BEFORE THE

DELAWARE RIVER BASIN COMMISSION

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IN RE: NATURAL GAS HEARING

SESSION I

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BEFORE: CAROL R. COLLIER, Executive Director,

Hearing Officer

William J. Muszynski, Member

HEARING: Thursday, February 24, 2011

1:30 p.m.

LOCATION: Patriots Theater at the War Memorial

1 Memorial Drive

Trenton, NJ 08625

Reporter: Nicole Montagano

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1 | WITNESSES: John Harmon, Marjorie Lofland, Madeline
  Rawley, Carol Gay, Jeff Zimmerman, Maya Van Rossum,
  Jeff Tittel, Tracy Carluccio, Jim Walsh, Mav Moorhead,
  Kate Millsaps, Joe Levine, Allan Nowicki, Marian
  Schweighofer, Sylvia Kingston, James Kilgore, Carol
  Woodmansee, James Seif, Betty Ann Sutliff, Cynthia
  Wildermuth, Debbie Yanacek, Walter Yanacek, Gunther K.
  Unflat, Ned Lang, John Woodmansee, Robert E. Bell, Sue
  Mickley, Sandra Davis, Jerry Dowd, Elizabeth Tatham,
10 Denise Millon, Aaron Bertholf, Buck Moorhead, Margaret
  Unflat, Robert J. Putnam, Harold Wood, Bob Ward, Elias
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12 Varga, John Moon, Frank Osterman, Jan London, John
  Veil, Arthur Kifers, Andrew McGrath, Owen Crowley,
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  Alice Joyce, Tim Graham, David Braun, Ling Tsou,
   George David Ebenberg, Angela Monci Fox, Paul
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  Silberman, Charles Olson, Shannon Ayala, Tim Devaney,
  Sandra Folzer, Cliff Westfall, Teresa Stimpfel, Deb
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  | Marci Bloom, Alex Allen, Iwatika Kulschyczi, Stefani
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  Leona Fluck, Ethelyn Honig, Leathea Vanador, Jenny
  Axelrod, Amanda Martinez, David Lam, Amy Hansen,
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  Thomas N. Church, Sheila Gallagher, Wendy Byrne, Bill
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PROCEEDINGS

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HEARING OFFICER:

Please take your seats. I'd like to call 4 this hearing to order. I'd like to start this 5 proceeding with the pledge of allegiance, if you can all stand.

PLEDGE OF ALLEGIANCE RECITED

HEARING OFFICER:

10 Good afternoon and welcome. I'm Carol Collier, executive director of the Delaware River 11 12 Basin Commission, and will function as the Hearing Officer for today's public hearings. Thank you for 13 taking the time out of your busy schedules to 14 participate in the hearings. 15

BRIEF INTERRUPTION 16

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HEARING OFFICER:

18 We have a policy, people who are taking numbers to testify, but we probably won't get through 20 all the numbers.

21 BRIEF INTERRUPTION

HEARING OFFICER:

I hope that is the last of that that we 24 have because we really are here to hear your concerns 25 through your testimony and what the court reporter

1 will be getting into the record so that we can respond Time is short, and we all want to hear from 2 you. This is the fifth of six hearing sessions conducted this week in three locations. On Tuesday we held two sessions at Honesdale, Pennsylvania, and one at Liberty, New York. All sessions will collectively 6 7 allow for hopefully a total of 18 hours of oral testimony.

Before launching into a specific 9 10 procedure to conduct this meeting, I would like to take a moment to express my gratitude to a member of 11 12 the staff here at the War Memorial and the State of New Jersey for the use of this facility. I'd also 13 14 like to introduce two people from the Commissioners. Eric Rope is here from the Corps of Engineers, 15 Philadelphia District. Corps of Engineers is our 16 17 federal Commissioner and represents the president and all federal agencies. And John Buster is here from 18 the State of --- excuse me, the Commonwealth of 19 20 Pennsylvania.

As you know --- there was a press release and public notice on December 9th, announcement available, the draft behind the gas development regulations on the Bureau's website. Notice initiated 25 a 97-day comment period, provided for public hearings

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1 to accept oral testimony, and establish formal proceedings for filing written comments to be accepted through March 16. We are using the National Park Service's electronic comment system called PEPC for Planning Environmental and Comment Systems.

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6 Comments are directly received and will 7 be reviewed by agency staff of Commissioners to develop responses, including changes, rules ---8 changes to the rules as appropriate. Less there be any confusion on this point, I want to emphasize that 10 the DRBC, not the National Park Service, is conducting 11 this rule-making, including the review of the oral and 12 written comments. The PEPC site's a valuable tool 13 that will help us report and sort out all the written 14 comments efficiently, but it's DRBC who is conducting 15 the process. We thank the National Park Service 16 17 heartily for making PEPC available to us. To date we have received over 1,200 comments electronically and 18 over 400 copies --- hard-copy comments. 19

Today's hearing includes two sessions. The first one's from 1:30 to 5:00 p.m. The second is 6:00 to 9:30 p.m. Each will begin with a very short presentation to provide a high-level overview of the 24 proposed rule. We also have provided at the 25 registration table a two-page, at-a-glance, fact

sheet. Both sources of information are intended to establish a common frame of reference for your comments today. The doors open at 5:00 p.m. for the 6:00 p.m. session. And any of you diehards that want to stay on for that are welcome to stay.

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I also want to acknowledge that the Commission has received numerous requests, no doubt we'll get more requests today, for extension of the comment period and holding of more public hearings. 10 Please be aware that the Commissioners are considering these requests and will announce their response at our regularly scheduled DRBC meeting next Wednesday, March 2nd.

Let me just go through a few of the logistics. A second document distributed at the registration table focuses on rules and guidelines for conduct. These rules are intended to help sustain the 18 flow of the hearing, to allow as many people as possible to be heard, and to ensure that an accurate record of all comments is obtained. We hope to hear from 150 people during the six hours of testimony, and 22 hopefully possibly more.

I'd like to reiterate just a few of the 24 rules to make sure we have a civil and orderly proceeding. One, commenter may speak once during a

1 hearing session. Comments will be recorded by a court 2 reporter. Please begin by stating your name, your place of residence, and if you wish, your affiliation. Speak clearly so that we can ensure we come away with an accurate record. Commenters will have two minutes 5 each, and time will be strictly observed. commenter's time is ended, the commenter must stop speaking and leave the microphone area. Lastly, I implore you to please remain quiet during the testimony so that the court reporter can produce an 10 accurate record. We've handed out 100 numbers this 11 We expect to get through 75 speakers, but 12 afternoon. we gave out extra numbers with the hope of fitting in 13 as many as possible. I will call ten numbers at a 14 When called, please step forward and sit in the 15 front row, and Rich Moore will assist you. 16 17 officials who have pre-registered will speak first. We appreciate everyone's cooperation and 18 thank you for your participation in the rule-making 19 20 process. So let's get started. May I have speakers one through ten please come forward and sit up front? 21

And at the same time, I'd like to turn over the

presentation portion of this proceeding to Bill

Muszynski, who is manager of the water resource

25 management branch, and will give a short summary of

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the regulations. Thank you.

MR. MUSZYNSKI:

Good afternoon, everyone. This is just a pictorial view of the basin stretching from the ocean all the way up to the headwaters, the reservoir systems, and the river plan. The Commission, for those of you who are not familiar with it, was founded in 1961. There are five signatory members to that Commission, four states, and the federal government, and the federal government is represented by the general and local division, U.S. Army Corps of Engineers.

The Marcellus Shale as you --- the shale itself is about 34 percent of the Delaware Basin, and it just happens to coincide ---. I know it's difficult to see probably way in the back. The dash line is the shale formation, and the darker area is what would be designated as our special protected water areas. And they tend to overlap in the Pennsylvania and New York areas.

The Commission has estimated that about 15,000 to 18,000 horizontal wells would be developed or are proposed to be developed. These do not include vertical wells, but these are the horizontal wells. They cover about 2,000 to 2,200 well pads depending on

1 how many actual wells are put on a pad, and we're 2 estimating somewhere between six to eight, possibly potentially even ten. These well pads are about five acres each and they would cover anywhere between 10,000 and 12,000 acres. And there would be additional acreage that would be required for supporting infrastructure, pipeline, connected 7 pipelines, and roads.

The expected ordinance for this type of 9 10 development for the fraction, hydraulic fracking process of the shale formation per well would be about 11 12 five million gallons per horizontal well constructed. And if you translate that to the number of wells that 13 we've estimated, that would come out to about 90 14 billion gallons, assuming there is no reuse of the 15 fluids that actually flow back after the fracturing 16 17 process has been --- is taking place.

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With reuse, between 90 and up to 100 percent of that, you would still need about 72 billion gallons of water. This development is expected to take place over a 20, 10 to 25, 30-year period, and it would follow a bell-shaped curve if it follows practices that it has in other state developments with a certain number of them being constructed at the top 25 of that bell.

The flow-back water that I mentioned, 1 that's the water that comes back after the initial 2 hydraulic fracking --- the formation takes place, we 3 estimate to be in the 10 to 20-percent range. first started in this process, that estimate was higher, but looking at the experiences that are 6 occurring in Pennsylvania, particularly in the 7 Susquehanna River Basin, the flow-back estimates are --- have come down a bit. That remains about a 10 million gallons back per well, and that would equate to 18 billion gallons over that 10 to 20-year period. 11 12 If it's reused, then it doesn't need to be treated as a wastewater treatment disposal facility. However, if 13 it's not --- 18 billion gallons of wastewater. The 14 issue is, of course, the --- capability in the basin 15 as well as at capacity rather and then capability of 16 17 those treatment plants to actually treat these wastewaters. 18

The regulatory strategy that the Commission graded the regulations around are, number one, the water withdrawal. Clearly we are concerned about protecting surface and groundwater sources, preserving ecological flows. And water is also used for the purposes --- for disjoined purposes, existing plants that are out there and in a similar capacity

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issue that needs to be protected, as well. The well 1 pad and the infrastructures themselves, the regulations would provide for --- provide currently for a --- development plan, and they also look to manage and track the use of water and any wastewaters that need to be disposed from where they originate 6 7 from to where they eventually would be disposed of and discharged.

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There are proposals in the regulations to also monitor and protect the surface water and groundwater sources, and I'll go into that in a bit. The wastewater disposal side, the Commission sees the need to ensure the receiving water bodies of these facilities are protected and also to make sure that the wastewaters, if they are going to be disposed of as opposed to reused, that they get to where they're supposed to be going, and that those facilities are approved for that purpose.

The purpose, and again, I'm not sure I have to tell this to a lot of people that are out This is a basin that provides water to over 15 there. million people. It's an incredible natural resource in the Mid-Atlantic, metropolitan area. quarters of the basin is --- three-quarters of the 25 non-title river is designated as a National Wild and

1 | Scenic River System. And there's exceptional water quality in the one portion of the river that we have designated as special protection water.

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The regulations also are complying with some of the existing regulatory requirements that the Commission has, both in the contact that was provided by the signatory parties. It supplements our comprehensive planning. And so the regulations that we have on the books for many years that are addressed in these regulations are the groundwater --- or groundwater Section 340 regulations, that are protecting groundwater sources, our floodplains, which have been around for many years. And our special protection waters, which I mentioned, and, of course, water, wastewater, water and water quality regulations which are on the books already.

The proposed regulations do --- first of all, consolidate. I mentioned that strategy of water, well pads and wastewater treatment, these regulations consolidate many of the existing regulations into one place, as well as to create regulations around the well pads themselves. They provide both certainty and clarity, we hope, to both the industry and to the They conclude a new process called the 24 public. approval by rule process for water sources and

wastewater. We have five Commission meetings a year.

All of the approvals are basically given at one of
those five Commission approvals, and looking at, for
instance, the Susquehanna, the approval by rule
process for water, we adapted some of what they do and
put a proposal for that in those regulations.

These regulations also rely on New York and Pennsylvania programs and expertise to regulate well construction and operations, so you will not be seeing case requirements, cementing requirements as part of these regulations because we are relying on both of those states. And these regulations do not just apply singularly to the Marcellus Shale formation, but they apply for all natural gas targeted formations.

The regulations are set up in sections, and types of approval that are provided for under these regulations and the water release and withdrawal area is public, and also the well pad, well pad public notice and procedures. If you meet certain conditions, if you're an existing water body --- water referral and meet certain conditions, you can get this approval by rule. It's either by the executive director ---. If you are not, then those --- you can apply and you can say for a docket approval which

1 would be done by the Commissioners or considered by the Commissioners at a public hearing. And the same is true for the well pads.

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For the natural gas development plan and any wastewater discharges that are applying to --treatment facilities that are applying to receive approval under this, they must go through the formal Commission process which is done at a public hearing. For water withdrawal, I'm looking at, you can get new sources, those sources that are not being used at present or have had Commission approval. sources would have to go under or go through the docket procedure because they don't have current Commission's approval.

If there are existing approved sources that have some excess capacity in them, withdrawal capacity, and then they can apply to the Commission under this proposed rule before the executive director approval. Reuse and recovery flow-back and production waters would be incorporated into the docket for the well pad and approved by the rules for the well pad or the actual natural gas development plan itself.

Imported water, that's water that is brought into the basin, any water that is brought into 25 the basin must receive Commission approval, and that's 1 done at a Commission meeting so that would be a docket. So that would give you some idea of how that is split up.

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The water referrals --- existing resources, as I mentioned, under certain conditions can get the approval by the water process. There are water tracking and recording requirements. These would make sure that the water is being used for the purpose that the Commission approves of for that purpose, and that it gets to where it's supposed to be going. Our current rules for water withdrawal, especially groundwater withdrawals, for instance, have active testing requirements to make sure that the withdrawal of that water is not in some way making an impact on the groundwaters.

The same thing for the surface water withdrawals. We have passed our requirements that apply to surface waters to make sure that the stream flows are protected for the ecological uses.

For the well pads and the natural gas development plan approvals, there's several things that apply and I'm not going to through them all, but there are a couple of them. They're all siting restrictions and setback requirements. You can get 25 the approval by rule for well pad if you meet certain conditions. There is water and wastewater tracking requirements. Once again, under tracking requirements from the water source, we are now tracking associated with the actual well pads where the water is being used. And if wastewater is taken up, recycled or reused, it's tracking on that. So it's sort of a built-in system.

We're also requiring for the high volume fracturing wells, background groundwater and surface and monitoring sample at the site. That would be done by the companies that are running these sites.

12 BRIEF INTERRUPTION

MR. MUSZYNSKI:

mostly additional planning requirements. And let me just go over that right now. This basically is the spine of the natural gas development plan that requires that at least these area maps be provided to the Commission. It provides for a landscape map which essentially lays out the existing areas that are on there, the existing geology, hydrology, et cetera, soils, mapping, et cetera. I'm not going into them all, but basically gives you the picture of what's on the released areas now.

It also requires well siting. These are

1 some of the well siting setbacks and conditions that 2 we had on there. I emphasize that the siting requirements are not absolute prohibitions. There are deviation, ability to get for them --- but they'd have to be done through the docketing procedure. we put this map together, that makes what we call a circulation map which is really a plan for all of the development of at least these areas within a set period of time that is provided in the approval. intention here is that rather than deal with a single 10 well pad, a single well pad by a single well pad, that 11 12 we would have a comprehensive development plan for Anybody who is going to be putting in more 13 that area. than five well pads in the basin or has more than 14 3,200 acres, at least must do this plan. 15

The wastewater discharge proposal. All treatment facilities that are going to be accepting this type of wastewater, there's a treatability study requirement. This study requirement in particular is designed to make sure that if they're going to accept this waste, that testing is done in advance to make sure that not only it would meet certain criteria for discharge purposes, but also that it would not interfere with the current discharge operations that they have at that facility.

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Each facility will be looked at site specific. Many of the treatment plants that were approached initially do not have site specific discharge requirements for these types of wastewaters, and so each one of them would have to be looked at individually and receive a review to make sure that We also effluent criteria are correct and protected. require analysis for acute and chronic toxicity section, as well as the total dissolved solvent requirements that are currently part of the Commission's requirements.

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As Carol mentioned, there are two public hearings, four sessions held. This is the third public hearing session. The comment period ends on March 16th, 2011. I will re-emphasize again that there are several ways to get your comments into the Commission. One is the electronic submission where you see the PEPC system, which you go through the DRBC website. The other is paper submissions that are mailed to delivered to the Commission's secretary. Submissions that are sent to us by e-mail or sent to the Commissioners are not going to be part of the It's too difficult to control where those record. comments go and whether or not we are going to be able 25 to collect them all. So this system was set up so

1 that we made sure that we get all the comments. Ιn 2 addition, any comments that are provided verbally here as part of the hearing or in writing, if you give them to Rich Moore or several of the EPA people --- excuse me, the DRBC people. So the DRBC people that are here to make sure they get into the record. All of these comments will eventually be put into the PEPC system and considered. And our intention by using this system is that it's a much more transparent system, that everybody will be able to see electronically the 10 types of comments that were received as opposed to 11 12 just a response to this document. And hopefully, respond to your requests that you normally get. And I 13 receive real comments as opposed to your summation of 14 Thank you very much. 15 the comments.

HEARING OFFICER:

If we can have the lights up and we'll call number one.

MR. HARMON:

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Good afternoon. My name is John Harmon.

I'm founder and president, CEO of the African-American

Chamber of Commerce in New Jersey. Our organization

is dedicated to economic empowerment, supporting

sustainable business growth, and ensuring that all New

Jersey communities have the opportunity to prosper.

1 The African-American Chamber of Commerce provides advocacy and support throughout the State of New Jersey's business community and closely affiliated with the National Black Chamber of Commerce which represents 95,000 black business owners.

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I strongly believe that the success of African-American or American businesses inextricably link to the sources success of domestic energy, et cetera. For our economy to grow and be competitive in the global economy we need a steady supply of cheap, reliable energy. I've kept close tabs on expansion of America's natural gas resources in the northeast and the ongoing work of the Delaware River Basin 14 Commission. And the Marcellus region is very lucky to be sitting on top of an abundant source of clean burning natural gas. While my home state of New Jersey is not a national gas producer, the state indirectly benefits from the well sites and investment in neighboring states.

New Jersey is strategically located as a shipping hub to provide materials for building projects and providing transportation services. Reports show that natural gas has supported \$58 24 million in construction industry and \$1.5 billion in 25 the transportation setting. This is in New Jersey

alone.

As a DRBC member, New Jersey's business community must voice its concerns regarding overly stringent regulations that would discourage this type of investment. While there's an important place for DRBC and state regulators, our policy makers must not place rules that will slow the booming natural gas sector. At the end of the day, what we are really talking about is the impact on the regulation of jobs. Thank you for this opportunity to voice our concerns to the public.

MS. LOFLAND:

Marjorie Lofland, Sellersville One, I guess District 145. Thank you for letting us speak.

The tooth that I put under my pillow was still there in the morning and I cried my heart out.

Momma rocked me and assured me that I needed very much to let everybody know so the tooth fairy would hear me. The next morning, mother load. It was really fabulous.

In the fall, a representative from DRBC spoke before the Philadelphia City Council assuring them that the backflow was brine. This means there is water underground. Shale leaks. If you've been anywhere around shale like road cuts, people see in

1 the wintertime the frost, the icicles coming out of the middle of the shale, this is the nature of that type of rock. We've got lots of it in Pennsylvania. Upstate, it's absolutely magnificent with some of the formations that are nearly vertical.

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About 80 percent, this is what the new assessment was of the fracking fluids that are pumped in, stay underground. What you put in there stays. It gets into the water and the water will wicket.

Any kind of an organization that has employees and stockholders needs to show a positive 12 bottom line. Putting no regulations with these people is like putting putty ground full of children out there without control. It doesn't work. The wells are being dug by humans. Humans are not zero defect. Please, take care of our watershed. Thank you.

MS. RAWLEY:

My name is Madeline Rawley. I'm from Bucks County. I'm an elected official in Doylestown Township. I'm actually a committee person, which is the lowest level of elected official in American politics. I like to think that we are closest to the people, and I wanted to speak for the people and their basic need.

> Their most basic need is water. And I

1 ask you please to wait. I have a question. words. What is the rush? The rush is anything other than wanting to help people, then you're wrong. Please wait until more studies come out and we're able to know all of the effects of the water --on the water in the environment in our Delaware River.

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I grew up along the Hudson River and spent many years in towns there. We were no longer able to go into that river after a while because some corporation had dumped chemicals into it. I had a friend who fished in that river. He persisted in 12 fishing in that river. He gave me the fish. I'm happy I didn't eat it. He did, and he died an early death of liver cancer. So these are the reasons why I am so concerned. And I just say to you, please do not rush into this decision. Give us a little more time until we find out more about the effects of this kind of drilling on people, their health, our environment here in and along the Delaware River which I'm so happy to live against and near.

And I ask you, please, another three words I've had said to me since I was young. makes waste. So I'll say to you, please, please wait until you know more before you issue these regulations. Thank you.

MS. GAY:

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2 Good afternoon. I'm Carol Gay. I'm from Brick, New Jersey. And I'm here in opposition to the 3 hydrofracking and drilling of these wells. Hydrofracking is an extremely dangerous process. Ιt is unsafe for animals. It is unsafe for people. Ιt is environmentally risky and will cause groundwater contamination. As dangerous as it is, it is not subject to the Clean Water Act, the Clean Air Act, or the Safe Drinking Water Act. How could something as 10 valuable and essential as our drinking water supply 11 12 system be exempt from these important and life saving acts? 13

This exemption is totally outrageous, and you may be thinking that it's not within your power to change this exemption but it's up to Congress to do that. Well, you certainly can use the power and influence of this Commission to make sure that Congress does add this dangerous process to the Clean Air Act, the Clean Water Act, and the Safe Drinking 21 Water Act.

But more importantly, you can use the power of this Commission to ensure that no fracking takes place in New York, New Jersey, or Pennsylvania. 25 You can use your power to protect our drinking water

1 system, and you have a responsibility to the 15.6 2 million people in Pennsylvania, New York, and New Jersey who live in the Delaware River Basin and you can prevent this drilling. You can prevent this in the Marcellus Shale.

The fluid that is used in the hydraulic fracking process contains 596 chemicals and uses 1.6 million gallons of water each time the fracking takes place. So we're talking about all these toxic chemicals being pumped into Mother Earth and contaminating our water supply. Water is sacred. 12 Water is necessary for life. No corporation should have the right to destroy our drinking water.

HEARING OFFICER:

Thank you.

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MR. ZIMMERMAN:

Good afternoon. I'm Jeff Zimmerman. I'm Counsel for Damascus Citizens for Sustainability, Friend of the Upper Delaware River, and NYH2O. to start with a little history lesson.

During the 1970s, almost every single one of the major environmental laws in this country were passed by Congress and signed by the president. Clean Air Act in 1970, the Clean Water Act in 1972, 25 the Toxic Substance Control Act of 1976, the Safe

Drinking Water Act of 1974, the Direct Resource

Conservation Recovery Act of 1976, and the

Comprehensive Environmental Liability Compensation and
Liability Act, Superfund, we all know it as.

But before all of those, the cornerstone 5 of our environmental regulations in this country was set by the National Environmental Policy Act of 1969. What NEPA required is the internalization of environmental considerations and the decision making of every agency subject to the Act. The cornerstone 10 of NEPA is the environmental impact statement 11 requirement on all proposals for legislation of a 12 major federal action significantly affecting the 13 quality of the human environment. Those proposals 14 must be accompanied by an environmental impact 15 statement. It is fundamental to me that the statement 16 17 be available to the public for use in formulating its 18 comments on the proposal for action.

DRBC is a federal interstate agency and therefore subject to NEPA. During the 1970s, DRBC had extensive NEPA regulations and did numerous EISs and environmental assessments. But then in the early 1980s it decided it couldn't afford to do them anymore, and so it suspended it. It didn't remove it. It suspended its obligations under NEPA.

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Over a year ago, you commented --- you proposed that DRBC would do a cumulative impact assessment. You should be doing that and have it available for us to comment on during this process. Thank you.

MS. ROSSUM:

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Good afternoon. My name's Maya Van Rossum, and I'm the Delaware Riverkeeper. There are alternative sources of energy that don't require shale drilling or hydrofracking. There is no alternative for water. Gas and profits may be inviting to some, but water is essential to us all.

The amount of fresh water on earth in our region and in our basin is finite. And yet the DRBC is proposing that these regulations to give hundreds of billions of gallons of our fresh water to the drillers, not in the form of a temporary use that will eventually return to our water systems but a permanent taking. Either the drillers are making up to nine million gallons of water per well so toxic we can't 21 use it again, except for more drilling, and we are making it loose in the environment to contaminate other clean water and healthy environments, or they're locking away our river's water underground in that 25 toxic condition so that it can never, ever be

available for human or animal use ever again. Either situation is untenable and unacceptable.

Today, our Delaware River is healthy in its upper reaches, and it's healthy because of the hard work of many people who cared enough to fight for the health and the protection of our Delaware River. But the quality of that water is fragile. And in our lower reaches, we already struggle from pollution, and we already have water battles in our basin. And yet the DRBC dares that the quality and the available quantity of our precious Delaware is for drilling.

DRBC does not have the knowledge needed to craft a set of regulations that would protect our water, our air, our land, and our communities from shale gas drilling. We're talking about toxic pollution, sprawling industrial development and waste, increased flooding, a permanent loss of fresh drinking water. But the DRBC is inexcusably refusing to do the needed scientific work before it pushes out its regulations and opens the door wide for the gas drillers. This can't be.

HEARING OFFICER:

May I call numbers 11 through 20 to come forward, please? Sir, you may proceed.

MR. TITTEL:

Jeff Tittel, director of New Jersey
Sierra Club. I'm here representing our more than
100,000 members that get water out of the Delaware
River. I'm here representing our 1.3 million members
and supporters nationwide. The future of the Delaware
River is at stake, and so is the water supply for 15
million people, 3 million here in New Jersey.

We believe that this hearing is an appropriate place because right outside this door is where the Trenton Waterworks is. And what happens upriver affects all of us. We are concerned that the current rules do not adequately protect this river from its biggest threat, which is fracking fluids. We believe that these rules should be put on hold, that moratoriums should stay in place until the studies from the USGS and EPA are done and we can do a more comprehensive rule that also follows NEPA. We believe that these current rules do not do that.

We are concerned that under the current conditions in the northern part of the basin we'll be turning our faucets into tiki torches and our river into a toxic sump. It has taken 30 years for this river to come back. I live in Lambertville along the river. It took 20 years or more before the shad started coming back. The river has gotten cleaner.

1 Now we're going to reverse it.

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2 Back in the '70s, we stopped Tox Island. Now we're going to turn it into a toxic river. 3 that is the concern that we have. Besides that, the destruction of hundreds of thousands of acres of 6 forest for drilling pads, supporting pads, roads, assembly places, and so on and so forth, we also have serious concerns in New Jersey because that gas coming out of Pennsylvania, they want to cut slats through the highlands and through the critical water supply 10 watersheds in northern New Jersey to take that gas to 11 12 New York City and actually drill through our reservoirs. 13

We believe that what we see with these rules is a depth, like 10,000 spills. And that is a concern that we have for the water supply and for the watershed for the people of New Jersey and this region. All we want to say at the end is just basically it's our water. It's our river. Frack, no.

MS. CARLUCCIO:

Tracy Carluccio, Delaware Riverkeeper Network. I expect we're going to hear a lot of myths today about the economic benefits of gas development. Dr. Janet Barrs, an economist, has examined the 25 economic data and points out that property values

1 decline, drinking water contamination increased, infrastructure costs and stream, land, and air contamination has led to unexpected expense for communities where drilling is occurring.

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2,486 gas well violations in Pennsylvania in 2010 alone. She also points out that with gas drilling, other industries decline such as sustainable industries such as agriculture, sport hunting and fishing, tourism, and organic farming. These costs 10 must be factored in in order to get a realistic economic picture of a short-term boom that an infusion 12 of cash to a limited number of landowners who lease out mineral rights. This does not translate into a public economic recovery. Let's get real. They don't even tax gas in Pennsylvania or New York. The public will be left with a bill for cleaning up the mess, especially since the gas industry's exempt from the Superfund law.

Cleaning up pollution once it occurs is actually not really possible. Groundwater that is 21 ruined is virtually forever polluted. This is especially true when you're dealing with a radio 23 nuclei with a half-life of 1,600 years, and radon, a 24 half-life of 4.5 billion years, both of which are 25 produced by shale gas drilling in Pennsylvania.

What it comes down to is not just who makes a fast buck but who pays the ultimate cost of the activity, and how much will it cost. And what about our obligation to promote the general welfare like our Constitution says? Or is it okay to spray carcinogens in the air from your backyard or poison downstream waters like ours because you're making money? Is it all justifiable to put in a toxic waste dump for a lucrative lease? Sadly, these things may actually come to pass with gas development now or in the future. How will future generations judge us for this boom? Only the DRBC knows for sure because the Bureau regulations that would define it.

MR. WALSH:

Hi. My name's Jim Walsh. I'm speaking on behalf of Food and Water Watch, a national non-profit organization that advocates for common sense policies for safe water and safe food.

We support a ban on hydraulic fracking in the Delaware River Basin because we have seen extensive research documenting potential dangers these processes pose on water. We are talking about our drinking water here. Something that people need to live. Make sure you don't forget that.

There are more than 1,000 documented

cases of water contamination near drilling sites 1 around the country. Fracking chemicals are toxic and 2 can leak into drinking water when injected or 3 contaminated water from spills and accidents can pose serious problems for drinking water, as well. concerned that the Delaware River Basin Commission is 6 7 moving forward with regulations rather than prohibiting drilling in these areas. These proposed regulations are not strong enough to protect the public health or the impacts of the environment of gas 10 11 drilling.

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Among other issues, they do not specify space requirements between wells, which could allow many wells to be drilled close together creating industrial landscape upstream, mind you. These do not address the possible harm from cumulative water withdrawals. They do not specify wastewater standards for chemicals specific to hydraulic fracturing fluids and radioactive elements that may be present in the produced water that comes from gas drilling. 21 rely on inadequate state regulations in many regards, including stormwater management, well construction, and wastewater storage facilities, and they do not consider the impacts that air pollution can have on water quality. Thank you for your consideration of

this matter. We'll provide further details in written comments. We provided copies of our report, Not so Fast, Natural Gas to members of the Commission. I urge you to read this. It's a lot of important information in there about the impacts fracking can have on our drinking water. Thank you very much for your time.

MS. MOORHEAD:

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Thank you for allowing me to speak. 9 10 May Moorhead with NYH20. Wastewater storage facilities are wholly inadequate impoundments in their 11 12 placement in ability to lease and evaporate, contaminate the air and groundwater, suffer toxic 13 infringements and limited --- unlimited use to come, 14 has loophole after loophole to allow us to suffer ill 15 effects that migrate to indeterminate distances and 16 17 degrees. All that exacerbated by the threat of 18 flooding and erosion has all been ignored.

Since the industry is leaving 85 percent of the chemical-produced wastewater in the frac wells, these wells should be classified as injection wells under the secret rules, and each well therefore requires an indicated EIS study. It is therefore incumbent that the setback rules should be deemed the distance not only from the well but from the entire

length of the distance of the horizontally shattered shale, the fracking process, where the possibility of underground migration is likely.

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The most basic tenant specific ingredient to hazardous toxic chemical compounds and the 5 resultant mix combinations are not known in detail. 7 Withholding this critical information by the industry is reason enough to wait before action to further this development process is permitted. Allowing the process without full disclosure of the chemicals is as 10 tantamount negligence of the highest order. 11 knowledge --- even no carcinogenic chemicals are 12 allowed to be used by the industry and are not --- and 13 are not prohibited by the DRBC. Diesel, which is 14 prohibited by the EPA, is not even excluded by the 15 DRBC. 16

Radiation and the produced toxic water with no acceptable means of disposal has no foreseeable answer. Injection wells and landfills do not offer any rational means of disposal for radiation The lack of safety standards in regard to whatsoever. drilling, cementing, casing construction is ignored by the DRBC, causes pollution, blowouts, gas migration. Once full disclosure of this hazardous waste is 25 achieved, you will see decline in the current industry practices and consequently the toxic process of hydraulic fracturing horizontal drilling.

HEARING OFFICER:

Thank you.

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MS. MILLSAPS:

6 Kate Millsaps with New Jersey Sierra 7 New Jersey's legislators are joining New Jersey Congressman Rush Holt, New York Congressman Hinchey, Mayor Bloomburg, and the New York City Council, and 10 Philadelphia Council in urging this Commission to delay the implementation of natural gas development 11 rules. The legislators urge you, the DRBC, to delay 12 the adoption of regulations on natural gas development 13 until the science of the studies being compiled by the 14 U.S. EPA and the DRBC are completed. 15

Thirty-five (35) legislators have signed on so far, and they are concerned that the drinking water for approximately three million New Jersey residents and our key economic industries will be jeopardized by the premature adoption of these rules. Their biggest concern, that hydraulic fracturing has been found to use a variety of contaminating chemicals and materials that can suddenly and in an uncontrolled manner be introduced into the surface waters and groundwater of New Jersey.

The legislators urge the DRBC to delay 1 2 the adoption of these rules stating, quote, our representatives on the DRBC need to protect New 3 Jersey's interests and ensure that the state's drinking water and its economy are not placed at risk by adopting natural gas rules without science --sound science. Who are these 35 legislators? President, Stephen Sweeney; Senate Majority Leader, Barbara Buono; Senate Deputy Minority Leader, Diane B. 10 Allen; Deputy Majority Leader, Senator Paul Sarlo; Senator Sandra B. Cunningham, the Majority Whip; 11 Assemblyman John Burzichelli, the Deputy Speaker; 12 Assemblyman Peter J. Barnes, Majority Whip; along with 13 14 the Chairman of both the Assembly and the Senate Environment Committee, and five Assembly Deputy 15 16 Speakers. The adoptions of these rules are 17 premature and place our drinking water at risk. 18 HEARING OFFICER: 19 20 Thank you. 21 MR. LEVINE: 22 Joe Levine, Damascus Citizens and NYH2O. 23 Regulations for shale gas fracking must be based upon a cumulative impact study. These regulations, the 24 25 best made regulations, cannot make drilling safe.

This is proven by what is happening where drilling is presently taking place. Just look at Pennsylvania.

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Fracking is intrinsically contaminating. It is not a decades-old, proven technology. just a few years old and is allowed only because it is 6 exempt from relevant regulations. There are no reports that can conclude this is safe because it's not possible to come to that conclusion.

These regulations should start by 9 rescinding the exemptions if they are intended to 10 protect our water. The dominant elements of the 11 12 hearing record are the Hazelman-Sawyer report and the New York State Watershed Inspector General report, and 13 the no less than eight reports submitted to the DRBC. 14 All of these reports say that this technology is not 15 safe, the risks are too great, and therefore you 16 17 cannot allow it, and it must be banned until it is proven to be safe. Even the industry's own Society of 18 Petroleum Engineers says there is substantial risk and 19 20 failures and accidents in all aspects of the drilling process. 21

The rate of accidents or failures exceeds one percent by all reports, sometimes five times that That means if there are 20,000 wells, there high. will be 200-plus accidents and failures. What will we do when our aquifers are contaminated by endemic

(phonetic)? One accident like the one in Clearville,

PA will spew millions of gallons of toxic poison that

does not degrade into our rivers. And nothing was

done wrong in those incidences. It's just the nature

of the operation.

In fact, Slummers (phonetic) Aid just put out a memo yesterday that they won't get away with this technology in Europe. It's too brute. If you examine the record of shale gas fracking, it poses too many risks to the basin resources. There should be no ---.

HEARING OFFICER:

Thank you.

MR. LEVINE:

16 Thank you.

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MR. NOWICKI:

Good afternoon. My name is Allan 18 Nowicki. I'm a lifelong resident and landowner from 19 20 the Commonwealth of Pennsylvania, as well as a 21 landowner in the State of New York. I'm a husband, 22 father, grandfather, farmer, businessman, and hold a Bachelor of Science degree in civil engineering. 23 been a lifelong hunter, fly fisherman, and 24 25 conservationist, and I've always been concerned about wildlife and water quality.

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In December 2007, I formed a company 2 known as Pennswood Oil and Gas, LLC, of which I am the 3 president, CEO, and owner. I went through the necessary background checks, letters of credit, and bonding that are necessary to become a licensed well driller under the regulations of the Pennsylvania DEP. I applied for and was granted and currently hold two natural gas drilling permits from the Commonwealth of Pennsylvania located in Wayne County. 10

On June 23rd, 2009, I met with the staff of the DRBC in attendance of the required pre-drilling conference. My surveyor, engineer, and hydrologist also joined me at this meeting. I was assured that the regulations were shortly forthcoming from the DRBC that would allow for the production of natural gas as well as the protection of the water within the basin.

Here we are 20 months later, and the regulations that have been proposed by the DRBC are unacceptable, unworkable, over reaching, and unconscionable. Under these proposed regulations, the oil and gas industry cannot access capital markets, create jobs, spur economic activity, or explore and develop natural gas. The production of natural gas in 25 the Delaware River Basin, while it's in the national

1 security of our United States of America, and lessens our dependence on expensive foreign oil. I implore you to reconsider your proposed regulations. you.

MS. SCHWEIGHOFER:

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I'm Marian Schweighofer. executive director for the Northern Wayne Property Owners Alliance. I'd like to thank you for the draft that you've put out. I'd also like to request that you not extend the comment period. A three-year wait is more than sufficient. This hall is not even full of speakers, so there's time adequate.

Our main priority is that we keep the power home in our state where we as landowners vote and pay taxes. We're in favor of common sense regulations that will protect the environment and allow for prudent exploration and production for all of the residents in Pennsylvania. These goals are not mutually exclusive. DRBC should be playing an important role.

How do we oppose vast and potentially all encompassing authority that this draft places in the 23 hands of DRBC and even in the executive director's hands of DRBC? DRBC offers no reason for intruding on 25 what historically has been the state's domain. On

page seven, the draft regs say that DRBC will defer to the states, but it's an Indian giver because in Section 7.5, there's a mile-wide exception that reads that --- rejects all possible approval by rules and it opens the door to allow the DRBC to control over our land use matters. With the Section 7.5 standards and the 500-foot setbacks and other setbacks, we end up with zero deferrals to the respective states, zero approvals by rules, and zero drilling possibility.

These regs show that the DRBC is either disingenuous or incompetent. United States is not interested in a dictatorship and neither are we as Pennsylvanians. The arbitrary power in the hands of the DRBC, which is a bureaucratic agency, we would rewrite the Section 7.5 leaving that the states should maintain their sovereign rights and control over gas permitting and enforcement with the DRBC serving as an interested party through legal memorandums of understanding and legal binding agreements. Thank you.

HEARING OFFICER:

Excuse me. We're going through the numbers. Yes, ma'am.

MS. KINGSTON:

Hi. I'm Sylvia Kingston, resident and

landowner in Damascus Township, Wayne County. And I'm 1 here because it's unconscionable that DRBC has taken 2 three years and come up with very flawed draft 3 The biggest problems are that the regulations. proposed process is backwards. The regulations 6 superimpose standards on the states to be enforced by the DRBC staff that is inexperienced in regulating oil The states should control with the DRBC and gas. authorized to make suggestions prior to state permitting of wells. 10

In addition, the excessive setbacks of 11 500 feet and all inclusive definition of what 12 constitutes a water body will prevent drilling on 13 virtually all land in the Upper Delaware River Basin. 14 States' rights, as well as property owners' rights are 15 The DRBC cannot be allowed to 16 not being protected. 17 develop into an unaccountable super agency that renders states useless. Tremendous discretionary 18 powers given to DRBC executive director and staff, and 19 20 there is enormous potential for abuse of discretion, 21 and this lack of certainty will eliminate long-term 22 investment in our region.

DRBC is overstepping the limitations of the compact by getting involved in land use issues and it's completely ignoring its responsibility for 25

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1 economic development of the basin which goes 2 unmentioned in these regulations. There's no time limits on the DRBC to enact --- to act ensuring death 3 by delay for all significant projects. It appears the regulations have been created with the express purpose of banning all drilling in the region. Please amend 7 the regulations to be meaningful, and no more delays. Three years is enough.

MR. KILGORE:

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Good afternoon, Ms. Collier. Appreciate My name is James Kilgore. My wife and I the time. own more than 1,700 acres, mostly contiguous within the Delaware River Basin in Scott and Buckingham Townships in northern Wayne County, Pennsylvania. lands are enrolled in American Tree Farm System and Forest Stewardship Program. We have participated in a number of federal and state programs to enhance forests and wildlife habitat on our lands. committed to caring for our lands and promoting good stewardship practices to protect the environment, water supply, and wildlife. Our lands are enrolled in 21 the Pennsylvania Clean and Green Program and remain committed to keeping our lands an open space with good farming practices.

In keeping with our belief that good

stewardship can go hand in hand with reasonable 1 economic development, my wife Denise and I support 2 development of the natural gas resources within the 3 Delaware River Basin. That said, the proposed draft Delaware River Basin Commission's drilling regulations are so onerous that they have slammed and locked the 6 door on gas exploration or production within the These proposed regulations must be streamlined basin. and redrafted to comply with the realities of natural gas exploration with the appropriate environmental 10 oversight spearheaded by state agencies that are 11 currently tasked to oversee natural gas exploration 12 and production within the basin. 13

Please go back to the drawing board and make the common sense changes provided in these hearings and in written testimony, and redraft the proposed drilling regulations so they will encourage quality companies with solid reputations to develop the resource. You have the key. Please unlock the door. Thank you for your time.

MS. WOODMANSEE:

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Carol Woodmansee, landowner. DRBC does not represent the citizens in Wayne County. We did not elect you, so why am I here pleading with you to 25 allow me to keep the rights to our land that we've

1 enjoyed for over 200 years? It is unconstitutional 2 for a government entity to confiscate the people's land without remuneration. So if you want to over 3 regulate us out of gas or out of bringing our gas to market, why aren't you paying us the fair market value of our gas?

New York City, New Jersey, and Delaware have polluted their water sources. There is technology to make these water sources palatable. So why aren't the citizens of these states asking their representatives to raise their taxes to pay for the cleanup of these rivers? Why is all the financial burden to supply clean water put on our citizens in | Wayne County? Pennsylvania has paid their monetary dues to DRBC on time every year. So why is it New York City is behind in their fees to support the DRBC? Pennsylvania owns 51 percent of the land in the DRB, so why does it only have a 20-percent say in the decisions that the DRBC makes?

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You raise concerns that gas drilling will use too much water from the Delaware watershed. The aqueduct carrying water to New York City spills 35 million gallons of water every day. It takes only five million gallons to totally frac a well. The DRBC 25 has expanded its authority to rule over our land, so

1 why doesn't it expand its authority to control and 2 repair the aqueducts? Our Pennsylvania Department of 3 Environmental Protection has regulations in place and experience of gas well drilling and fracking for 60 years. Over 300,000 wells have been fracked, and not one well, drinking water supply, has ever been contaminated by fracking fluids. Not one. So why doesn't the DRBC acknowledge their incompetence and relinquish authority to our --- of our Pennsylvania land to our Pennsylvania representatives? 10 Thirty-seven (37) percent of our residents in Wayne 11 County receive government aid while citizens in 12 Bradford County ---. 13

HEARING OFFICER:

Thank you. Before you start, Thank you. I'd like to call numbers 21 through 30 to come forward, please. And number 19. Proceed.

MR. SEIF:

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I'm James Seif, representing the Marcellus Shale Coalition. We are 170 members, several hundred supporting businesses, and hundreds of thousands of employees in many states. We share the 23 DRBC mission of proper planning, conservation, and development of our precious water and mineral 25 resources. We want to help you get the regulatory

process right and, please, in a timely way.

We do have, of course, some significant objections to your current approach. The requirement of a natural gas development plan is unworkable requiring a detailed infrastructure plan years before any development, and we know of few industries that could provide such plans at this stage. The call for streamline Commission review of future development is a supposed benefit of this proposed regulation, but in practical effect will probably require full Commission review and many delays for each well pad. Some of the proposed regulations ranging from unjustifiable restrictive siting standards to excessive bonding requirement, overreach and may reduce natural gas production.

Empowering the executive director to prescribe standards on a case-by-case basis with no opportunity for challenge raises questions about the Commission's capacity. The proposed standards related to siting, design, and operation of well pads are a significant departure from the Commission's role regarding the review of water resource projects, and they invite legal challenge for you going beyond the scope of your capacities.

Finally, we are concerned that the

1 natural gas activities have been singled out by 2 Commission, and therefore required to adhere to standards that other industries do not labor under. We know that the stakes are high for the environment, as well as for our local and national economy and for the energy situation on our entire planet. On behalf 6 of the 170-member coalition, we urge your utmost care in proceeding.

MS. SUTLIFF:

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Betty Sutliff, lifelong resident in Damascus, Pennsylvania. In the draft regulations Section 7.3, number 15 says no harm to water resources 12 has occurred or been alleged or alternately, any actual or alleged harm. Carol, I really don't know what you were thinking with that. This is the equivalent of chunking for sharks.

I was in West Trenton when Carl Whilesner (phonetic) was quick to bring in the milk jug of brown water from near the pump well site, yet there's silence on the outcome. The reason, it cleared up quickly and further tests deemed that it was fine. Turbidity. Rylie (phonetic) water can happen when a water well is drilled nearby. In Honesdale on Tuesday, I also listened to Josh Fox accuse others of lying. Yet in his film and in a recent CNN interview,

1 he continues to say he was offered a lease for his land.

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I've been to the Wayne County Courthouse in Honesdale, Pennsylvania, and Josh Fox does not own any land in Milanville or anywhere else in Wayne County. Zero, zip, zilch, nada, none. I have a copy of the deed to his father's land, not Josh's. Josh's name is not on it. What well company would offer a lease to someone who owns no land?

Please do not extend a comment time beyond March 16. The venues in Honesdale and in Liberty were not filled to capacity. They actually ended early before the nine o'clock deadline. Ιf people have something that important to say, they can say it in 90 days with 18 hours of oral testimony. Any attempt to go beyond that is just an attempt to further cleanse the bull's intestines. Thank you.

MS. WILDERMUTH:

I'm Cindy Wildermuth from Tafton, Pennsylvania. I have a Master's degree in environmental management. I own a land and land management consulting company. I'm a conservationist, a landowner in Pennsylvania and New York, a realtor and a past chair of the Pike County Planning 25 Commission.

The DRBC proposed draft natural gas 1 2 regulations creates serious concerns. Thev're overreaching, duplicative, and arbitrary. Section 1.5 3 of the compact states, the Commission shall preserve and utilize the functions, powers, and duties of existing offices and agencies of government and is 6 directed to utilize and employ such offices and agencies for the purpose of this contact. Pennsylvania DEP is continually improving its regulations, staffing, and oversight of all aspects of 10 natural gas development. A 20/10 third-party review 11 of DEP's regulations of hydraulic fracturing 12 concluded, quote, that the Pennsylvania program is 13 well managed, professional, and meeting its program 14 objectives, end quote, and commended them for the 15 hiring of 95 additional staff in the past two years. 16 This was third of a series of reviews initiated by EPA 17 in 1990. 18

Section 7.5 proposes regulations not applied to any other land use in the basin as the Commission presumes that natural gas development will severely impact the watershed. Where is the basis for this? The Western Pennsylvania Conservancy performed three extensive monitoring studies at the French Creek watershed in northwest Pennsylvania. The recent 2009

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1 report states, quote, the French Creek watershed is 2 nationally recognized for its high aquatic species diversity. The studies are interpreted in the 3 management recommendation for agriculture, riparian buffer zones, stream bank erosion, and residential 6 runoff. Despite the fact that this watershed has over 3,000 natural gas wells, nowhere does the conservancy 7 mention natural gas development as a risk or a management focus to protecting water quality.

The point is not that there's no need to worry about natural gas development in our region. 12 But in Pennsylvania, it and other management issues have been successfully regulated by DEP, and French 14 | Creek is an example. Thank you.

MS. YANACEK:

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My name is Debbie Yanacek. I live in Damascus, Pennsylvania. The definition of natural gas development project is far too inclusive encompassing everything from pipelines and compressor stations to support vehicle tire cleaning and dust control on This is totally unacceptable and puts 21 access roads. the DRBC in charge of activities that can and should be regulated by municipalities and the states, if at all.

Since when did the DRBC mission have

anything to do with compression stations or tire

cleaning? This is totally an absurd attempt to become

the master of everything having to do with natural

gas. It cannot stand. The project definition should

be limited to water withdrawals and discharges and to

those of 100,000 gallons or more per day. We have

gone from this common sense threshold to the point

where the DRBC is seriously proposing to regulate dust

control which is simply beyond the pale. These

regulations should defer to the states.

There are incredibly no time limits in 11 these regulations on DRBC review of applications. 12 There are several references on page 17 to time limits 13 imposed on applicants, but no time limits on actions 14 by the DRBC. The inexcusable delay by the Commission 15 in dealing with the Stone Energy application 16 illustrates the need for deadlines as a simple matter 17 of ensuring due process for applicants. We must have 18 accountability and deadlines on DRBC action with 19 20 deemed approval for failures to act. Any open-ended process is no process. It's nothing but bureaucratic 21 22 tyranny, and this must be corrected by adding enforceable time limits on the DRBC. 23

HEARING OFFICER:

Thank you.

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MS. YANACEK:

Thank you.

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MR. YANACEK:

3 I'm Walter Yanacek, a property 4 Hello. owner in Damascus, PA. Been there, a lifelong 5 6 resident. What our group did, we got together and formed --- we got our gas leasing contract for all the environmental protections and that. That's been submitted to the DRBC, and I think the DRBC here is infringing on our rights and our --- we've been 10 stewards of this property for over three generations. 11 I have four children. Two children live on our 12 property. We're good stewards of the land. We plant 13 food plots for the animals, the deer. So we have 14 hunting and fishing. 15 I just feel the DRBC has had plenty of 16 17 I don't see no need for any more hearings. feel that you had enough for you to sort out. 18 I feel these setbacks and regulations put on the gas 19 20 companies and things are a little too much, and I feel 21 that you're stepping out there and trying to regulate 22 something so nothing will ever happen. This, we feel that, you know, the 23

economic ---. I'm a contractor, and the economics for 24 the area just from our leasing has given us a lot of 25

employment and a lot of jobs. We feel that this gas 1 2 will bring good economics to the area, and pray that I mean, we feel that we'll have a lot --- you 3 know. Our families will be able to stay. Families in the area are unable to live in the area. They have to move out because there's no jobs. And we need this. So all I can say, I'm kind of naïve. Even New Jersey and Trenton, you don't need this gas? It's right in your backyard unless you want to pay five times as much for it from foreign and other sources. That's up 10 to your choice, but when your money runs out from your 11 economics, you'll find out where you have the energy 12 in your own back yard. Thank you. 13

MR. UNFLAT:

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Good afternoon. Thank you for letting me speak. My name is Gunther Unflat. My wife and myself own 400 acres in Pike County, Pennsylvania. We raise standardbred broodmares. We have them on our farm, you know. And I have a little thing I wrote here.

In this country, we have been drilling for gas and oil for over 100 years. Yes, there have been problems like with any other new industry. But we've come a long way since then in the industry, improvements and good state regulations. It is more important at this point in time that we start drilling

on our land in a safe manner for gas to bring jobs to 2 our communities and give our country energy independence. We have enough gas and oil in our 3 country to supply many other countries, and this would help us balance our budget and make us number one world leaders once again.

The money that I will receive from drilling will enable me to keep my family farm the way it is for many decades to come. And I'd like to make another comment. I know some of the people here are from New Jersey and they're protesting the use of the Delaware River. Well, I don't know how drilling would really affect the Delaware River, but I will say to the New Jersey residents, if they give me a moment, would be to clean up your own act because Jersey has been --- is the number one cancer state in the country. And there's a reason for that. They have more golf courses and all kinds of other things that are polluting the land more than anything. And if they want clean water, let them drill water wells in New Jersey and see how they make out instead of saying 21 that the Delaware up north where we live is polluting the Delaware River. It's not true. Thank you.

MR. LANG:

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Good afternoon. My name is Ned Lang. 1 I'm a lifelong resident of Wayne County, Pennsylvania. I was born and raised on a farm in Wayne County, went to the service, came back out and I now own a business and 235 acres of land contiquous to the Delaware River, about a mile of riverfront. And I also own and operate a farm in Wayne County, Pennsylvania that 6 borders the Susquehanna.

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I want to say the following, and I want to talk about sustainability. Each day we import 13 million barrels per day of oil and export \$1.3 billion of our money to foreign countries, many of which are our enemies. This is not sustainable, and by any measure is downright dangerous. We now have the ability to harvest energy in an environmentally conscious manner from our own soil. The notion that gas drilling will cause groundwater contamination is based upon hyperbole and emotion. There are tens of thousands of gas wells between Texas and Pennsylvania operating every day in an environmentally conscious manner.

It is the responsibility of the DRBC to oversee the quality of water in the basin, not suffocate the economics in the basin with yet another layer of land use restrictions. If the regulations 25 are allowed to be enacted as presently written, it

will amount to nothing more than confiscation of our land, its uses, and the oil, gas, and mineral rights it possesses without compensation.

May I remind you, this is America, and that's illegal. We need to move forward immediately with regulations that pertain to water use only, that are fair and equitable to the citizens of the --- the citizens of and the businesses and industries that work within the Delaware River Basin. Thank you.

MR. WOODMANSEE:

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I'm from Hello. I'm John Woodmansee. 11 12 Buckingham Township in Wayne County. About four years ago we had a land man approach us wanting to lease our 13 property. That was four years ago. In the four years 14 since then, nothing has happened with the DRBC. 15 were still floundering. You still have no idea what 16 you're doing. The only thing you've actually 17 demonstrated is your incompetence and your inability 18 to do anything correctly, and there's no reason to 19 20 assume that all of a sudden you're going to be able to do it correctly. You can't. You've proven that. 21 You 22 have to accept it. Facts are facts. You should let the DEP do what the DEP does best. 23

25 to stand here and ask you to allow me my rights.

I'm in an unusual position today.

1 Well, I'm not going to do that. I don't think I 2 should have task for my rights. I don't think I should have to apologize for owning property. 3 think I should have to feel bad because these people don't. They're whining and crying behind me. 6 their problem. I have somebody from --- we just heard somebody from Princeton, New Jersey telling you what should happen with my property in Wayne County. may make sense to you. It makes no sense to me, and it makes no sense to most of us. That is one of the 10 strangest, most bizarre things I've ever heard, and 11 this room is full of strange things. And we've heard 12 a lot of them from behind me here. 13

I'm sorry about all of this, but I cannot change what is. We need the gas. We will get the gas, it's going to come. These people behind us use this product. They're paying Hess. They're paying They're paying all these companies to extract. Exxon. They're paying them all to fracture. That's how they get this stuff. They're using the energy, and they're complaining that they don't want us to do the very thing that they're paying Hess to do. They can't have it both ways, try as they will. Well, thank you very much for your time.

MR. BELL:

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My name is Robert Bell. I live in Hawthorne, New Jersey. I also have and own property in Damascus Township. I feel very strong about the economic development of the natural gas in I've seen seven farms that are in my Pennsylvania. immediate area go out of business, and the people that own those farms want to retain them. Now, let me refer back to my pre-written text.

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The regulations incorrectly assume as gas drilling water use is --- something. The water conservation provision on page 58, while good, raises questions of water use for the gas production is 100 percent to something, as applied earlier if the water is to be recycled. The regulations also unfortunately contribute to the fallacy that hydraulic fracking threatens the water well supplies. Previous provisions on page 61 of the water well monitoring are good, but for reasons have nothing to do with hydraulic fracking as suggested by the title.

We do need to further compress shale gas 21 migration, which is the real reason for this monitoring with the fracking, as the Dimock case has already done by the deliberation --- distortion of anti-drilling advocates. The regulations need to be 25 revised accordingly. Thank you.

HEARING OFFICER:

Before you start, can I call numbers 31 through 40, please?

MS. MICKLEY:

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Good afternoon. I'm Sue Mickley. have a family farm of 300 acres in northern Wayne County, and I have a 50-acre farm in Lehigh County, Pennsylvania, and I have been a lifelong resident of the DRB.

I really ask that common sense prevail. You have been told that your own compact tells you to rely on local regulations and state regulators to do the jobs that are required to do proper land and water management, and I believe you need to adhere to that. The statistics used in the beginning of your presentation are vastly exaggerated by over 300 percent, and we take exception to that. It should be studied better and more scientific foundation for those numbers.

And also, I'd like to talk about the expertise, I do believe the DRBC does have, which is the whole studies of parts per million in the Delaware 23 River and their tributaries for contaminants. that is the criteria you've used throughout history to identify and approve projects throughout the basin.

1 You know very well how parts per million are 2 dissipated as flow of water goes into the Delaware, as the Delaware goes downstream through fresh water areas like the National Park Service land between Milford and Strasburg. And yet you have never corrected and you've allowed the fallacy to continue that the lower Delaware's at high risk of fracking from northern Wayne County. Even if there were to be an incident, which is minutia, based on the history of 300,000 10 wells in this country, it's always been proven to be localized. And even if there was some disbursement of 11 12 chemicals, you know that it would be dissipated well before it would ever reach any of the lower portions 13 of the Delaware and it would be underneath the 14 standards of your parts per million for every single 15 chemical involved. 16 17 Let me give an example of what you have

Let me give an example of what you have approved. You approved a landfill in Easton, PA, on a slope that is well above the 20-percent slope. That landfill takes in garbage from Pennsylvania, New York

UNIDENTIFIED SPEAKER:

Thank you. Thank you.

MS. DAVIS:

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Hi. I'm Sandra Davis. I'm from Delaware

County, New York. Today I want to talk a little bit
about the well pad standards that were duplicated.

The well pad standards duplicate state regulations and
are unnecessary. Moreover, proposed standards are
completely unrealistic, particularly the 500-foot
setback from water bodies and wetlands.

A typical five-acre well pad would be 467 feet squared in size, and 500-feet buffer around such 8 a pad would require roughly a 40 to 50-acre site that is free of any water bodies and wetlands. While this 10 might sound reasonable, the definition of a water body 11 encompasses seasonal and intermittent depressions, 12 channels, ditches, and similar drainage ways, as well 13 as all wetlands. There are virtually no areas in the 14 Upper Delaware Region where 40 to 50 continuous acres 15 of land lacking these features can be found. 16 existing well site could meet the standard due to the 17 necessary presence of small ponds, streams, ditches, 18 trenches, and wetlands. These standards would prevent 19 20 all approval --- would prevent all approvals by rule and therefore stop all drilling. Revisions are needed 21 22 to defer to the states.

I grew up on a dairy farm in Delaware

County. I'm a fourth-generation family. We have been in the farming business for many years, and I would

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never do anything to hurt my family's farm. We have thousands of acres between our timbering land and our farming land and our quarries. I just want to say that I don't feel it's unreasonable that we would want to drill. We want to be self-sufficient. We want to take care of our country. We want to take care of our country instead of foreign oil dominating the market.

This is ridiculous, and we need to take charge now.

MR. DOWD:

Thank you for having me. My name is

Jerry Dowd, and I am a resident of ---. I'd like you
to believe that I'm a resident of Wayne County and a
farmer, but I'm really a resident of Bucks County,
Pennsylvania, the city of Doylestown. I'm a doctor.
I have six children and 18 grandchildren, and I thank
you for your efforts to keep my drinking water safe.

That said, I really don't agree with most
of the regulations that you have proposed. I have a
previously written statement which I'll put in the
mail. I'm sure that you realize why this country is

having difficulties it's having with citizens of this

country criticizing one another without the free interchange of speech. I apologize to you for my behavior if I've ever done anything like that, and their behavior.

I have 500 acres. I'm not ashamed to say 1 2 that I'll be glad to take any money that Newfield Hess wishes to give to me. I'll give it to my kids. those people have to understand that it's not their land and their water. It's my land and my water. Whether or not they like that doesn't concern me at 7 Thank you for your kindness, and I appreciate the chance to express myself. Have a nice day.

UNIDENTIFIED SPEAKER:

You can leave your written comments here with us.

MR. DOWD:

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Thank you. I will.

MS. TATHAM:

Thank you. I'm Elizabeth Tatham. regulations are for all shale formations according to page three, Article 7(c) scope, quote, the article applies to gas wells in the basin regardless of geological information, end of quote. We just saw the DRBC map which only shows the Marcellus formation. 21 Where are the others that are covered by these regulations? For more than two years, two gas

(phonetic) Township, which is located in the Lockatong

companies have tried to drill for gas in Nocamicky

1 Formation. That geological formation extends to
2 Newark and past it to the Palisades in northern New
3 Jersey. It is huge. Then there's the Stockton
4 Formation, which is located in New Jersey and
5 Pennsylvania on both sides of the Delaware River. The
6 people of New Jersey, Delaware, and southern
7 Pennsylvania believe we are safe from gas drilling
8 effects. They have the right to know there's gas
9 drilling that can start in their backyard two years,
10 five years, or ten years from now using these

12 If you are only addressing Marcellus, why not say so? Why say all formations? I just talked 13 14 | last night to someone from Texas, and he said the 15 Barnett now has another layer or formation underneath 16 it that's much richer, and drilling is planned for 17 that. So you decided last spring not to have regulations before a scientific study like the EPA or 18 19 the one by the Geological Survey. You need to listen 20 to your own decision and keep that promise. Thank 21 you.

UNIDENTIFIED SPEAKER:

Thank you.

11 regulations.

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MS. MILLON:

Good afternoon. My name is Denise

I am a member of the Lower Wayne Property 1 | Millon. Owners Alliance and a supporter of the Northern Wayne Property Owners Alliance. I was born and raised in Wayne County, and I'm still there. I don't have a gas lease on my property, not by my choice.

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Wayne County is being held hostage while other counties are prospering in all aspects. folks that live here on weekends and those that have retired here from neighboring states have done so because it's a beautiful area. Well, let me break it to you. Let me break it to you this way. It was beautiful when you got here and it still is because our parents, our grandparents and our great grandparents made it and kept it that way, and have passed that pride onto their predecessors. there day in and day out. We work there, pay taxes there and support our community. We love where we live and it will always be left that way even after the gas and oil companies have completed drilling.

Those of you who choose to believe in the coffee shop talk and the nonsense that comes out of Hollyweird, California and the like need to educate yourselves as to the truth and not the myths, like we did. There are current sufficient regulations in place to monitor this industry. We don't need more

1 redundant and ridiculous regulations in place to 2 stifle landowners and progress. God created this planet with all the resources we would need to survive right here where we are. Why are we as Americans relying on other countries for some of our food 6 supplies, fuels, clothing, building materials, workforces? Because we've gotten lazy and complacent.

The best generation this country has seen are dying off, and at a rapid place --- rapid pace. 10 The World War II generation is the one that I'm talking about. That was at a time when the whole country stood together as one and did not rely on other nations to feed us, build our armaments, et 14 cetera. With the meltdown happening in some African nations and the Middle East countries where most of our fossil fuels come from, we conservationists of convenience, wake up. You will when all of us are paying over \$5 per gallon for gas and fuel oil to heat our homes and drive us to work. And by the way ---.

UNIDENTIFIED SPEAKER:

Thank you.

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MS. MILLON:

Thank you.

MR. BERTHOLF:

Good afternoon. My name is Aaron Bertholf and I live in Honesdale, Pennsylvania, in Wayne County. I'm here in support of the property owners who wish to drill on their property. vested interest and will not have any type of monetary gain from the drilling process.

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The economy in our region is at a free Natural gas will grant us the opportunity to recover from our economic hardships. It will inject life into our local businesses and landowners. respect a lot of things, people's opinions, people's concerns about safety, and people's freedom of speech. However, all I'm asking is that the property owners' rights are respected to drill on their land.

No one who's supporting this process is here to create animosity or conflict. We're here to voice our opinions and concerns about these regulations and the rights they stand to take away from the landowners if they're left as they're currently written. We're not here to make a name for ourselves or to attempt to become a millionaire by producing a movie that is actually entirely based on 21 myths. We're here for our economic future as well as our economic independence from foreign resources. Please hear these landowners' concerns. Let them do 25 as they wish with their properties. And let our

individual states put regulations in place with your input. Don't strong-arm our property owners with these regulations. Amend them accordingly so we can move forward to the future.

MR. MOORHEAD:

Hi. My name is Buck Moorhead. I'm with NYH2O. Thank you to the DRBC for its efforts with these regulations.

There are two things and only two things that I am certain about being here today. One is that everyone in this room on both sides of this issue want to take care of the water in the Delaware River Basin. What I'm equally certain about is that no one in this room can say with complete certainty what the quality of the water in the basin will be in 5 or 10 or 20 years after 5,000 or 10,000 or 20,000 wells have been drilled. Those are the only two things I'm certain about.

It appears that absent a cumulative impact study and what that could teach the DRBC, that the DRBC is preparing to move ahead to monitor this activity and react and adjust the negative impacts that occur. This strategy does not acknowledge that the hydrology of the river basin is a complex system. One of the properties of complex systems is that they

1 have non-linear responses to inputs. In complexity science, that means that small inputs can lead to the large changes, not necessarily predictable and proportionate to the input.

The regulations do not address the 80 percent of the fracking fluid toxic water that is not pulled up, that remains in the geology and the hydrology of the basin. Until these regulations recognize that that toxic water must be accounted for and that the cumulative impacts must be understood and regulations address it accordingly, these regulations cannot be considered complete or acceptable.

UNIDENTIFIED SPEAKER:

Thank you.

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MS. UNFLAT:

My name is Margaret Unflat. I live in Hawley, Pennsylvania, and I'm a landowner. I'd like to refer to docket modification procedures and notice requirements in the regulations which are far too subjective and far reaching. Subsection H on page 18 gives the executive director too much arbitrary power which should be carefully limited. Also, the public 23 | notice procedure is almost guaranteed to produce controversy as every landowner within 2,000 feet is 25 required to be given notice which naturally inspires

the belief on the part that they have some standing and right to veto an application in their backyard.

It's impossible to reliably notify everyone within that distance, and the failure to reach some will become a basis for lawsuits alleging improper notice. Moreover, the regulations are inconsistent as to proof of notice. Such notice should be limited to directly adjoining landowners, and notice in local newspapers. Anything more is bureaucratic overkill that will complicate everyone's life for no good reason.

Also, with all the unrest overseas, oil and gas prices are going way too high already with no end in sight. America has to take care of itself. We have the resources and the knowhow how to do it. We need jobs for our people. There's no more manufacturing here anymore. At least the drilling would create more jobs, and not just in the drilling industry. We need to be self-sustaining regarding oil and gas. Thank you.

MR. PUTNAM:

Oh, hello. My name is Robert Putnam.

I'm a resident and representative of two landowners in Damascus Township, Pennsylvania, and I'm here to speak regarding DRBC's proposed regulations. One point

1 being critical habitat.

Critical habitat has absolutely no place
in this set of regulations. The U.S. Fish and
Wildlife Service and the states already handle that,
and it falls far outside the scope of what the DRBC
should be addressing. It's an open indication to
manipulation of the approval process by those special
interest agendas.

Moreover, the statement on page nine about critical habitat need not actually be habitat at all reveals the opportunity for such manipulation. This language should be deleted along with all references to critical habitat in the regulations.

This is a matter for the states.

The definition of earth disturbance is also too broad, encompassing normal form practices and even stockpiling of material, which is ludicrous. It is likewise already regulated by the states and should be deleted. Stop trying to reinvent what the states and others are already doing.

On a final note, all these tree huggers and Michael Moore wannabes, if they're so concerned, should do more about the unregulated pollution of our nation's water and not try to block citizens and landowners' rights. Thank you.

MR. WOOD:

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Hello. My name is Harold Wood. I'm from Damascus Township, PA. I grew up on a farm, and became an excavating contractor in 1972 and a fireman in '74. Our family had a section of land that was deeded to us from William Penn. I would have to say that the attempt of the DRBC to dictate extreme land use to PA for gas companies would be unproductive.

PA was the first in the world in the 1850s with oil and gas production. We have high quality water all over the state and have set the standard by which you try to get your water in New York and New Jersey. The PA DEP has experience with gas and oil wells and high standards for soil conservation. The DRBC working with and not above state DEPs would cover your concerns faster and more thoroughly.

I've been a fireman for 37 years, 10 years as chief and 25 years as fire marshal. three years ago, a neighbor called us with a fire in In, not on. He had burned some wooden 21 his driveway. scraps and the blue flame would not go out. The fire only increased when he sprayed water with his hose. Being a very environmentally conscientious person, we 25 knew he had not dumped any paint thinner or gas there. 1 My company had done the work, hauled in the stone and 2 poured the concrete, so we knew there were no accelerants on the property. The only explanation for his fire was methane gas from a small swamp over the driveway. No gas drilling. No dusting. No big 5 business. Only Mother Nature. Thank you. 6

HEARING OFFICER:

Before you start I'd like to call numbers 41 to 50 to come forward, please.

MR. WARD:

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I'd like to say thank you for the 11 12 opportunity to speak today. My name is Bob Ward. I live in Pennsylvania, Damascus Township, a little 13 14 hamlet called Tyler Hill where a lot of people would like to see us drill. I do support the safe 15 extraction of natural gas in northeast Pennsylvania. 16 17 In fact, I support it throughout this whole great country. It's natural, belongs to the people, and all 18 the people will be sharing in it when it comes out of 19 20 the ground.

How many layers of bureaucracy do we need to oversee that? Susquehanna River Basin Commission 23 has done a good job. The Pennsylvania DEP has done a good job. Drilling over in Bradford and Susquehanna County, and the last time I was over there, I believe

I still saw people walking around. None of them were laying on the ground dead. I do see people around here today --- I do see people walking around here today with citing no drilling in the Delaware River.

Now, we ain't drilling in the Delaware River. In fact, we do have regulations in place that state we will not drill within 1,500 feet of the Delaware River. You got to frac it to crack it to get the gas, which is good for our country. Thank you very much.

MR. VARGA:

My name is Elias Varga. I live in Tyler Hill, Damascus Township. And I'm a landowner.

Section 7.5 asserts that no evidence that well pads may have a substantial impact on the water resources to the basin. How can this be if the amount of disturbance is limited to a mere five to six acres out of 1,280 acres in a production unit? How can this be when both states are ready to pose some of the toughest stormwater management rules in the nation? How can this be when our forest and land has been steadily growing over the last half century?

There is simply no basis for a statement that well pads could have a substantial impact on water resources of the basin. There's no need to separate Delaware River Basin Commission well pad

standards, and the regulations should be revised accordingly.

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Did you know that the Delaware River turns red after heavy rainfall? I think it's in the special protection waters. And it's a sight to see, and it lasts for perhaps several days. contributor is the Callicoon River Creek. Other tributaries contribute to that discoloration, and it's quite --- quite a sight to see. It is surprising that the Delaware River Basin Commission fails to direct more effort to this problem rather than direct all their energy to restrict the gas industry from exploring and developing natural gas.

These regulations represent three years of wasting efforts resulting in the most restrictive requirements that man or woman ever created. a prime example of wasting money.

MR. MOON:

My name's John Moon. Hello. I'm a resident of northern Wayne County, and I've lived there all my life. We're only about one mile from the people's farm in the test well site there. Me and my family and my parents live on a 200-acre farm which is 24 not productive anymore, because just the way things 25 are going. But I do see a great need for gas

production to help bring back things in Wayne County.

2 My main concern is some of the regulations that could drive the natural gas business 3 out of our county or bring it to a standstill. those is Section 7.5, asserts with no evidence that well pads may have a substantial impact on the water resources of the basin. How can this be if the account --- the amount of disturbance is limited to more --- mere five to six acres out of 1,280 acres in a production unit? How can this be when both states 10 already impose some of the toughest storm water 11 management rules in the nation? 12 How can this be when our forestland has been steadily growing over the last 13 14 half century? There is simply no basis for a statement that will --- that well pads could have a 15 substantial impact on water resources in the basin. 16 17 There is no need to separate DRBC well pad standards and the regulations should be revised. 18

UNIDENTIFIED SPEAKER:

Thank you.

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MR. OSTERMAN:

My name is Frank Osterman. My wife Karen and I own 39 acres of woodland in Preston Township.

We love our little piece of heaven and are active stewards of our land. Many landowners in Wayne County

1 are land rich but barely able to make ends meet with 2 the rising property taxes and other expenses. seniors have refused to sell off parcels of their land 3 because they want to preserve the destruction of forest, pollution caused by housing, cesspool and paving. 6

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Our area was blessed with the Marcellus Shale, which could greatly help our residents maintain stewardships of their land by providing income and permits area seniors to live comfortably in It would also bring employment to our retirement. 12 economically depressed area, and assist our nation to become energy independent and no longer be at the 14 mercy of unstable foreign governments. The present turmoil in the Middle East is already causing energy prices to soar and will lead to greater economic 17 hardship.

Our property is located farthest from the Delaware River, is under the jurisdictions of the DRBC. Adjacent to our property, the watershed rains into the Susquehanna River. It's under the jurisdiction of the SRBC, which value their river as 23 much as the DRBC values the Delaware. But they actually acted quickly to protect the environment by 25 | following DEP regulations already in place which

protects all rivers in the state.

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It appears that DRBC is choosing to reinvent the wheel and not enact rules which have been proven to work for other agencies. I respectfully urge the DRBC not to be influenced by fearmonger tactics being used, but instead rely on the proven methods in place. The way the proposed regulations are now written, it confiscates our property rights, can destroy woodland, and allows Wayne County to remain a depressed economic area. Please enact reasonable regulations now which protect property rights and the environment. Thank you.

MR. LONDON:

Jan London, landowner in Sullivan Hi. County, New York. I'm opposed to horizontal hydraulic fracture drilling. I understand the need for jobs to bring better economy to struggling rural communities. From what I've learned over the last three years reading online countless lectures, forums, town meetings, is that there is too much risk involved with drilling for gas with the current frac technology.

I heard on the TV last week of a man in 23 Bradford County who lost all water in his well while vertical lay was just started through the aquifer on 25 his neighbor's property frac well. This is one of

countless stories of damage. So the gas industry
tells us there's not been one documented case of water
pollution or migration, and there's a growing list of
people experiencing problems related to this industry.
So someone is lying to us. Shouldn't we wait and rely
on the science to study what the dangers really are?

When will the industry be honest and say

when will the industry be honest and say three percent, five percent or whatever of the wells will have some sort of failure, and we should just deal with it? Dr. Anthony Ingraffea, Cornell professor and foremost scientist studying hydraulic fracturing, and one of the people who actually was an originator of the technology, states that if we frac 70 percent of the land of the Marcellus Shale for 40 or 50 years, we would create enough gas to fuel the country for two years. Is it really worth it?

I think you should sit down with Dr.

Ingraffea and study his numbers. Sure, it will make a few landowners wealthy, but at what cost? If we started drilling with this technology in 1981, we would be dealing with the consequences now. 1981 doesn't sound that long ago; does it? With China, India and Norway and Australia and other multinational companies buying large percentages of the U.S. shale leases, I suspect our promise of energy independence

will just be sold to the highest bidder. With the gas companies sign a lease that stated the lease couldn't be sold and all gas produced not stay in the USA.

MR. VEIL:

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Good afternoon. My name is John Veil, recently retired from 30 years working on water issues and started my own consulting business, Veil Environmental. I'm here today to support the intent of the proposed regulations, but also to express my concerns that the details are far too complicated with layer upon layer of applications, reviews, approvals and fees.

I spent more than 30 years working on water and wastewater, both as a state regulator and as a national environmental policy analyst. I reviewed and studied water regulations adopted by the federal government in many different states. I can honestly say that I've never seen a set of oil and gas regulations as complex and burdensome as the ones under consideration today.

I don't suggest that gas wells should be drilled everywhere without concern for local environmentally sensitive areas. However, even after excluding those sensitive areas and implementing 25 reasonable linear setbacks from other structures,

there are still many areas within the Delaware River watershed that can safely be used as well sites. my written comments contain much more detail, but let me offer a couple of general thoughts and key points as you move forward with your regulatory process.

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The process of natural gas development is not new or unique. It's been done in many different states for many decades. DRBC regulators can learn from oil and gas agencies in other states that have 10 been regulating oil and gas for many years. And there are state organizations for that which would allow you to gain their experience. DRBC should develop more realistic estimates of future well drilling activity. The ones that were presented at the beginning today, I believe, are gross overestimates of the numbers of wells. Good regulatory programs can be fully protective without being burdensome. It's not as easy to write them, but you can do it. It's been done before.

And finally, regulations should not create barriers to innovation. In conclusion, I support the proposed regulations' goals, but concerned that you are not getting good factual information. Thank you.

MR. KIFERS:

Good afternoon. My name is Arthur 1 2 Kifers. I'm from Brooklyn, New York, and I have objected to the early issuance of the draft rules. 3 feel DRBC should wait for the insights that are to be gained from the EPA study and the New York DEC and the 6 DRBC cumulative impact studies that are currently 7 underway.

I object to the short review period. The period should, I feel, be 120 days rather than the 90 days we've been given. The period is too short to consider all the implications of the proposed rules. The hearings should also be held in all districts that rely on the Delaware water for their drinking water.

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The draft rules do not address the cumulative impact of water withdrawal, well development and waste disposal of thousands of wells that would transform the basin into an industrial landscape. Draft rules do not restrict use of toxic chemicals. It should be made clear that hazardous waste will be subject to laws governing generation, transportation and disposal of hazardous wastes. The draft rules do not provide strong wastewater They should require the removal of all standards. They should allow --- should not toxic chemicals. 25 allow disposal through municipal water treatment

plants that are made to dilute rather than remove toxins.

Draft rules rely on inadequate state regulations for stormwater management, gas well development, casements and floodplain protection. The draft rules allow for an expedited review. The fast track hides the process from public review.

In conclusion, the DRBC is under no obligation to further gas exploration, but it does 10 have the obligation to protect the public.

MR. MCGRATH:

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Hello. My name's Andrew McGrath, and I'm a resident of Delaware County, Pennsylvania. among the thousands of citizens who are extremely concerned about the irreversible effect of hydraulic fracturing. I ask you to withdraw the draft regulations for gas drilling in the Delaware River watershed because they are inadequate to cover the acute and cumulative risks to our waters. The public comment period must be extended and expanded. DRBC 21 must hold more hearings in urban areas, and we must wait for the science.

I ask that you push the March 16th public comment deadline back by a minimum of six months and 25 not finalize any regulations for at least two years in order to take into account the EPA study of deep gas drilling life cycle impacts on water. Please rewrite the regulations after a cumulative impact study has been completed for the Delaware River watershed.

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In Pennsylvania and the other states where fracking is permitted, there has been methane in tap water, polluted wells, toxic discharges in streams, well explosions and conversion of scenic wild places into sacrificial industrial zones. If fracking is as safe as the gas companies claim, why do they impose the fracking? And while gas companies count natural gas as a clean alternative to oil, recent studies show that when the entire life cycle of natural gas production is considered, it is as much or more damaging when it comes to greenhouse gas emissions. DRBC regulations currently do not include this source of pollution from air. They must.

I would like to add something to the comments regarding gas drilling waste from the Delaware River watershed from Section 7.6 of the draft 21 regulations. One, drilling --- flow-back must be classified as hazardous waste because it contains contaminants deadly to biological life. Two, there must be no impoundments for flow-back anywhere in our 25 watershed. These open plastic-lined pits are

1 Superfund sites in the making. They must be 2 completely outlawed. Three, waste must be tested for NCQO, a potent carcinogen known to show up in 3 flow-back as a result of chemical interactions. four, there must be no discharge or gas drilling in the basin. This puts all our health at risk. 6 Thank 7 you.

MR. CROWLEY:

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Thank you. How do you do? My name's Owen Crowley. I'm a resident of Manhattan, and I'm here with a group called United for Action. I think a couple of my colleagues will speak at more length on the substance.

But the first thing I want to do is present you with an additional 234 letters. letters, we worked with a couple of our coalition partners and a couple of others, and basically last Thursday we decided, let's remind people about the hearing coming up and that there's an opportunity to comment. All these 234 letters were hand signed. lot of them are individual. One person sent her letter with an apology that her printer was on the fritz and she handwrote a two-page letter in neat 24 print. You'll be able to read it. Don't worry. 25 these people are clearly very moved and determined to have a part in this process.

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UNIDENTIFIED SPEAKER:

Why aren't they here?

MR. CROWLEY:

Actually, that's a good question. 5 answer that. A lot of the people that we work with 6 7 are upstate New York and Pennsylvania and increasingly New Jersey because in New Jersey I think people are beginning to realize the hazards presented by some of the infrastructures being laid down, including the 10 proposed structured pipeline. We work with doctors, 11 lawyers, who are --- yeah, doctors who are concerned 12 for human health primarily and all of that. Work with 13 14 a lot of just citizens who are speaking up on this. And to them, it's just crazy that this kind of 15 activity would be allowed to be anywhere where people 16 17 live.

But one big objection actually for people that are in downstate New York is why is it that the major population centers, who are the stakeholders in this, haven't seen the hearing. Now, the New York City Council Environmental Committee next Tuesday is having a hearing on hydrofraction of gas in the DRBC process. And I'm wondering, if you can answer this, 25 will there be anybody from DRBC present at that

1 hearing? No. It's \$15 each way train ticket. suggest you go. Thank you very much.

MS. JOYCE:

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My name is Alice Joyce, and I live in Brooklyn. And I own my own home. I own my own home. I enjoy the water, the pure water, along with nine million other New Yorkers. And I'd like to keep it that way.

The unpredictability of gas drilling can 10 be made the words of Donald Rumsfeld, who used them to address the unpredictability of the war. He said 12 there are known knowns, things that we know. We also know that there are known unknowns, things we do not 14 know. But there are also unknown unknowns, the ones we don't know we don't know. There have been a number of major unknown unknowns. Catastrophes related to drilling in the past few years, the cause of which even when proven by studies, are said to be unknowns even though studies show that they know.

Perhaps one of the most dramatic, if not 21 most well-known examples, is the 2006 mud volcano of East Java which erupted after exploratory drilling. Imagine a mudflow that covers three square miles at a depth of 65 feet, that swallows four villages, 25 25 | factories, kills 13 people after rupturing a natural

gas pipeline, displaces 13,000 families with a flow so execrable that it fills 50 Olympic-sized swimming pools a day or that construction of dams, levies, drainage channels and flooding the crater with concrete balls all fail. Even though a study concluded that a known cause of the eruption came from overestimating the pressure the well could tolerate, it is a known known.

HEARING OFFICER:

Thank you. Excuse me. Before you start, can I have numbers 61 to 70 come up front? Fifty-one (51) to 60. Thank you.

MR. GRAHAM:

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14 My name is Tim Graham. I'm from New York I just have to congratulate everyone here today 15 because I think it shows that the tenure of the times 16 17 is changing. We the people are going to start taking precedence over our culture of secrecy, deception, 18 manipulation and exemption. People exempting 19 20 themselves from the law or will not listen to power. People in Egypt, Libya, Wisconsin, Illinois, people 21 22 are going to start coming out to these things, especially if they're held at times when it can be 23 convenient for them to get off of work. 24

And with regard to my comments, American

jurisprudence is based on human life, environmental 1 health, collective common good, human rights, and not profits, monetary gain and external costs, which have to be borne by the public, such as the Gulf oil spill or New York City's water supply if our water becomes contaminated and we have to put in a filtration system at a \$30 billion-plus cost, which I'm sure the oil and gas companies won't pay for. Selfish individuals, economic gain, my family farm, my land, their problem, tough times, we got to make a buck, pejorative labels, 10 tree huggers, enemy-based thinking, foreign 11 dependence, scare mongering. It's time we change the 12 way we live and the way we think. Arrogance of doing 13 as we please, sue us, prove it, our marshals to 14 protect gas company employees, indifference to 15 employee health. All of those things are not the way 16 of the future if we are to turn this country around. 17 And while I'll agree with many of the people who own 18 family farms and land, in some ways, they nonetheless 19 20 have ---. 21

UNIDENTIFIED SPEAKER:

Thank you.

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MR. BRAUN:

Hi, good afternoon. My name is David 24 25 Braun. I'm here from New York City, and I'm a part of

1 United for Action. You have to be kidding me. 2 Seriously, it hasn't been a year since the deep water horizon disaster, and you guys are about to let the industry regulate itself. You're going to tell them to, oh, please, this is the honor system. You guys can watch where this wastewater goes. It's no big It's only 400,000 pounds of chemicals going deal. into each well. All the radon, everything else that comes out of the ground. I mean, this is a serious problem, and you guys are about to hand them the keys 10 to the mint, you know. I mean, this is the craziest 11 thing. So you've got to be kidding me about that. 12 13

Now, you mentioned the expected water withdrawals. You didn't --- or the expected water usage. You didn't mention the expected amount of chemical usage. Like I just said, 400,000 pounds of chemicals. That equals, for your estimations in terms of wells, eight billion pounds of toxic chemicals will be put into the ground in the Delaware River Basin area. That is the equivalent of 11 Empire State Buildings worth of toxic chemicals. That's an insane amount going straight into the ground which will migrate into our water supply. Now, I'm being very honest, you've got to be kidding me.

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Even with movies like --- out there, with

the state and studies that have been done, damaging 1 reports like the Hazelman-Sawyer report, you still 2 want to do this. I mean, it's the craziest thing. 3 mean, you've got to be kidding me. We need to have a cumulative impact study before we do anything. mean, seriously, you know, folks, Carol, you seem like 6 a very rational person. We have the evidence. know this is bad. We can't proceed with this. about the precautionary principle? So we don't sell crack for a reason, and honestly, we shouldn't frac 10 for a reason. All right. 11

MS. TSOU:

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I'm Ling Tsou from New York City, a 14 member of United for Action. Despite widespread opposition, DRBC prematurely issued draft regulations for gas drilling in the Delaware River Basin. please, do not issue regulations permitting hydraulic fracturing without first addressing at least the following two points.

One, regulations should be based upon a comprehensive cumulative impact study, not on existing state regulations which are woefully inadequate. This draft fails to take into account the cumulative impacts across multiple wells of water withdrawal and the full lifecycle of well development.

Two, a lack of restrictions on the 1 2 chemicals that may be used to hydraulic fracture gas wells. Chemicals currently used for fracking are 3 known to be hazardous to human health. It has not been established that hydraulic fracturing gas drilling is safe. 6 That gas companies have demonstrated a total lack of technical capabilities to detect and reverse the effects of accidents or mismanagement.

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Remember the gas well explosions in many people's backyards? A group of high school students 12 at a New York City high school said, remember the major tobacco companies' CEOs who swore that there was no evidence that cigarette smoking was either addictive or cancer causing. The claims by the gas companies' CEOs that hydraulic fracturing gas drilling is safe and will not harm people's health and our environment sounds very similar.

I'm a grandmother, and I'm terrified of what kind of future we're leaving for our children and grandchildren. Water is more precious than gas, oil or gold. Life as we know it cannot exist without water. Please do not rush to issue regulations 24 permitting gas drilling in the Delaware River Basin. 25 Your job is to protect the precious resources for all

the people who depend on this water and for all future generations. Thank you.

MR. EBENBERG:

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I'm about the 52nd Good afternoon. person here to speak today, and I am a resident of Hudson County, New Jersey, and I'm a human being and I depend on water to live. I see you've got a conflict of interest here just by the bottled water you have on Yeah, well, why don't you drink it? your table. it. You may need it some day.

UNIDENTIFIED SPEAKER:

I haven't opened it.

MR. EBENBERG:

It also appears that you people have been neglectful, incompetent, and not doing your intended jobs. You should be paid a salary. Actually, they should fire the guy that hired you. That's the way I see it. And I'd be worried about Governor Christie taken out in handcuffs like he did to the Safe Valley Sewage Authority. And we need Congressional hearings just to check out you people at the DRBC. You know, to regulate yourself is nearly impossible. remember back to when they came out with OSHA. made great laws back in the '60s and they had nobody 25 around to enforce it for the first 20 years.

1 were no inspectors. These people are running amuck with yourselves here. It's unreal. You know, there's not much more I can say, you know. Somebody else can probably use the time.

But for all you landowners who feel you've lost your rights, if you love the oil cartel, you're going to love the water cartel.

MS. FOX:

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My name is Angela Monci Fox. resident of New York City and former resident of Wayne County where my former husband and our three children, one of whom is Josh Fox, still own 22 acres of land which we purchased when he was born in 1972.

I want to speak to those of you who are here to advocate for fracking. I want you to open your eyes to the facts called for in the documentary Gasland created by Josh, not because he's a Michael Moore wannabe, but because of his passion for the land in which he was raised. I want to put --- I want you to put yourself in the shoes of the real people in this film whose lives are being destroyed as we sit here today debating this issue. It is not fantasy. It is a movie that is based in fact. It is a documentary. It is not fiction. It is a human story, and their story is my story, and it can be your story. 25

The oil and gas industry is so threatened 1 2 by this film that it has created a special ad campaign to debunk it. Energy and debt is a PR firm. Some of you may be here today who have preempted Josh Fox and Gasland and Google with muddied ads. Does the oil and gas industry really believe that all the people who have awarded this documentary did so because it was not based on facts? Starting with the special jury price at Sundance, the environmental media award, the 10 John Lennon Yoko Ono award for peace, so threatened by facts in this film that, in an unprecedented move, 11 they wrote to the Academy of Awards asking for it to 12 be removed from the nomination category for an Oscar 13 for best documentary. On Sunday, this Oscar-nominated 14 documentary will bring this issue to national 15 attention, fortify a national movement against 16 17 fracking, making it possible to bring our case to the president to ask him to restore our human rights to 18 clean water, clean air, and the families ---. 19 20 DRBC ---UNIDENTIFIED SPEAKER: 21 22 Thank you. 23 MS. FOX:

--- will be on the wrong side of history 24 if they vote to proceed with this drilling. 25

MR. PELOQUIN:

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Paul Peloquin of Brooklyn, New York City. 2 This commission is a kangaroo commission with an 3 attempt for democracy with its qo-ahead draft regulations, a 90-day comment period, no hearings in 6 New York City, Philadelphia or any other major affected city, fast track --- with its fast track 7 approval process which excludes public comments and oversight, and its failure to include stuff like the cumulative impacts as a part of its study. It's going 10 forward without studies which are in process. 11 would the industry have lobbied and achieved its 12 exemption from the Clean Air Act and the Clean Water 13 Act and the Safe Drinking Act? Because the industry 14 probably will not function with hydrofracking with 15 16 these acts in place. 17 There's no reason, given the mandate of

this Commission, to protect the drinking water of people and to protect the water in the area to go 20 forward while these exemptions exist on the federal level. Yet 15 million people or more with their God-given, nature-given, good, safe water are to be subject to a nonreversible geological experiment. Stop shilling for the national gas industry. Withdraw these regulations and protect our water.

MS. CRONLY:

Good afternoon. Mary Ellen Cronly. I'm here as a concerned citizen to speak against fracking and for our beautiful country so that we can keep it for our children and grandchildren.

Pure, safe water is a treasure that's not available for billions of people around the world. In other countries every day 1,000 children worldwide die because of unsafe drinking water. In the United States, our pure, safe water is the envy of the world.

But the gas industry wants to develop hydrofracking full force without regard to our precious water and environment. And after they have made trillions and ruined our water supply, they're going to proceed to make more billions selling us back, quote, unquote, purified water.

The proposed regulations do not regulate the tons of toxic chemicals that gas companies intend to pump into the ground. And the Hazelman report conducted by environmental firms from New York City said that the pressure caused by hydrofracking causes unintended faults, cracks in the rocks that can go miles and miles to places where it's not even --- wasn't intended to go from the drilling site into our water supply. It's unknown what this fracking is

1 doing under the ground. They haven't considered the 2 cumulative impact of thousands of wells in our environment. 3

The corporation said drilling in the Gulf was safe, but the regulations that were supposed to protect the Gulf were not enforced. How are the DRBC regulations going to be enforced? Hydrofracking must be banned before we have a disaster like the Gulf but magnified exponentially.

HEARING OFFICER:

Before you start, I'd like to call 11 12 numbers 61 to 70 to come up.

MS. SCHAB:

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14 Hello. My name's Marjorie Schab. I come from Remsenburg, New York, and I'm here by 15 organizations NYH2O. You put in your PowerPoint 16 presentation, provide certainty to the industry. 17 Ι thought the mission that you have is to provide 18 certainty to the people of the United States, and 19 20 nothing is more important than our water. I was born in Philadelphia, and I live in New York, and the lives 21 22 of 15 million people are at stake, our health and our welfare. 23

And I especially want to address the fact 25 that you only have, in the sense, a bond of \$125,000

1 for pollution damage. I called the superintendent in 2 Southampton Town in Long Island. I said, how much does \$125,000 buy? And he told me a half a mile of the two-way road. That is it. Now, I feel this is woefully inadequate. And due to the pressures, the investment pressures which have nothing to do with our well being, our economic well being, our health well being, they will pay the fee and make the pollution. It pays for them to do that. So all your regulations will mean nothing because the fee is so low they can 10 simply walk away. 11

There is an alternative we can do and have enough energy, and that is through renewables. 14 No one's mentioned that. Solar, hydro and wind. The whole country can do it. Therefore, can do it. we don't need to worry about drilling in the Delaware River Basin. We can keep it as pristine and as beautiful as it is. And the other thing is tourism is one of the biggest industries in the world. So thank you. Just keep that going.

MR. SILBERMAN:

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My name is Jerry Silberman. I'm here to speak on behalf of the 5,000 members of the Pennsylvania Association of Staff Nurses. As a union 25 of healthcare professionals and patient-care

1 advocates, we oppose hydrofracking in the Delaware River Basin until it is proven safe. 1,000 of our members live in the shale-drilling region.

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The experience of other regions of the country and even the drilling which has been done in 5 6 Pennsylvania tell us that this gas-mining process is an enormous threat to public health. Large quantities of toxic carcinogens such as toluene, xylene and benzene are unavoidably released into the air and water and have already poisoned wells in Pennsylvania. 10 These toxins don't stay on the property where the well 11 is, nor will the property owners foot the healthcare 12 bills for the thousands of people who will be sickened 13 over the course of this drilling. 14

We call on you to prohibit any frac drilling until a completed environmental assessment is released and publicized, and citizens are given a chance to comment, at least a dozen hearings throughout the basin. We call on you, based on existing evidence, to prohibit any open impoundment of wastewater and to require full, verifiable, independently verifiable remediation of any wastewater at the drilling site as a condition of permitting. Wе call on you to require that any permitted drilling operation be shut down pending full confirmation of

1 remediation of any contaminated water within five 2 miles of the well site, and to require the full responsibility of the drilling company for all necessary remediation. We call on you to do no harm, to honor your compact obligation to preserve the quality of our water. Thank you.

MR. OLSON:

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Hey, hello there. Thank you for being I know --- it didn't start. My name is Charley Olson. I'm from United for Action. I live in New York City, the forgotten borough of Staten Island 12 where they have trees and we enjoy them and we don't want the pipeline to come through there either, which 14 | hasn't been mentioned.

The first priority of all of this should 16 be do no harm. It's the first law of doctors, of nurses, et cetera. Another important priority should be why waste our time, as a man was just talking about just a few minutes ago, with the fracking when we know we've only got 30 years or less of the oil that can come from this shale, and we should be moving that money and those resources towards renewable energy sources of the many varying kinds that we do have.

The problems that we --- and I'm 25 wondering, the homeowners that were pro-fracking have

left. They've left en masse. They were sitting here. 1 2 But if there are some of them still here, I'm wondering, what will it take to convince any of our sides here whether either side is right or wrong? Will it take massive bodies? Will it take the hospitals being filled? Will it take the insurance 6 companies to be sued and showing the problems that are there?

We saw the problems with the tobacco industry, and we believed the businesses then. were wrong. We believed the government when it came 12 to Agent Orange and 9/11, and we found out that they were wrong. We couldn't trust the government and 14 business. We need from you the scientific proof that makes this really work. We need the same rules and regulations that residential houses in Pennsylvania have. We need to take the exceptions out of the 18 | Halliburton exceptions for clean water. Thank you.

MS. AYALA:

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Hello. My name is Shannon. I'm a I heard about fracking because I was a volunteer. student activist in the climate and in the food justice movements. It first struck me as an environmental justice issue because I heard about it 25 as a controversy dividing rural communities and

pitting local farmers against the people who wanted local farming the most. It was about national security and jobs.

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At the time I was graduating last year, my new friends got me researching in this. realized, hey, I identify with another boom, a boom of activists that believe in a just transition to a green color economy and a more local, sustainable, and economically diverse society that's possible.

10 People who want to be farmers, who want to use this land and build an inspiring new 11 infrastructure for a new America. So instead of 12 getting a real job after school, I really spent almost 13 the last year in going to everyone I know, to 14 sustainability clubs, to radical people, to everybody 15 and say, let's focus on the environmental justice and 16 17 radical drilling, because we know that the problems 18 with these things are real. We know that we can stop these things. We know that at least we can stop the 19 20 worst things and shift subsidies to renewable energy. So all we are saying is give green a chance. 21

MR. DEVANEY:

Tim Devaney, Delaware County, Pennsylvania. No one can do due justice to the 24 importance of this subject, gas drilling in our

watershed, express the depth of our concern or offer 1 constructive criticism. We need more time to review 2 the DRBC draft regulations. At 89 pages, they are 3 inadequate to protect our citizens and preserve our Commonwealth. I request a continuance of the public hearing until all relevant data is available for 6 7 review and necessary impact studies and baseline data gathering are completed.

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I ask for additional public hearings throughout the Delaware River watershed, and I point out that we need more time to ensure that 12 Pennsylvania's new representative on the DRBC, our newly elected governor, is well-enough versed in the facts to fairly represent the more enlightened opinion of our people.

For example, there is a gulf of misunderstanding between the Gaslands of Josh Fox and the slick television campaign for the gas industries' vested interests. Our common sense in heart --- in caring for our home state's future supports the former accounting as more likely truthful.

Part two. Water is the vehicle driving Water is the source of life on the wheel of life. earth. Culture and civilization, heritage and development flourish in proportion to abundant and

1 accessible pure, flowing, uncontaminated water. Water keeps life alive. No surprise our Pennsylvania 2 Constitution affirms the right of our people to clean 3 water.

In contrast, last year --- by the DRBC for the gas fracking industry to withdraw from northeast Pennsylvania three-quarters of a million gallons of water per day represents the average daily water use of 12,096.7 Pennsylvanians. How does the Commissioner's oath of office, and that's to uphold and defend our Constitution, which is lopsided, exchange the fresh water for gas?

MS. FOLZER:

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Hello. I'm Sandra Folzer. I have 100 acres in Tioga County. But one of the things I want to point out today is I'm also a cancer survivor. I've had a double mastectomy. If you look at my face right now, at all these scars, that I just had cancer taken from my face.

And I'm very concerned about the carcinogenic chemicals that are in the wastewater. Ιt is not a hypothesis. It's a reality. We know a lot of the chemicals are carcinogenic. We also know that the fracking brings up radioactive materials. That's 25 a given. And I think that that's something that we

1 need to pay attention to. It's not a matter of will 2 cancer increase, but when it will start increasing. It's already been increasing. We know that childhood cancer is on the uprise which means it's not just lifestyle. It's something in the environment.

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I also am sorry that all these landowners left because I too as a landowner --- I want to respect their right that they want to do certain things on their land. But what they need to keep in mind is what they do on their land impacts my land and my life. I did not lease my land, but my neighbors 12 have leased their land. And what happens is when the air is polluted, it comes into my land. When they pollute their water or when it goes into the water system, it comes into my water. I worry night and day about all --- how the aquifers are being polluted. know it by --- from engineer hydrologists that water, especially salty water, goes very quickly into --into the aquifers.

And I want to make sure --- I want to commend that --- I know you have a difficult task ahead of you, but I hope that you don't trust the gas companies who have seen the damage they've done upstate. And the fact, I don't think we can trust them. They say they have not hurt the water when, in fact, we know there are many cases. So good luck, but please have a moratorium and take time. Thank you.

MR. WESTFALL:

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Hello. My name's Cliff Westfall. I'm a landowner in Wayne County, Pennsylvania. I'm a member of Damascus Citizens and also a resident of New Jersey.

I'm sure the Commission will receive many technical comments, including from me, but right now I would like to talk about the politics surrounding this issue and what they're like to be in the future, particularly here in New Jersey.

At the outset, I should say that I find 13 14 it shocking and disturbing that Governor Christie, through his DEP secretary, Mr. Martin, has taken a 15 position urging the DRBC fast track regulations. 16 17 Specifically in a letter dated July 13th, 2010, here is the following. The DRBC promulgated regulations by 18 September of last year in advance of any cumulative 19 20 impact study that might guide in formulation and 21 implementation, and determine whether it is even 22 possible that hydrofraction be done safely in a 23 watershed of this importance. The Pennsylvania regulations take primacy over DRBC authority, a move 24 25 that would obviate the very purpose of the agency.

They also appear to support the return of 1 feed water to basin water, which is --- currently 2 exists no adequate treatment of method available scale 3 --- permitting different potent carcinogens for which there simply is no safe level. It didn't have to be this way. Governor Christie has taken a very 6 proactive, pro-environmental stance with respect to the dredging of the Delaware and offshore --- natural gas terminals. Republicans, Democrats alike in our state depend upon clean water, and any alleged benefit 10 to New Jersey is far outweighed by the risks to our 11 drinking water. 12

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New Jersey communities depend on the Delaware --- not only does it take water directly from the Delaware, but also those who get their water from other surface water sources, those who depend upon the New Jersey Coastal Clean Aquifer all through South Jersey. Crucially, it's worth pointing out regarding the politics, that most communities do not now realize about the water of the Delaware, but they will because the inevitable accidents that will occur if this is allowed to go forward in the headwaters of your watershed.

Every day there are new reports of 25 accidents that shouldn't be occurring in the river or its tributaries. There's a real possibility of
disaster. How is this really a politics issue? It is
my sense in this abbreviated process of no hearings in
New York or Philadelphia represented a decision by the
Commissioners, the faster they can get through this,
the quicker the issue will dry up and blow away. The
opposite is true. For all of the issues raised here,
it's going to only grow as soon as this process is
implemented.

MS. STIMPFEL:

Good afternoon. Thank you for listening through everything that's gone on. I'm Teresa Stimpfel. I'm chair of the Central Jersey Sierra Group. We have 1,700 members right here in this area. No, I wasn't buzzed in to get here and speak. I came here because I want to.

I'm nervous. I'm nervous speaking and I'm nervous depending upon you. The DRBC is an agency that's expected to be doing no harm. Yet your draft regulations are double speak providing cover for profit-driven companies to exploit what they see as a resource pool and damage our crucial resource that 15 million people today and millions to come in future generations will depend upon. It took eons to form this gas deposit and our water supply. Only greed and

careless disregard for people and our environment prompt this rush to drill.

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If the process is so safe, why do you have such limited liability for developers? You encourage small scale, less experienced developers with approvals by rule that should be banned. All wells must have plans. If this is so safe, prove it with a cumulative study and delay the rules until the EPA and other scientific studies are completed.

10 While you duck your responsibility to write true, up-to-date comprehensive rules informed by 11 12 science from independent sources, you force us to suffer from old weak New York and New Jersey and ---13 14 New York and Pennsylvania rules that are clearly inadequate and will pollute our water and our air. 15 New Jersey will have to breathe toxic air in their 16 17 emissions from industrial exploitation, including 18 toxic evaporation from open waste pits that should be banned. We will breathe smoke and chemical vapors 19 20 from fires and explosions, such as the one last night 21 that occurred in Avonale (phonetic). How can you 22 prevent future pollution when you don't require disclosure of the chemicals or list the wastewater as 23 hazardous? 24

MS. BLOOM:

Gas drilling is a public health issue. 1 2 Thank you for working hard on your draft regulations, but they fail to address the acute and cumulative 3 health impacts from unconventional gas drillers, so they must be redrawn --- withdrawn and rewritten after 6 the EPA study is complete and after a cumulative 7 impact study is done, specifically for the Delaware River Basin. Please extend the March 16th public comment deadline for at least six months and preferably two years until the EPA study and the 10 cumulative impact study are done. 11

I wake up every morning with asthma. My mother died from lung cancer, and members of my immediate family suffer from respiratory disease. So I know what it's like and it's not just a little tightness of breath. Respiratory disease kills.

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is the number two cause of lung cancer, along with radian 226 and radian, both potent carcinogens. Until more is known about the health impacts from these radionuclei, your draft rules must not be finalized. Studies have also already shown that gas drilling increases asthma to as high as one in four in children in gas-drilling areas.

Your draft rules allow huge centralized

Shale gas drilling mobilizes radon, which

waste pits which must be outlawed. Frac water picks up organic compounds from the shale during fracking.

When the flow-back waste is stored in the frac pits, the hazardous pollutants, including benzene, tuolene, xylene into the air, combine with nitrogen oxide to produce ground level ozone, the primary component of unhealthy smog. We know that air interacts with water. The two are completely intertwined. We need to look at air impacts as well as water.

These regulations rely on compliance and transparency from an industry which has shown the opposite behavior over and over. When people get sick and sue gas-drilling companies, the companies force them to sign nondisclosure clauses to keep silent. Until these silences are broken, there must be no gas drilling.

HEARING OFFICER:

We would like to take a little break for our court reporter, who's been doing just a great job. And we want to call numbers 71 to 80 to come up forward. So just a short break.

22 SHORT BREAK TAKEN

HEARING OFFICER:

Please take your seats. We're ready for the next speaker.

MR. ALLEN:

Okay. My name is Alex Allen. I was at the hearing in Honesdale on Tuesday. I heard a lot of talk about property rights. I actually grew up in Wayne County, Pennsylvania. I actually own land in northeast Pennsylvania, and now I live downstream in Philadelphia.

I want to talk about some other rights that I have as a Pennsylvanian. The Pennsylvania Constitution guarantees me the right to clean water and clean air. I consider that a human right. It doesn't matter if it's written on a piece of paper. Anybody in the United States should have that right.

So with gas drilling, we have this body of anecdotal evidence suggesting that the activity, you know, may deprive people of their rights to clean water, to pure air, pure water, clean air. It's a staggering record. We have the bubbling of methane in the Susquehanna. We have unsafe levels of total dissolved solids in the Monongahela. Thousands of reports of well water contamination. Case after case of human illness, and unusually high rates of childhood asthma in active Barnett shale drilling areas. Fish kills, salamander die-offs. These strong indications give me no assurances that my human rights

are protected, you know, if this activity continues in the basin.

So we're talking about the property rights of hundreds of landowners against the human rights of millions of people who live --- who get their drinking water from the basin and breathe the air in the basin. Which rights take precedence?

MS. KULSCHYCZI:

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My name is Iwatika Good afternoon. Kulschyczi. I am just a student. I'm just a Philadelphia renter. And I'm just from Pennsylvania, but I'm also just a part of your future.

We the people, in the era of cooperation, accountability, transparency, stand where legal thought intersects with supported data and common sense foundations. Yet the questions of quality of life remain for critical thinking. So in terms of 18 renewable resources, what about gas or water? maybe is human life renewable? Is public health 20 renewable? Is flora renewable? What about the fauna? 21 Could that be renewable for us, too, just like gas or water or human life? These tasks all needed base information on our actions individually and collectively. Maybe then it could just be time to 25 change how we think about how we want to solve our

1 problems.

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There is also the question of a timeline 2 focus with not only immediate, but short-term, 3 midterm, and yes, also long-term consequences for challenges and successes and our lives. I advocate for not only a continued moratorium, but concurrent study, a cumulative one at that for impact, but more so continuous enforcement, vigilance and restrictions. I suggest a new normal plan where our needs can be met timely for collective sustainability. I do not want 10 to illustrate argumentation over the facts because I 11 12 am no expert at that. Rather to ask for long-term thoughtful decision making. 13

MS. HOULAND:

Hi. I'm speaking as a Philadelphia resident. I'm not an expert of any sort. I'm just someone who would like to reiterate what the young man who just spoke said about human rights versus property owners' rights. I'm not a landowner. I'm an urban resident, and I'm scared shitless that the water that I rely on is going to be contaminated due to actions that are beyond my control.

And I find it appalling that many of us, industry, non-industry, officials, all of the stakeholders, and there are many involved in varying

levels of denial about a very present and clear
danger. When cows are producing stillborn calves in
proximity to well pads, as happened to Terry Greenwood
in Washington County, Pennsylvania, there can be no
question that toxicity is occurring. So this is about
mismanagement and greed. Let's call it what it is.
In short, negligence and exploitation.

So I'm asking you, the members of the 8 DRBC, three things. Do not allow --- please do not 10 allow what I'm calling a travesty of justice to occur. Please do a comprehensive, cumulative study before any 11 regulations are finalized. The second thing I'm 12 asking for is, please ban waste impoundments if you 13 want to protect humans, domestic animals and wildlife. 14 And the third thing is, please allow for more hearings 15 in Philadelphia and New York. And the last thing I'll 16 17 say, close your eyes and imagine the groundwater.

MR. HINE:

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My name is Ron Hine. I'm a landowner in Damascus, Pennsylvania. So far just a handful of gas wells have been drilled in the Delaware River Basin. They're all vertical wells. None have undergone hydraulic fracturing for the production of natural gas. But already we have problems. A year ago, contamination was discovered at the Rodson well. On

1 Tuesday, testimony at this hearing revealed water 2 contamination adjacent to the Crum site and the Teeple well. So let's expand the number of wells to 15,000 to 18,000. That's your number. Let's add horizontal drilling and hydraulic fracturing to the mix. we'll bring in countless truckloads of toxic 6 chemicals, none of which are prohibited by your regulations. Benzene, toluene, methylbenzene, xylene, 2BE, just to name a few.

Look at the Jonah gas field in Wyoming or Garfield County, Colorado. Then you can picture what the river basin will look like at full buildup. industrial landscape with a multitude of chemicals 14 below the earth, upon the earth, and in the air.

The gas industry claims this is all safe They spend billions of dollars on national and clean. TV to convince the public of this. They pour millions into the campaign coffers of elected officials to skew the political process in their favor. Over a ten-year period, the gas industry contributed \$856,000 to a current DRBC commissioner. The Marcellus Shale Coalition paid a former governor and his staff \$900,000 to lobby for the industry.

UNIDENTIFIED SPEAKER:

Thank you.

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MS. PRYDE:

My name is Coralie Pryde. I'm from Wilmington, Delaware. After spending days studying these regulations, I have to agree with people who say they find them confusing because I do, too. But I also strongly feel that they are inadequate.

I think that there are some good ideas for regulations here, but what I don't see are good ideas for enforcement and monitoring of those regulations. In Pennsylvania, when I can look, some companies have a record such that each well that they have has had ten infractions or failures to follow the regulations in the past couple of years. We must have monitoring, and we must know how we're going to pay for it because it will be expensive.

Another problem is the regulations don't mention to me when we're going --- we're concerned about different chemicals in the water, and I know there'll be tests for them, but which ones will be tested for. I don't see things like fluronitril (phonetic), pinalen --- monoxide, a very powerful carcinogen, mentioned, or radon, hydrogen sulfide.

Most important thing, though, is I'm concerned about the long-term. Once --- these wells will be capped and abandoned, within 30 years or so,

1 studies by the EPA show that it is almost inevitable 2 that they will begin leaking within the next 50 to 100 The cement will shrink and allow gases to come up. When there's minor dislocations in the earth, less than an earthquake, it will cause the pipes to crack. They have already identified leakage of chemicals from these abandoned wells. In 100 years, who is going to pay for that damage when these companies are out of business and gone? How does this protect the people in the environment of the Delaware 10 River Valley? 11

MS. LINDEN:

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Priscilla Linden, Washington Crossing, Pennsylvania, and for 47 years a professional social studies educator. So I'd like to talk about geography, history, economics and government.

Geography, DRBC regs are not wide enough ranging in area covered. History, DRBC regs are not long range enough in time for both pre and post drilling monitoring and remediation of problems as the drilling companies' responsibilities. Economics, as a consequence, the public will be saddled with the costs of continuous monitoring and cleanup in perpetuity, both in dollars costs, as well as in health costs to 25 the citizenry. Government, state laws have proven to

1 be inadequate, so the DRBC must not simply defer to them for the enforcement part of the regulations. certainly the federal Halliburton loophole offers no Clean Water, no Clean Safe Drinking Water, or Clean Air provisions.

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Procedurally, I'd like you to wait until the EPA and other scientific impact studies have been done at least two years to 2012. Insufficient comment period time and place, please extend those. We need regional baseline testing of water quality, volume and flow, as well as seismic activity and air quality that already exist in the Delaware Basin for at least a year before drilling to be able to measure any actual 14 effects after drilling.

The regulations need to require continuous monitoring of regional effects in perpetuity, that is readily accessible to the public, ideally by satellite and internet monitoring by all these groups that showed such concern for the safety of these.

More specifically, the regulations must go far beyond the well pad. It should be measured from the ends of each horizontal drilling rig. should require special traces for each horizontal 25 drilling extension. They should show responsibility 1 in perpetuity for all the groundwater because it migrates at 1,200 feet per year even at 500-foot depth.

MR. FLUCK:

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I'm George Fluck from Robbinsville, New Jersey. The challenge and the problem. We need to monitor and control environmental impact of 2,000-plus natural gas wells and radials with the staff of two. The simple answer, it cannot be done.

However, since the migration of problems can extend or comingle beyond a well site, county or state, the DRBC is the only organization that is in 12 position to monitor a production well and execute 14 real-time shutdown or scram protocol if required because of a breach in the Delaware River Basin protection permit. The state, county and municipalities, based on past history, will be very busy responding to accident victims, continual infrastructure repair, well pad fires and Hazmat issues. Reference, last night's natural gas fire in It will be attached to my article. Pennsylvania.

The problem can be solved by installing a close-loop, positive feedback system of real-time 24 measurement devices at each well pad transmitted to an 25 automatic control system located at DRBC headquarters.

Examples of measurement metrics, underground chemical migration, as determined by a unique tag tracer for each well and radials. Chemical, air, surface water, ground waters, seismic, additional future measurements necessary by the DRBC as determined during the lifetime production of a gas well. Measurements should include not just chemicals that the gas company puts into the ground, but the entire spectrum of mineral and other agents that can become dislodged during the natural gas drilling and production process.

HEARING OFFICER:

Thank you.

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MR. FLUCK:

Thanks a million.

MS. BORICHEVSKY:

Good afternoon. I'm Connie Borichevsky, president of the League of Women Voters of Bucks

County. I thank you for the opportunity to speak on behalf of our members throughout the Commonwealth.

We question how you can decide the fate of our majestic resource, the Delaware River Basin, when the evidence is still out. The EPA study is not yet completed. The research on the cumulative and long-term impacts of hydrofracturing remains

1 unfinished. What's the rush? Once you reach the verdict on these regulations, life-altering consequences will ensue.

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We the people of Pennsylvania have a Constitutional right that I quote in part from Article One, Section 27. The people have a right to clean air, pure water, and the preservation of the natural, scenic, historic and aesthetic values of the environment. Please protect the rights today and for generations yet to come.

As a result of our statewide, year-long study, the league developed a position on natural gas extraction from the Marcellus Shale, and our position supports the maximum protection of public health and the environment in all aspects of natural gas production, site restoration, and delivery to the customer by requiring the use of best practices and promoting comprehensive regulations, communication and adequate staffing across government agencies.

The league commends the Commission for seeking broad-based public input through this series of public hearings. But the draft regulations are a mere starting point. Economic and political influences are being brought to bear on the issue 25 before you. Make your deliberations reflective of

1 public input and the scientific studies yet to be 2 completed. Ensure that the process is transparent. Let your decision making model good governments that is truly of the people, by the people, and for the people so that what we value will not perish from the 6 earth.

MS. WILKINSON:

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Karina Wilkinson. I'm speaking on behalf of Food and Water Watch, a non-profit, consumer advocacy organization that advocates for common sense policies that will result in healthy, safe food and 12 access to safe and affordable drinking water. We have a national membership across the country, including in 14 New Jersey --- an office in New Jersey.

We appreciate that the Commission recognizes that horizontal drilling and hydraulic fracturing technologies can have a substantial effect on the surface and groundwater resources of the basin. And we share your concern outlined in the draft regulations that the Commission's current threshold established by its rules and practices and procedure do not adequately protect the wider resources of the 23 basin from gas development.

But the DRBC has a responsibility to 25 protect public water from hydraulic fracturing, and we

1 urge you to make your moratorium permanent. We do not 2 believe that you have conducted an adequate review of the specific dangers related to fracking before moving forward with these draft regulations. EPA has been tasked with assessing the full potential impacts of 6 fracking on water resources and preliminary results of 7 this study will be released in 2012. Full results are not expected until 2014. Any regulations that do not fully consider the results of this study are premature. 10

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It is also very important that the DRBC adequately consider input from the public when making decisions that affect our water supply. I have 90 letters here from supporters who are local residents asking for additional hearings. On their behalf, I recommend that the Commission extend the public comment period to include hearings in additional areas that will be affected if drilling is allowed to move forward, including New York City and Philadelphia in order to fully evaluate the potential impacts of the proposed regulations.

On behalf of Food and Water Watch and the estimated 15 million people who get water from the Delaware River Basin, I urge the Commission not to 25 move forward with implementing regulations on gas

drilling. To the extent that you do, it should be with adequate scientific ---.

MS. FLUCK:

Leona Fluck, Robbinsville, New Jersey.

The Delaware River Basin is the drinking water source for 15 million people. The DRBC is responsible for maintaining the river basin's quality under the special protection designation within the Clean Water Act. The DRBC draft regulations are premature without a cumulative impact analysis. The regulations must be put on hold until the U.S. EPA has completed their scientific studies that are due in 2012.

I want the DRBC to set all standards and regulations and not rely on state or rest on their regulations. Pennsylvania state standards are inadequate and inconsistent over time with their special exemptions and loopholes. Total DRBC oversight is critical for the basin, not for a day or a year, but for decades and decades due to the impact of water withdrawals and the life of gas wells and the industry. I want the DRBC in total control from the approval and monitoring of well sites through industrial development, production and then shutdown, extending beyond that for contamination. This includes the entire area, the well and its radials,

which could extend to 5,000 feet and impact many aquifers.

DRBC, please protect us, the environment, the river basin and our aquifers. I don't trust the gas industry to monitor itself.

HEARING OFFICER:

Thank you. Before the next speaker I'd like to call numbers 81 to 90 to come forward.

MS. HONIG:

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Hi. My name is Ethelyn Honig. I'm a resident of New York City for 77 years, and I didn't plan on speaking here today. I never heard of you. heard of hydrofracking, and I'm an artist. Married, widowed. My husband was a musician.

And the first do-not-harm comment really resonates with me. I have no plan of speaking, however, what I am gathering is that a very small organization, you guys call the DRBC, have a huge, over-the-top responsibility, probably more than you could possibly deal with. And I'm not even sure that legally you should be in this position. It seems to me as though this is a federal issue because of lines 23 between states are simply lines. And that you are divided into one small geographic area which impacts a 25 huge number of people. Somehow, it seems as though

1 it's a structuring incorrect in the sense that somebody's made a major structural governmental error in dividing our country in terms of the environment in this way. I don't know what can be done to change that, but it's like tribes in other countries.

MS. VANADORE:

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Hello. My name is Leathea Vanadore. Ι live in New York City. I'm a lifelong activist on behalf of things that are really dear to my heart and of essential importance to a great number of people.

Hydrofracking, to me, is an act against humanity. The result of this process known in other parts of this country, there are a lot of lies and 14 misinformation out there. When fracking is done, it's not just that little area they show you on top of the earth. It spreads God knows where. And also there had been earthquakes in areas where there were never earthquakes before hydrofracking took place. think that by permitting this process to go forward, you are letting the genie out of the bottle. And once you let the genie out of the bottle, you can't put it back in again. But the destruction will live for generations.

I have no I have no children. 24 25 grandchildren. But I have friends who have children

I have nieces and nephews who have 1 and grandchildren. 2. families. And some of them are as unenlightened as some of the people who spoke here today, and some of them could care less. This is not a Democratic or Republican or an independent issue. This is a human issue, and it is a moral issue. It speaks volumes to 6 7 If you're willing to sell out --- landowners are willing to sell out for a paltry sum of money, which they're not going to get back, and the further truth is this oil --- this gas will not help this country. 10 It will be immediately shipped off to other countries. 11 And the only winners are those few at the top, and the 12 rest of us at the bottom are losers. 13

MS. AXELROD:

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Good afternoon. My name is Jennifer Axelrod. I'm a property owner, a farm owner, an attorney and a conservationist. I own an 80-acre farm parallel to the Delaware River, New Jersey, and I spent years planting deciduous trees and saplings I bought from the New Jersey Forestry Department. Over 4,000 symbols of hope for the future, habitat and to help the watershed that winds its way into the mighty Delaware River.

The property value of dwellings without clean water is zero. Communities with toxic and no

water supplies become instantaneous ghost towns. 2 These are the financial considerations, but by no means the most important ones. Our survival, our entire survival depends entirely on a clean water supply, and it is finite. We cannot afford to observe 6 in our bodies and our savings, any more health issues caused by biosides (phonetic), industry disruptives, neurotoxins and carcinogens, to name a few that sicken We cannot as a society afford to clean up pre-existing superfund sites. These are the ones that 10 hydrofracking is causing. 11

How can we remediate ones we cannot even 12 see or fully know the long-term consequences are? 13 Even organizations came and poisoned one of our 14 reservoirs, we would consider it an act of 15 How is bypassing the Clean Air and Safe 16 bioterrorism. Water Drinking Acts keeping the process secret by 17 claiming propriety interest restraints, not paying 18 commensurate taxes, not being financially liable for 19 20 creating what is essentially superfund sites, damaging our roads and bridges with traffic, clear cutting 21 22 forests to create pad sites. Second, releasing toxic chemicals into the air, not being regulated and being 23 held accountable for all this, not considered an act 24 25 of terrorism on each and every one of us? I believe

we've reached a tipping point. A moratorium must be placed in the hydrofracking. Thank you.

MS. MARTINEZ:

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I'm Amanda Martinez, and I'm a New Hi. York State tap water drinker and very proud of it. live around people who pay \$5 for sparkling water, but I guess they work with the industry because no other people can afford to be paying water to drink, and you have to have 15 million people that depend on you for that. You know the numbers and I'm sure you have all the data in the industry collected. And if you have to wait --- I don't know why it is because you have most of the evidence that says that this is just abhorrent. You know about the millions of gallons of chemicals and the billions of gallons of water, and I just don't know whether I'm going to die of the I don't know what's going to chemicals or of thirst. be first, but it's a horrible death either way.

If you want to believe that the chemicals are not poisonous, or if you want to believe that the water is not scarce, and if you want not to believe the facts, then you cannot regulate now or next month or ever. I think everything has been said, and I guess that's all I have to say, you know. I'm sorry that they left because the property --- the landowners

1 are just getting taken. And the ones who are making money here are the gas drillers. The industry is the one that's getting all the money, and we're just suffering because of that. Thank you.

MR. LAM:

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Hello. My name is David Lam. student studying bioenvironmental engineering with a minor in economics. I was born in Trenton, raised in Lawrenceville and Pennington. I go to school at 10 Rutgers University.

On a grander scale, this is all about In an infinite growth system on a finite 12 economics. planet, that entire ideology is absurd. Today, why 14 don't we pursue renewable energy sources because of the countless benefits it has above fossil fuels? Obviously we pay for Volvos because they'll last longer than Kias. Why don't we do the same with energy?

If you include the environmental costs of cleanup and remove the fossil fuel subsidies, 21 renewable energy sources by far will come out on top. Until the penalties exceed the profits of these companies, nothing will happen. Plus, it can draw out these lawsuits for years, almost generations. 25 then at the end, just pay a settlement.

Also, this is an example of the broken window fallacy where if you destroy something, it drives the economy. But here, even if you break a window and the window-maker makes money, the society as a whole loses out because that money can be directed towards something, a new good, such as a new suit or something.

Residents today here are fearful. it's time that the profit-driven powers of corrupt legislators and energy companies are fearful as well because every generation has a revolution, and today we have the possibility of organizing in a way that no other generation ever had. So you will see the youth-created revolution around the world. Thank you.

MS. HANSEN:

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Good afternoon, Commission. My name is Amy Hansen, and I work in New Jersey Conservation Foundation. Thank you for the opportunity to comment today. NJCF has a 50-year history of protecting lands that drain into the Delaware River Basin, and we have grave, grave concerns about the already absurd, negative and also potential negative impacts from natural gas drilling on our water supply. NJCF has made a large investment in lands in the Delaware Bay 25 watershed, and we help to implement milestone water

protection, including the formation of the Delaware and Raritan Canal Commission. We are troubled by the rush to drill and lack of caution with respect to our critical drinking water supply.

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We have been speaking with our colleagues in Pennsylvania, the Pennsylvania Association of Land Trust Alliance. And they are seeing frightening leveling and industrialization of forestland, protected farm land, and open space at a rapid pace due to gas drilling. They also are concerned that every well in Pennsylvania could become contaminated by this process within a certain number of years.

NJCF does appreciate the work that DRBC has done over the years to maintain the exceptional water quality that now exists in the mighty Delaware River, and we urge you to continue that work and improve water quality where needed. These draft rules fall far short, however, of meeting that goal even though they include some proposals that are stricter than some states' rules.

The more stringent proposals are a good start, but the draft rules need to be developed only after needed scientific studies have been completed The rules do not protect from the and understood. 25 risk of catastrophic harm from individual wells, nor

do they address a cumulative impact. Thank you.

MR. CHURCH:

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3 My name is Tom Church, and I live in Easton, Pennsylvania. At the moment I live in Easton, Pennsylvania, but my --- in my earlier days I lived in the State of West Virginia for many years, for 20 vears. In 1972, I bought 125 acres in rural West Virginia down a dirt road. It was a very beautiful It was its own little valley. property. And it was pretty pristine at the time. And over my 20 years 10 that I lived there, there were many, many changes. 11 And I'm here basically as one of these landowners on 12 one side who had the option of leasing to oil and gas 13 drillers and learning from the ground up what they 14 were about. And on the other side, I actually went to 15 work for a natural gas company as a utility worker 16 reading meters and working on meters. 17 I was a licensed meter technician in the State of West 18 Virginia. And went from the period of time when I was 19 20 testing meters using natural gas just sitting in a 21 meter house with natural gas boiling around my ears, 22 using it as a testing device, the gas itself, to --using a digital unit that used air. So there have 23 been so many changes over all the years that the 24 25 natural gas business has been going on.

And at this point, I --- the benefits that I have had from having leased with three wells on the property and having made \$30,000, \$40,000 over a 5, 10-year and 20-year period, it's not justified by the damages that have --- that I saw in so many ways and have so many anecdotal evidences of problems.

MS. GALLAGHER:

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I'm Sheila Gallagher. I've lived in Easton, Pennsylvania on the Delaware River. And I'm here just as homeowner, landowner and descendant of ancestors who came over from Europe over 250 years ago and settled on the banks of the Delaware River. And my family still lives there. They still have farmland there.

And I just am very concerned about the lack of evidence to prove that there is safety in this process. And I would like to see the Delaware River and all of its beautiful resources to remain as such. And in the reality of life, water is something that every human being needs. Gas, although it's a natural 21 resource, is in essence a poison to our bodies. the only reason that there's an importance in this now is because people in this environment now believe that all of our modern conveniences are something that we 25 need to have rather than looking at the long-term.

They're more interested in the here and now and let the generations to come clean up the mess.

and I just believe that, you know, so much of our resources today that we're using to drill these wells could be put to better use. It would be much better to spend the money that goes into driving tanker trucks of water down the roads and beating up our roads to provide renewable resources rather than to take resources that will wear out in another few years, and that will be the end of it. Thank you.

MS. BYRNE:

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12 I'm Wendy Byrne from New York City. DRBC's draft regulations leave management of 13 well-designed construction and operation to the state 14 where the well is located. Pennsylvania has not had a 15 good record on regulating fracturing. New York State 16 17 does not have rules yet, and their proposed regs were sorely lacking. Because in the 2005 Energy Bill, 18 hydraulic fracturing was exempt from several 19 20 environmental acts, including the Safe Water ---21 Drinking Water Act, drilling companies say it's not 22 our fault. Last December Amy Mall of the NRDC 23

24 published a list of incidents around the country where

25 drinking water is contaminated and hydraulic

1 fracturing was a suspected cause. She indicated that 2 the only ones she listed were cases where a homeowner had enough detailed knowledge to know that a nearby well had been recently fractured, and specifically included that information in reports. For instance, 6 in Pennsylvania, in September 2010, a lawsuit was filed by 13 families who say they had been and continued to be exposed to contaminated drinking water linked to hydraulic fracturing. Eight different properties in Susquehanna County are said to have 10 contaminated drinking water. One child has 11 12 neurological symptoms consistent with exposure to toxic substances. 13

In 2009, drinking water on a farm in Washington County tested for arsenic at 2,600 times acceptable levels, benzene at 44 times above limits, naphthalene at five times the federal standard, and mercury and selenium levels with official --- over official limits. These incidents involve several different drilling companies.

A further concern is contamination of ground and surface water from an open pit storage of chemicals and wastewater. In your beginning introduction ---.

MR. WOLFE:

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Good afternoon. My name is Bill Wolfe. 1 2 I live in Ringoes along the river, Ringoes, New Jersey. I came here this afternoon basically to listen, so I don't have prepared remarks. I'll submit written comments. But I want to speak from my experience as a former regulator for the DEP, and 6 Environmental Advocate in New Jersey.

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And typically I'm a very strong advocate of the very strictest regulations you can find and am typically very frustrated by how the regulated community uses scientific unknowns and scientific uncertainty to frustrate effective regulation. So in this case, I'm very disgusted by, you know, this perverse irony that the industry in this case is exploiting uncertainty, and your regulations are not protecting the public and the resource that your regulations are effectively alleviating a ban or a moratorium in protecting the oil and gas industry. So this is a perverse proceeding from the outset. think you need to realize that certain things present certain risks that are not amenable to regulation. 21 And I think we have that case here. You can't regulate effectively, so you basically either have to ban it outright or put in place a moratorium until you 25 have a foundation upon which you can build an

effective ---.

And, you know, and then there are other factors that go beyond the regulatory arena and deal with, you know ---. I'm saddened by this process because I see how corrupt it is at its core and how the public and democratic interests are completely, completely frustrated by money and politics and profits. And it's disgusting.

And as a former regulator, you know, certain things at the margin you can deal with those kinds of constraints. But in this case it's totally unacceptable.

MR. MENKES:

I want to say that, first of all, I'm not opposed to fracking. I just want it done in a very responsible manner. That's the least that can be provided for me. My name's Larry Menkes. I'm a nationally certified sustainable building advisor and director of Sustainability and Freedom's Way Foundation, a new national heritage park in Bucks County, Pennsylvania. I'm also a member of the Association for the Study of Peak Oil and Gas.

Our project in Bucks County relies on the exceptional quality of our environment before it gets out in our air or water is tainted. This multi-

1 million dollar project and the local jobs that go with 2 it, is ruined. Unfortunately, our water has already been tainted. Millions of barrels of frac fluid have 3 --- and flow-back have been dumped into our local Yosemite Creek, poorly treated. This was done 6 improperly, illegally, and there has been no penalty, 7 consequence or accountability for this. Is this the kind of oversight that I want? I think not.

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What's the hurry? This gas isn't going anywhere. The price is at its historic lows. It will only get more valuable with time. The solution to polluting is not dilution. That's very 20th century. The solution is to prevent it. No one has a right, moral or otherwise to harm another. No one has a right to cause harm without being accountable morally and financially.

As a member of ASPO, I can assure you that natural gas is not a substitute for petroleum, which is a transportation fuel. Natural gas won't reduce our dependence on foreign oil. We can get this right and have the time to do that, if given it.

I've spoken to representatives of the industry who claim that the only reason for not doing it right is that their profit margins will be lower. 25 Finally, who pays for the common cost of this?

the taxpayer. And I know that more than half of our energy is wasted.

HEARING OFFICER:

Thank you.

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MR. BRALOW:

Hi. My name is Matt Bralow. I'm from

New York City. I just came here today because I also
am opposed to this. It seems premature moving
forward, or it seems like a rushed process. And I

really think that you guys need to take into account,
you know, the population that would largely be
affected by this, you know, in the cities like New
York and Philadelphia. I think there needs to be more
hearings.

Obviously there are safety issues. 15 mean, it seems pretty obvious. I mean, you see people 16 17 living on this --- near these sites and they get sick, you know, with cancer. I mean, that's just there. 18 Just imagine if it was in New York City. 19 20 apparently it only takes a minute billionth of a particle to make people sick or experience symptoms. 21 22 So I just think you need to just get a --- you know, an independent study done, you know, that looks at all 23 these risks and, you know, the cost benefit ratio, you 24 25 know, as far as economic and as far as safety for

people.

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I also agree that it seems --- I mean, I 2 came here and it just seems really like kind of 3 grotesque and sick, the fact that --- and just sad to see that the people put economic --- their own economic interests ahead of the greater good for people and our safety and our health because it really --- it seems like greed is motivating all of this, and money. And the people that ask for --- you know, the owners that wanted this, they're gone now. They don't 10 even listen to the other side. You know, I just feel 11 12 like they're just motivated by money, yeah.

HEARING OFFICER:

14 This will be the last speaker for this session. 15

MR. PLATT:

Thank you for that honor. My name is Rodney Platt, and I am a Delaware County resident and a Delaware River water drinker.

I wanted to thank the Commission for the current moratorium and this hearing process. believe you are the only body in the country shouldering this awesome responsibility. I urge you to reflect on your conscience and at least extend the 25 hearing period by 120 days. We need to hear from New

1 York and Philadelphia cities at the very least.

I am a hiker, burger, swimmer, kayaker, 2 fisherman, and very grateful water drinker. 3 learned very much from Rachel Carson in the day of the unintended consequences of corporate environmental exploitation. The 2005 exemptions of the Clean Water and Air Acts prove profit motive of the gas industry and its arrogant rejection of the science --- of protection we have suffered long to build.

Once fractured, the water aquifers are permanently compromised to possible leaching of over 500 extremely hazardous poisons from the process. There is no remediation for many of these. No quick profits for the gas industry, the jobless and the hungry, blind landowners, and the chief energy are worth the very long-term contamination of our most precious resource. I will gladly pay more for safer energy in order to protect these resources.

Please wait until the EPA science is in to make the responsible decision. Thank you. Cheap gas or cheap water.

HEARING OFFICER:

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Okay. With that, we will close this The evening session starts at 6:00 p.m. session. 25 Thank you very much.

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2	HEARING CONCLUDED AT 5:00 P.M.	
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CERTIFICATE

I hereby certify, as the stenographic reporter, that the foregoing proceedings were taken stenographically by me, and thereafter reduced to typewriting by me or under my direction; and that this transcript is a true and accurate record to the best of my ability.

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mede madagano