#### BEFORE THE

### DELAWARE RIVER BASIN COMMISSION

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IN RE: NATURAL GAS HEARING

SESSION II

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BEFORE: CAROL R. COLLIER, Executive Director,

Hearing Officer

William J. Muszynski, Member

HEARING: Thursday, February 24, 2011

6:00 p.m.

LOCATION: Patriots Theater at the War Memorial

1 Memorial Drive

Trenton, NJ 08625

Reporter: Nicole Montagano

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WITNESSES: Tanyette Colon, Jennifer Foulk, Nancy
Hedinger, Michael McMackin, Dorothy Clarke, Austin
Kelly, Jamie Balancia, Donna Fasanella, Cathy Pregmon,
Joe, Candido Rodriquez, Henry D'Silva, Andrew McGrath,
Julie Edgar, Lorraine Skala, Kathleen C. Feeney,
Esquire, Manijeh Saba, Elizabeth Tatham, Grace Agnew,
Sarah Parker-Givens, Lisa Rochelle, Robert Tiffany,
Barbara Tiffany, Erin Crump, Heather Maltin, Linda
Lord, Pam Fitzpatrick, Faith Zerbe, John McVeigh, Paul
Roden, Liz Nelson, Sara Scully, Liz Nelson, Victoria
Ochocki, Ann Dixon, Tracy Carluccio, Laura Michaels,
David Giffen, Becca Menshen, Juliet Marlier, Rodney
Platt, Elizabeth Christy, Audrey Braam, Val Sigstedt

				_			
1		I N D E X		3			
2							
3	OPENIN	G REMARKS					
4	Ву	Hearing Officer	6 -	10			
5	PRESEN	PRESENTATION					
6	Ву	Mr. Muszynski	10 -	-			
7	24						
8	TESTIM	TESTIMONY					
9	Ву	Tanyette Colon	24 -	26			
10	Ву	Jennifer Foulk	26 -	28			
11	Ву	Nancy Hedinger	28 -	29			
12	Ву	Michael McMackin	29 -	30			
13	Ву	Dorothy Clarke	30 -	32			
14	Ву	Austin Kelly	32 -	33			
15	Ву	Jamie Balancia	34 -	35			
16	Ву	Donna Fasanella	35 -	36			
17	Ву	Cathy Pregmon	36 -	37			
18	Ву	Joe	37 -	38			
19	Ву	Candido Rodriguez	38 -	39			
20	Ву	Henry D'Silva	39 -	40			
21	Ву	Andrew McGrath	41 -	42			
22	Ву	Julie Edgar	42 -	44			
23	Ву	Lorraine Skala	44 -	45			
24	Ву	Kathleen C. Feeney, Esquire	45 -	46			
25	Ву	Manijeh Saba	47 -	48			

					4	
1	Ву	Elizabeth Tatham	48	-	49	
2	I N D E X					
3		(Continued)				
4	TESTIN	TESTIMONY				
5	Ву	Grace Agnew	49	-	51	
6	Ву	Sarah Parker-Givens			51	
7	Ву	Lisa Rochelle	51	-	53	
8	Ву	Robert Tiffany	53	-	54	
9	Ву	Barbara Tiffany	54	-	55	
10	Ву	Erin Crump	55	_	56	
11	Ву	Heather Maltin	56	_	58	
12	Ву	Linda Lord	58	_	59	
13	Ву	Pam Fitzpatrick	59	-	61	
14	Ву	Faith Zerbe	61	-	62	
15	Ву	John McVeigh	62	-	64	
16	Ву	Paul Roden	64	-	65	
17	Ву	Liz Nelson	65	-	66	
18	Ву	Sara Scully	67	-	68	
19	Ву	Victoria Ochocki	68	-	69	
20	Ву	Ann Dixon	69	-	70	
21	Ву	Tracy Carluccio	70	-	72	
22	Ву	Laura Michaels	72	-	73	
23	Ву	David Giffen	73	-	74	
24	Ву	Becca Menshen	75	-	76	
25	Ву	Juliet Marlier	76	_	77	

_	_	5				
By Rodney		77 - 78				
INDEX						
	(Continued)					
TESTIMONY						
By Elizabe	th Christy	78 - 79				
By Audrey	Braam	79				
By Val Sig	gstedt	80 - 81				
CLOSING REMARKS						
By Hearing	Officer	81 - 82				
	TESTIMONY  By Elizabe  By Audrey  By Val Sig  CLOSING REMAR	(Continued) TESTIMONY By Elizabeth Christy By Audrey Braam By Val Sigstedt				

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12 Collier, executive director of the Delaware River

13 Basin Commission, and I'll function as Hearing Officer

14 for tonight's public hearing.

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16 busy schedules to participate in DRBC's natural gas

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18 please silence your cell phones. This is the sixth of

19 six hearing sessions conducted this week in three

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21 sessions, each at Honesdale, Pennsylvania and Liberty,

22 New York. All sessions will collectively allow for a total of 18 hours of oral testimony.

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25 procedures of the conduct of this meeting, I'd like to

(814) 536-8908

Before launching into the specific

PROCEEDINGS

regulations. And I'd like to start with the Pledge of

rule-making public hearing process. And just to note,

locations around the basin. On Tuesday, we held two

Okay. I'd like to call this hearing to

Good evening and welcome. I'm Carol

Thanks for taking the time out of your

HEARING OFFICER:

HEARING OFFICER:

Allegiance. Please stand.

PLEDGE OF ALLEGIANCE RECITED

order. This is the natural gas hearing, DRBC

Sargent's Court Reporting Service, Inc.

1 take this moment to express my gratitude to Bill Nutter and his staff of the War Memorial and the State of New Jersey for the use of this facility. I'd also like to let you know that John Buster is here from the Commonwealth of Pennsylvania, representing the Commissioner of that state.

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As you know, DRBC issued a press release and a public notice on December 9th, 2010, announcing the availability of the draft natural gas welldrilling regulations found at DRBC's website. notice initiated a 97-day public comment period, provided for public hearings to accept oral testimony, and established formal procedures for filing written comments to be accepted through March 16th. using the National Park Service's electronic comment system called PEPC, Planning Environmental Public Comment system. Comments are directed to the DRBC and will be reviewed by DRBC staff and Commissioners to develop responses, including changes to the rules as appropriate.

Lest there be any confusion about this aspect of the process, I want to emphasize the DRBC and not the National Park Service is conducting this rule making, including the review of the oral and written comments. The PEPC site's a valuable tool

that will help us record and sort your written comments effectively, and it is DRBC who is conducting that process. We do thank the National Park Service wholeheartedly for making PEPC available to us. to date we've received 1,200 comments electronically and over 400 hard-copy comments.

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What we will do this evening is start with a very short presentation to provide a high-level overview of the proposed rule. We also provided at the 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.

I also want to acknowledge the Commission has received numerous requests, no doubt there will be more of them in today's hearing, sessions asking us to extend the comment period and hold other public hearings. Please be aware the Commissioners are considering those requests and will announce the response at the regularly scheduled DRBC public 21 hearing this coming Wednesday, March 2nd.

So let's go through a few of the logistics. A second document distributed at the registration table focuses on rules and guidelines for 25 the conduct. These rules are intended to help sustain 1 the flow of the hearing, to allow as many people as possible to be heard, and to ensure that an adequate record of all comments is obtained. We hope to hear from 150 people during the six hours of testimony here today.

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I would like to reiterate just a few of the rules to ensure that we have a civil, orderly proceeding. Commenters may speak once during a single hearing session. Comments will be recorded by a court reporter. Please begin by stating your name, your place of residence, and if you wish, affiliation. Speak clearly so that we can ensure we come away with an accurate record. Commenters will have two minutes each, and time will be strictly observed. Once a commenter's time is ended, the commenter must stop speaking and leave the microphone area. implore you to please remain quiet during testimony so that the court reporter can produce an accurate record. We've handed out numbered cards, and what I will do is call ten numbers at a time. When called, please step up front and sit in the front row, and David Kovach will assist.

We appreciate everyone's cooperation, and thank you for your participation in the rule-making process. So let's get started. I ask speakers one

1 through ten to come forward please in this row. And I will turn it over to Bill Muszynski, who is manager of DRBC's water resources management branch, to give a short summary of the regulations.

#### MR. MUSZYNSKI:

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Good evening. This is a drawing here of the basin going from the Atlantic all the way up to the top of the basin up in New York. And it includes the reservoir systems for the New York City residents as well. For those of you who are not familiar with us, the Commission was founded in 1961. It has five signatory parties who are the Commissioners of four states and the United States government, who is represented by the general of the North Atlantic Division.

The Marcellus Shale, and you'll have possibly a little difficulty seeing in the back, the 18 hashed area, the dashed area, is the area of the Marcellus Shale that cuts across a large part of our basin, almost 36 percent of our basin. And the sort of tannish or, it should be tan, darker area, that is the portion of our basin which we consider to be special protected waters. So as you can see, they do sort of coincide and overlap at least as far as the 25 portions in Pennsylvania and New York.

The anticipated or expected gas well 1 2 development that we concluded is about 15,000 to 18,000 horizontal wells. These do not include any 3 vertical wells that may be associated with this program. Assuming six to eight wells per well pad, 5 you're looking at 2,000 to 2,200 well pads. would equate to about 10,000 to 12,000 acres, assuming about five well pads per --- five acres per well pad. And that does not include the additional acreage for support infrastructures. 10

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As far as water needs go, usually one horizontal well is fractured at about five million gallons of water. That would equate to about 90 billion gallons of water over a 10 to 20-year, 25-year development process. If there is no reuse, it would be 90 billion gallons. If there is a reuse of the flow-back water that comes --- the initial water that comes back out of the frack right after the frack process, that would lower that amount to about 72 billion gallons which would be used as part of the 21 next fracking.

In terms of wastewater treatment and disposal, as I mentioned, the flow-back water, we're estimating that would be about 20-percent return. That number was higher when we first started this

program. We were looking in the range of 40 percent after looking at what was happening in other states.

With the data coming in from the Susquehanna Basin, it seems to be indicating that the flow-back is more in the 10 to 20-percent range. So that would be about a million gallons per well that we'd get back to reuse as part of the next fracking process or would be converted into wastewater which would need to be treated and disposed. And, of course, the issue with regard to that is treatment plant capacity in the basin as well as the capability of the treatment plants to handle this material.

The Commission's strategy is based upon a three-pronged approach. Water withdrawal, the water to support this operation. We are certainly concerned about protecting surface and groundwater supplies, preserving the ecological flows in our basin, as well as ensuring that there is a capacity for the treatment facilities that are already in the basin.

With regard to the well pads and the infrastructure, we have crafted a Natural Gas

Development Plan which I will talk about in a minute, that would look at not just well pads, but looks at the entire development and lease area as one program. We are looking to make sure that the water is managed,

1 meaning that we know where the water comes from. It's 2 coming from the DRBC-approved source. Where it goes to make sure when it leaves the source, it goes to well pads in the basin that are approved to accept And then what happens to that water on this water. the well pad site itself. And then eventually making sure that it is --- needs to be disposed of properly and that it is disposed of properly.

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We are also putting in the regulations requirements that there be approved presite alteration, post --- pre-set alteration during the well construction and fracking, and after when the wells are in production, that there be monitoring, 14 monitoring both of the surface and the groundwater sources in the vicinity of that well pad. addition, the DRBC will be doing ambient monitoring, not necessarily associated with a particular site of the ambient waters.

The wastewater disposal site, we have to make sure that any treatment plants that are thinking of accepting this wastewater are done so that we protect the receiving water bodies to which those facilities discharge. That means that we have to make sure that they have adequate effluent requirements and 25 treatment requirements. And facilities that have not

been approved to take this wastewater, we have to make sure that we review them to make sure that they do have that adequate criteria. In addition, wastewater that leaves these sites, we want to make sure that, again, they get to the sites to which they are supposed to go, and so there's a tracking program to make sure that they do get there and are correctly --- treated correctly. And finally, we want to make sure that there's adequate treatment available.

The purpose of the regs, again, is the 15 million people that rely on the water of these basins for drinking water purposes. This is an incredible natural resource in this particular area, the mid-Atlantic metropolitan area. Three-quarters of the non-titled river is designated a national wild and scenic river system. And as I mentioned earlier, DRBC has designated the area from basically the Calhoun Street Bridge here in Trenton all the way up to the Delaware River portion as special protection waters.

The other purpose of these regulations is to comply with DRBC's existing programs that we already have. Our regulations implemented statutory ordinances that were granted in the DRBC compact by the signatory parties when they signed the compact. They agreed to try to manage this basin more as a

1 basin as opposed to the individual states. And so that's why they get together and try to manage it as a It supplements the Commission's comprehensive basin. plan.

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And if you look on our website, you will see that there are regulations already on the books, regulations that deal with groundwater protection, regulations that deal with flood plans, regulations dealing with special protection water, and finally, our water withdrawal and wastewater --- water quality regulations that are already on our books. So these regulations have been looked at with regard to how all of these pieces fit together.

We consolidated the regulations. Ιn essence, rather than have people try to look at the water withdrawal and the wastewater, we tried as much as possible to put them in one place. We have made enhancements in some places. In other places we've made it by reference. But we put them in one place so that everybody has an easier time of finding it, how they apply specifically to this particular operation. So it included the regulations for water withdrawal, for well pads, natural gas as well as wastewater They provide certainty and clarity to both disposal. industry and to the public that they can now look at

them in one place.

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2 It includes a proposal for approval by rule process. And the approval by rule process I'll 3 discuss a little bit later, but essentially that is something the Commission does not have. something that is in the Susquehanna Basin for their water approvals, but is not in the Delaware River Basin Commission at this time. It relies on the New York and Pennsylvania programs to --- and expertise to regulate well construction operations. The reason you 10 do not see well constructing casing requirements and 11 12 cementing requirements in our regulations is because there was a decision to --- after reviewing the 13 regulations with the Commissioners and the states, 14 that we would rely on their programs that they already 15 had in place. In some cases, Pennsylvania has 16 17 recently revised those regulations, and we understand that New York has not completed its process yet, but 18 we felt comfortable that we could rely on their 19 20 regulations.

In any event, when you deal with the Commission and the states, it is the more stringent of the requirements that always count. So even if we were less stringent than they were or they were less stringent than we were, it is the most stringent

1 requirements that count.

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And these regulations are written to
apply to all natural gas formations, not just the
Marcellus Shale. So they are comprehensive in the
sense that if people change formations on us,
whatever, these regulations apply to all those
formations. This is just the way they are set up in
the six sections.

The types of approval that you can get. 9 | Water use and water withdrawal for well pad, if you 10 meet particularly the requirements of the setup in the 11 draft regulations, you may be able to apply for an 12 approval by rule, which is an approval by the 13 14 executive director. And there are public noticing procedures that apply to both approval by rule as well 15 as a docket. 16

If you do not meet certain criteria, then you have to go through the normal approval process, which is approval by Commissioners at one of our public hearings. The Commissioners meet five times a year, so you would have to wait until one of those five times to be considered by the Commission for approval.

On the Natural Gas Development Plan,
which is a much more comprehensive document, and the

wastewater discharge, which is really a revision to normally existing approvals, both of those, you would have to go through our Commission hearing process, and again, the public participation process that goes along with it.

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How does this play out in the water withdrawal and use approval side? For new sources, if you were going to apply to get a new withdrawal source for this purpose, you would have to get a docket. whether you're groundwater or surface water withdrawal, treated wastewater to be used, or 12 non-contact cooling water, you would have to go through a docketing process. If it's an existing --already existing approved source that may have capacity --- excess capacity associated with it, you estimate it for ten years and you did --- if you can stay within that, then you can apply for an AVR if you're groundwater or surface water, et cetera.

Reuse of recovered flow-back or production waters would be incorporated into an approved docket or an AVR. And then finally, if you input water into this basin --- actually, even if you export water out of this basin, that can only have been done with the approval of the Commission. So 25 that would have to be a docketed activity.

The types of conditions that are included 1 in water use and withdrawal, these are just a few of 2 There's obviously more conditions in the Act 3 To highlight a couple, there is the and regulations. AVR process potential. There's also water tracking and reporting requirements that are reported directly 6 to the Commission by the person who is providing the water for this purpose. And that would come in to us, so we are actually out seeking RFPs. We are actually putting requests for proposals out to provide us with 10 a computerized online tracking system so that that 11 would feed into this program and then it would become 12 available and open, obviously, to the public for 13 14 review as well.

As for testing requirements, regardless of whether you're putting in a groundwater well for water supply purposes or for any other purpose, you have to demonstrate that the aguifer itself will not be impacted significantly and negatively impacted by your operation. If you're a surface water, we have passby flow requirements to ensure that ecological flows in the waterway are protected.

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For the natural gas pad and the Natural Gas Development Plans, there are requirements that we 25 have split the programs into low volume wells that

1 hydraulically fracture less than 80,000 gallons because the hydraulic fracturing, especially vertical wells, has been a common practice in drinking water wells. But we had to split them into low volume and then wells with high volume. High volume is anything that goes over the 80,000 gallons per well number.

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There are siting setback requirements that are associated with these that are in the There are, again, water and wastewater regulations. tracking at the well pad site itself that needs to be done. And there's also background, groundwater and surface water monitoring, again, all the way during the construction and fracking and then during the production and operation stage. For as long as production goes, there will be monitoring requirements.

There are planning requirements that we put especially because this would be the very keystone of the Natural Gas Development Plan. Offsite cutting, drill cuttings, targeted formation, that material would not be allowed to be remaining onsite. And we do require wastewater storage, flow-back water storage to be in tanks. We do allow for centralized impoundments, but not located on the well pad sites 25 themselves. And there are modified public noticing

procedures.

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This essentially is the spine, I call it, 2 of the Natural Gas Development Plan. There'll be a 3 lease area map requirement where it shows the entire leasehold so as these companies come into us, we will know what their entire leaseholdings are in the basin. And the landscape map will have a variety of features associated with it, including hydrology maps, geology maps so that we know what makes up this leasehold area currently in terms of the roads, structures, et 10 11 cetera.

And in addition, there will be a well pad site --- well pad sitings and restriction requirements that we placed into the draft regs. But in any event, these are not absolute prohibitions. I know having listened through a few days of comments already that people are taking these as absolute restrictions. They are not absolute restrictions. There are ability to get deviations, to get variances to these restrictions. The only restriction that you cannot apply for a variance for is if you're located in a floodway, which is where --- the floodway is defined as usually on maps of the Weather Service. FEMA, Federal Emergency Management Agency, puts out a fire 25 and floodway, for instance, of the Delaware River.

1 And it's really that section that carries the majority of the floodwaters and has a certain current associated with it as well.

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So then when you get those, you get what's in the lease area. You then look at your restrictions and you put your map together. finally, you put down what your planning, the proposal for that particular lease. And that's the plan that would go out to the public and to the Commissioners for consideration.

On the discharge approval side, each of these have to be looked at individually because we need to tailor-make requirements to the waterway either based on our existing water qualities or information that you get as part of the program. are putting in a provision for a treatability center. As a treatment that wants to consider accepting this, I have to do a treatability study, estimates of the wastewater and make sure it does not negatively impact that wastewater treatment plant's operation or the sludge handling facilities in any way for treatment, and can meet the effluent requirements that are placed It will be site specific. on it.

Discharge requirements. Also there's provisions in the regulations for acute and chronic 25

1 toxicity analysis and limitations. And on the total dissolved solids, there are stream quality objectives 2 that the Commission already has in place. These are not new requirements, but we certainly put that in there to alert you that, again, the Commission already has these basin-wide.

As Carol mentioned, this is the second day of hearings. We've held hearings at two locations on Tuesday, and this is, I guess, the last session for today. The 90-day --- actually, it's more than 90 days because we put it out earlier, but we are counting it as an additional 90-day period. Written comments, close of business, March 16th, 2011. can submit it electronically via the PEPC system. can provide paper submissions, which are mailed to our Commission and not mailed to our Commission secretary at the address that we have here, and you can find that on our website as well. Or any comments orally or written that are handed in today to our staff will also be included.

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We will take all of these comments, put them into this electronic system that the Park Service was kind enough to allow us access to, and that will help not only facilitate our review of the comments, 25 but it will also allow the public to see what the

comments were as opposed to a summary report. 1

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Normally, when you do a response document, you summarize all the comments, and that's what the majority of the people see. If you want to see the actual comments, you have to visit someplace to see it. But hopefully, through this electronic system, you have electronic access to the types of comments that we received after the close of the public comment period.

# HEARING OFFICER:

Thank you, Bill. May I have the lights, please? Now let's start with testimony. Number one.

# MS. COLON:

Tanyette Colon from Damascus, PA. I'm reading this letter today on behalf of both myself and my husband, who's a physician. I will start by saying that this is quite possibly one of the biggest threats to public health.

The draft regulations issued by the DRBC on hydraulic fracturing in the Delaware River Basin 21 are incomplete. You have not looked at the chemicals being used, and blatantly ignore health effects. How can you ignore health effects from chemicals like 2-butoxyethanol, benzene, toluene, ethylbenzene and 25 xylene are being used? 2-B for short causes internal

1 bleeding, leading to liver and kidney failure. high doses, it's lethal. Permit data shows that 2-B 2 was used in our basin at the Woodland Management Partners exploratory well this past summer. is a known carcinogen. Toluene is a known abortive, causing miscarriages. Ethylbenzene is a neurotoxin, causing brain fog as well as chemical sensitivity. long-term health impact study has been done, but we know what damages these chemicals can cause individually. How can we risk allowing these to enter 10 an aquifer that provides water for 15 million people? 11 You also did not take into account the 12 health effects of the substances already found in the 13 shale: heavy metals, radioactive elements, high levels 14 of barium, lithium, hydrogen sulfide that's produced 15 by bacteria, and a chemical called 4-NQO, which is one 17 of the most potent carcinogens, and it's showing up in flow-back fluids all over the Marcellus Shale. 18 neither naturally occurring in black shale or a known 19 20 drilling fluid, yet it consistently appears. imperative that the DRBC conduct a health impact 21 22 assessment before proceeding with any final regulations. To do anything else would be 23 irresponsible. 24

And I'll quickly end on this note. Those

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who live in our area in Damascus witnessed what
happened with the Woodland Management exploratory
well. An analysis of that pit content indicated
presence of high levels of barium, lead, arsenic and
chromium. Families nearby were potentially exposed to
hydrogen sulfide. And to this day, as far as I know,
the residual content of that pit was solidified and
buried close to those homes with no resolution today.
Thank you.

# MS. FOULK:

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Jennifer Foulk, Chalfont, Pennsylvania.

I'm a professor of biology at Montgomery County

Community College in PA, and I have a graduate degree in conservation biology.

15 The idea that hydraulic fracturing can be allowed in a river basin that supplies water to 15.6 16 17 million people is ludicrous. Your draft rules place zero restrictions on chemicals used in fracking. 18 According to the Endocrine Disruption Exchange, many 19 20 of these chemicals are hazardous and known carcinogens, such as diesel fuel, benzene and 21 22 formaldehyde. There is also no way to study what happens when chemicals are mixed and act 23 syngergistically to produce a new cocktail of 24 25 pollutants.

Your draft rules do not establish standards for all wastewater constituents. Treatment facilities in Pennsylvania are not equipped for the current degree or volume of contaminated wastewater, nor can they test for all contaminants since the complete cocktail is not available for public disclosure.

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Public water supplies are already being affected. In the last two years, Cabot Oil and Gas trucked more than 44,000 barrels of wastewater to a treatment plant in Hatfield, Pennsylvania, which ended up in a creek that supplies drinking water to 300,000 people. That creek's a mile from my house. And these are just the incidents we know about.

15 Your draft rules defer to state regulations, which are, in Pennsylvania, completely 16 In 2010, there were 2,486 violations 17 inadequate. 18 noted by the Pennsylvania DEP, including explosions, spills and toxic pollution of air and water. 19 If you 20 allow drilling in the basin, then months from now when the pockets of some are full of dollars but our 21 22 property values have plummeted, our roads are a mess, our trees are gone, our wildlife is poisoned, our air 23 24 and water are ruined, we're all sick and our kids are 25 all sick, how much is clean water going to be worth to

What's it going to take to realize that we can't you? drink money?

## MS. HEDINGER:

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Good evening. My name is Nancy Hedinger, and I'm here on behalf of the League of Women Voters of New Jersey. The League of Women Voters is a nonprofit, nonpartisan organization, and we have concerns about the premature adoption of regulations on natural gas development, including hydraulic fracturing, in the Delaware River Basin.

We support open government and the active and informed participation of citizens on public So as not to put --- to publish critical issues. regulations which will affect basin state residents for decades from now without adequate public input, the League requests the comment period to be extended to at least 120, if not 180 days. In addition, public hearings should be held at geographically accessible locations in each basin. And there should be at least one public hearing in New York City and one in 21 Philadelphia.

We also urge you to delay the promulgation of regulations until the Commission has received and considered the results of independent, cumulative impact analyses of the effect that gas 25

1 drilling will have on the quantity and quality of the waters in the Delaware River Basin. The study should also address the site-specific characteristics of the shale formation and the potential for seismic activity.

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In addition, empirical data from wells and other locales illustrates that the drilling process, as well as the compressor stations serving it, release air pollution, which will settle out in our surface waters and reservoirs. This too needs to be taken into account before final regulations are adopted. It is also worth noting that the initial results from the EPA fracking study are not due until 14 2012.

Hydraulic fracturing technology in the United States is still in the experimental stages. 16 17 Its cumulative long-term impacts are not fully known in the United States. Therefore, we feel it is in the 18 best --- not in the best interests of the citizens of 19 20 New Jersey, New York, Pennsylvania, Delaware for the 21 Commission to fast track the regulations before the 22 science is in. We urge you to slow down, get all the facts and make an educated decision. 23

# MR. MCMACKIN:

My name's Michael McMackin. Hello.

1 a registered master plumber in Line Lexington, 2 Pennsylvania. I'd like to make public comment on every aspect of your grandiose plan, but unfortunately, you only allow me two minutes to make a

public comment.

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But what I have to say is how do you, the DRBC, expect to protect my community from gas drilling and chemical wastewater from being dumped into the Neshaminy watershed after you already have allowed the industry, the municipalities and the government state regulating protection agencies to dump 44,000 barrels 12 of frack wastewater into the watershed and the Lower Delaware River, and over one million barrels to go lost and unaccounted for without one fine or action for these violations to the people and to the river under a moratorium?

I ask what will the new DRBC regulations do to prevent this from happening once again, or we as a community just have to accept this kind of criminal, unregulated, free-for-all, causing inevitable destruction to our greatest natural resource, our fresh water supplies. We must ban gas drilling in the Delaware River, all of its tributaries and our watersheds. Thank you.

MS. CLARKE:

Good evening. My name is Dorothy Clarke.

I live in Highland Park, New Jersey in Middlesex

County, and I get drinking water from the Delaware and

Raritan Canal, which is fed from the Delaware River.

My family and I will be directly affected by gas drilling, and the rules you adopt are crucial to our health and the health and viability of the Delaware River. I urge the Commission to fulfill its mandate and protect the clean waters of the Delaware River Basin. I urge you to do this in two ways.

First, delay and vote against the adoption of the final regulations until two studies can be completed. The DRBC should conduct a cumulative impact study of the impacts to the basin, including not only the impact of water withdrawal, spills and possible migration underground of toxic frack water, but also the possible future impacts. It is well known within the industry, concrete and grouting that are necessary to segregate frack water in deep wells from drinking water supplies closer to the surface are subject to failure over time, which could have catastrophic consequences decades or even centuries in the future.

The simple fact is that the chemicals
that are pumped down holes must remain segregated from

1 aquifers and surface waters for as long as the area is to remain habitable. And until you can credibly assure that rules and procedures are in place that quarantee this outcome with a reasonable degree of certainty, it would be dangerous and possibly illegal to allow this process to go forward.

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In addition to the cumulative impact study, the DRBC should wait for the EPA studies to be The EPA study of the effects of the completed. hydraulic fracturing on the drinking water is currently underway. And aside from the urgency of the gas industry to begin drilling now before the facts are out and while the boom is underway, there's no reason for this process to begin in such a crucial watershed before this study is completed. the proper understanding of the facts can regulations be drafted that will ensure the protection of public health and the environment can indeed drilling be deemed safe to go forward at all. You should also expand the public participation process. Thank you.

# MR. KELLY:

I'm Austin Kelly from Philadelphia, Pennsylvania. And it should be obvious that this is wrong on so many levels. There have been no hearings in Philadelphia, New York, Pittsburgh, none at all in 1 Delaware. Millions and millions of people will be affected. Our health and well being, not to mention the Mother Earth from which we came, are all going to be degraded and spoiled by these initiatives which serve corporate profit, not the public interest.

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This sort of theater which we're facing today is not really democracy. When the Delaware River Basin Commission says democracy, they mean business. This is the only lesson we can draw from these hearings, this rush to drill, in a context in which the regulatory bodies on federal and state level 12 have been weakened and defunded, not to mention the regulatory mechanisms, such as relevant laws, which were intended to protect the public interest.

In the absence of all of those, this fast track, these three months towards fracking can be nothing but trouble for all of us and all of our future generations. And anyone who helped with that process is committing a great wrong. And I think we, the people, know as we watch in Cairo, Wisconsin and 21 around the world, that it is through our own actions that the right will be done. And it's not through waiting for these so-called leaders to lead us. is all.

#### HEARING OFFICER:

Before the next speaker, can I please call anyone who has cards 11 through 20 to come forward?

#### MS. BALANCIA:

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Good evening. My name is Jamie Balancia. As with the previous speaker, I'm from Highland Park, New Jersey.

Fracking is not a form of clean energy. Fracking is not sustainable or renewable energy. fracking of the Delaware River Basin is the perpetuation of a practice of gas companies putting their profits before our health and safety.

The DRB supplies water to five percent of the United States population. And the water is used for drinking purposes and for the production of our There are about 50 million people who are going to be directly impacted by this project. The industry has tried to divide us, garner our support by promising payoffs and work. But this is everyone's fight. This is everyone's investment because it's everyone's water and everyone's future.

We've heard that the industry will 23 regulate itself. We're being asked to simply trust that our interests will be protected. We need to recognize that this project is not proposed because of 25

1 the goodness of the gas industry. It's a business decision with short-sighted goals for which we, the public, must pay. We must unite to call for sustainable jobs, renewable energy and sanctity of the water on which we all rely. This is our water and this is our future. I thank you for your time.

#### MS. FASANELLA:

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My name is Donna Fasanella. Hi. reside in Lawrenceville, New Jersey. I just bought a property last year in Sullivan County, New York, almost seven acres, and was gravely disheartened to 12 hear about this plan of fracking in this entire area, or at all.

And I agree, these meetings seem to be nothing more than an inconvenient, but necessary, contrivance. It seems that there's a foregone conclusion for big business, big oil and gas, to move in and make a killing.

Just as a point of fact, last week a poor Ecuadorean grandmother who had sued Chevron was 21 awarded \$8.3 billion in a lawsuit award because Chevron had damaged the rainforest where she and her family lived for generations, just so you understand what's going on across the world, even to the very 25 poor, who may seem otherwise hopeless.

The oil and gas industry admit to the 1 enormous and extensive use of water in the drilling 2 process. Every day there are dozens of large tanker 3 trucks bringing in hundreds of thousands of gallons of water to be mixed with lethal chemicals to be injected deep into the earth. The river's creeks and streams 6 and beautiful forests of this region are being depleted at such a rapid rate that the gas industry must now resort to buying up outer-lying cities' and towns' municipal water. Along with the ongoing 10 depletion of surrounding waters, like the Lehigh 11 12 River, known for its pristine beauty and whitewater rafting excursions, and the Susquehanna, which is the 13 main source of the area's residents' drinking water, 14 is a potential inevitable polluting of these important 15 water supplies. At present ---. Thank you. 16

#### MS. PREGMON:

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Good evening. My name is Cathy Pregmon. I'm from Delaware County, Pennsylvania. I am here as a concerned citizen speaking on behalf of myself and the many others who could not come today. I do not believe that there are people who couldn't come that were motivated by apathy. Rather, they may have been concerned with economic survival that does not depend 25 on their gas drilling leases.

I urge the DRBC to revisit the draft 1 2 regulations and also extend the public comment period. We look to your agency to provide better, more comprehensive regulations than currently promulgated by DEP. Please put restrictions on the chemicals drillers can use in the fracking process. Specify wastewater standards on chemicals used in the drilling 7 practice, and do not allow exemptions from stormwater management as exempted under the Clean Water Act.

We know that you, the DRBC, can promulgate better, safer and more stringent 12 regulations than are currently in place. I urge you to wait for the cumulative studies and protect the river basin and all its citizens before it's too late. Thank you very much.

### JOE:

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Thank you for your time. Quote, there has never been a proven case of water contamination caused by hydraulic fracturing, unquote. Industry representatives and lobbyists use this line over and over in Josh Fox's film, Gasland. But this line contains two major deceptions.

One, the words hydraulic fracturing. Biq 24 gas defines hydraulic fracturing as the moment 25 underground fractures are split and not the entire

The industry could never claim that 1 drilling process.

2 there has never been a proven instance of water

contamination due to the whole process of gas

drilling. But when they confine their definition to

the split, the explosion, the underground earthquake.

This is a part of the process that has never been

fully investigated, and they can legally deny the

obvious.

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Two, the word proven. How can you prove something that has never been fully investigated? The fact that non-naturally-occurring chemicals specifically associated with fracking fluids and drilling muds are showing up in the American people's water is the first level of proof. My name is Joe. live in Lehigh Valley, Pennsylvania, downstream from Gasland. And we all live downstream. Thank you for your time.

## HEARING OFFICER:

Thank you.

# MR. RODRIGUEZ:

My name is Candido Rodriguez. I live in Bucks County, Pennsylvania. And one of the previous speaker said that drilling is good for America. have to submit to you that is a disaster for America 25 because of the enormous uncertainties that are still

1 open for the hydrofracking. One is the lack of a cumulative impact of water withdrawal and well 2 development. And there is no method in the draft 3 regulations for control of the drilling and the water depletion. The other issue has to do with that there are no restrictions on the chemicals that drillers use 7 in the hydraulic fracturing.

So in view of these, it is easy to 8 recognize how the interests of the gas industry are 10 dictating the action and how the interests of the 11 people are taking a second seat. So profit trumps people. It is not difficult to recognize how there's 12 hydrofracking stories developing, privatizing profit, 13 14 and externalizing costs, such as cleanup costs, damage to the environment and ecosystems, public health 15 costs, infrastructure repair costs and costs resulting 16 from dumping gas into the atmosphere. 17 So I think to protect our waters, the DRBC needs just one 18 regulation. No hydrofracking allowed. 19

# MR. D'SILVA:

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Henry D'Silva from Bucks County, Pennsylvania. Our personal freedoms are often gained legally or otherwise by often compromising the freedoms of others. Such is the case of obtaining 25 fossil fuels such as natural gas or oil anywhere.

In the Delaware watershed, the freedom to profit by a few stands by compromising the safety and health of over 15 million people in the watershed. The DRBC was founded to protect these people. drilling should be banned as there should be --- no amount of regulation will guarantee such protection under any section of the regulations.

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In my opinion, we don't need an environmental impact study as there should be a total ban on obtaining such fossil fuel. We are five percent of the world's population and we use 25 percent of global petroleum and gas. We should be using much less.

Another reason is our own health. Cancer has become the number one killer in the US, and we're looking at a number of carcinogens in the process of hydrofracking. Also, all this abundant energy that we seek is lowering our physical activity and leading to obesity and diabetes and heart disease. And this is a no-win situation if you proceed.

And we have, in addition, global warming and rising greenhouse gases. We really should not be doing this process. Dr. Howard of Cornell University pointed out that the process of gas drilling, the 25 total process, is somewhat dirtier than coal mining.

So please ban this process. Thank you.

# MR. MCGRATH:

My name is Andrew McGrath. I'm a resident of Delaware County, Pennsylvania, and I'm among the thousands of citizens who are extremely concerned about the irreversible effects of hydraulic fracturing. And I ask that you push back the March 16th public comment deadline by a minimum of six months and not finalize the regulations for at least two years in order to take into account the EPA study of deep gas drilling's life cycle impact on water.

I want to point out that the interests of giant, multinational oil and gas corporations are quite different from the interests of the people who live in this area, and that strong regulation and enforcement is extremely important. The gas and oil companies have shown that they cannot police themselves as evidenced by thousands of violations in Pennsylvania alone in 2010. These draft rules that you have issued rely on weak state regulations in many areas.

And an area that I'd like to talk about for the next 45 seconds is the centralized wastewater storage facilities that the DRBC allows in these regulations. And they defer to state standards for

them. In New York's draft supplemental generic
Environmental Impact Statement, impoundments as large
as 40 acres are anticipated, and operators are
building huge impoundments in Pennsylvania right now.
One of the major sources of air pollution is from
these wastewater impoundments in which toxic
contaminants volatize to the air, then are breathed
in. They're deposited on soil and water, causing
highly mobile pollution.

Further, DRBC proposes no setback requirements for the impoundments, deferring to the states for onsite pits up to 250,000 gallons. Pennsylvania setbacks are the same as for gas wells, which is only 100 feet from a water body, and as close as 20 inches above the seasonal high water table.

So in summary, for the last ten seconds here, please wait for the science. Understand that there may not be a safe way to do hydrofracturing. And focus on renewable energy such as solar, wind, geothermal and the other sustainable energy sources that will guide us through the 21st century.

#### MS. EDGAR:

Good evening. My name is Julie Edgar.

I'm from Topton, Pennsylvania. I'm an extremely

concerned citizen who has been concerned enough to

join Clean Water Action and Lehigh Valley Gas Truth on account of my concern.

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Insofar as your detailed regulations have stymied and frustrated the selfish and short-sighted aims of profit-mongering gas corporations and property owners, you are apparently doing a much better job than I thought before I got here today, and I thank you for that. But insofar as the cumulative environmental impact studies are incomplete, I must ask why are we even here today considering the adoption of these regulations prematurely?

On one hand it is a tragedy that we, the public, must stand here to ask you to protect our collective health and safety over and above privatized profits. But on the other hand, this is a great opportunity for you, for you, the DRBC, to stand up and set a shining example as the protectors of the largest unfiltered watershed in the United States of America. And we are looking to you to do that. have the difficult, unenviable and thankless job of standing up to the caterwauling of self-interested and inpatient business and property interests who would too gladly sacrifice the health and welfare of citizens, animals and ecosystems for their extremely 25 short-term gain.

Folk have the right to leverage their 1 private property for profit, but only insofar as it 2 does not injure others. And I would also mention injuring ecosystems which support the long-term survival of all living things. This is how the world works. Corporations rape and pillage the world's resources and socialize and externalize the many costs. Unfortunately, it's expedient for them to pay fines or violations than to actually do it safely. And since the federal government, due to the 10 Haliburton loophole, is not protecting us under the 11 12 Clean Water, Clean Air and Superfund laws, we look to you so you can be the saviors of many coming 13 14 generations.

People who stood here in favor are thinking ten years down the road. We want you to think 100 years down the road for all of us, please, and thank you.

#### MS. SKALA:

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My name is Lorraine Skala. I live in 21 Bucks County. I'm an environmental educator. And I don't know what else I can add to the much more eloquent speakers that have come before me except to say that I rely on the Delaware for my drinking water. I was appalled when I found out that fracking water

1 was being dumped into the Neshaminy, which I live about a quarter mile from, and I kayak in and around the Delaware and Neshaminy.

But you know, my biggest concern right now is I teach children. I teach them water issues. 6 What do I say to them? Can I come away and say, yes, your future, you know, drinking supply is going to be I'm teaching them about the Marcellus protected? I'm teaching them about all the impacts on our Shale. watershed. And it's scary. It's a scary future 10 So what do I tell them? 11 they're looking at. Please 12 protect our drinking water. Thank you.

#### MS. FEENEY:

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Hi. My name is Kathleen Feeny. I am not associated with any group. here as an individual today because I'm so gravely concerned. I closed my business and gave up any money that I desperately need that I could have made today to inform myself. And as a lawyer, I know that if this were a courtroom and we were going to decide this the way they do in my line of business, the jury's in. The jury is in.

But what is so troubling to me is that the Commissioners aren't here. No one really wanted to hear what I had to say today. I know you two have

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been very attentive, clearly informing yourself as
quickly as you can. But it seems to me, being part of
a system that puts up PowerPoints, it just fits this
scheme that serves this interest of fracking into some
kind of framework so that later --- although this
proceeding is so rushed and the Commission isn't here
to hear any of us. Where are they? I know you can't
answer me. But as a lawyer, I know that they're not
here. And this is a mere procedural formality that's
fitting into the way things are going.

12 Pittsburgh. You couldn't swim in the Monongahela, the Allegheny or the Ohio. When we drove up to Lake Erie, 13 it was stone bed, and that was all done by industry. 14 And my dad told me, we're going to bring it back. 15 We're going to bring it back in your lifetime, kid. 16 17 And they did. The rivers are barely coming back. Lake Erie is coming back to life. We could always go 18 to the Delaware Water Basin. You're going to take 19 20 that, too?

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I'm 57 years old. I grew up in

Now I live in New Brunswick, New Jersey.

Neither I nor my kid nor my grandkid could swim in the
Raritan, the Passaic, the Hudson, the West, all given
up to industry. These are our natural resources. My
dad's dead of cancer, but it needs to come back.

## HEARING OFFICER:

Excuse me. Before you start, may I call numbers 21 through 30 to come forward?

#### MS. SABA:

Good evening. My name's Manijeh Saba. I live in Somerset, New Jersey. Yes, where are the Commissioners? Why aren't they here? Why are they hiding from the public? This is appalling.

And my other question is what is the rush? What is the rush to issue a deficient regulation with unknown impacts on the health of the public and millions and millions of people for generations to come? Why rush before the results of scientific hydraulic fracturing cumulative impact analysis is released?

DRBC has the mandate of do no harm to the protection of the Delaware Rivers. But the draft falls far short of its mandate. Why is the rush? Results of EPA --- EPA study of hydraulic fracturing for potential impact on drinking water, public health, environment is due in 2012. Why is the rush?

Please remember, water is basic to life.

Seventy (70) percent of our body is water. This fundamental substance needs to be protected from profit-motivated, fear-mongering oil and gas

industries and their land --- and selfish landowning supporters.

Clean water supports health. Health is basic and is our fundamental right. Respect your mandate of do not --- do no harm, and withdraw the draft and begin after the study is released. And stop --- extend the deadline.

#### MS. TATHAM:

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My name is Elizabeth Tatham. I live in Bucks County. These regulations are too weak and they are totally inadequate.

In Honesdale, I was appalled to hear landowner after landowner complain that the 500-feet setback proposed was just too excessive. 500 feet from a reservoir, 500 feet from a stream, from wetlands and the Delaware River is excessive? Nothing will suit these people. They want to drill two feet from the Delaware.

I know a man in Texas who had his well water tested, and the lab found traces of drilling chemicals in it. They said not to give it to small children because it has neurotoxins in it. I asked 23 him, where is your well? How close is it to fracking? 24 He said one mile. If one mile wasn't enough to 25 protect this man's water, what will 500 feet do?

won't protect anybody.

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Several people mentioned using a tracer earlier today. This is an effective procedure for proving where the fracturing flow-back from the gas well went and what water it contaminated, whether in wells or stream. It is critical that you mandate tracking of chemicals by independent labs that you have approved and that no fracking ever occur in this watershed without it.

The Academy of Science in Philadelphia --- Sciences in Philadelphia did a preliminary study that showed there were 25 percent fewer salamanders and aquatic insects in streams near heavy drilling than there were in streams where little or no fracking occurred. This shows what it does to aquatic life. What do you think it does to our children? Thank you.

## MS. AGNEW:

Hi. My name is Grace Agnew, and I'm a librarian at Rutgers University and I live in Highland Park, New Jersey.

I wanted to mention a risk and a danger that I think is very significant that hasn't been addressed yet. One of my hats, as I am a data management specialist, I work with large depositories. 25 And for the past ten years, I've been consulting on

1 the National Earthquake Engineering System. You may 2 know that recently there were a cluster of earthquakes in Arkansas that the Arkansas Geological Survey believes is related to fracking. They are not near a fault. They are near injection wells as part of the fracking process. 6

I noticed your regulations, your PowerPoint, do not address the issues of the danger of 8 seismic activity. You know, you don't have to be an earthquake engineer to know that if you inject stuff 10 at very high pressure in geologic structures, you're 11 going to cause seismic activity. What people here may 12 not know is that the northeast is one of the most 13 overbuilt --- well, they know that. They live here. 14 It's one of the most overbuilt areas, but it's also 15 overbuilt before there was significant regulations in 16 17 the building codes to support seismic activity. have an earthquake here, we are in trouble. 18 know that fracking can and probably has caused 19 20 numerous seismic activities. You haven't addressed it. You haven't done your homework. 21

If you think that I'm not speaking correctly, if you think I'm speaking out of my hat, let me tell you that the USGS has identified that we 25 have everywhere from mild to severe risks of

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1 earthquakes in this area, particularly in New York. And I can also say that Christchurch, New Zealand did not think that they were going to get an earthquake and did not think they were going to lose a lot of lives. We would put Christchurch to shame if we have 5 earthquake activity. Do your homework first, please, 6 7 before you even think about opening up the Delaware Basin to fracking.

## MS. PARKER-GIVENS:

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My name is Sarah Parker-Givens, and I'm from Easton ---. My name is Sarah Parker-Givens, 12 and I'm from Easton, Pennsylvania in Northampton County. And I live right alongside the Delaware 14 River. And I'm here because I oppose this process of fracking.

I oppose the dumping of hazardous wastewater containing known cancer-causing chemicals into our drinking water. And I think it's time to begin investing in clean alternative ways to create energy that don't have a detrimental environmental I ask that there be more public hearings impact. because I know there's lots of people in my area who would want to come and speak out. And I ask this process to be banned. Thank you.

## MS. ROCHELLE:

My name's Lisa Rochelle. I live in 1 Easton, Pennsylvania. I have lived along the wild and 2 scenic Delaware all of my life on both the 3 Pennsylvania and New Jersey borders. When I was 13 years old, my mother died of cancer. When I was 33 years old, my father died of cancer. When I was 40 6 years old, my two sisters were threatened with breast cancer.

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These corporations that pollute do not pay the true cost, the legacy price that we pay with our children, the quality of our water and the quality of our air. An increased rise of asthma has happened around the fracking wells, along with nosebleeds, which is why the mayor of Dish, Texas moved his family It's pretty bad when the mayor leaves. out of Texas.

I urge you to ban. This is not drilling. This is poisoning. There's just no other way to say Really, you know. These corporations that make it. millions and billions of dollars of profits each year, none of us do. But we're the ones who pay the price 21 with our health. We get cancer. And then we can't work and then we can't pay our mortgages. We can't sell our house because the property values go down, and then we need to go on the state and federal systems, and then you call us freeloaders. What the

1 hell is the matter with that?

2 Do you have children? I don't. But I care about yours if you have them. What are you doing 3 to the earth? You tell me what creatures can live without water. Who can? But all of us, all of these mammals, not even just all the animals on the earth, no one lives without water. You show me who lives without water. You want to light your water on fire when it comes out of your tap? It's bad enough that we're fluoridated. It's bad enough in my area where I 10 work in Martins Creek that there's a coal power plant 11 12 that they call a steam plant. It's coal. And one of the surface things broke and it came dumping down the 13 river, and it took three days before they even 14 informed the treatment plant that it happened. 15 treatment plants aren't equipped. We're going to get 16 17 poisoned if you don't stop it. Ban it now.

## HEARING OFFICER:

Thank you.

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# MR. TIFFANY:

Hello. My name is Robert Tiffany. I was born and spent the first few years of my life on the Susquehanna River in Wyomissing, Pennsylvania. Last May I went back to visit friends and relatives there. I would hope that you people should go there to see

1 what is going on before you make any decisions.

2 Relatives, brothers, sisters, cousins are being split.

Farms are being split because there are two opinions

 $4\mid$  in the family. But it doesn't help when the lake,

5 which is still common to the two halves, is bubbling

water and all of their wells are polluted. They'd

7 been promised to have drinking water the rest of their

8 lives. By whom? Not by DEP, but by some small

9 company that comes along. Forget it. They don't

10 provide water for their clothes.

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Now, I know this hearing is about regulations. It's about better regulations to limit the probability or possibility of a disaster or contamination. I think what I would like to see you folks do is to go back to the other groups, committees, I've heard say, whoever it is. I want to talk about inevitability. It is inevitable given the state of geology, the state of the art in drilling and the secrecy and ability to buy anything you wish for enough money that's going to cause our downfall. When do we learn?

#### MS. TIFFANY:

Hello. My name's Barbara Tiffany, and I live in Point Pleasant, Pennsylvania. And I do not envy you in your job. And I realize that and I think

we all realize that the interest of large corporations are overwhelming and the pressure that you have to be under is excruciating. However, I would like to direct your attention to the three --- four bottles of water on your table.

# HEARING OFFICER:

I haven't opened them.

#### MS. TIFFANY:

Imagine that they are filled with some portion of the effluent from one of these drilling projects. Please, I invite you to drink it. In fact, what we're really talking about here is murder.

#### MS. CRUMP:

Hi. My name's Erin Crump. I'm in Montgomery County, Pennsylvania. I want to start with saying that I don't think 18 hours of oral testimony is enough for you to hear about the environmental disaster that this is going to create. So I would definitely ask that you extend the comment period, but I'm with most people in this room that think you should just ban the process altogether.

I think we're really wasting an awful lot
of time. I sat here and I watched your PowerPoint and
I'm looking at all the things you have to do. You
have to have these tracing programs. You have to find

adequate treatment plants. You have to permit. You
have to monitor. You have to have planning
requirements. You're doing all this stuff. You're
fragmenting forests. You're trucking in water.

You're trucking out frack water. There's all this
stuff that's going on and on and on. Why don't we
just not do this? Why don't we stop and focus our
time on things like sealing our homes, making sure
that we stop wasting all the energy that we're wasting
anyhow?

Once we do that, then we can look for less scary options for creating energy. I don't see anybody out there protesting putting solar panels on homes or putting in geothermal wells or building houses. I just don't see it. People aren't pissed about that. This is what they're mad about. Those things create jobs, they save us money and they're going to make sure that we live in a safe world. So think that all of this is ridiculous. I don't know why we don't just stop this process. We do not have to go down this road. There are other roads that we can go down. Thank you.

## MS. MALTIN:

Hi. My name is Heather Maltin, and I 25 live in Gwynedd Valley, Pennsylvania. I'm very opposed to fracking, and I agree with all the speakers so far. And I do wonder if there are any speakers here that are in support of fracking because I know that this is an open forum. So it's pretty clear that this is a bad thing and we're going down the wrong road. I mean, are we so foolish to let big business take over and let us be destroyed and have no water and no health for our families and our future?

I'd like to see this Commission wait until we see the EPA study be concluded, look at the health impact. I mean, rushing ahead is not the way we want to go. Is it fair and is it right? It's not. It's wrong. It's the wrong decision. We need scientific data. We need to look at the short-term and long-term effects of these chemicals in our soil and in our water so we know they're not good, and we're just going to find out more and more bad.

Let's look at states that have destroyed their land and water because of ignorance and because people who have no money and resources are being taken advantage of. That's all I'm seeing. That's all I'm hearing of. I don't hear of any good. And I see these commercials for the natural gas companies, they're so misleading. They make us think it's a good, clean way to heat our homes and to make things

run, and it's not. If people really knew what was going on, they'd be sick.

So I just hope that we think before we act and we protect our water. And, you know, why can't we have more hearings in the Philadelphia area 6 and in some towns where there are highly educated people who will stand up should they know what's going Because many people do not know what is going on here. Please, I urge you, stop rushing ahead before we know what we're doing to ourselves. Thank you.

# HEARING OFFICER:

May I have 31 to 40? Numbers 31 to 40 come forward.

## MS. LORD:

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Hi. My name's Linda Lord. I'm from Gloucester City, New Jersey. I live two blocks from the river, and my family has been in New Jersey for over 100 years.

I'm hoping that you will wait for the cumulative studies. I'm not against natural gas, but I think that the process that's being used to extract it is unconscionable. I think that there's not enough protections against accidents. I don't think the casings are going to be monitored correctly. I think 25 there's no --- the process that they use, there's no

1 way to reroute the chemicals in case of accidents.

2 How long does it take them to stop pouring chemicals

down before --- when an accident occurs? Is it going

to go on for months and months like what happens in

Is there a plan to reuse these chemicals? the Gulf?

Can't they vacuum them back out? Isn't there a better

7 way to do this so that it's safer? Do the

carcinogenic chemicals have to be used? Can we not

substitute something better?

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I really hope you extend the period for I really hope that you take my grandchildren this. into consideration before you poison their water. I really hope that you do the right thing. Thank you 14 very much.

# MS. FITZPATRICK:

Hello. My name is Pam Fitzpatrick. from Bucks County. I've been doing water advocacy for 30 years. No one pays me to be here. I have never taken a dime.

I think a lot of people are chasing the 21 money, the corporations. I think it's a moral issue because children are dying. I have an acquaintance that had went to a child's autopsy in the Gulf for the poisoning, and it is global poisoning. I think it's 25 clear about ---. I also have a background in geology,

and there's no way that this is safe, and there should be a ban on it.

I also wanted to address all these industries want to go and set up shop at the most pristine, beautiful sources of our water that are near the headwaters. And the headwaters are the things that really have to be protected. It's right there. Money cannot buy clean water. It should just be banned.

The headwaters are like your brain. If you pollute your brain, the rest of it just is destroyed. And I'm hearing from people from all over the country and New Zealand and around the world about Halliburton, gas drilling, how our resources are being destroyed. And what good is it if you take the money if your water is bad and you can't survive?

My friend signed a lease. She should know better, she said, in this beautiful area near Fort Still. There were five cars a day. Now with gas drilling, there are 500 trucks transporting water, and they're pulverizing the roads. She says, I can get \$300,000 in three years, and I know that my water may get polluted beyond ---. It just doesn't make any sense. Fifty (50) years from now they're going to say, boy, that fracking, why couldn't they --- it's

like the dinosaur ages. Why couldn't they do something that's clean? Thank you.

## MS. ZERBE:

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My name is Faith Zerbe. I'm a resident 4 of Delaware County, and I also have the luxury of spending a lot of time in beautiful upper Delaware tributaries looking at the fresh water critters that live here. And it's such a beautiful place. And I also have the luxury of looking at the September --in September of 1989, going back and looking at the 10 petition that was put in by Delaware Riverkeeper 11 12 Network for outstanding natural resource waters. I dug it out of a file yesterday and I thought, wow, 13 14 here is the petition that started this, the special protection waters. And I thought, wow, I was 15 years 15 old then. And we were thinking about this. 17 has been doing such a good job so far.

But now here we are with this fossil fuel giant. And 20 years later, we're thinking, what are we going to do? And we're considering regulations to regulate an industry that may not be safe to regulate. So we need to put the brakes on. And I urge DRBC to do that.

Some major issues I see with the regulations. First, DRBC regulations do not require

the use of nontoxic fracking fluid. We need to push
the industry to do these things if they want to do any
drilling at all in our watershed. DRBC does not
require a tracer to be added to fracking and flow-back
waters to ensure that we can pinpoint pollution back
to the drillers, therefore setting up a system that
protects the drillers and not the communities. We
know from the history of the drillers across the
nation when you look at the track record, they're not
standing up. They're not being accountable. So we
can't have them do this here.

Also, air impacts are not addressed.

Really, very concerned about new studies that EPA has come out to look at looking at the fact that emissions are 9,000 times greater for methane than what they had thought before. And also, scientists have shown clearly that we need the setbacks, that we need to protect the watershed and the 500 setbacks even more than that. So I implore you to do the right thing, to use your power and to keep special protection waters. Thanks.

#### MR. MCVEIGH:

My name is John McVeigh. I live in Upper Black Eddy, Pennsylvania. I have several comments and questions I just want to post for a public record.

I have two minutes to discuss what I 1 feel. I could talk for thousands of minutes. 2 interested in this about six months ago only, and I 3 scribbled down these notes very quickly just tonight. My first comment is natural gas is not a sustainable energy source. Why is the existing footprint not 6 7 large enough? Why isn't the whole State of Pennsylvania and West Virginia not big enough for What is driving the speed of this these people? drilling? The natural gas can wait. It can stay in 10 the rocks another 100 years. What is driving this? 11 There needs to be a moratorium in the 12 Delaware watershed. Permanent moratorium. 13 The 14 Delaware watershed is too valuable. Our water is too valuable. Clean water is more --- is too valuable.

15 We don't seem to appreciate how valuable clean water 16 17 is, and that needs to be appreciated. Permit moratorium on the Delaware watershed. That's what we 18 need. 19

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There are many clearly documented areas of risk and many documented examples. Re-explosions, road accidents, pipeline accidents, corruption. is no remediation plan. What's the plan for Dimmock? What's the plan for the mountaintop coal removal areas 25 of West Virginia? There is no remediation plan.

Capitalism is not about the government 1 2 creating jobs for people. Government is supposed to protect the people. And the Delaware River and the 3 state forests need to be protected. Conservation has not been looked at. The environmental impact, the 6 risk assessment, has not been done. Water treatment of frack fluid --- there's thousands of websites where you can get the data on how dangerous this is. months, and I can talk for hours about it. 10 cultural impact hasn't been addressed. The pipeline grid hasn't been addressed. The EMS and the fire 11 12 hasn't been addressed. Future generations, health problems, the loss of the ecosystem of all living 13 14 things, DRBC is responsible for this. This is your 15 job.

# MR. RODEN:

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My name is Paul Roden. I live in 18 Bucks County. And I support the extension of public comments. And we should wait at least for the EPA study. But I think it should be banned.

The more I read about it, the more 22 horrified I am. How could the Delaware River Basin Commission award Delaware River the Pennsylvania river of the year, and then go forward with these regulations? The regulations are a joke.

1 And what about the surface casing specs? 2 There's nothing in there about the piping for extracting the stuff. What about blowout permits? 3 You saw what happened in the Gulf without a good blowout permit. Who's going to pay for the monitoring of all this stuff? When the governors don't want to --- don't believe in regulation and taxes, who's going to pay for the cleanup? In this whole era of antitax, anti-government, the government can't do anything right, who is going to pay for the monitoring? 10 companies aren't. They don't want to. 11

I think it was Nockamixon Township passed 12 some regulations that one of the gas companies ---. 13 That's what we want to do. We don't want to be 14 burning this gas to begin with. We don't need it for 15 global warning. We don't need it for our water 16 17 supply. I grew up --- I spent my summers in Sullivan I went to Honesdale to the agricultural fair 18 County. every summer. I love that stuff. I have relatives 19 20 still up there in Sullivan County. I don't want this 21 thing to go forward. It should be banned. I mean, 22 all these questions --- it's not going to happen unless we band together and stop it. Thank you. 23

# MS. NELSON:

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Hi. My name is Liz Nelson. I'm

originally English. I've lived here for, I guess, 28 I live in Somerset in New Jersey.

And I want to say that after being here all day, it's been kind of thrilling to hear people's very articulate, moving words that are so pertinent to the issue. But it's also very depressing. A couple people have mentioned that the Commissioners are not here, and that really is insulting to this whole process. It almost makes me wonder if it's such a 10 done deal. Is it such a done deal that are we wasting our time? Are Americans wasting their time standing up for their country against pollutors who wantonly do whatever they want? Is this country already bought and paid for by corporations? Is it Ecuador already? Are our communities going to be filled with pits of, you know, contaminated water tomorrow? Are we any different than the Ecuadorean Indians already? And my appeal to everybody here is don't let this go away. Even if you don't get another hearing anywhere else, don't let it go away. Go to

# HEARING OFFICER:

your country. Fight for it.

Before you start, are the numbers past

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the streets and let other Americans know that this is

## MR. MUSZYNSKI:

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They're up to 41 now, but we have 41.

## HEARING OFFICER:

Forty-one (41)? We're at 42.

Whoever is left out there, please come up.

# MS. SCULLY:

7 Okay. Hi. My name is Sara Scully, and I'm from Hunterdon County, New Jersey. And I don't 8 have any new information. I just have some insight on this event which is interesting to me. I produce 10 events. And just looking at the production of this 11 12 event, I feel it says so much about our relationship as the people to the DRBC. While it's very random 13 that you're in an elevated place and we're all beneath 14 you and I'm standing at a podium looking up at you, I 15 would so much prefer --- whether it's metaphorical or 16 17 literal, I would so much prefer this podium be up on that stage equal to you. Whether or not we make that 18 literally happen, I say this in the spirit of I want 19 20 you to value our comments on the same level as yours and truly take seriously the level of responsibility 21 22 all of us entrust you with. 23

I know you're employees. And I know many of you are just doing a really, really good job. 25 the Commissioners are elected or appointed.

1 have such a serious responsibility to all of us to seriously look at and consider these comments on the same plane as you consider your jobs and your position.

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The next thing I would just like to mention also in terms of event design that reflects something about our culture and attitudes is, again, the bottled water. We cannot take for granted that the privatization of water is an okay thing, that we we'll all just buy bottled water. This technology seriously threatens our free drinking water, and we need to take for granted that we all should have access to free drinking water in our wells that is clean and healthy and not privatized. Thank you.

# MS. OCHOCKI:

My name is Vickie Ochocki. in Hatfield, Pennsylvania. But I'm not a native Pennsylvanian. I was born and raised in the Los Angeles Basin. In my childhood, it once went three years without any measurable rainfall. So we got pretty excited by seeing water in its natural state. And when I moved here to Pennsylvania, it was like it refreshed my soul because you got water for free. You didn't have to pay for it to come out of a tap. 25 actually came down from the sky. It actually ran

1 through the earth and there were trees growing out of it and all kinds of good stuff. For a Californian, that was very interesting and exciting to me.

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I would hate to see that go away. would hate to see the rivers and the creeks become stinking messes of dead fish and frogs with 18 legs growing out of them. But more than that, as I've been listening to people, one thing that kept coming to my mind is why not wait? Why not wait until this very expensive, time-consuming EPA study is complete? The only reason I can think of for rushing is money. And it ain't ours.

So I would like to submit to you that in the long run, the profit, if you will, the proceeds from waiting and making sure will be greater than the profit, the proceeds, from rushing. So please wait for the EPA to do its job. Thank you.

#### MS. DIXON:

Ann Dixon from Philadelphia. So thank you for the moratorium so far. As you know, special protection waters, most of the Delaware is --- it's legally obligated for it to remain as clean as it is now. So thank you for doing that.

We are hanging on by a thread here, and 25 we --- over 50 million people who count on the

1 Delaware River for drinking water are counting on you to protect us because no one else is. And you've protected us really well so far.

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So about the regulations that have been proposed, I thank you for the setbacks from streams. 5 That's a really good thing. A couple of days ago, I 6 just found out about this new chemical in fracking fluid in flow back. I thought I heard it all. know, we've all heard about the benzene and the 10 toluene and the carcinogens. NCOO (sic) is a chemical that isn't in frack fluid. I mean it isn't in the 11 12 fracking chemicals. It's not naturally in the rocks, in the shale. It's a result of the combination of 13 14 chemicals used. This is so carcinogenic that it is used to produce tumors in lab animals. And it was 15 discovered in the 1940s in gas and well --- gas and 16 17 oil fields.

So like everyone else here, I would really like you to have a moratorium continue until the EPA studies are complete and we can see where to go from there. Thank you.

#### MS. CARLUCCIO:

Tracy Carluccio, Delaware Riverkeeper 23 I waited until the end because I didn't want 24 | Network. to take anybody's time. And just want to say a couple 25

things that I've moved to think about over the course of the day.

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As you know, we've considered the draft rules not to meet the DRBC's legal mandate to do no harm. That is do no harm. And that's what is necessary in order to protect the exceptional water quality of the wild and scenic Delaware River and the drinking water for 15 million people. And we're going to be submitting extensive written comment to explain why we have come to that conclusion.

But what I want to say tonight is that we 11 are downstreamers here. And there's three million 12 people in New Jersey, 1.5 million people in 13 Philadelphia, and all the people in Delaware. 14 all on the receiving end of what's going to be 15 happening up river of us. We only have the DRBC to 16 17 protect our drinking water and the special resources attached to this river because the states are not 18 going to do it. Pennsylvania and New York do not have 19 20 the regulations and they don't have the will. And the 21 federal government, they're not doing it. The federal 22 government has exempted the gas industry from portions of every major environmental law. 23 All we have is the Delaware River Basin Commission, and you're a powerful 24 25 agency. You can do it. You can actually say you

cannot hydraulically fracture with chemicals in this watershed. And we think you should do that. You should step up to the plate and do it.

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I'm proud to be from New Jersey today. I'm proud to be here with these folks. But I want to 5 say that there are people who came from Philadelphia and Delaware and all over the place. Those folks need to go to a conveniently located location in order to speak up. And we need to have the Commissioners here. I do think that. I'm proud of New Jersey, but I'm 10 embarrassed to say that Governor Christie did not see 11 fit to have the New Jersey Commissioner here tonight. 12 Every other state, when I went on Tuesday, had their 13 Commissioners there. That's embarrassing. Thank you. 14

### MS. MICHAELS:

Hi. My name is Laura Michaels. I am from Philadelphia, Pennsylvania. Came here by train. And I also want to thank you for the job you've done up until now to protect us. The waters at the headwaters of the Delaware River are of very high quality and it's a beautiful thing.

Generations from now will know if we acted to protect them. Humanity has existed for a very, very long time without natural gas. Natural gas is a luxury. Humans have lived without it for a very

long time. We've evolved to live without it. Clean water we cannot live without. Generations from now will judge us by our actions in the present.

I implore you not to allow hydraulic fracturing anywhere near the headwaters of the Delaware. I implore you, if you do allow that to happen, to go above and beyond the state regulations, which are not enough to protect us all from very dangerous chemicals, tainting our genetic legacy. I implore you not to think of this generation alone, not to think of corporate welfare, but for the welfare of human beings living quiet lives of desperation.

Generations from now will not know your faces and names, but they will know that somewhere in the past, someone protected them or someone didn't.

So I implore you to protect them. I don't have children of my own because I'm too afraid of the corporate interests that will destroy their world.

# HEARING OFFICER:

Is there anyone else who would like to speak that did not pick up a number? Okay, sir. If you could come up and fill out a form.

## MR. GIFFEN:

Hello. I'm David Giffen. I live in

Buckingham. I also want to thank the Delaware River

1 Basin Commission for all the work that they've done in the past. Tremendously important work. 2 It hopefully takes over for the lackluster and the horrible efforts made by the states. You're looking at grandpop, December 24th. That's all I got to say. Thank you.

# HEARING OFFICER:

Anyone else?

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# UNIDENTIFIED SPEAKER:

Is there more time to speak again?

# HEARING OFFICER:

No, since we didn't have that in the 11 12 rules. This is really to hear from people that have not spoken yet tonight. 13

## UNIDENTIFIED SPEAKER:

It might not be a rule, but we're all 16 here and you have time. You should hear from the people.

## UNIDENTIFIED SPEAKER:

Do you get to respond to people or no? 19 20 Are you just here tonight?

#### HEARING OFFICER:

In a hearing setting, we do not respond. 23 If this was more of a workshop setting, then there's 24 more of a give and take. And we have had a couple of 25 those, and it's possible to do another one of those.

1 Another speaker.

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# UNIDENTIFIED SPEAKER:

It's only 7:38.

### MS. MENSHEN:

My name is Becca Menshen, and I live 5 in Bucks County. And I'm renting in Bucks County. 6 7 Actually, my husband and I are thinking about making a permanent move to Pennsylvania. I grew up in northeastern Pennsylvania, and I have a great love for this state. But I'm taking great pause at the moment 10 about whether to come back here. I've been living in 11 Europe for the last 18 years. And one of the reasons 12 we chose Bucks County is because it seemed like this 13 precious place that survived a lot of these 14 developments and things. And so as I said, we are 15 taking a big deep breath and saying should we really 16 17 go ahead in light of what's being considered here.

And because this moves me so much, I went on the road and put up some word out on the bulletin boards to try to get folks to rally around to come to this. I caught this with short notice. And I went out on the road. And I thought one thing that's very interesting when I went to some of the communities, and I went to community centers, and asked if I could post, and they said that this was too controversial,

1 for example, to go into a community center where tourists would come, that here's a very controversial topic that could put off tourists.

And I really thought to myself this is the bread and butter --- a great deal of the bread and 5 6 butter for this region outside of the question of clean water, which is without a doubt the most --- the key issue that we have to deal with here. But again, going back, think about that. They didn't want --and this was a very neutral posting. They didn't want 10 that on their boards. It scares tourists away. 11 Imagine what tourism will look like in a few years if 12 this thing takes the route it might. 13

## HEARING OFFICER:

Thank you.

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# MS. MENSHEN:

Thank you very much.

## HEARING OFFICER:

Another speaker?

# MS. MARLIER:

My name is Juliet Marlier. Hello. Ι currently live in Yardley, Pennsylvania. But I'm originally from the western part of the state. And I own some property with my siblings in western 25 Pennsylvania. We had been approached more than once

1 by energy companies who were offering increasingly large amounts of money for us to drill --- to allow drilling on our property.

And when we started investigating, we were appalled at the lack of regulation and proprietary information that we were not allowed to have access to. And I am discouraged by the current climate in Pennsylvania. And I see this body as being a safeguard or some sort of sanity between the interests that would endanger our water tables and the people who depend upon it. So I thank you for holding 12 these hearings and I hope that you will continue to take a slow and rational approach to this issue.

## HEARING OFFICER:

Thank you.

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# MR. PLATT:

My name's Rodney Platt from Delaware I was honored to be the last in the last County. session, and I didn't quite finish. I had 20 seconds. Thank you again for what you're doing.

I wanted to say that the genie is out of the bottle at this point. Please keep the benzene and the methane in, or we'll be forever drinking out of our water bottle. Cheap gas or cheap water. Carol, cheap gas or cheap water. The wars of tomorrow will

1 be over water, not gas. Keep that in mind. that's a very expensive --- there is no alternative to water. Thank you.

# HEARING OFFICER:

Thank you.

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# MS. CHRISTY:

Hi. My name is Liz Christy. I currently live in Center City, Philadelphia. I just graduated with an environmental studies degree, so this is all pretty new to me. I recently started working for a clinic in the Poconos region, and I've known about fracking for a while but I didn't think that it would have such immediate health effects on the people in 14 northwestern Pennsylvania.

And I've been working with a family who has a two-year-old son named Wylie. And he started experiencing severe osteoporosis in his arms and legs and in his teeth. And his teeth and bones started breaking. His teeth were peeling. And it was really weird and nobody knew what was going on. He doesn't 21 have actual osteoporosis. It just looked like it. And then they got their water tested and they found that there was ether in their well, and that's really scary. And he's so little. And there is not really anything they can do about it except for move and

start treating him and see if maybe it gets better.

But I really don't want that to happen in the Philadelphia region, and I love Philly. And I've only been living there two years, and I really don't want to move. And I'm afraid if fracking happens in, you know, northern and southern Pennsylvania, that I will end up having to move. And that really sucks. So thank you for your time.

## MS. BRAAM:

Thank you. My name is Audrey Braam. I live right across the river in Bucks County. I was moved to add my voice to all of the opinions that I've heard tonight.

Thank you for the job that you've done in protecting the river and the Delaware River Basin thus far. I enjoy fishing, swimming, canoeing in the Delaware. I would like to continue to do so. My water comes from the Delaware. I live right on the Pennsylvania Canal. Water is paramount to me, and I don't think that natural gas is an inexpensive way to solve our energy problems. I just don't think that it is possible to assure me that those chemicals are safe in any way, shape or form. And I would just like to say that there is no such thing as cheap gas. It's just not worth the cost. Thank you.

# HEARING OFFICER:

One more speaker.

# MR. SIGSTEDT:

My name is Val Sigstedt. I've been before --- in these hearings before. There was an issue in this region that they called it Dump the Pump. We were stopping it and we did not do it, but we sued everybody in the attempt to stop the pumping --- Point Pleasant pumping station. As a result of losing, the State of Pennsylvania changed its laws regarding how they handle water. Now you can take water from a river or any place, any industrial water you want, and run it down one of Pennsylvania's streams. And it's my contention that that turns Pennsylvania streams into industrial ditches.

into an industrial ditch, and I feel terribly responsible because we didn't win the pumping station and stop that from happening. They poured millions of gallons of fracking fluid down the Neshaminy Creek. When it gets to the bottom of the Neshaminy Creek, it turns to the right, and the first town it goes past is named Torresdale, and that's where the intakes of Philadelphia's municipal water supplies are.

I just watched the Neshaminy Creek turn

I just hope very much that, first of all,

you'll take it in your hearts to slow this process down before we all get overrun by a bunch of crazy Texans and the Halliburtons and the nuts of this world who are trying desperately to make more money than there is, and then leave us. The price of oil, the price of gas is going down and down and down. there's a real good reason for thinking that they're not going to be buying gas anymore.

# HEARING OFFICER:

Thank you very much.

# MR. SIGSTEDT:

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Thank you very much.

## HEARING OFFICER:

If there are no more speakers, one thing you could do if you're interested is we could close the hearing now, and then we could just have a dialogue with Bill and I coming down there. have to say that, you know, we're here because of the huge crowds that we were expecting, and there are very few places that have this size seating. It's not 21 really our desire to be at a different elevation than you all. As you know, our regular meetings, we try and find places that we're all on the same plane. So this is an unusual setting for those who know us. if you want, are you interested in that? We can just

## 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.

mede madagano