHAIR:
15	On January 23rd in Indiana,
16	Pennsylvania, and then lastly, January 27th in
17	Tunkhannock. Information on the specific locations of
18	the hearings is also available o DEP's website at
19	dep.state.pa.us. There are also copies available of
20	the Citizen's Guide for DEP Regulations on the
21	website. And inside the document you will find
22	descriptions of the environmental regulatory process
23	in Pennsylvania, the EQB's role, how to submit
24	comments and tips for submitting effective comments.
25	That's included.

	-
1	8 The proposed rulemaking, which was
2	adopted by EQB on August 27th, 2013, would amend Title
3	25 in Pa Code Chapter 78 to update the requirements
4	related to surface activities associated with the
5	development of oil and gas wells. The EQB adopted the
6	proposed rulemaking with recommendations for a 60-day
7	public comment period and at least 60 six
8	hearings, not 60, across the state. This represents a
9	heightened level of public participation as there
10	usually is only a 30-day public comment period for the
11	typical Department rulemaking.
12	Additionally, public hearings are held
13	on the basis of public interest. And for some
14	regulations there are few or even none that are held
15	if there is no request for a hearing. Due to the
16	increased public interest in this rulemaking, the EQB
17	has scheduled seven public hearings to allow ample
18	opportunity for public comment on the proposed
19	rulemaking.
20	The proposed regulatory amendments would
21	address recent statutory changes in Act 13 of 2012 and
22	codify existing practices. Such a rulemaking would
23	allow for the implementation of key provisions in Act
24	13, including further consideration of impacts to
25	public resources such as parks and wildlife areas, the

1 prevention of spills, the management of waste and the 2 restoration of well sites after drilling. The proposed rulemaking also includes standards ---. 3 BRIEF INTERRUPTION 4 5 CHAIR: The proposed rulemaking also includes 6 7 standards affecting the construction of gathering lines and temporary pipeline and includes provisions 8 9 for identifying and monitoring abandoned wells close 10 to the proposed well sites. In order to give everyone an equal 11 opportunity to comment on the proposal, I would like 12 13 to establish the following ground rules. First, I will call upon the witnesses who have pre-registered 14 to testify at this hearing. After hearing from these 15 witnesses, I will provide any other interested parties 16 17 with the opportunity to testify as time allows. Second, testimony is limited to five minutes for each 18 witness. Third, organizations are requested to 19 designate one witness to represent and to present 20 21 testimony on its behalf. Fourth, each witness is asked to submit 22 three written copies of his or her testimony to aid in 23 transcribing the hearing. Please hand me two copies 24 25 and please hand one copy to our stenographer, who is

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1 down there in the nice bright blue shirt so we can see
2 him. And please do this prior to presenting your
3 testimony.

4 Fifth, please state your names, address 5 and affiliation for the record prior to presenting 6 your testimony. The EQB would appreciate your help by 7 spelling names and terms that may not be generally 8 familiar, so that the transcripts can be as accurate as possible. And our last ground rule this evening. 9 Because the purpose of the hearing is to receive 10 11 comments on the proposal, the EQB Board and also the EQB staff cannot address questions about the 12 rulemaking during the duration of the hearing, but you 13 may address questions to us after the hearing is over. 14 In addition to or in place of verbal 15 testimony presented at today's hearing, interested 16 persons may also submit written comments on the 17 proposal. Written and verbal comments hold the same 18 19 weight when considered in the finalization of the rulemaking. All comments provided become part of the 20 21 official public record. All comments must be received 22 by the EQB on or after --- or on or before February 12th of this year. Comments to be addressed to the 23 Environmental Quality Board, Post Office Box 8477, 24 Harrisburg, 17105-8477. Comments can also be e-mailed 25

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11 1 to regcomments@pa.gov, or submitted online through 2 EQB's regulatory comment system. All of this 3 information is also available on DEP's website. 4 All comments received at the hearing, as 5 well as written comments received by the February 12th 6 deadline will be entered as part of the formal record 7 and considered by the EQB and will be included in a 8 comment response document, which will be prepared by 9 the Department and reviewed by the EQB prior to the 10 Board making its final action on the regulation. And 11 anyone interested in receiving a copy of the 12 transcript of today's hearing may contact the EQB at 13 717-787-4526 for further information. 14 I think we're almost done. I would like to call the first commenter. And that will be Jim 15 16 Rodgers. 17 OFF RECORD DISCUSSION 18 MR. RODGERS: 19 Good evening, members of the 20 Environmental Quality Board. My name is Jim Rodgers. 21 I'm a director with Dawood Engineering. We are a 22 civil engineering firm located at 2020 Good Hope 23 Road ---. 24 OFF RECORD DISCUSSION 25 MR. RODGERS:

My name is Jim Rodgers. I'm a director 1 with Dawood Engineering located at 2020 Good Hope 2 Road, Enola, Pennsylvania, 17025. I want to thank you 3 for allowing our team of engineers and environmental 4 consultants to provide feedback regarding the proposed 5 rulemaking on Chapter 78. 6 7 Dawood is a Pennsylvania based corporation, a civil engineering and environmental 8 consulting firm, which provides numerous services to 9 the oil and natural gas industry, including wetlands 10 delineation, erosion and sedimentation control 11 development and compliance, geotechnical engineering, 12 permitting, construction oversight, routing and 13 hydrostatic testing, to name a few. 14 A majority of Dawood's 107 employees are 15 native Pennsylvanians who appreciate and enjoy the 16

vast natural resources within the Commonwealth. 17 Therefore, as a company, we appreciate the 18 Pennsylvania Department of Environmental Protection's 19 attempts to protect those resources by regulating the 20 21 environmental effects of the oil and gas industry. Pennsylvania has been recognized as having some of the 22 nation's strongest regulations on oil and gas 23 development, providing greater certainty for companies 24 seeking to do business here, and we support that. 25

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1 According to STRONGER, the State Review of Oil and Gas 2 Natural Gas Environmental Regulations, the current 3 regulations are, quote, well-managed and meeting their 4 program objectives.

5 However, we are presenting today to 6 express our concern with some of the proposed 7 revisions presented by the PA DEP. Our company and 8 its employees have firsthand experience with the 9 extraordinary efforts made by the operators to comply with regulations which protect our natural resources, 10 11 the Commonwealth and its citizens. As a trusted 12 advisor to our clients in the industry, Dawood works 13 with the operators to ensure worker and citizen safety, as well as to adhere to best management 14 15 practices to protect the environment. As an example, Dawood works with its operators to design sites that 16 17 will lessen the area of surface impacts.

According to the Energy Information 18 19 Administration, the Commonwealth is currently producing 18 percent of the nation's natural gas, a 20 21 dramatic increase in just the last few years. Last 22 week this body postponed its first hearing on these 23 regulations because of brutal, record-setting cold. That decision last week underscores the critical need 24 25 to continue to develop affordable domestic energy to

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1 heat and power homes, our businesses and schools like 2 this one for the safety and economic wellbeing of the 3 Commonwealth citizens.

4 Additionally, continued development furthers the goal of eliminating our dependence on 5 6 foreign fuel. Dawood strongly suggests the EQB 7 requires the PA DEP to technically evaluate the proposed regulations without pressure from groups that 8 may be unfamiliar with or unaware of the scientific 9 facts. Dawood encourages the PA DEP to revise the 10 proposed regulations in order to establish justified, 11 practical, scientific and cost effective regulations. 12

13 Among our many concerns with the proposed regulations, we would like to highlight the 14 following, which pose a particular burden to our 15 business and the oil and gas industry. Section 16 78.51(2), quality; the quality of a restored or 17 18 replaced water supply will be deemed adequate if it meets the standards established under the PA Safe 19 Drinking Water Act or is comparable to the quality of 20 21 the water supply before it was affected by the 22 operator if that water supply exceeded those standards. Dawood agrees that if an operator impacts 23 24 water quality, the operator is responsible for restoring or replacing the water supply. However, the 25

1 operator should only be responsible for restoring or 2 replacing an impacted water supply to the quality of 3 the water supply before it was affected by the 4 operator.

5 Section 78.52(a), abandoned and orphaned 6 well identification proposes that the operator 7 identify the location of orphaned or abandoned wells 8 within 1,000 feet measured from the surface above the 9 entire length of a horizontal well bore. Identifying abandoned and orphaned wells is acceptable. However, 10 11 this requirement must not be open ended. In its current form this regulation is unclear as to what 12 requirements will be placed on the industry and has 13 14 the potential for undue and unnecessary added expense. 15 Section 78.15(g) requires the operator 16 to protect ---17 CHAIR: 18 One minute. 19 MR. RODGERS: 20 --- public resources, but the regulations do not provide the criteria for protecting 21 the public resources. Dawood suggests that the 22 proposed regulation be revised to clarify words such 23 as corridor, discrete areas, and other such terms. 24 As with other regulatory programs, for example, the 25

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1 Resource Conservation Recovery Act, the regulations 2 should provide language that allow the operators to 3 rely on generator knowledge for disposal purposes in 4 lieu of continued chemical analysis of materials 5 generated on site. In closing, Dawood urges the EQB to 6 7 reconsider the proposed regulations. Modifying and 8 revising the oil and gas regulations at this time 9 without providing scientifically sound and clear 10 language would be detrimental to the EQB, PA DEP, industry and the citizens of the Commonwealth. Thank 11 12 you for your time. 13 CHAIR: 14 Thank you. Next we have Stephanie 15 Wissman. 16 MS. WISSMAN: 17 Good evening. My name is Stephanie 18 Wissman, executive director of Associated Petroleum 19 Industries of Pennsylvania, 300 North Second Street, Harrisburg, Pennsylvania, 17101. 20 21 API, Pennsylvania's division of the American Petroleum Institute, a national trade 22 association that represents all segments of American's 23 24 oil and natural gas industry, is more than 580 members 25 providing most of the nation's energy. API is also a

standard setting organization. For 89 years, API has 1 led the development of petroleum and petro-chemical 2 3 equipment and operating standards. These standards represent the industry's collective --- on everything 4 5 from drill bits to environmental protection. API maintains more than 650 standards and recommended 6 7 practices. Many of these are incorporated in the state and federal regulations. 8

9 API supports strong environmental safeguards and stewardship and commends the DEP 10 regulatory oversight program. However, we do have 11 concerns with several provisions contained in the 12 proposed rulemaking that we outline in detail in our 13 formal and written comments. In the interest of time, 14 I'll highlight some general comments that we have and 15 provide comments that address permits and transfers, 16 pre-drilling or pre-alteration surveys, abandoned and 17 orphaned well identification, control and disposal 18 planning, emergency response for unconventional well 19 sites and oil and gas gathering lines. 20

We suggest language be added to clarify the effective date for the new requirements that wells constructed prior to that date are grandfathered in. There are a number of definitions and sections of text that refer the reader to other statutes or

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1 This causes the reader to search regulations. 2 elsewhere to find the other statute or regulation and 3 review it before being able to understand what Chapter 78 requires. This is not user-friendly and does not 4 5 facilitate regulatory understanding and compliance. Also a number of sections are very detailed and 6 7 restrictive. We suggest that these sections be given 8 some flexibility to allow for the use of alternate 9 methods as approved by the Department.

10 Permits and transfer, Section 78.15(d). 11 While there is no problem with using Pennsylvania 12 National Diversity Inventory for identification of the 13 habitats of threatened or endangered species, there is 14 a structural problem with giving a policy the force of 15 regulation. The use of the PNDI for screening sites 16 is a policy application that can be changed without 17 going through the regulatory review process. Citing 18 it as the way to comply gives it the force of 19 regulation.

20 The recent example of the Pennsylvania 21 Game Commission wanting to list various bats dying 22 from the white nose virus symptoms can have 23 significant undesired impacts. This is a slippery 24 slope. It is recommended that the use of PNDI be 25 designated as an option for identifying these

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1 habitats.

2 Pre-drilling or pre-alteration surveys, Section 78.52(d). This section states that the 3 operator shall provide a copy of the results within 4 5 ten business days of receipt of the results. It is suggested that the language be revised to allow for 6 the submittal of the results to the Department within 7 30 days after the spud date of the first well on the 8 9 pad to allow for all pre-drill samples to be as a 10 single package. Abandoned and orphaned well 11 identification, 78.52a --- 52a(a). It is suggested 12 that language is added to include a six-month 13 effective date to allow for wells already permitted 14 but not yet completed. Section 78.52a(b)(3). It is 15 suggested that the language be revised so that the 16 forms are part of the permit applications sent to 17 landowners. In addition, how long are operators going 18 to be required to wait on property owners to complete 19 and return the questionnaire? 20 Control and disposal planning, emergency 21 response for unconventional well sites, Section 22 78.55(f). This section requires the well operator to 23 provide the PPC plan to, in addition to the 24 Department, the Pennsylvania Fish and Boat Commission 25

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20 1 or the landowner upon request. This is unreasonable. 2 The Pennsylvania Fish and Boat Commission or the 3 landowner upon request. The Fish and Boat Commission 4 and the landowner have no jurisdiction to access PPC 5 plans. The Department should not by regulation give 6 them authority they do not have otherwise or be placed 7 in a situation ---8 CHAIR: 9 One minute. 10 MS. WISSMAN: 11 --- by those parties that would require the Department to take enforcement action for 12 violations of this section. It is strongly 13 14 recommended that these proposed changes be deleted. 15 Oil and gas gathering lines, Section 16 78.68(h). The Pennsylvania Public Utility Commission 17 was granted jurisdiction over 49 CFR Parts 192 and 195. To avoid conflicting expectations and rules, the 18 Department should defer to the Department of 19 20 Transportation and the Public Utility Commission to regulate compliance with these sections of the federal 21 code. 22 Thank you for the opportunity to testify 23 24 this evening. API and its member companies stand 25 ready to continue to work with DEP on striking a

21 1 balance between environmental protection and economic 2 development. Thank you very much. 3 CHAIR: 4 Thank you. Next, Ella Forsyth. Ella, 5 do you have a copy of your ---? 6 MS. FORSYTH: 7 Yes, I do. 8 CHAIR: Okay. Great. Thank you. 9 10 MS. FORSYTH: 11 I am Ella Forsyth, a leader in the League of Women Voters of Pennsylvania, at 226 Forster 12 Street, Harrisburg, Pennsylvania, 17102, telephone 13 234-1576. On behalf of the League of Women Voters of 14 Pennsylvania, I am speaking. We thank you for hearing 15 16 our input on these proposed regulations that will impact our commonwealth for generations to come. 17 18 As provided by our state constitution, 19 we have a right to clean air, pure water and the preservation of our natural resources. The League's 20 21 statewide position, based on a study and consensus, supports requiring the use of best practices, 22 comprehensive regulation and adequate staffing across 23 24 government agencies to provide the maximum protection 25 of public health and the environment in all natural

1 gas operations.

2 Tonight, we speak on portion of Section C, Environmental Protection and Performance Standards. 3 We begin with reporting and remediating releases, 4 5 Section 78.66, a topic underscored by recent events in 6 West Virginia and others within our own state. First, 7 throughout this section and the entire document, the word regulated must be replaced by pollutional, given 8 9 that regulatory exceptions exist for substances involved in the oil and gas industry. Further, 10 released to the pollution of water must be expanded to 11 the pollution of water, air and land, 78.66. 12 13 Given that time is of the essence in combating releases, notification protocol throughout 14 this section needs to be revised to be by telephone, 15 e-mail and/or text immediately after discovery, not 16 17 within two hours or as practicable. All such communication should be archived for future access. 18 Because of the highly toxic nature of the substances 19 used in natural gas operations, the 42-gallon limit 20

21 should be reduced to ten gallons so that more 22 stringent remediation occur.

A borrow pit or an earth disturbance created by excavation for oil and gas construction activities needs to be defined by size and regulated

accordingly by permit. Based on size and location,
 these pits have consequences to our water and land.
 It is not enough to just register location.
 Restoration should be accomplished without two-year
 extensions of time limits and according to best
 practices.

7 The League applauds inclusion of oil and 8 gas gathering lines in the proposed regulations. 9 However, the definition needs to distinguish between production lines and gathering lines. Smaller 10 11 gathering lines that feed into larger gathering lines also need to be included. Installation practices and 12 13 environmental considerations for gathering lines must be consistent with current best practices for 14 interstate transmission lines, given their size and 15 16 the pressure of natural gas transport. 17 Because of the tendency for sinkholes to

18 form in carbonate geology present in our Commonwealth, permits for gathering lines must include this factor 19 20 to prevent problems with pipeline integrity. The permitting process should also limit the number of 21 22 gathering lines in a given area so that the footprint and risks of the infrastructure is minimized. Without 23 24 consolidation requirements the cumulative impact of 25 independent gathering lines from various operators in

1 the same area is monumental.

Horizontal direct drilling is only one 2 of the many alternatives for pipeline installation in 3 4 areas of wetlands and waters. A protocol should be established for the use of each method. Permits would 5 be awarded only to the best available practice based 6 7 on site specific conditions, particularly local geology as determined by the County Conservation 8 Districts. More stringent conditions for permitting 9 should exist in exceptional value and high quality 10 streams. To protect our water, drilling fluid 11 additives, other than bentonite and water, must be 12 shown to be safe in water supplies by independent 13 testing before use in pipeline installation. 14 15 CHAIR: One minute. 16 17 MS. FORSYTH: Finally, in addition to notifying the 18 19 Department prior to such drilling, operators should be required to notify water suppliers and treatment 20 plants downstream. Such notification would serve to 21 22 promote closer monitoring and appropriate action in the event of accidental discharges or blowouts. Thank 23 you for your consideration. 24 CHAIR: 25

25 1 Thank you. Jeff Zimmerman? Mr. 2 Zimmerman, have you already given your additional 3 copies? 4 MR. ZIMMERMAN: 5 Actually, no, I haven't. And I don't 6 have them with me. 7 CHAIR: 8 Okay. 9 MR. ZIMMERMAN: 10 They were provided already. 11 CHAIR: All right. 12 13 MR. ZIMMERMAN: 14 Good evening. My name is Jeff I am here on behalf of Damascus Citizens 15 Zimmerman. 16 for Sustainability, which is a grassroots citizen 17 environmental organization dedicated to the protection of public health and the environmental impacts of oil 18 19 and gas drilling. 20 Before getting into a number of substantive issues, there are two procedural points. 21 22 First, the comment period set by the Board currently 23 is 60 days. This is grossly inadequate. The comment 24 period should be extended to at least 120 days to 25 afford the public adequate time to comment. Second,

additional hearings should be scheduled so there is at 1 2 least one hearing in each county that has been or will 3 be impacted. It is unconscionable to us that there are no hearings in several of the most heavily 4 5 impacted counties such as Bradford, Butler and 6 Susquehanna. The best way that this Board will learn 7 what negative impacts may occur is to hear directly 8 from those most heavily impacted today.

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9 Regarding substantive issues, first, protection of public water supplies requires further 10 11 revision. Documents that are taken from Oil and Gas 12 Division of DEP shows that through 2012, at least 161 13 drinking water wells have been contaminated by oil and 14 gas development activities. What must be required is 15 that existing water quality be documented before any 16 development activity takes places. Pre-development 17 water testing should involve a comprehensive and consistent set of parameters. The required parameters 18 must be far more inclusive than mainly the primary and 19 20 secondary Safe Drinking Water Act standards. Both DEP and agencies in other states 21

22 have identified hundreds of different chemicals that 23 have been used in hydraulic fracturing fluids. 24 Drinking water wells should be tested for the broadest 25 spectrum of chemicals known to be used with fracking

operations. When contamination of drinking water 1 2 wells does happen, the oil and gas well operator should be required to restore that drinking water to 3 at least the water quality standards required for 4 5 public water supplies. If the pre-construction water 6 quality was better than the standards, the operator 7 must be required to restore to that quality at a 8 minimum.

9 Second, it's well known that there are hundreds of thousands of orphaned and abandoned oil 10 11 and gas wells spread across the Commonwealth. Each of these wells is a potential conduit for contamination, 12 13 but before any development should be allowed, the 14 applicant for the permit should be required to conduct an on-site survey extending at least one mile from the 15 16 end of the proposed horizontal oil well holder to 17 identify orphaned and abandoned wells. Further, the application must document that such a survey has been 18 performed and any wells identified have been properly 19 20 plugged.

Third, the regulations should prohibit the use of open pits for storage of fluids and other waste. Anything less than proposed, fluid management should not be allowed. These restrictions should not apply only to new operations. They should be applied

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1 to continuing use for existing ---.

3 comprehensive waste management system such as laid out 4 under subtitle C of the Federal Resource Conservation 5 Recovery Act. Although there is a program that has 6 limited application in the oil and gas industry at the 7 federal level, there is no restriction in the federal 8 law that precludes a state from applying more 9 stringent and expansive requirements. It is essential 10 that there be a true waste management program 11 applicable for oil and gas development. 12 Finally, Damascus considers these 13 proposed regulations as falling short of the standard 14 or its review that is fully faithful to its trust and		the second se
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12Finally, Damascus considers these13proposed regulations as falling short of the standard14or its review that is fully faithful to its trust and15responsibilities under the environmental rights of the16Pennsylvania Constitution. As the Supreme Court of17Pennsylvania recently stated when striking down parts18of Act 13 as being unconstitutional, and I quote, the19benchmark for a decision has the express purpose of20 <u>CHAIR:</u> 23One minute.24 <u>MR. ZIMMERMAN:</u>	10	that there be a true waste management program
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20 environmental rights amendment to be able or to give 21 actual degradation of our air and water. 22 <u>CHAIR:</u> 23 One minute. 24 <u>MR. ZIMMERMAN:</u>	18	of Act 13 as being unconstitutional, and I quote, the
<pre>21 actual degradation of our air and water. 22 <u>CHAIR:</u> 23 One minute. 24 <u>MR. ZIMMERMAN:</u></pre>	19	benchmark for a decision has the express purpose of
22 <u>CHAIR:</u> 23 One minute. 24 <u>MR. ZIMMERMAN:</u>	20	environmental rights amendment to be able or to give
23 24 MR. ZIMMERMAN:	21	actual degradation of our air and water.
24 MR. ZIMMERMAN:	22	CHAIR:
	23	One minute.
25 As trustee, the Commonwealth has a duty	24	MR. ZIMMERMAN:
	25	As trustee, the Commonwealth has a duty

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29 1 to permitting or encouraging degradation, litigation 2 or depletion of public natural resources that 3 essentially occurs because of the state's failing to restrain the actions required, close quote. Thank you 4 5 very much for your attention. 6 CHAIR: 7 Thank you. All right. Next is Tara 8 Howey. 9 OFF RECORD DISCUSSION 10 MS. HOWEY: 11 Good evening. My name is Tara Howey, 12 government affairs manager for WPX Energy, 6000 ---13 can you hear? 14 CHAIR: 15 Maybe if you take it off the podium. 16 MS. HOWEY: 17 6000 Town Center Boulevard, Canonsburg, PA, 15317. First of all, WPX Energy has been in the 18 Marcellus Basin since 2009 and since that time we have 19 drilled over 100 wells. Most of our employees who are 20 21 with us have over 30 years' experience in the natural 22 gas industry. We have been founded on a strong, 23 stringent set of values and we want to be difference-makers in our communities and in the 24 25 industry. Building relationships with a variety of

30 1 stakeholders, while establishing and maintaining trust is very important to us. 2 Our team of experts have been involved 3 actively from the beginning of the public review of 4 Chapter 78 regulations. Along with our trade 5 associations, we have engaged with the DEP, DCNR, TAB 6 and all the environmental working groups involved in 7 this labor intensive process. We respect and 8 9 appreciate all of those who have given of their time, energy and efforts in vetting the proposed 10 regulations. I will speak for only a few moments this 11 evening regarding the topics of upmost importance to 12 us, and of course we will be submitting a technical 13 paper before the stated deadline, February 12th. 14 Recognizing the voluminous nature of the 15 Chapter 78 regulations, the first that we'd like to 16 talk about is Section 3215(e) of Act 13 requires the 17 Department to develop regulatory criteria that 18 protects public resources while ensuring optimal oil 19 20 and gas resource development and respecting oil and gas property owner rights. However, the proposed 21 regulation in Chapter 78 Section 15, we believe, do 22 not adequately implement or address these 23 24 requirements. The regulatory criteria for conditioning a permit has not been provided and the 25

1 draft regulations only frame the Department's 2 authority to implement the conditions. If industry is 3 required to avoid to mitigate potential impacts to 4 these resources, the criteria used to assess impacts 5 must be established and provided.

6 In addition, requiring the industry to 7 potentially gain clearance for species of special concern may significantly limit our development 8 9 opportunities and/or create costly mitigation solutions which would be in conflict with Section 10 3215(e) as it pertains to ensuring oil and gas 11 development and property owner rights. If the 12 13 Department's goal is to protect the Commonwealth's resources as they specifically relate to threatened, 14 endangered or species of special concern, then 15 industry has the right to know the locations of such 16 sources --- resources in order to avoid or mitigate 17 18 any potential impacts.

Another significant issue is the water replacement. The main concern is the DEP is proposing the industry replace a water supply to Safe Drinking Water standards or better even when the results of pre-drill testing of the water supply show the water did not meet the standards in the first place. There are many challenges in this Commonwealth, as we all

1 know, with regard to private water wells, especially 2 the lack of construction standards. Our experience with pre-drill testing and several studies independent 3 4 of natural gas development demonstrate that a large 5 number of private wells are poorly constructed, many 6 contain iron, manganese, coliform, methane, and many 7 do not meet the criteria of the SDWA. 8 Until such a time as the Pennsylvania

9 legislature passes legislation to require property 10 owners to properly construct private water wells and 11 ensure that they meet SDWA, it is unreasonable for the 12 DEP to require the industry to restore a private water 13 well supply to better standards than originally 14 existed. We are requesting that if the operator impacts a water supply, the DEP requires replacing the 15 16 water supply to the pre-drill test results. Regarding 17 waste water management at a well site, the natural gas 18 industry ---

- 19 CHAIR:
- 20 One minute.
- 21 MS. HOWEY:

22 --- has been recycling and reusing water 23 and minimizing fresh water use for quite some time 24 now. Unfortunately the new regulations are forcing 25 operators to rethink this option. In order to

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1 increase the amount of water being reused/recycled, 2 the regulations need to provide an avenue for the 3 operator, either through permits or DEP approvals, to 4 document, move and reuse water from one site to another. In addition, Oil and Gas Division must have 5 its own regulations concerning water management and 6 7 not be conflicted or confused with that of the Waste 8 Management Division.

Finally, orphaned and abandoned wells, 9 identifying active, inactive, plugged, abandoned and 10 orphaned wells prior to hydraulic fracturing may be 11 something that the industry can work with DEP, but not 12 to the level of the proposed regulations, as that may 13 lead to non-ending obligations on behalf of the 14 industry for wells that are not ours. It is well 15 known that the State Review of Oil and Natural Gas 16 Regulations, STRONGER, have been charged with 17 18 assessing the states ---.

19 CHAIR:

20 Time is up.

21 MS. HOWEY:

22 Okay.

23 CHAIR:

24Thank you. Appreciate your time, Next25we have Nathan Soy. Mr. Soy, did you provide your

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1 additional copies?

2 MR. SOY: 3 No, Clean Water Action is going to be 4 submitting technical testimony. My name is Nathan 5 Soy. I reside at 360 Franklin Church Road in Dillsburg, Pennsylvania, 17019. And I am the 6 7 Harrisburg area representative for Clean Water Action. 8 Our organization represents over 120,000 different people in Pennsylvania. And we're one of the 9 10 conveners of the Pennsylvania Campaign for Clean Water, which is 140 different organizations in 11 12 Pennsylvania. 13 Since we're going to be presenting technical testimony, this is not going to be a 14 15 technical presentation. This is a presentation having 16 to do with what's right and wrong, what people have called morality. In the past five years, I have 17 18 gotten to know many people in shale country in Pennsylvania. More and more families have lost their 19 drinking water to shale gas drilling in Pennsylvania. 20 21 We have the hardest time here in 22 Pennsylvania even getting the Department of 23 Environmental Protection to keep track of how many families have lost their water because of shale gas 24 25 drilling. Eventually hard work and the journalism of

35 1 Laura Legere eventually told us there was over 161 2 families that have totally lost their water. 3 There's a basic situation here. Who is the government supposed to be protecting? Is it 4 5 supposed to be protecting the interests of the 6 industry to develop or is it supposed to be protecting 7 the interests of the people? 8 The way the regulations are many times 9 designed, one could say that the interests of industry 10 are being served. The DEP should not compromise its obligation to protect the environment by balancing the 11 12 citizens' constitutionally guaranteed right for Clean 13 Water against the private interests of oil and gas. The DEP is required by the Pennsylvania Constitution 14 15 to protect the public's right to a clean environment. The proposed regulations provide that 16 even though the DEP determines that a proposed well 17 18 will have a probable adverse impact on a public resource, the DEP still cannot impose conditions that 19 will prevent or mitigate that harm without first 20 21 considering the impact of the condition on the individual mineral right owner's ability to optimally 22 23 develop his or her oil and gas rights. This regulation inappropriately places DEP, whose mission 24 25 is supposed to be to protect and conserve

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ĩ	Pennsylvania's environment in the position of
2	balancing protection of important public resources
3	against individual property rights.
4	Furthermore, it inappropriately and
5	potentially illegally elevates the optimal development
6	of oil and gas over the protection of important public
7	resources against likely adverse impacts. These draft
8	regulations do not give proper weight to the DEP's
9	constitutional obligation to protect the environment.
10	So long as the DEP's actions do not affect a taking of
11	private property, the DEP should not be rather,
12	the DEP should be obligated to take whatever actions
13	are necessary to condition permits in a manner that
14	protects important public resources.
15	CHAIR:
16	One minute.
17	MR. SOY:
18	Given all of that, one, we need to
19	prohibit operators from using open pits for storage of
20	regulated substances. Two, we need to prohibit the
21	on-site processing of shale drill cuttings and we need
22	to define fresh water that is used in oil and gas
23	operations. We need to prohibit the burial or land
24	application of drill cuttings and we need to prohibit
25	the on-site burial of waste pits.

37 Furthermore, the bonding requirements 1 are wholly inadequate. The \$600,000 that covers an 2 3 operator's well site is an extremely low amount, and this bonding is supposed to secure all ---4 5 CHAIR: 6 Your time is up. 7 MR. SOY: 8 --- the operator's legal duties 9 concerning water supply, replacement, restoration and 10 well plugging. Pennsylvania is going to be left with a tragedy that is going to be like ---. 11 12 CHAIR: 13 Mr. Soy, your time is up. 14 MR. SOY: 15 Thank you very much. 16 CHAIR: 17 Thank you. Next is Jennifer Quinn. 18 MS. QUINN: 19 Good evening. My name is Jen Quinn and 20 I am the Central Pennsylvania outreach coordinator in 21 PennFuture's Harrisburg office, 610 North Third Street, 17101. PennFuture is a statewide 22 23 environmental organization that works to create a just future where nature, communities and the economy 24 25 thrive. During my testimony, I will provide comments

regarding proposed changes to Chapter 78 regulations,
 but please keep in mind that PennFuture will be
 submitting detailed written comments for the Board's
 consideration.

As a preliminary matter, I'd like the 5 Board to keep in mind the recent contamination of 6 7 drinking water for 300,000 West Virginians when you 8 consider the long-term impacts of the decisions you 9 will be making concerning these regulations. The West 10 Virginia drinking water crisis happened in part because of loose regulations and lack of government 11 12 oversight and reminds us how dependent we are on clean 13 water for our health and our security. Now is the time is take a critical look at how to better protect 14 15 our waters.

16 I would like to thank the Board for the 17 work it has done in proposing regulations in Chapter 18 78 to help improve environmental protection. Among other things, we support requiring aboveground 19 20 pipelines for transporting wastewater, requiring 21 security around storage vessels at well pads, 22 requiring identification of well operators' parent and 23 subsidiary companies and requiring any restored or 24 replaced water supply at a minimum to meet the 25 standards established under the Safe Drinking Water

1 Act.

1	Act.
2	However, there are some areas that can
3	be improved. I will give two examples. All fluids
4	related to oil and gas development should be contained
5	in engineered facilities, not natural depressions.
6	Section 78.1, definition of freshwater impoundment and
7	pit, Section 78.56. Our streams and groundwater
8	should be secure from pollution caused by the storage
9	of wastes and fluids associated with oil and gas
10	production operations.
11	The definitions of pit and freshwater
12	impoundment raise questions about that objective
13	because they continue to incorporate the concept of
14	natural topographic depressions within the
15	definitions. We should not even suggest that
16	Pennsylvania will allow fluids related to oil and gas
17	operations to be managed in natural depressions. All
18	facilities used to hold fluids that may contain
19	potential water pollutants should be specifically
20	engineered for the task.
21	The DEP's proposed regulations for the
22	road-spreading of brine pose unacceptable threats to
23	the Commonwealth's water resources and would be
24	unlawful, Section 78.70(a). Section 78.70 of the
25	DEP's proposed oil and gas regulations would authorize

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1	the road-spreading of brine from conventional wells
2	for dust control on dirt and gravel roads. Proposed
3	Section 78.70(a) would authorize the road-spreading of
4	brine for de-icing purposes. Both sections would deem
5	any operator that spreads the brine on the roads to
6	have a permit-by-rule for the beneficial use of
7	residual waste as long as the operator complies with
8	the proposed Chapter 78 regulatory scheme.
9	DEP's approach is troublesome for two
10	reasons. First, because the proposed regulations do
11	not ensure compliance with the DEP's anti-degradation
12	program or contain adequate chain of custody
13	requirements, the risks of spreading brine on roads
14	outweigh the benefits, which are largely confined to
15	disposal cost savings for the industry.
16	The second problem with Section 78.70
17	and 78.70(a) is a legal one. All wastewaters from oil
18	and gas operations, including brine, are residual
19	waste under the Pennsylvania Solid Waste Management
20	Act. It follows that any beneficial use of brine,
21	including dust suppression and deicing, is subject to
22	regulation under the DEP's SWMA regulations as Title
23	25 Pennsylvania Code Chapter 287. These regulations
.24	do not currently allow permits-by-rule for
25	road-spreading or any other beneficial use of brine.

1 Beneficial uses of brine may be approved only under 2 the general permit scheme set forth in Subchapter H of Chapter 287. Thus, the permit-by-rule scheme proposed 3 4 in Sections 78.70 and 78.70(a) is not only imprudent, 5 it would be --- it would also be illegal. 6 Thank you for your time and 7 consideration. 8 CHAIR: 9 Thank you. Next is Teresa McCurdy. 10 MS. MCCURDY: 11 Hi, my name is Teresa McCurdy. I'm here to testify --- I'm sorry, 1646 Lowell Lane, New 12 13 Cumberland, PA, 17070. I'm here to testify on both on behalf of myself as a citizen and the Pennsylvania 14 Grade Crude Oil Coalition regarding the proposed 15 regulation. I have a one-person, both government and 16 17 public relations firm. I also provide development or business development for natural gas wastewater 18 treatment facility. So I've been attending a lot of 19 conferences, educating DEP meetings and so forth, both 20 on behalf of my client and in working with the PGCC 21 and PIOGA. And matter of fact, I'm a subcommittee 22 chair on water, waste management and recycling. 23 So some of the issues that some folks 24 25 were discussing, you know, these are really

1 well-vented regulations that we talk about all the 2 time, whether it's water resources, advisory committee 3 meetings or the Technical Advisory Board. And each 4 party --- and these boards are made up of industry and 5 environmental organizations as well as DEP. And so I wanted to thank both DEP, industry and even the 6 7 environment --- people who are in the environment 8 community, because everyone's put thousands of hours 9 into the regulations as they currently are. 10 But having said that, it's obvious both sides feel there's still work to be done. A little 11 12 bit about PGCC. It was originally formed in 2013 by about 20 producers of --- that refine conventional oil 13 14 and gas to help advance local economies and energy 15 independence by promoting shallow oil and gas 16 production in a safe, environmental manner. Well, why 17 form a new coalition, especially when there are others 18 out there? It's because the found that the founding members were concerned about the burdensome 19 20 regulations that were going to be imposed to them and 21 because a lot of them felt early on in the process 22 that these regulations were not going to have much an 23 effect on conventional producers. 24 And just a little bit --- a lot of 25 people may know that oil was first discovered in

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Pennsylvania and drilled, and so many people know that 1 2 Pennsylvania grade crude oil is used. If you look to Wikipedia for a definition, they call it sweet crude 3 oil. They also go on to say that it can be comprise 4 substances such as gasoline, kerosene, fuel oil and 5 wax, but also white oil and paraffin. I think what 6 many people don't know is that paraffin can also be 7 used in chocolate, to make candy. Paraffin is a 8 byproduct of refining oil. You can also use the 9 paraffin --- they use it for the covering on M&Ms so 10 they don't melt in your hand. 11

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12 And again, although PGCC will be submitting very formal comments, we do feel it was 13 important to, you know, educate people that this 14 15 industry is very vital. We have two refineries in Pennsylvania and we want to make sure that the jobs 16 17 stay here and not go elsewhere because the business 18 dries up and goes away. And by the way, for at least maybe half the people in the room, we all use some 19 type of byproduct of crude oil when we wear makeup. 20 21 So when Act 13 of 2012 was adopted by the legislature, like I said, we didn't think that a 22 lot of it was going to affect them. But one of the 23 things that was found out that did affect them real 24 25 quickly was the size and the scope of different

1 aspects of the regulation, such as their being told 2 that when you compile a pit, when you build a pit, 3 that a pit has to be a certain slope and size and so 4 forth. But with a conventional operator, they may 5 have a well site that is a fraction of the site of an 6 unconventional one. They may hold a couple of little 7 water ---

CHAIR:

One minute.

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MS. MCCURDY:

--- versus, you know, hundreds of trucks 11 12 for water. So it's a completely different industry. So at one of the press conferences, one of the folks 13 that stood up and said, you know, you know, I have ---14 15 I'm sorry, there's two examples. He says --- at one 16 point he goes, you wouldn't apply the same regulation 17 to someone building a house as you would someone 18 building a nursing home.

And that's all we're asking, is that the DEP and regulators make sure that the regulation fits the size of the business being considered. One of those aspects are costs. Looking at the IRRC regulatory analysis form that was outlined, one example real quick is that in order to identify an abandoned, orphaned well would cost zero dollars. It

45 1 has to cost someone man hours to prepare the 2 documents. Thank you very much. 3 CHAIR: Thank you. Next we have Tanya Wagner. 4 5 MS. WAGNER: 6 I've already submitted my copies. 7 CHAIR: Thank you. 8 9 MS. WAGNER: My name is Tanya Wagner, 5007 Apache 10 Drive, Mechanicsburg. And I'm speaking tonight as a 11 private citizen, as a nurse with about 50 years of 12 13 experience in the healthcare industry. 14 I assumed that most testimony given 15 tonight would be empirical in nature, so I choose to speak more philosophically because I believe actions 16 are guided by values and legislation is crafted not 17 just from knowledge, but influenced greatly by 18 19 attitude and moral integrity. That said, I think it's time we undertake bolder efforts to put tougher, more 20 specific language in these proposed regulations. If 21 we can't balance public health needs and land 22 stewardship properly with economic growth and the 23 24 search for new energy sources, Pennsylvanians will pay a price that we and our offspring will sorely regret. 25

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1	I speak with confidence because, as
2	others have mentioned, as 300,000 West Virginians were
3	learning of a chemical spill that rendered their water
4	virtually untouchable, the US House of Representatives
5	in Washington was hard at work gutting the Federal
6	Hazardous Waste Cleanup Act, How ironic. If this
7	would become a law, it will seriously erode the
8	federal government's ability to help us if a similar
9	disaster were to happen here. We could be in dire
10	straits unless we get our own house in order and fast.
11	The Elk River spill in West Virginia,
12	while not due to fracking, is still a cautionary tale,
13	because the CEO of the company responsible is or was
14	considering bankruptcy, as many do. So he won't be
15	paying for cleanup. And in Pennsylvania we've not
16	required drillers to establish a remediation fund for
17	accidents that may well devastate our water supply.
18	Yes, we have an impact fee, but that's simply for
19	mitigating day-to-day wear and tear on a community's
20	infrastructure.
21	It's reported that a legislative plan is
22	evolving to entice drillers to substitute mine
23	influenced water, I guess that's acid mine drainage,
24	for their fracking process in place of clean water.
25	While that sounds like a really tantalizing concept on

1 its face, a tricky use of the term beneficial in the 2 plan's text and a proposal to exempt companies from 3 liability who would agree to use this stuff, clearly 4 doesn't.

5 While much is promised by operators and 6 legislators and agency spokesmen assures that all is 7 well, I do suffer cognitive dissonance when reviewing 8 information that contradicts the pro-fracking message, 9 like countless violations, token penalties, inadequate 10 rules for safe use and disposal of hazardous 11 substances, danger from orphaned and abandoned wells, 12 migration of methane and wording in laws that smacks 13 of bias favoring mine operators over public health and 14 environmental safety. Just one issue I shudder to 15 think about is what happens if we permit long term 16 burial of waste pits and toxic or radioactive substances like --- materials like drill cuttings? 17 18 Why, we could create sites like the infamous Love 19 Canal which, quoting New York's health commissioner, 20 remains as a national symbol of failure to exercise 21 concern for future generations. Is that how we want 22 to be remembered? 23 I'm no expert, but distance and location 24 limits listed in these proposed regulations seem

25 uncomfortably close to areas they're supposed to

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1	protect, accompanied by vague enforcement language.
2	Won't a laissez-faire approach just invite less safety
3	and more risk? I'm troubled too when many people,
4	including elected officials, willingly accept
5	drillers' assurances of safety. For me, their
6	credibility sank after hearing that the industry hired
7	the same public relations firm tobacco executives
8	employed back in 1994, the ones who raised their hands
9	at a congressional hearing and under oath stated, I
10	believe that nicotine is not addictive.
11	On that note, I'll close by sharing two
12	wise and very relative proverbs. First, it seems the
13	only thing we've learned from history is that we don't
14	learn from history at all. And second, humans come to
15	their moment of clarity only through pain and
16	humiliation, sadly, their own and not someone else's.
17	My hope is
18	CHAIR:
19	One minute.
20	MS. WAGNER:
21	that these tendencies can be
22	reversed in this critical matter and that wisdom,
23	foresight and courage will prevail over greed and
24	expediency. Our land, our citizens and even mine
25	operators will be the better for it. Thank you.

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1	CHAIR:
2	Thank you. Next, William Schneider.
3	OFF RECORD DISCUSSION
4	MR. SCHNEIDER:
5	I'm Bill Schneider from Hampden
6	Township, 5007 Apache Drive, 17050. I'm a registered
7	Independent voter and I'm old. I've been around for a
8	while. Tonight I'd like to put an old guy's
9	perspective on the Marcellus Shale water quality issue
0	here in Pennsylvania. As we travel down memory lane
1	in the next three or four minutes, keep in mind that
2	old adage that the names and faces keep a-changing,
3	but the stories are always the same.
4	Those of us who were around in March
5	1979 probably recall Jack Herbein, vice president for
6	Power Generation for MetEd/GPU, holding a news
7	conference at Three Mile Island, telling us that the
8	situation was under control when at that very moment,
9	uncontrolled radioactive releases were occurring.
20	Remember Exxon Valdez? Instead of complying with
21	remedial sanctions to clean up the environmental
22	disaster they caused, Exxon Mobil spent the next 20
23	years in court attempting to mitigate or eliminate the
4	extent of the fines and penalties imposed.
25	And the warm and fuzzy BP commitment to

1 the Gulf commercials that we've all been seeing in the 2 last year, guess what? Their legal team commenced the 3 same kind of campaign that Exxon Mobil employed in 4 their attempts to get the financial sanctions 5 necessary to clean up their mess, reduced or 6 eliminated.

7 Now we know that next to agricultural 8 runoff, acid mine drainage is the greatest contributor 9 to water pollution in the Commonwealth. Most of the 10 culprits are mining operations shut down more than 50 11 years ago. We know that Tom Corbett's received over a million dollars in campaign contributions from gas 12 13 companies. We know that Halliburton, Cabot and other 14 drillers have amassed over 4,000 violations in the 15 last four years, just with the current environmental 16 laws on the books.

17 We know that there are roughly 200,000 18 abandoned oil wells statewide, mostly unmapped, dating 19 from the discovery of oil in Pennsylvania in 1859. We also know that ten percent of Marcellus drill holes 20 21 leak methane when they're first drilled. That number 22 grows to about 50 percent in ten years. We know that something on the order of 30 percent of the water 23 24 injected into the earth as part of the fracking 25 process stays within the earth.

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	But we do not know where that toxic
2	water will end up, especially if an earthquake or a
3	rock strata change occurs, possibly causing waterway
4	pollution, or else remaining underground, never again
5	to be part of the water cycle. Either way, the
6	indigenous water supply we all need for survival is
7	depleted. We know that a gag order is imposed when
8	fracking companies enter into settlements with
9	aggrieved citizens whose wells have been polluted. So
10	the rest of can't access information that would
11	identify risks to which we may unknowingly be exposed.
12	So tonight I ask you this fundamental
13	question. Do you believe that fracking companies are
14	any different than GPU, Exxon Mobil, BP or the mine
15	owners who have been gone for 100 years? Does their
16	commitment to their shareholders take a backseat to
17	public health concern? I think not.
18	I believe that fracking will create a
19	major environmental disaster within the next decade.
20	I say that because even if frackers go by the book 99
21	percent of the time, the fact that we're knowingly
22	polluting the earth's crust will eventually catch up
23	with us. What Pennsylvania needs is a disaster fund,
24	regularly replenished by fracker earnings so that
25	drillers pay for the damage they cause, not the

1 Commonwealth's taxpayers.

Since I doubt that our government 2 3 leaders possess the political courage for such a bold move, there are half measures that will serve to 4 mitigate some of the risk. One, the DEP should 5 6 require drilling company operators to restore 7 contaminated drinking water to Drinking Water Act 8 standards. 9 CHAIR: One minute. 10 11 MR. SCHNEIDER: Two, drilling company operators should 12 be prohibited from using open pits for waste storage. 13 Three, regarding waste disposal, drillers should 14 follow the federal regulations for hazardous 15 substances that other industries must follow. And 16 17 four, drillers must identify existing wells before site and well construction and drilling, so that the 18 new well can be modified if needed. Drillers must 19 20 then plug and seal the old orphaned or abandoned wells according to same --- state safety standards prior to 21 22 the new wells being drilled. Thank you. 23 CHAIR: Appreciate it. Richard Martin? 24 25 MR. MARTIN:

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1	Good job, Mr. Schneider. Good evening.
2	My name is Richard Martin, 740 Oak Hill Drive, Boiling
3	Springs, PA. The DEP fails to take into account the
4	cumulative effect of the natural gas industry on our
5	environment. Many of the chemicals used in
6	hydrofacking are carcinogens, neurotoxins, endocrine
7	disruptors. And these wastes, as well as others, are
8	a direct threat to our water supplies and air quality
9	and wildlife. What is the acceptable risk? While
10	these chemicals may be beneficial to the gas industry,
11	their use must be tightly regulated as to prevent harm
12	to us. DEP should follow the mantra, if you can't
13	measure it, you can't manage it.
14	Since the gas industry had a hand in
15	drafting these regulations, then weasel clauses and
16	other ambiguous language must be eliminated. Flowback
17	water, for instance, should be regulated tightly with
18	documentation by way of cradle to grave paper trail.
19	Operators will naturally seek the most cost effective
20	method of disposal. DEP is not fulfilling its mission
21	of environmental protection if operators are allowed
22	to bury drill cuttings, otherwise known as toxic
23	teabags, on site. On-site disposal is not equivalent
24	to a well-designed and regulated landfill. Disposal
25	of drill cuttings must be treated in the same way as

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1	flowback water, cradle to grave documentation.
2	I've spent much of my 75 years on the
3	Allegheny National Forest lands and I've seen the
4	effect of operators simply walking away from their
5	responsibilities after wells fail to be economical.
6	I've seen hundreds of orphaned and abandoned wells on
7	the ANF. So I hope you learn from the Fed's mistakes.
8	The water sources surrounding my hunting
9	camp 13 years ago in Howe Township, Forest County were
10	polluted with benzene as a result of a fracking oil
11	and gas well 990 feet away. No letters have been sent
12	to property owners by the driller or to the
13	Department. Despite presumption, DEP was ineffectual
14	in getting replacement water. When asked about suing
15	the driller, the response was, well, we don't have the
16	budget.
17	One replacement water well finally was
18	built for the six camps. After a few months, the
19	driller cut off the power supply. DEP should require
20	drillers to post a bond assuring a permanent supply of
21	water that meets Safe Drinking Water Standards. I
22	have much more, but I will elaborate with a postscript
23	electronically. Thank you.
24	CHAIR:
25	Thank you very much. Next is Wendi

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1	Taylor.
2	MS. TAYLOR:
3	My name is Wendi Taylor and I live at
4	435 Parkview Court in Camp Hill. Thank you for
5	allowing me to come and provide comments on the
6	proposed regulations relating to oil and gas wells.
7	While I don't live in the Marcellus Shale region, I am
8	interested in what is happening and what might happen
9	in that region.
10	I am afraid that we, the citizens of
11	Pennsylvania, are going to be in the same situation
12	that those in Wyoming are. There the fracking boom
13	has come and gone, and according to the New York
14	Times, the companies that once operated the wells have
15	all but vanished, many seeking bankruptcy protection
16	and unable to pay for the cost of reclaiming the land
17	they leased. Recent estimates have put the number of
18	abandoned drilling operations in Wyoming at more than
19	1,200, and state officials say several thousand more
20	might soon be orphaned by their operators.
21	Generally, I would urge this Board to do
22	three things. Provide more public disclosure, limit
23	the use of grandfathering and adopt the most stringent
24	regulations that the law will allow. As the
2.5	Pennsylvania Supreme Court pointed out in its recent

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1 decision on Act 13, Pennsylvania lawmakers have a poor 2 record of protecting its citizens from the many 3 problems created by the industries like timber and 4 coal. Now we're making the same mistake with natural 5 gas. You see, these regulations are about five years 6 too late.

7 The industry has been able to avoid 8 They've gotten key exemptions in federal regulation. 9 Safe Drinking Water Act, Clean Air Act, Clean Water Act, the Emergency Planning and Community 10 Right-to-Know Act and the Resource Conservation and 11 Recovery Act. We need stringent state regulations 12 that will strictly be enforced by the Pennsylvania 13 14 Department of Environmental Protection. As the Board reviews Chapter 78, please do all you can to give 15 citizens the regulations that reflect their right to 16 17 clean air and clean water.

The Pennsylvania Department of 18 Environmental Protection should determine the 19 20 chemicals and the contaminants to be included in 21 pre-drilling water tests, not the drillers. Further, 22 the testing should be done in independent labs and the results should be available to DEP, the landowners and 23 the public. Too often chemicals and methane gas show 24 25 up after drilling and because those specific chemicals

or contaminants were not included in the pre-drilling
 tests, no one can prove if the water was degraded by
 fracking.

DEP regulations continue to allow the 4 storage of wastewater in open pits or impoundments. 5 Open pits are a recipe for disaster and the State 6 7 needs to ban them altogether. Existing impoundments should be cleaned up and closed. Hydraulic fracturing 8 fluid, flowback and produced water at well sites 9 10 should be stored in aboveground tanks during all 11 phases of drilling and treated as the hazardous waste 12 that it really is.

13 Stray gas migration has been a problem 14 in Pennsylvania in some measure due to the old 15 unplugged and abandoned wells, whose gas can migrate 16 into the groundwater during drilling operations. 17 Before drillers do anything, ---

CHAIR:

One minute.

18

19

20

MS. TAYLOR:

21 --- they should be required to survey 22 the site to identify orphaned wells that may not be 23 known or mapped. If discovered, the drillers should 24 cap the wells before construction begins. Further, 25 drillers should be required to provide the results of

1 the surveys to DEP.

2 Act 13 requires water supplies that have 3 been contaminated by drilling to be restored or replaced to meet Pennsylvania's Safe Drinking Water 4 5 Act. The regulation should specify that those that 6 who had high quality water before drilling, that they 7 should be restored and not merely replaced with water 8 that meets the minimum safe standards. I urge you to consider all the comments from these hearings that 9 10 call for more protection of our environment, because 11 contamination can last far longer than the jobs the 12 industry creates. Thank you for your attention. 13 CHAIR: 14 Thank you. Next, Amanda Gruenbaum. 15 MS. GRUENBAUM: 16 Good evening. My name is Amanda 17 Gruenbaum. I am a junior at Elizabethtown College in Elizabethtown, PA. 737 Baugher Avenue, 17022. I am 18 19 here tonight to add my voice to this discussion and I 20 represent the many college students across 21 Pennsylvania that are and will be in the near future 22 seeking more than just a job, but a career. We as a 23 student ecosystem have come interested in the proposed 24 rulemaking affecting the natural gas industry. 25 My main focus pertains to jobs. Whether

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1	59
1	it is direct or indirect, the oil and natural gas
2	industry provides and supports hundreds of thousands
3	of jobs in Pennsylvania, and not just in the areas of
4	the state that are realizing the development of this
5	energy resource. The natural gas industry is a job
6	multiplier, so for students seeking a career in supply
7	chain management, mechanical engineering, civil
8	engineering, as well as communications, like me, have
9	a better chance of finding a job within their field of
10	study.
11	In fact, a lot of industries will be
12	able to grow and provide more jobs to residents of
13	Pennsylvania as natural gas becomes a consumer
14	resource across our state. The more careers the State
15	can provide its youth, the more of a chance
16	Pennsylvania's youth will be able to work and raise
17	their families here in Pennsylvania. Thank you for
18	your time.
19	CHAIR:
20	Thank you.
21	OFF RECORD DISCUSSION
22	CHAIR:
23	All right. Gary Hovis?
24	MR. HOVIS:
25	Good evening. My name is Gary Hovis and

I represent the Pennsylvania Independent Petroleum 1 Producers headquartered in Bradford, Pennsylvania, 2 3 Post Office Box 103, ZIP 16701. Thank you for the opportunity this evening to present the following 4 remarks from the perspective of the shallow 5 conventional oil and gas industry in Pennsylvania. 6 Our organization was founded in 1985, 29 years ago, in 7 response at that time to the state's legislative Act 8 223. Today we represent small and medium sized 9 producers of the conventional shallow oil and gas 10 11 wells in this state.

Ms. McCurdy and I didn't really 12 collaborate, but some of the topics she covered I'm 13 going to be covering too. Penn grade crude. Most 14 people think that crude oil was first discovered near 15 Titusville, Pennsylvania on August 27th of 1859 by 16 Colonel Edwin Drake in a well drilled to 69 and a half 17 feet, and it was a brand new mineral for the white 18 19 man's use.

However, crude has been seeping up through crevices in the ground for eons before the white man came to America. The local Indians would skim it off the surface of the water on Oil Creek, a creek today that's one of the highest water quality streams in northwestern Pennsylvania, and then use for

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1 medicinal purposes. So it wasn't just coincidence 2 that Colonel Drake decided to drill for oil where he 3 did.

4 Penn grade crude that's produced in 5 Pennsylvania is also found in the western tier of New 6 York State, parts of eastern Ohio and of course in our 7 state, and then West Virginia. And that Penn grade 8 crude is very unique. The crude is a paraffin based 9 medium in comparison to the crude found in --throughout most of the rest of the U.S. and around the 10 11 world, which is mainly an asphalt or tar-based crude. 12 In addition to excellent motor oils, 13 lubrication greases, gasoline, kerosene, diesel fuel, Penn grade crude generates over 60 different products. 14 15 Ms. McCurdy mentioned a number of those, waxes, 16 furniture polishes, hand creams, lotions, cosmetic 17 creams and waxes used in foodstuffs, including chocolate candies to dilute and make the candy more 18 19 soft. Our crude is also used for the plastics 20 industry, which is one of the biggest suppliers of 21 many things that we use in our lives today. Look at 22 the seats we're sitting on tonight. So all the 23 different polys that we have in the plastics industries are --- come from our crude. Urethane, 24 25 nylons, PETs and so on.

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62 1 Left on the ground, Pennsylvania crude 2 will break down and disappear over time. This is not 3 true of the asphalt based crudes found around the 4 world and imported to this country. These have a 5 tendency to turn into tar when left out in the sun. 6 In the early days --- in the early days 7 of our country, most homes were heated with firewood, 8 readily available from the surrounding forests. On 9 the plains where trees weren't available and seldom 10 seen, buffalo dung became one of the ready sources of 11 available fuel. As time progressed and the demand for 12 nighttime lighting around our towns and cities 13 became needed, ---14 CHAIR: 15 One minute. 16 MR. HOVIS: 17 --- man came up with the idea of using 18 whale oil for burning in streetlights. Well, you know 19 what happened there. It created quite an industry, 20 but after a time, most of the whales were 21 disappearing. Today many of these are endangered species. Of course, for home lighting we used candles 22 23 made from the animal fat. And today those candles are made from waxes of Penn grade crude. 24 25 So what does this leave us for the

63 future? Wind and solar power can supplement major 1 2 energy sources, but are problematic and inconsistent. 3 Hydro power can also supplement, but is not the total answer. Problems and concerns come with nuclear 4 5 power, which was once considered the solution for our 6 future. The big problem there is the challenge of 7 what to do with the spent fuel. 8 This leaves us, an industrial nation, 9 with few options for the near future, low sulfur 10 coal ---11 CHAIR: 12 Time's up. 13 MR. HOVIS: 14 --- fuel oil or natural gas. Thank you. 15 CHAIR: 16 Thank you. Kevin Moody? 17 ATTORNEY MOODY: 18 Good evening. My name is Kevin Moody. 19 I'm general counsel and vice president for Pennsylvania Independent Oil and Gas Association, 20 otherwise known as PIOGA. We've heard the acronym 21 22 mentioned tonight. As general counsel, I will address three legal issues. Of course, we will be providing 23 extensive written comments of a technical nature of 24 25 the proposed regulations.

1 But I'd like us to start with saying 2 that there are --- the regulation as proposed is 3 incomplete in four major areas. They were the areas that were identified by the TAB, Technical Advisory 4 5 Board, and there were a series of workshops to address 6 these issues and they were over the summer. There has 7 been no change in the proposed regulation as a result of those workshops. 8

9 The DEP staff admitted and acknowledged that the regulations were incomplete in that respect, 10 and that's why the workshops were held. It was 11 described as a proposal for consideration. So in that 12 respect, it does really not comply with the Regulatory 13 14 Review Act for proposed regulation, which must be a regulation that's intended to be promulgated as a 15 16 final regulation. So if the regulations are incomplete, they are not intended to be a regulation 17 18 with no changes.

Now with respect to the recent Act 13 decision by the Pennsylvania Supreme Court, we've heard references tonight to Section 3215, protection of public resources and regulations to develop criteria for imposing conditions to protect these resources. And it seems clear that the Pennsylvania Supreme Court has enjoined those sections. The

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Commonwealth petitioned for reconsideration of that 1 2 decision. And in that, they acknowledged that the 3 provisions are enjoined. The municipalities and the 4 citizens answered that petition, also acknowledging 5 and agreeing that these provisions are enjoined and 6 therefore this regulation, that there are portions of 7 that address all those sections, cannot be promulgated for even further activity until the Supreme Court or 8 the Commonwealth Court clarifies the situation. 9

10 Now with respect to the species of 11 special concern, it's our understanding that the regulations equate that term to critical communities, 12 13 and that is incorrect and is really wrong. It's a matter of law and it's a matter of fact because the 14 15 term species of special concern is an overriding term that describes threatened, endangered, candidate, rare 16 or whatever types of species, you know, deserve some 17 18 protection.

And that term comes from a book, which I have here, published in 1985. And it's apparent when you look on page 35, it describes the definition of status categories and it lists endangered, threatened, vulnerable, status undetermined, extirpated, recently extinct. All of these are status of special concern species. So that's an overarching term. It's not a

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1 term that is precise and certainly is not a term that 2 can be equated with critical communities. That term 3 appeared in the original Oil and Gas Act, drafted 4 first in 1984, and this publication came out in 1985. 5 Clearly the two terms are not the same and so that 6 equating that term with critical communities is just 7 improper.

8 Now, as far as --- well, the other areas I just want to mention --- I'm not going to get into 9 10 them in detail, but they've been addressed a little 11 bit by the other representatives from the other conventional organizations. PIOGA has its roots going 12 13 back to 1918, representing conventional operators. We 14 also represent unconventional operators and also 15 supply chain companies. And we just believe that the regulations really don't adequately address the 16 conventional producers' concerns and they impose 17 18 requirements --- unreasonable requirements without 19 economic justification. 20 CHAIR: 21 One minute. 22 ATTORNEY MOODY: Finally, we've also heard mention of the 23 regulatory review analysis. There's Act 72 of 2012, 24

25 an amendment to the Regulatory Review Act that

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1	requires special considerations to small businesses.
2	Many of PIOGA's conventional operators are small
3	businesses. And the Act requires that there be
4	economic impact and flexible alternatives to be
5	considered to regulatory requirements. The
6	regulations do not do that at all and the regulatory
7	analysis form is completely inadequate and fails to
8	address any of those requirements of Act 72. Thank
9	you.
10	CHAIR:
11	Thank you. Michael Ganz (phonetic) in
12	the audience? Michael Ganz? No? How about Eric
13	Cowden?
14	MR. COWDEN:
15	Good evening. My name is Eric Cowden.
16	My address is 300 North Second Street, Harrisburg,
17	17101. I'm the community outreach manager in Central
18	Pennsylvania for the Marcellus Shale Coalition, an
19	association working with regional partners since 2008
20	and currently comprised of nearly 300 exploration and
21	production, midstream and service companies committed
22	to developing clean burning natural gas resources. In
23	2012 our members were responsible for 96 percent of
24	the natural gas produced here in Pennsylvania.
25	Energy development has an incredible

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1	history in the Commonwealth, and indeed, natural gas
2	development can serve to enhance and improve our
3	natural resources. Significant investments have been
4	made across the Commonwealth by our industry to
5	provide needed habitat and restore lands and
6	watersheds. Partnerships with conservation groups are
7	examples of our industry's willingness and commitment
8	to voluntarily protect and preserve our natural
9	resources. And our industry has raised the bar for
10	shale development further with practices designed
11	specifically to lessen the impact on surface
12	disturbance and provide strategies to improve habitat
13	and landscapes.
14	The benefits do not end there. Take for

15 example the fact that the Commonwealth accounted for 16 18 percent of the nation's natural gas production in recent months, according to the EIA. This has led to 17 more --- this has led to more revenue. The natural 18 19 gas industry has paid over \$1.8 billion in taxes since 2008 and \$460 million over two years to communities, 20 counties and the state in impact fees. 21 More than 200,000 new hires in 22 Pennsylvania are supported by industries associated 23 24 with shale development, according to our Labor and 25 Industry. And despite the rhetoric, these are, myself

1 included, lifelong, taxpaying residents of this great In addition, there is --- in addition, 2 Commonwealth. there is great cost reduction in residential fuel. 3 My grandparents, married 63 years, saw their monthly 4 5 budget for natural gas heat be reduced by \$150 per 6 month. That is an \$1,800 per year savings to senior 7 citizens on a fixed income.

8 These benefits unfortunately are at 9 risk. Pennsylvania has a complex regulatory environment and an uncertain fiscal climate, which has 10 11 resulted in the Commonwealth falling behind. And there is even less certainty in the wake of a decision 12 of the Pennsylvania Supreme Court to reject portions 13 14 of Act 13 of 2012 that established a statewide standard for oil and gas development. Moreover, a 15 plurality of the Court ruled to roll back many of the 16 17 environmental protections under Act 13, including more stringent well setbacks. Nevertheless, our industry 18 will voluntarily comply with these setbacks at the 19 Governor's request. 20

Other regulatory provisions spurred by Act 13 and the Chapter 78 revisions that followed add to the Commonwealth's strong regulatory framework, which the State Review of Oil and Natural Gas Environmental Regulations, or STRONGER, a national

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non-profit organization dedicated to assessing state
 regulations, refers to last fall as well-managed,
 professional and meeting its program objections. And
 for that we applaud both the General Assembly and the
 Pennsylvania DEP.

6 At the same time, many of the DEP's 7 proposed regulatory changes to Chapter 78 stretch beyond legislative intent and will undercut the 8 9 Commonwealth's ability to compete for capital while providing little or no additional benefit with regard 10 11 to safe and secure oil and gas development. One such example is the establishment of special concern 12 species, which raises questions about how any such 13 list is generated, what criteria are used to determine 14 15 whether there is an impact to these species and how 16 DEP proposes to mitigate impacts to such species. The Marcellus Shale Coalition will 17 provide detailed written comments on the Department's 18 19 proposed regulations in the weeks to come. Our overarching message, though, is straightforward. 20 21 CHAIR: One minute. 22 23 MR. COWDEN: 24 Instead of undermining our strong, 25 consistent and predictable regulatory framework, we

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71 should work cooperatively to revise these proposals to 1 maintain a balance between strong environmental 2 protection and a competitive economic climate. 3 It does not need to be a false choice 4 between the environment and economics. And we urge 5 6 the DEP to continue working with our industry and its 7 stakeholders across the Commonwealth on a reasonable, competitive path forward. Thank you for the 8 opportunity to testify. 9 10 CHAIR: Thank you. Next is Barbara Sheffer 11 12 Rooney. OFF RECORD DISCUSSION 13 MS. ROONEY: 14 Am I last? 15 16 CHAIR: 17 No, you're not. MS. ROONEY: 18 19 My name is Barbara Sheffer Rooney, 127 South Strathcona Drive, York, Pennsylvania, 17403. 20 Thank you for providing an opportunity for me and my 21 organization to comment on the regulations being 22 considered by DEP. 23 24 CHAIR: And your organization is? 25

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1	MS. ROONEY:
2	I am speaking on behalf of the
3	Pennsylvania AAUW, American Association of University
4	Women of Pennsylvania. I'm from the York branch.
5	CHAIR:
6	Thank you.
7	MS. ROONEY:
8	I am chair of the Marcellus Shale
9	Committee. In addition, I speak as mother of 6, a
10	grandmother of 12, and perhaps I may be part of the
11	problem. Too many children. And I am concerned about
12	the future of our children and coming generations in
13	Pennsylvania having an experience what our water
14	supply will be, the effect on our streams, our rivers,
15	our agricultural lands, secondary to this relatively
16	new industry known as hydraulic fracturing of the
17	natural gas covering 63 percent of the state.
18	I am prefacing my remarks with the
19	approved position statement from April 2012 from the
20	AAUW annual meeting. Quote, the AAUW Pennsylvania
21	opposes the development of shale resource can you
22	hear me
23	CHAIR:
24	Yes.
25	MS. ROONEY:

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1	without this?
2	CHAIR:
3	Yeah.
4	MS. ROONEY:
5	Of shale resources in Pennsylvania
6	unless the environment, public health and safety and
7	the welfare of the communities involved are protected.
8	Any such permitted development should prioritize the
9	value of water resources above gas resources. Our
0	full report is available at online,
1	AAUW-PA.AAUW.net.
2	We make the following main points. One,
3	the proposed I'm too tall. The proposed
4	regulations need to be scientifically valid and based
5	on best practices and state of the art methods and not
6	upon any am I too loud? Any agenda of the and
7	not based on any agenda of the gas industry or
8	political plan.
9	Two, we note that in the 167 pages of
20	the Pennsylvania Supreme Court decision of December
1	2013, and based on the principles derived from the
22	State Constitution of 1972, that Section 27 is the
3	most important. And I quote, the people have a right
4	to clean air, pure water and to the preservation of
5	the natural, scenic, historic and aesthetic value of

1 the environment. Pennsylvania's public natural resources are the common property of all the people, 2 3 including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and 4 maintain them for the benefit of all the people. 5 The 6 end of quote. Currently, many of you probably know 7 this, the Pennsylvania Auditor General, Eugene 8 DePasquale from the York area, is auditing how DEP is 9 10 regulating the Marcellus Shale natural gas industry. This audit is ongoing and close to completion. 11 Therefore, the Pennsylvania AAUW recommends that the 12 EQB study this audit and take the findings into 13 account before any new regulations are approved. 14 Four, because ---15 16 CHAIR: 17 One minute. 18 MS. ROONEY: --- of the Pennsylvania Supreme Court 19 decision, we're holding this Board to a higher 20 standard and hope we do not have to go to court again. 21 All the other comments, other groups we agree with, 22 Clean Water Action, PennFuture and League of Women 23 Voters. Current public Health Impact Reports should 24 be included in regulatory decisions, such as Shale 25

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1	Drilling and Public Health, released and presented on
2	November 23rd, 2013, by the League of Women Voters in
3	the Heinz History Center in Pittsburgh. Eleven (11),
4	another study to take into account is the Pipelines of
5	Pennsylvania, a Case Study of Lycoming County,
6	prepared by the League of Women Voters in 2012.
7	Twelve (12), defragmentation of our
8	state parks and forests is a growing concern and
9	well-documented. Thirteen (13), the so called, quote,
10	revolving door, of nearly 50
11	CHAIR:
12	Time's up.
13	MS. ROONEY:
14	Thank you very much.
15	CHAIR:
16	Thank you. Heather Strock? Is Heather
17	here?
18	MR. STROCK:
19	Heath.
20	CHAIR:
21	It says Heather. Are we going?
22	MR. STROCK:
23	It's Heath.
24	CHAIR:
25	Oh, Heath. I'm sorry.
25	Oh, Heath. I'm sorry.

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1	MR. STROCK:
2	Heath, H-E-A-T-H.
3	CHAIR:
4	Is he here? I apologize.
5	MR. STROCK:
6	That's all right. Everybody gets it
7	wrong.
8	CHAIR:
9	I looked too quickly.
10	MR. STROCK:
11	All right. I'm going to be submitting
12	my testimony afterwards in writing there. I'd like to
13	thank you for letting me speak here. I'm just
14	speaking as a private citizen.
15	CHAIR:
16	If you could give us your name
17	MR. STROCK:
18	Yes.
19	CHAIR:
20	and your address?
21	MR. STROCK:
22	My name is Heath Strock. I live at 828
23	Fishing Creek Road in New Cumberland, Pennsylvania,
24	17070. DEP, thanks for letting me speak here. As a
25	private citizen, I have no specific numbers for DEP

1 regulations to mention. I need to mention, though,
2 that as far as the local families and farmers, the
3 topography of Cumberland County is an unbelievably
4 gorgeous. It sits between two mountain ranges.
5 Therefore, in fact if any accident were to happen, it
6 would go directly into the Susquehanna, and then in
7 turn, directly into the Chesapeake.

8 My main topic is to make you aware of 9 the current water usage of Cumberland County. I think 10 the people would be really, really surprised to learn 11 the amount of water that is taken in, or let's say used by the county currently. I'll say that shortly. 12 13 number one, I must say that the average water drilling 14 permit, though, for commercial use is 25 years. Did I 15 vote for that? I don't think so.

16 Number two, gas already has left Utah and Wyoming. 17 They're corporations. They're owned by ---actually large corporations, and this is the price 18 19 of doing business. They go into corporations they go 20 into cities, they go into towns, they go, they do 21 their thing, they're gone. Okay. That's the price of 22 doing business. They wreck things. Okay. The 23 financial resource is based on speculation. Okay, 24 Something like the price of gold and silver. 25 Now to bring it home. There's five

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1	million gallons, okay, of water used per well. All
2	right. Five million gallons per well. Now, if we can
3	comprehend that a little bit here, just to take it
4	home here, so you guys know. Hopewell Township,
5	there's eight wells that produce right now in Hopewell
6	Township. This is private wells. This is just
7	private, corporate wells. This is in Hopewell
8	Township. They have just millions of gallons per day
9	is what they use.
10	Okay. Hopewell Township, 0.05 for the
11	Solid Waste Landfill. 0.145 million gallons per day
12	in Shippensburg Township. North Newton Township,
13	0.144 million gallons per day for their supply and
14	irrigational systems. North Newton Township again,
15	1.292 million gallons per day. And again, 2.6 million
16	I'm sorry, 2.16 million gallons per day. The
17	quarry outside there at Dickinson Township, 0.0
18	.102, yeah. Gees, I'm trying to talk too fast.
19	.102 million gallons per day. South Middleton, 0.624.
20	Are we starting to get the picture yet? North
21	Middleton Township, golf course, .25 million. Another
22	golf course there, we got .5 million gallons. Carlisle
23	Borough, a paving corporation, .05 million gallons.
24	South Middleton Township, PPG, .535 million
25	gallons. We have Carlisle Barracks Golf Course. They

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79 use .35 million gallons per day. 1 Now sometimes we have a little water 2 3 shortage and we have to turn our taps off. Isn't that 4 kind of strange? I think so. 1.45 in Middlesex 5 Township. Then again, White Rock Acres, they use 6 specifically ----7 CHAIR: 8 One minute. 9 MR. STROCK: 10 --- .37. Well, we'll scrap that. Once again, this is speculation. Somewhat like the price 11 of gold and silver, like I said. And I'm listening to 12 13 this gentleman here talk about crude oil and the testimony that's been made and brought to my attention 14 15 its use in plastics. And the people that just kind of skated over that plastics. In 1880s, the discovery of 16 plastics promoted the beginning of carelessness. No 17 18 one cared if things broke. Just replace it with another. 19 Some things need to be plastic, but 20 unfortunately they're thickness and their middle can 21 be adjusted to the consumer. In other words, plastic 22 has become the downfall of Made in the USA. And we 23 cannot afford to use water speculatively. It will 24 become the most important resource in the world. And 25

80 1 the PA economy is highly, highly based on water for 2 recreation and for other purposes. Thank you. 3 CHAIR: Thank you. Al Winestock (phonetic)? 4 5 MR. WINESTOCK: 6 I'll just provide written testimony and 7 I'll defer and send something in writing. 8 CHAIR: 9 Okay. Thank you. Teresa Myers? No 10 Teresa? Well, then, you were almost the last --- you 11 were almost last, Barbara. That concludes our --- is 12 there anybody else who didn't sign up either outside 13 or pre-registered? Would you like to say something? 14 MR. BRADY: 15 If you don't mind? 16 CHAIR: 17 Yeah, come on up. 18 OFF RECORD DISCUSSION 19 MR. BRADY: 20 You know what, I'm actually quite loud 21 when I choose to talk like this, because I lectured in 22 classrooms for 11 years. I am Steve Brady, 1614 Lake Road, Trout Run, Pennsylvania, 17771. If you don't 23 24 know the address, that's right at Rose Valley Lake, 25 which is surrounded by four or five, I'm losing count,

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1	natural gas wells. Horizontal rigs, if you will.
2	And I wanted to first off, say thank you
3	for holding these hearings, and secondly, thank you
4	for having regulations that are more stringent than
5	they have been in the past. Let's acknowledged that
6	the regulations you're putting out there are more
7	stringent, including some of the ones people are
8	asking you do I see in here, like let's don't have
9	open storage of water, those sorts of things. So
10	thank you for answering their request before they ask
11	it.
12	But I wanted to share with you all as
13	someone who sees these wells all the time, let me tell
14	you what I'm seeing up there. It's not all bad. It
15	is not Three Mile Island. It is not a person who's
16	doing some secondary work on coal like in West
17	Virginia.
18	I mean I've been watching the respect
19	that they have for the environment up there. I've
20	been watching the way even if they do store the
21	water in open pits, the way they've been putting
22	double and trouble liners inside there. I can see the
23	way they've been handling the water up there, working
24	with the community, not against the community. And so
25	I mean I've seen my share of bad things and I've seen

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1	my share of good things. Twenty (20) years in the Air
2	Force, I've seen both of those things.
3	And so what I'm telling you, if you want
4	to listen to the stories and read The New York Times,
5	you're going to hear the things that sell newspapers.
6	But if you want to know what's actually happening, I
7	would recommend you go and talk to the people, the
8	landowners up there, talk to those that are around
9	there, because we actually care very deeply about what
10	happens to Rose Valley Lake. Rose Valley is a State
[1	Fish and Game Commission property. Or Fish and Boat
12	Commission, whatever the heck it is. It's a state
13	property. It's managed very closely and very
14	carefully.
15	We care deeply about that because in
16	part it brings people to our area. And one of the
17	things we like about it is that it's been shown
18	respect by Anadarko, by Seneca, by EXCO, even Atlas,
19	which if we're going to talk about a driller that may
20	be is running on more of a shoestring, they are
21	demonstrating tremendous respect for the environment
22	around the area.
23	Now they did do a burn-off, but I tell
24	you what, the 24 hours hearing that burn-off and
25	seeing the light in the middle of the night, it was

1 brighter than a full moon. You kind of sit there and 2 go, whoa, this is kind of not cool. Actually it was 3 quite hot. You could feel the heat if you got within 4 5,000 feet of it. But it was 24 hours and then they 5 were done, and then they capped it, they cleaned up 6 everything and it looks really good up there.

7 I do want to say when we talk about what happens when they go into townships is that corporate 8 9 --- corporations are going in, it's what corporations They went into Gamble Township and my 10 do. 11 father-in-law's a township supervisor. He'll tell you that they've improved the roads, they've improved the 12 13 other infrastructure. They're putting pipelines in that can be used for other things later. They're 14 rolling money back in because there is money coming 15 The 16 from the state, because they are being taxed. impact funds are rolling back into the townships for 17 18 the townships to improve and for the county to improve what's going on with the county and the township. 19 So it's not all bad. It's not all fear. 20

I do appreciate the empirical data that gets put forward by the people, the engineers that know the engineering data. I believe that the state actually has good engineering data to use when they build the regulations. I could talk to empirical because I can.

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84 I have the skill sets. But I just wanted to share my 1 experiences. And I guess this actually is empirical 2 3 too. This is my empirical, anecdotal evidence of what we're experiencing up there. So thank you. 4 5 CHAIR: Thank you. Is there anyone else in the 6 7 audience who would like an opportunity to make 8 comment? Ma'am? MS. MANN: 9 Hi, I'm Robin Mann from Rosemont, 10 11 Pennsylvania, Delaware County. OFF RECORD DISCUSSION 12 13 MS. MANN: Robin Mann, 266 Beechwood Drive in 14 Rosemont, Pennsylvania, Delaware County. Thank you 15 for the opportunity to comment. I missed the hearing 16 closer to home, so I was able to attend this one. 17 Thank you also for some of the improvements that have 18 19 been proposed that will at least provide a great deal more protection than we currently have. 20 That said, I am concerned that I think 21 some basic principles are not being fully applied that 22 really should be in this instance. First of all, 23 taking the necessary protections to safeguard the 24 public and safeguard the environment. DEP needs to be 25

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1	careful not to be splitting the difference between
2	what oil and gas industries would like to see and what
3	advocates for public health and the environment are
4	saying. Really the whole measure should be what is
5	going to protect the environment and the public.
6	Secondly, we need to learn from the
7	past. So Pennsylvania has a very sad and serious
8	legacy with pollution from extraction of coal and oil
9	and gas in the past. So we know enough to be
10	particularly cautious about where we go from here.
11	Those principles in mind, I would
12	recommend the following. If pit liners have been
13	known to leak in the past, and they have, then don't
14	play any more Russian Roulette with Pennsylvania's
15	groundwater. DEP should prohibit any fracking waste,
16	open frack pits and impoundments.
17	Secondly, disposal of waste liquids and
18	solids. Drill cuttings contain hazardous, sometimes
19	radioactive substances that shouldn't be landified or
20	buried. Secondly, onsite burial of waste pits should
21	be prohibited. Third, the spreading of brine from all
22	wells for deicing, dust suppression, et cetera, not
23	just the brine from shale gas wells, should be
24	prohibited.
25	Next, the orphaned wells are a serious

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1	and widespread problem in Pennsylvania. People have
2	spoken about that this evening. It is good that DEP
3	is calling for those to be identified, but that is not
4	sufficient. What needs to happen is before any
5	construction occurs onsite, those wells need to be
6	identified and avoided. That's the whole point, is
7	avoiding the potential for accidents and intersection
8	between new drilling and old.
9	And finally, the restoration and
10	replacement of contaminated water supplies to Safe
11	Drinking Water Act standards. If the pre-drilling
2	quality of the water exceeds Safe Drinking Water Act
.3	standards, then the restoration should to be that
4	higher quality, because anything less than that is
15	really it amounts to nothing more than theft.
6	Thank you very much.
7	CHAIR:
8	Thank you. Anyone else in the audience?
9	Sir?
20	MR. MARK:
21	My name is Michael Mark. I live at 1207
22	Galway Court in Hummelstown, Pennsylvania. I just
23	want to mention three points that have come up here.
24	One is that the relatively low price of natural gas
5	and how it's helping people, that's true for right

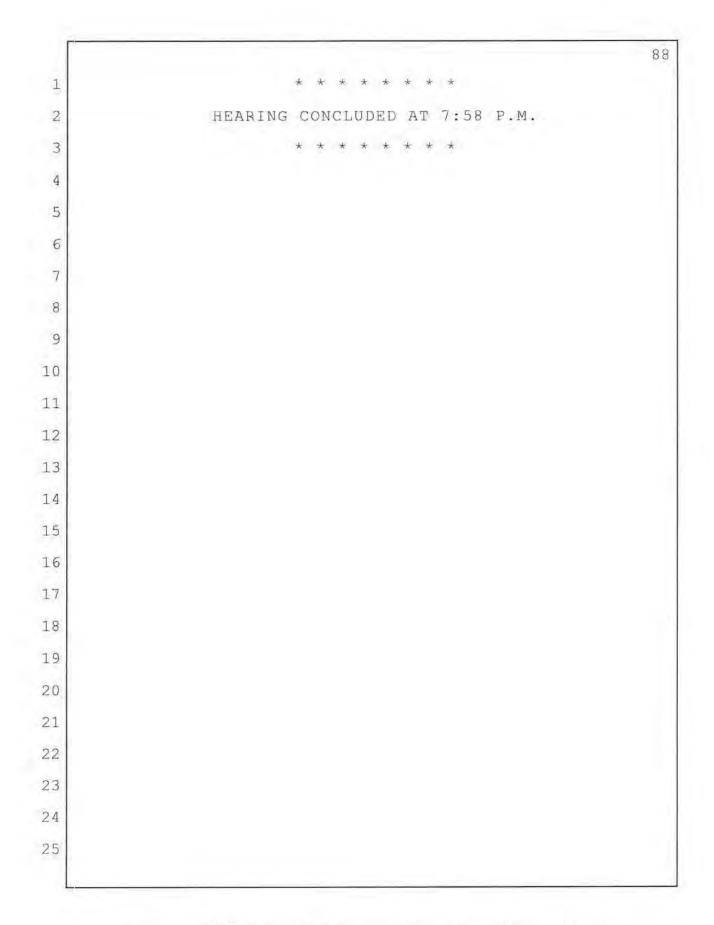
now, but when the facilities that are exporting 1 2 liquefied natural gas is depleted, a lot of the gas in 3 Pennsylvania is going to be going out to foreign countries where it gets three or four times the price, 4 5 and our price will go up also.

6 People talk about jobs, a lot of people 7 work in the energy industry. If we were more heavily 8 invested in alternative energy --- there is many 9 studies that show that that actually produces more 10 jobs. The other things that we haven't talked about 11 at all --- we've very importantly talked about 12 protecting our water and our air and our land right 13 now, right here. But we need to talk about the 14 future. Carbon-based fuels are, you know, a time 15 bomb. We need to be looking at some alternatives. 16 Thank you very much. 17

CHAIR:

18 Is there anyone else in the audience who 19 would like the opportunity to speak this evening? 20 Going once, going twice, three times. We're done. However, the last three speakers, if you 21 22 could just see Jessica at the end just to make sure 23 that we have your contact information correctly. Thank you. And we are adjourning at --- my watch says 24 25 7:58.

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CERTIFICATE I hereby certify that the foregoing proceedings, hearing held before Chair Witmer was reported by me on 1/16/2014 and that I Tyler S. Rhoads read this transcript and that I attest that this transcript is a true and accurate record of the proceeding. Jugler D. Moon