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1	COMMONWEALTH OF PENNSYLVANIA
2	DELAWARE RIVER BASIN COMMISSION
3	* * * * * * *
4	IN RE: DRAFT HYDRAULIC FRACTURING
5	REGULATIONS
6	
7	PUBLIC HEARING 3
8	* * * * * * *
9	BEFORE: WILLIAM FORD,
10	Hearing Officer
11	HEARING: Thursday, January 25, 2017
12	1:00 p.m.
13	LOCATION: Double Tree Hotel
14	Philadelphia Airport
15	4509 Island Avenue
16	Philadelphia, PA 19153
17	SPEAKERS: Rep. Greg Vitali, Dr. Stuart
18	Chen-Hayes, Joy Bergey, Dr. Walter
19	Tsou, Peter Winslow, David Kinney,
20	Sylvia Metzler, Vanessa Baker,
21	Jonathan Lutz, Patricia Libbey, Norman
22	Torkelson, Geoffrey Selling, William
23	Moore, Shannon Pendleton, Joan Farb,
24	Stephanie Herron, Kim Ong, Jean-Marie
25	Donohue, Jean MacFarlane, Corinne

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6	NONE OFFERED	
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P R O C E E D I N G S

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HEARING OFFICER:

All right. If you would take your seats, please. We're going to begin. Good afternoon, everybody. For those that came from anywhere outside of Philadelphia, way to go. You made it here.
Absolutely unbelievable. I don't think it was an easy route in.

My name is William Ford, and on behalf of the Delaware River Basin Committee, welcome to today's public hearing. I will be serving as the Hearing Officer for this proceeding.

Just to be clear, I have no affiliation with the DRBC staff. I am not a member of an environmental group. I do not own any property in the area that is at issue here today.

I am a retired Lehigh

County Common Pleas Judge. And right now, I am in private practice, and I do mediations and arbitrations. So I just wanted you to know as far as non-affiliations.

The DRBC has engaged me to conduct these hearings on its behalf to provide opportunities for oral comment on the Commission's draft rules. It is my intention to provide an orderly, safe, and civil forum that allows for the creation of a clear record for these proceedings.

My comments, my
introductory comments, will
last only about five minutes.
But there is some important
information here that you will
be interested in. And at the
end of this, at th end of my
comments, my final comment is

	9
1	going to be about an
2	opportunity that all of you
3	have today, that you might not
4	fully realize. And I'm going
5	to try to emphasize that as I
6	close here today.
7	I ask that all
8	cellphones be turned off. In
9	the hearings that we had just a
10	few days ago, I forgot to
11	announce that, and there were
12	some interruptions as a result
13	of that. So thank you.
14	First, a few reminders
15	about safety. In the unlikely
16	event that we would need to
17	evacuate this space, please
18	make a note of the emergency
19	exits and plan in advance the
20	exit that you would use.
21	Also, please keep all
22	aisles safe and the exits clear
23	throughout the hearing.
24	Before we start, on
25	behalf of the DRBC, I would

like to thank our hosts, including the hotel, for this space here today. I'd also like to thank the Pennsylvania State Police, the Philadelphia Police Department and hotel security for their presence here today, and also for the safety that you are providing us. I would ask that if you can, please rise and join me in saying the pledge of allegiance.

PLEDGE OF ALLEGIANCE RECITED

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HEARING OFFICER:

Thank you, ladies and gentlemen. Please forgive me as I actually read part of this because I want the make sure I'm accurate in terms of the regulations that are at issue here today.

The draft rules that are the subject of this hearing were proposed by the Delaware

	11
1	River Basin Commission to amend
2	the Commission's
3	administrative, manual and
4	special regulations regarding
5	hydraulic fracturing
6	activities, and to provide for
7	additional clarifying
8	amendments to the Commission's
9	rules of practice and
10	procedure.
11	A notice of proposed
12	rulemaking, along with the text
13	of the draft rules and
14	supporting documents, were
15	posted on the DRBC website on
16	November 30th, 2017 and have
17	been published in the Federal
18	Register and Basin State
19	Registers.
20	Information about the
21	draft rules and the public
22	process has and will remain
23	available on the Commission's
24	website throughout the process.
25	As I've tried to educate

myself about the issues that are so important to you, I have used the website. And I just thought it was fantastic in terms of really filling me in on the various issues and what's at stake here today.

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Second, provisions for ensuring the safe and protective storage, treatment, disposal, and/or discharge of

As set forth in the notice of proposed rulemaking, by resolution per the minutes on September 13th of last year, the DRBC Commissioners directed the executive director to prepare and publish for public comment, a revised set of draft regulations to include first prohibitions relating to the production of natural gas utilizing horizontal drilling, and hydraulic fracturing within the basin.

in

1 wastewater within the basin 2 associated with horizontal 3 drilling and hydraulic 4 fracturing for the production 5 of natural gas where permitted. 6 And finally, regulation 7 of the interbasin transfer of water and wastewater for 8 9 purposes of natural gas 10 development where permitted. 11 If adopted, the draft 12 rules would add to the 13 Commission's regulations a 14 section on hydraulic fracturing in shale and other rock 15 formations. This section 16 17 would, first, prohibit high

Second, it would require review under the Delaware River Basin Compact of any project that involves the following.

volume hydraulic fracturing

such formations within the

Delaware River Basin.

25 First, the exportation from the

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14 1 Basin of surface water, 2 groundwater, treated 3 wastewater, or mined drainage 4 water at any rate or volume for 5 use in hydraulic fracturing of hydrocarbon-bearing rock 6 7 formations outside the basin. 8 Or second, the 9 importation into the basin and 10 treatment and discharge within 11 the basin of wastewater from 12 hydraulically fractured oil and 13 gas wells. 14 Also, this section would 15 establish standards for the 16 treatment and disposal of 17 wastewater from hydraulically 18 fractured oil and gas wells. 19 I'm almost at the end of 20 the verbatim reading. 2.1 The Commission also 22 proposes to amend its administrative manual, rules of 23 2.4 practice and procedure, by the 25 addition of projects review

	15
1	classifications and fees
2	related to the management of
3	produced water from hydraulic
4	fracturing of
5	hydrocarbon-bearing rock
6	formations.
7	Minor amendments to the
8	project review classifications
9	unrelated to hydraulic
10	fracturing were also proposed.
11	Ladies and gentlemen,
12	the copies of the proposed
13	rules can be found on the
14	website. This is one of six
15	public hearings on this matter.
16	We just had two of them, and I
17	see some familiar faces from
18	two days ago.
19	In addition to accepting
20	oral comments at these public
21	hearings, the Commission is
22	accepting written comments
23	through 5:00 p.m. on Friday,
24	March 30th, 2018.
25	Written comments will
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1 receive the same consideration 2 as oral comments. Written 3 comments can be submitted 4 online using a link that can be 5 found on the DRBC website. 6 you do not have access to a 7 computer or the internet, and 8 you would like to submit 9 written comments, you may 10 request an exception by writing 11 to the DRBC at the following. 12 And I will say this twice. 13 was pointed out at the last 14 meeting that some people are 15 not handy with computers. So 16 the address will become very 17 important to you. 18 Anything that you send 19 in should be sent to the 20 attention of Commission 2.1 Secretary. The address is 22 DRBC, P.O. Box 7360, West 23 Trenton, New Jersey, 08628. That's attention Commission 2.4 25 Secretary, DRBC, P.O. Box 7360,

West Trenton, New Jersey,
08628.

This is significant.

Today's proceedings are being videotaped. And also, they're being recorded here by a registered Court Reporter. A transcript is being created. A written transcript is being created. A written transcript is being created that will become part to the decision-making record for the proposed rules.

Let's see. This is aside from the script that I have here. If you come forward, apparently some people have exhibits, a chart or something along those lines --- you're welcome to show it to me. But I'm not the one that's going to make decisions here. I would suggest that you turn things toward the camera right there. And what we show will then be displayed on the video

that's being created here. So that's where it should be.

Also, when you come forward, I would also suggest that you direct all your comments this way so it is recorded, rather than to the audience, ladies and gentlemen. Because there's a chance that that will be missed. And also by the Court Reporter, that may be missed and you won't be able to look at your comments.

The electronic

recordings are being made to

enable the DRBC Commissioners

to see and hear your comments

even though they cannot attend

all six hearings. And

secondly, to allow the DRBC

staff, in consultation with the

commissioners, to prepare a

detailed comment and response

document that addresses the

issues and concerns that you

1 raise.

Now, here's how the hearing will proceed, ladies and gentlemen. First, the Commission thanks all of you who have registered in advance either to attend or to attend and speak today. Your doing so has helped the staff to prepare for these proceedings.

At the last two hearings that we had, both of which were on Tuesday, we really had excellent substantive comments that were made. There really was not grandstanding. People were concerned about getting their substantive comments out to support their position. And that's what's suggested here today. That's what's going to make a difference her, so I will call that to your attention.

Here is the order of

1 speakers that I will call as 2 time permits. First, those who 3 registered in advance to speak 4 today and who have not already 5 spoken at another hearing. 6 Second, those who registered to 7 speak when they arrived today, 8 and who have not already spoken 9 or registered in advance for 10 another hearing. And then 11 finally, if there is anybody 12 else in the audience who wishes 13 to speak, whether or not they 14 have signed up to do so. 15 Because of time constraints and 16 preparation for the second 17 hearing today, you'll only be 18 able to speak one time, ladies 19 and gentlemen, here today. 20 When I call names from 21 the registered list, from the 22 list of registered speakers, I 23 will try to call three names 24 every time so that those next 25 on the list are ready to go.

And if your name is called and you're not the one right up, you might want to move toward the front to make it easier.

And I think I'm going to get some additional names here that have signed up today.

And I think it's promising that we should be able to get to everybody today.

All right.

An important point. We will start with a three minute time period limit for each speaker. You actually can say a lot in three minutes. If, in what you have prepared, you can tell that it's going to be more than three minutes, condense it. We will stick with the three minute time period. I will actually cut you off. I will do it politely, but I will cut you off in fairness to the other people, ladies and

	22
1	gentlemen. You're actually
2	cutting into their time. And
3	comments and yelling from the
4	audience just cuts into
5	people's time.
6	Candidly, it's a matter
7	of manners. So let's, you
8	know, show respect for
9	everybody that speaks here. So
10	I don't mean anything personal
11	when I cut you off at three
12	minutes, but that's exactly
13	what I'll do. All right.
14	If you exceed the
15	permitted time I'm sorry.
16	Let me go back for a moment. I
17	may revise the time limit as
18	the hearing goes on if it looks
19	like we're going to run out of
20	time. Okay? So we'll see how
21	that goes. But it looks like
22	everybody will get three
23	minutes.
24	If you exceed the
25	permitted time, you will hear a

23 1 buzzer, and I will ask you to 2 stop speaking. If you 3 continue, as I said, you will 4 be taking someone else's time. 5 You will have the opportunity 6 to follow-up in writing if you 7 wish, ladies and gentlemen. While the subject matter 8 9 of this hearing is something 10 that many people are passionate 11 about, the purpose of the 12 hearing is not for public 13 demonstrations. 14 The audience is asked to 15 remain quiet while each 16 commentator speaks so that the 17 Court Reporter and recording 18 devices can produce an accurate 19 record. Interrupting another's 20 testimony is prohibited. 2.1 Naturally, it would be 22 disruptive, I think, for all of 23 us. 24 Speakers are asked when 25 they come forward to start by

stating your name. And if you wish, if you're affiliated with any organization, you are welcome to state that, ladies and gentlemen. That's not required, though. But please do tell us your name.

If as part of your comments you are asked a question, please do not expect a response during the hearing. First of all, I'm not in a position to answer questions. Two days ago was a wonderful education for me. Fascinated by the subjects. So while I have an interest in this, I am not equipped to answer your questions, ladies and gentlemen.

And also, the directive for today's hearing was to hear from you. There are other processes to get information to you. But today is to hear from

1 you. And that's full 2 restriction to that. Again, 3 rudeness intended, but you 4 won't be getting information 5 from this side.

> This hearing could go as long as 4:30. After everyone who speaks who wants to speak terminates early. But I think we'll be getting very close to 4:30. If we get to 4:30, we will stop right then because we have to get people out and then

> gentlemen, what's next? After all the public input is received, the DRBC staff and the Commissioners will develop a comment and response document that addresses each of the commenter's concerns. The Commissioners will consider

6 7 8 9 does speak, perhaps it 10 11 12 13 14 15 people in for the second 16 hearing. 17 Okay. Ladies and

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changes to the proposed rules
in response to the comments
that are received and will hold
a vote to either approve the
rules as proposed, approve the
rules with changes, or reject
the proposed rules.

The decision makers on this and all rulemaking by the Commission, are the Commissioners themselves, who may act through their appointed alternates.

The Commissioners are the governors of the four basin states, Delaware, New Jersey, New York, and Pennsylvania, and on behalf of the federal government, the division commander of the North Atlantic Division of the U.S. Army Corps of Engineers.

And I want to make as my final comment this point. This really is an opportunity. The

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1 Commissioners --- as I 2 understand it, you have newly 3 elected commissioners. You 4 have newly elected governors in 5 some of these states. So while 6 you may think you know what 7 their view is on the important 8 subjects here today, I think 9 none of us really knows for 10 sure. 11 So I'm expecting that 12 this is going to be a fair 13 process, and that's why I 14 stress the idea of substantive 15 comments. They really could 16 make a difference, ladies and 17 gentlemen. 18 So this sa opportunity 19 to be heard on the written 20 record, the video record, and 2.1 your comments here to all of us 22 today. 23 All right. Ladies and 24 gentlemen, thank you for your 25 attention during that. And all

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public to be heard on this very important issue.

> primarily for the record that I And I would like position is consistent with the

> represent the 166th District in

At the outset of this think it's important to restate Amendment of Pennsylvania. The

people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic, and aesthetic values of the environment.

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natural resources are common property of all the people, including generations to come. resources, the Commonwealth shall conserve and maintain them for the benefit of all

including generations yet to come because I think we in the legislature sometimes forget that. When we're correcting legislation, it's not only for

that the Pennsylvania Supreme

1 Court is finally taking this 2 provision of the Pennsylvania 3 Constitution seriously. 4 To date, there have been about 11,000 unconventional 5 6 wells drilled in Pennsylvania. 7 11,000. There should be places in Pennsylvania where fracking 8 9 does not occur, and the Delaware River Basin is one of 10 11 those places. That watershed 12 supplies drinking water to over 13 15 million people. 14 The Delaware River has 15 been designated a national wild 16 and scenic river by Congress, 17 and it's been awarded special 18 protection water status by the 19 Delaware River Basin 20 Commission. And that's because

of the many valuable

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qualities this river possesses.

Drilling is a very

highly industrial activity. It

environmental and economic

	32
1	can turn pristine forests into
2	industrial sites. I have
3	visited numerous drilling sites
4	over the years in the course of
5	my job. And I have seen the
6	truck traffic, the gravel
7	roads, the fences, the spills.
8	It really can degrade.
9	HEARING OFFICER:
10	We're going to stop you
11	at that point, Representative.
12	Thank you very much.
13	<u>REPRESENTATIVE VITALI:</u>
14	Thank you.
15	HEARING EXAMINER:
16	Thank you, sir. Dr.
17	Chen-Hayes. And after, next
18	will be Joy Bergey. And then
19	Walter Tsou. That's T-S-O-U.
20	If I mispronounce it, I'm
21	sorry. Okay. And it is Dr.
22	Stuart Chen-Hayes, correct?
23	DR. CHEN-HAYES:
24	It is.
25	HEARING EXAMINER:

33 1 Okay. If you will, 2 please. 3 DR. CHEN-HAYES: Great. Good afternoon. 4 5 Thank you. I appreciate the 6 chance to speak to members of 7 the Commission and the general public. And I'm going to be 8 9 anecdotal. I'm a professor of education in the State 10 11 University of New York. I live 12 in Newtown Township. And I'm a 13 newly elected judge of 14 elections on the Green party. 15 I'm very excited. There are 11 16 colleagues who are now elected 17 representatives from the Green 18 party. We are a party that is 19 extremely focused on people, 20 planet, and very anti-profit. 21 And so we are for a complete 22 ban on any fracking-related 23 activities in the Delaware River Basin. 24 25 Since I live in New York

or since I work in New York,

since I lived many years in New

Jersey. Now, I live --- I'm an

elected official in

Pennsylvania. I don't have any

connections to Delaware, at

Very interested in protecting the land, and the water, and the people of this, and future generations of the those three states.

this point, that I know of.

And so as an educator, I was thinking what would be one of the most powerful stories that I could tell? Usually at this time of day, I'm in a pool. I'm a swimmer. I certainly use water. I consume water. I have my water bottle with me. But I was thinking about a story that I told my now 14-year-old. And many folks in the audience may be aware of this story of water I

heard. I re-read it today as Ι was coming for the Commission. And it talks about how all of us, at one point in time, will drink an entire back yard swimming pool full of water. And for those of use who are swimmers, it's probably two swimming pools.

And I thought about as I read in the book that it talks about the importance of protecting the waters from pollution. And as I went through, I realized they don't say one word about fracking.

And so we really are damaging the environment. And my colleague who spoke just before me gave very clear, very specific examples.

But the idea is that water is a finite resource. We don't get any extra. We don't have any less. And so the more

pollutants that we put in,

particularly into the Delaware

River, the more that we're

compromising all of our health.

Not only our health, our

children's health, but their

children's health as well.

So I think about in our

home, that we have multiple
water filtration systems. And
I have lived in two countries,
and worked in five states,
lived in seven. And I have
never seen my water filtration
systems gunk up faster than
where I live right now in
Bucks. And I know that we have
major water quality issues
already.

We are really having a lot of drama in terms of the pollutants that are already present in the water. And so there's no reason we want to be adding any more. We're really

endangering our health. When you look at the health of the oceans right now, there's report that was just made that talked about how soon we will have more plastics in the ocean than we do fish.

And so since the

Delaware River Basin empties

into the Atlantic Ocean, it's

really critical that we're

protecting the ocean.

HEARING OFFICER:

Thank you very much.

The Doctor --- now just one moment. The restrooms, the ladies room is right outside the door back there. The men's room is through that door and then down this way. For the men to get back in there, they have to go through the detectors again. Okay? The x-ray machine or whatever it is.

2.1

	38
1	Okay. All right. And
2	next is Joy Bergey. Ms.
3	Bergey, please. Anybody?
4	Thank you.
5	MS. BERGEY:
6	My name is Joy Bergey.
7	I live in Flourtown in
8	Montgomery County,
9	Pennsylvania. And I am a
10	lifelong resident of the river
11	basin. I am speaking on behalf
12	of partnership for policy
13	integrity, a nonprofit
14	organization that focuses on
15	energy and environmental
16	policy.
17	For the past three
18	years, we've been investing the
19	EPA's regulations of new
20	chemicals used in drilling and
21	fracking. This fall,
22	marketplace on NPR broadcast a
23	two-part story on our
24	investigation.
25	Based on our findings

and mounds of evidence about additional risks, we support the Commission's proposal to prohibit hydraulic fracturing in the basin.

We also urge the Commission to prohibit wastewater disposal, water withdrawals, and other related activities. Allowing our gas and drilling activities in our basin --- allowing oil and gas related activities in the basin would amount to a huge gamble for our drinking water and environment.

Our analysis of EPA's regulation of new chemicals proposed for drilling and fracking found in 2003 and 2014, EPA reviewed 126 such chemicals.

The agency found health concerns about more than 85 percent of these substances

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1 including lung effects, 2 neurotoxicity, kidney toxicity and developmental toxicity. 3 4 And yet, EPA allowed most of these chemicals to be 5 6 commercially manufactured, 7 usually without health testing that could have more 8 definitively established risks. 9 More than half of the 10 11 chemicals flagged by EPA potentially harmful were used 12 or likely used in oil and gas 13 14 wells. Chemical manufacturers 15 often kept the identities of 16 these chemicals secret, as 17 permitted by federal law. 18 Here in Pennsylvania, 19 drilling chemicals often do the 20 same. Where in state law, 21 otherwise requires them the

drilling chemicals often do the same. Where in state law, otherwise requires them the disclose publicly the fracking chemicals they use. As a result, it is difficult or impossible for the public to

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	41
1	determine where many fracking
2	chemicals have been used, even
3	if the EPA has said that these
4	chemicals can pose health
5	risks.
6	This secrecy and other
7	concerns range from
8	radioactivity in wastewater to
9	chronic leaks in underground
10	wells makes fracking and
11	associated activities a risky
12	roll of the dice for our
13	sensitive watershed. That's
14	not worth it. Thank you.
15	HEARING OFFICER:
16	Thank you, ma'am.
17	MS. BERGEY:
18	Do you want a copy?
19	HEARING OFFICER:
20	You can submit that, if
21	you'd like, through the written
22	process. All right. And let
23	me just go through the names,
24	sir before you start. Let's
25	see. That was Joy Bergey. And

42 1 then we're going to here from 2 Dr. Tsou next. And then after 3 that will be Peter Winslow and 4 David Kinney. 5 Okay, sir. When you are 6 ready, please. 7 DR. TSOU: Thank you. My name is 8 9 Dr. Walter Tsou. I'm the 10 executive director of 11 Philadelphia PSR and a former 12 health commissioner of 13 Philadelphia. Because time is 14 short, I will simply allow 15 others to explain why we should 16 have a complete ban in the 17 Delaware River Watershed for 18 fracking. 19 My brief comments 20 concern around potential 21 spillage of produced flow-back 22 for what's in the Delaware 23 River. As a public health 24 physician, I draw your 25 attention to the known and

1 unknown harmful effects 2 introduced from fracking waste. 3 As noted by others, as much as 4 to 10 million gallons of water are laced with 50 to 5 6 different chemicals, which are 7 used to create fracking fluid. The flow back backwater not 8 9 only contains these chemicals, 10 but also brine and highly 11 radioactive materials like 12 Radium 226. The risk to the 13 produced water in the Delaware 14 River is simply unthinkable. 15 Yellow Researcher last 16 year published an article that 17 identified over 1,000 chemicals 18 used in fracking, of which 76 19 percent of the chemicals have 20 not been studied for toxicity. 2.1 Of the 240 substances 22 that were known to have 23 toxicity, at least 55 of them 24 were carcinogens. Twenty (20) 25 were known to increase the risk

1 of leukemia. Forty-three (43) 2 percent were known to have 3 reproductive toxicity. Forty 4 (40) percent developmental 5 toxicity. And 17 percent 6 affected both a developing 7 fetus or a woman's reproductive health. 8 9 Many of these chemicals 10 act independently with 11 structures where even a 12 nanogram, that is to say one 13 part in one billion, could 14 block or stimulate the receptor 15 site, or affect field growth, 16 or our hormonal systems. 17 Because pregnancy is 18 limited to nine months, we can 19 measure exposure with 20 literature on fracturing and 2.1

compare it to growth outcomes.

Two reports that were done recently last year showed that the proximity of growth near gas wells were associated with

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1 neonatal health outcomes.

In Texas, they geocoded 159,000 birth records and found a 14 percent increase in pre-term birth and fetal deaths.

In Pennsylvania, they geocoded 1.1 million babies born proximal to the active gas wells based on the select date of those wells. And if you lived within one kilometer of any of those active wells, you had a 25 percent increased chance of having low birth weight babies.

Two other studies are worth noting. At Hopkins
Newburg School of Public
Health, they analyzed 35,000
cases from the Geisinger Health
System and found a 40 percent
increase of premature birth.
And these large numbers all
suggest that these are highly

1 statistically significant
2 studies.

The fact that actually the State of Pennsylvania or the federal government has not funded any health study in this country is an abomination.

In short, there is growing evidence that fracking is bad for health. The civic duty in --- will show that there are 1,300 articles on the adverse effects of health from fracking. If you allow fracking for anywhere in the Delaware Watershed, you will have committed a public health disaster.

HEARING OFFICER:

Okay. The next speaker
will be Peter Winslow. And
then on deck, will be David
Kinney and Sylvia Metzler. And
this is Peter Winslow?

MR. WINSLOW:

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1	Yes.
2	<u>HEARING OFFICER:</u>
3	Please come up, sir.
4	MR. WINSLOW:
5	Thank you for this
6	opportunity to comment on the
7	proposed rules for regulating
8	natural gas development
9	activities under 18C of parts
10	401 and 440. I'd also like to
11	thank Representative Vitali for
12	bringing forward Article 1,
13	Section 27 of the environmental
14	rights provision of the
15	Pennsylvania constitution.
16	My name is Peter
17	Winslow. I'm speaking today on
18	behalf of the Philadelphia
19	Chapter of Pennsylvania
20	Interfaith Power and Light. We
21	are communities of faith
22	responding to climate
23	disruption as an urgent moral
24	issue.
25	Climate disruption

results in increasing frequency and intensity of storms and droughts, as well as sea level rise, all of which stress the Delaware River Basin, along with the ability of the DRBC to manage water resources and to

Reliance on fossil fuels causes and exacerbates these conditions. Climate disruption I view as the context in which all of the concerns that you're going to be hearing about for the health and safety of the people, and the protection of the environment, and the wild scenic river. Benefits of the watershed are being considered.

So we appreciate the intent of the proposed rules to protect the watershed by prohibiting high volume hydraulic fracking within the basin. And by discouraging

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1	both exportation of fresh water
2	and importation of wastewater
3	associated with fracking
4	operations outside the basin.
5	Nevertheless, we are
6	apprehensive about loopholes
7	built into these rules.
8	Discouragement is a term
9	less open to interpretation.
10	And the evaluation processes of
11	water code section 2.30.4
12	allows considerable discretion.
13	Let's just close the door to
14	exploitation of the Delaware
15	River Basin by the fossil fuel
16	industry. We ask that you
17	tighten the loopholes and
18	extend the scope of your rules.
19	One, prohibit any export
20	of water from the basin for use
21	in oil and gas extraction.
22	Two, prohibit any import
23	of fracking wastewater to the
24	basin for treatment.
25	Three, prohibit

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1	injection of fracking
2	wastewater into or under the
3	basin.
4	Four, prohibit the
5	underground storage of natural
6	gas or natural gas liquids.
7	And Five, beyond the ban
8	on high volume hydraulic
9	fracking operations, please
10	prohibit all activities
11	associated with hydraulic
12	fracturing in the Delaware
13	River Basin.
14	Thank you for your
15	attention concerning this
16	matter.
17	HEARING OFFICER:
18	David Kinney will be
19	next. And then on deck would
20	be Sylvia Metzler and Vanessa
21	Baker. And this is Mr. Kinney?
22	MR. KINNEY:
23	Yes.
24	HEARING OFFICER:
25	Sure.

51 1 MR. KINNEY: 2 Thank you. David 3 Kinney. I am a Mid-Atlantic 4 policy director for Trout 5 Unlimited. We represent 23,000 sportsmen in the four Delaware 6 7 River Basin states. More than 8 half are here in Pennsylvania. 9 As an organization, 10 Trout Unlimited advocates for 11 responsible energy development. 12 We work to encourage policies and practices that avoid, 13 14 minimize and mitigate impacts 15 on trout habitat, cold water 16 resources. 17 And the Delaware River 18 Basin is a priority for us. We 19 spent a lot of time and 20 resources on the projects that 2.1 restore and reconnect trout 22 streams, especially in the 23 Upper Delaware.

local towns. We're working

So we're working with

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1 with local communities, with 2 local partners, local 3 contractors.

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The benefits of this work are not just better trout habitat, but it's also a boost for the outdoor recreational economy, which is key to the region up there, as well as improve the flood resiliency for local communities.

So all of that said, Trout Unlimited supports these about provisions that would allow the export of source water and the import of wastewater, and I'm going to highlight just a handful of those.

The water export section in particular doesn't spell out in any detail how these withdrawals will be regulated, such as requirements for pass-by flows.

The basic parties spent
an awful lot of time
negotiating about flows on the
Delaware. These regulations
don't deal at all with how
withdrawals of potentially
millions of gallons of water
for hydraulic fracturing would
affect overall management of
the river's resources. And for
an organization like Trout
Unlimited, we're very concerned
about that wild trout fishery.

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1	Second, while we
2	appreciate the stringent
3	proposals dealing with
4	wastewater import and
5	treatment, we're concerned
6	about the list of pollutants of
7	concern. It only includes a
8	fraction of the chemicals the
9	EPA has documented in the
10	fracking fluids and produced
11	water. So we would recommend
12	that the Commission set water
13	quality standards.
14	Finally, we have
15	concerns about how DRBC would
16	enforce and monitor the import
17	and export of water. There's
18	nothing this is something
19	that's not detailed at all in
20	these regulations, and that's
21	an oversight that should be
22	dealt with.
23	Just in conclusion, a
24	few years back, T.U.
25	highlighted the Upper Delaware

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1	as one of the ten special
2	places in the central
3	Appalachians that deserve
4	protection, including the
5	Satchel River Watershed and
6	George Washington and Jefferson
7	National Forests. A number of
8	those places have since been
9	protected from the impacts of
10	hydraulic fracturing. And we
11	think that with some
12	improvements, that these
13	regulations that the DRBC has
14	set forth will go a long to
15	accomplishing that in the
16	Delaware River Basin. Thank
17	you.
18	HEARING OFFICER:
19	Thank you, sir. The
20	next three speakers will be
21	Sylvia Metzler, Vanessa Baker
22	and Jonathan Lutz. This is Ms.
23	Metzler. Am I right?
24	MS. METZLER:
25	Yes. My name is Sylvia

56 Metzler. I'm from 1 2 Philadelphia, Pennsylvania, 3 I'm wearing my stethoscope 4 today because when I leave 5 here, I'm going to work. I'm 6 an nurse practitioner. I'm 7 retired, but still work in health. 8 9 As a nurse and a nurse 10 practitioner, I'm extremely 11 concerned about the health of 12 people. And as a nurse, it 13 wasn't just as a human being. 14 I'm very concerned about water. 15 just read about 16 Capetown, South Africa. Their 17 reservoir is almost empty. 18 Water is a problem all over the 19 world right now, potable water. 20 Anything that we do that is 2.1 going to interfere with human 22 beings to have enough water is

so worrisome. And certainly

activities in the Delaware

fracking and fracking related

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River Basin is endangering our water.

I am connected with food and water watch. And one of our positions is we want a ban on all fracking in the Delaware River Basin. And actually, I would like to see a ban on fracking everywhere. But that's who we are speaking to today. And of all fracking related activities. That means no withdrawing water from the Delaware. That means not putting treated water back in or injecting wells.

You know, I think most of us remember that when President Bush and Vice-President Cheney were in office, they got together with the heads of the gas and oil companies. And they were able to make some very deep, and important, and dangerous in my

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opinion, changes that regulations that we had that protected us are no longer in place.

One of those things is the proprietary chemicals, that these companies can put all kinds of chemicals in fracking water, and we aren't allowed to know what they are. It's bad enough the ones we know about that are endocrine disrupters that are interfering with people's health.

I've traveled through
Pennsylvania in Susquehanna
County several times. Three
times. And talked with people
there whose lives have been
impacted by fracturing. Their
drinking water, that they can't
use their wells anymore. But
their health. People who have
been sick. Animals dying.
Even people have died from the

59 1 effects of fracking. 2 And worse yet, in 3 Pennsylvania, when they would 4 report to the Department of Health, their worries, their 5 6 concerns, they really weren't 7 taken seriously. 8 So we need to protect 9 our health. We need to protect 10 our water supply, our air, the 11 soil. We have to ban fracking 12 and all fracking related activities in the Delaware 13 River Basin. Thank you. 14 15 HEARING OFFICER: 16 Next three speakers will 17 be Vanessa Baker, Jonathan 18 Lutz, and Patricia Libbey. 19 Okay. And this is Vanessa 20 Baker. Okay. 21 MS. <u>BAKER:</u> 22 Hi. My name is Vanessa 23 Baker. I'm here as a private and concerned citizen. And 17 24

million people depend on this

1 drinking water. So we can't 2 afford to risk rendering it undrinkable? You're 3 destructive and out of touch if 4 5 you allow them to destroy not 6 only our own drinking water, 7 but that of generations and 8 generations to come. 9 The half life of radium 10 is 1,600 years. And it's been 11 shown to be 226 to 200 times 12 greater downstream from a 13 fracking watershed in a study 14 from Duke University. 15 Radium is, of course, a 16 radioactive chemical. And can 17 cause anemia, cancer, and that. 18 So the consequences of this 19 catastrophic decision will be 20 deadly, deadly and 21 long-lasting. With a half-life of 22

1,600 years, that means that by 3618, only half of the radium will have decayed into the gas

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1 radon, which also causes 2 cancer.

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Although radon has a short half-life of about four days, the radium will still be ruining our drinking water. Radium is just one dangerous chemical found to be laced in the fracking process. The EPA had health concerns about 88 fracking chemicals. And it's likely that the fracking companies will also be using secret proprietary chemicals.

This means that fracking --- that facilities will be treating unknown chemicals,

This has all happened in groundwater concentrations increased significantly in 2010 to 2011. These salts, when mixed with chlorine, which is

62 1 what drinking water is treated 2 with, of course, create trichloroethylene and 3 haloacetic acid, which are 4 5 strong carcinogens even in low 6 amounts. 7 A government study showed that just showering in 8 9 water contaminated with 10 trichloroethylene caused blood 11 concentration with 12 trichloroethylene to rise five 13 to tenfold. 14 Short-term effects 15 include central nervous system 16 effects, cardiac arrythmia, 17 abnormalities of the liver and 18 kidneys. 19 Long-term effects 20 include adverse effects on all 2.1 the organs previously listed, 22 as well as respiratory disease, 23 cancer, birth defects, 2.4 miscarriages, and delayed

neo-development. We cannot

63 1 ruin our precious water supply 2 with these deadly chemicals. 3 Thank you. 4 HEARING OFFICER: 5 Okay. Jonathan Lutz will be next. And then 6 7 Patricia Libbey and Norman Torkelson. Okay. Mr. Lutz. 8 Is that correct? 9 10 MR. LUTZ: Good afternoon. My name 11 12 is Jonathan Lutz. I am the associate director of the 13 14 Associated Petroleum Industries 15 of Pennsylvania, division of the American Petroleum 16 17 Institute. I want to thank you 18 for considering my thoughts 19 here today. 20 I want to begin by 21 clearly stating that our number 22 one priority at API is to 23 provide energy in a safe, 24 scientifically sound manner, 25 while also having the least

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1	possible impact on the
2	environment. And our members
3	take this responsibility very
4	seriously. To this end, our
5	industry supports effective
6	regulation that fosters safety
7	and protects the land, air, and
8	water.
9	Regulation and oversight
10	are important to the U.S.
11	natural gas industry and our
12	industry is well regulated by
13	both federal and state
14	governments.
15	As you know, the DRBC
16	centers its watershed
17	management efforts on sound
18	science. Accordingly, it is
19	imperative that any final
20	decision on the proposed
21	regulations be based on science
22	as well.
23	While opponents of
24	energy production argue that
25	well stimulation will ruin our
	1

water resources, science
clearly indicates otherwise.
Unfortunately, the Commission
relies primarily on two
particular studies in moving
these regulations forward,
including the EPA's hydraulic
fracturing and water resources
study.

However, even this exhaustive six year, \$30 billion study does not result in any significant correlation between hydraulically fractured and impaired water resources. In fact, this study indicates that hydraulic fracturing activities have not led to widespread economic impacts.

A wide variety of recent reputable studies by both government agencies and academic institutions also support the conclusion that hydraulic fracturing is not a

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1	threat to drinking water.	
2	Perhaps most importantly, the	
3	Susquehanna River Basin	
4	Commission's extensive	
5	real-time water quality	
6	monitoring network consistently	
7	shows that natural gas	
8	operations in the Commonwealth	
9	are not contributing to	
10	negative impacts on water	
11	quality in the basin.	
12	However, a recent PWC	
13	study shows that oil and	
14	natural gas production in	
15	Pennsylvania supports more than	
16	320,000 jobs in the	
17	Commonwealth, including direct	
18	industry jobs, as well as jobs	
19	in wholesale, retail,	
20	construction, manufacturing,	
21	and other sectors. The same	
22	study shows that these jobs saw	
23	roughly \$23 billion in wages	
24	paid to individual	
25	Pennsylvanians in 2015.	

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1	These jobs are the
2	cornerstone of a nearly 45
3	billion economic impact to the
4	Commonwealth.
5	This API is a
6	standard-setting organization.
7	We have developed a series of
8	hydraulic fracturing
9	recommended practices that are
10	continually revised and
11	updated. These recommended
12	practices can be found on our
13	website. And I encourage you
14	to explore them. Thank you.
15	HEARING OFFICER:
16	Okay. The next three
17	speakers will be Patricia
18	Libbey will be next, Norman
19	Torkelson, and then Geoffrey
20	Selling. And is this Ms.
21	Libbey? Okay. Whenever you're
22	ready.
23	MS. LIBBEY:
24	This is Pat Libbey.
25	Mine is a prayer to God because

I feel he is the best one to help us in the whole situation. Dear God, please help the DRBC gather in their decision making to tighten the regulations, to not open the Delaware River for water exportation, and to ban waste importation from our watershed. Only you know the pressure they may be under. Help them do the just thing for the world you gave us to tend and to defend.

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We have heard about the probable outcomes of taking so much water from our lovely river. The harm to animal life and our recreation. The water levels that would allow ocean tides to come even further upstream than what is expected

the country from fracking

22 from global warming. 23 We have seen examples of 24 great harm in other parts of

69 1 wastewater's multitudinous 2 harmful chemicals; cancer, 3 neurological problems, horrible rashes. And we don't want 4 these for ourselves, our 5 6 present children or future 7 generations. Please help the DRBC to 8 make decisions on these issues 9 10 that would protect us, not 11 cause harm, that would keep 12 beauty and health in our River 13 Valley and not cause disease 14 and death. Refresh the 15 Commission in their long 16 listening and help them make 17 things right for the benefit of 18 all. 19 God, please bless all 20 who are with us here today. 2.1 Give us courage, strength, 22 understanding, and love. In 23 Jesus' name, we ask this. 24 Amen.

HEARING OFFICER:

Thank you, ma'am. The next speakers will be Norman Torkelson, Geoffrey Selling, and then William Moore.

MR. TORKELSON:

I'm Norman Torkelson, and on behalf of the Lower Delaware Wild and Scenic River Management Council, we offer the following comments.

The Wild and Scenic
Rivers Act was passed by
Congress in 1968 with the goal
of protecting the free flowing
condition of designated rivers
that are to be managed in a way
that protects and enhances the
values that prompted their
initial designation.

In 2000, we were designated a wild and scenic river segment. From just below the water gap to just above the tide water, our segment represents numerous and diverse

partners, including the states
of Pennsylvania and New Jersey,
Bucks and Northampton Counties
in Pennsylvania, Mercer,
Huntingdon and Warren Counties
in New Jersey. And this very
own Delaware River Basin
Commission.

The National Park

Service, the Delaware River

Green Way Partnership, the

Delaware and Lehigh Courier

Commission, and well over two

dozen river communities and

organizations who formerly

endorsed us who have a

memorandum of understanding.

Partners agreed to

participate in the cooperative

implementation of our

management planning to protect

and enhance those levels that

led to our designation. We

applaud the DRBC for banning

hydraulic fracking in the

72 1 Delaware River Watershed. 2 However, we insist that 3 allowing any fracking-related activities are inconsistent 4 with the goals and the 5 6 objectives of our management 7 plan. Disposal of fracking 8 waste within our watershed has 9 10 the potential to effect the 11 water quality of millions of 12 people who should have a 13 reasonable expectation, and the 14 right to clean water, a clean 15 environment for now and future 16 generations. 17 We also are concerned 18 that exported basin waters 19 could support unwanted, 20 unneeded, and unsafe projects 2.1 that would only further degrade our beautiful Delaware River. 22 23 Green amendments are 2.4 gaining more and more momentum

across our nation. Since the

1 early '70s, Pennsylvania has 2 had a constitutional green 3 amendment. 4 Recent litigation won 5 watershed legal victory that 6 not only protected PA 7 communities from ruthless frackers, but affirmed the 8 9 constitutional right of people in the state to a clean and 10 11 healthy environment. 12 New Jersey also has 13 introduced legislation for the 14 same. 15 The tide is turning. 16 Instead of changing rules to 17 allow for additional 18 environmental degradation, we 19 expect the DRBC to be looking 20 to continue its work to protect 2.1 our watershed for the benefit 22 of all. 23 Therefore, we are

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1	total and complete ban on
2	hydraulic fraction and related
3	activities for extracting
4	natural gas in the Delaware
5	River Basin. Thank you.
6	HEARING OFFICER:
7	Thank you, sir. The
8	next speakers would be Geoffrey
9	Selling, then William Moore,
10	and then Shannon Pendleton.
11	And is this Mr. Selling?
12	MR. SELLING:
13	Yes.
14	HEARING OFFICER:
15	Okay. When you're
16	ready, sir, please.
17	MR. SELLING:
18	Thank you for the
19	opportunity to speak forcefully
20	against hydraulic fracturing in
21	the Delaware River Basin. My
22	name is Geoffrey Selling. I'm
23	a retired science teacher, a
24	volunteer with several of the
25	watershed organizations that

1 are part of the Delaware River 2 Watershed initiative, upstream cluster, a stream keeper with 3 4 one of those organizations, and 5 a Pennsylvania master watershed 6 steward through the Penn State 7 extension service. I'm here as a private 8 9 citizen, not representing any 10 of those organizations. 11 However, through this work, I

> In all seasons, I spend at least one day, and sometimes more each week in the Delaware River Watershed making measurements, and working to improve the riparian health of many of the Delaware River's

Thus, I know firsthand, as well as from reading and research, how impaired many of

12 have learned a great deal about 13 the Delaware River Basin. 14 15 16 17 18 observations, taking 19 20 2.1 feeder streams. 22

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the Delaware River Basin's waterways are.

I strongly oppose the hydraulic fracking process and any expansion of it, as it damages both our land, as well as the waterways available.

There have been numerous incidents and environmental damage from fracking, and further impairment of the water quality in our already compromised basin.

Indeed, the William Penn Foundation has allotted \$44 million in its Delaware River Watershed initiative to improve the water quality in the Delaware River Basin.

Formal research from the Chair of Chemistry at Rice
University has shown that
fracking wastewater contains
barium, chromium, copper,
mercury, arsenic, antimony, as

well as cancer-causing
compounds such as toluene and
ethylbenzen.

A single fracked well can use over 2 million gallons of water annually, much of which becomes toxically-laced wastewater. A study out of Duke University from last year showed that in Pennsylvania alone, there were 1,293 spills of fracking wastewater in a ten year period, about 130 spills each year.

This is ultimately the water that we and our children drink, in which we wash our babies, and in which we cook.

We all live downstream from other places. And what happens on the land upstream and in the water spreads throughout each watershed, compounding the damage as the water flows downhill.

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1	Therefore, I oppose
2	fracturing in general and the
3	use of our Delaware River water
4	for fracking outside the Basin.
5	There are many ways to produce
6	additional energy. Further
7	damage to out waterways and the
8	water in them should not be
9	considered a viable option.
10	Thank you.
11	<u>HEARING OFFICER:</u>
12	Okay. The next three
13	speakers would be William
14	Moore, who will be next. And
15	then Shannon Pendleton. And
16	then Joan Farb. Okay. And
17	this is Mr. Moore?
18	MR. MOORE:
19	Yes.
20	HEARING OFFICER:
21	Good. Okay.
22	MR. MOORE:
23	Thank you for this
24	opportunity to address the
25	Commission. And I am someone

who grew up in the oil industry. And back in 1930, when the spindle top well blew up in Texas, my father was a kid.

And later on, he became a petroleum geologist. And when that thing blew up, you could tell where all the stuff that came from beneath the ground went, because you could see it. If you got water and put it on top of it, you could see it.

what comes out fracking comes into the pipelines, into the trucks, into the refineries. But other things that come out of fracking, which many, many people here have already been discussing, will end up in the water. And so far as I know, the state of Pennsylvania where I live doesn't have any system. And

doesn't want to spend any money on active and accurate testing of the waters in this state.

I do know that in Texas and Oklahoma, and all along the basin wherever fracking occurs, you have a higher, a much higher much higher incidence of earthquakes occurring. And when that strata is broken and breaks occur, the breaks in the strata continue further. So even if it's not in the Delaware River Basin, that stuff can get into our water.

We don't need to have any water from the Delaware River Basin taken out and used for fracking. And we certainly don't want to have any wastewater from a fracking process introduced into the Delaware River Basin. And I call upon the governors of Delaware, New Jersey,

1 Pennsylvania, and New York to 2 direct their representatives on 3 the basin to ban fracking, ban the use of water from the Basin 4 5 in fracturing, and ban the introduction to the Basin of 6 7 water that is a byproduct of 8 fracking. Thank you very much. 9

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HEARING OFFICER:

Thank you. Shannon Pendleton will be next. And then Joan Farb. And then Stephanie Herron.

MS. PENDLETON:

Thank you. My name is Shannon Pendleton. And I want to thank the DRBC, Your Honor, for the ability to make a public comment.

My public comment is as a private citizen and a mother. I would like you to call for a complete and total ban on fracking and all fracking-related activities,

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especially any water or wastewater distribution back into the Basin.

My experience in

learning about hydraulic

fracturing comes from living

downstream from where

wastewater was dumped above my
water supply.

And we're now in Pennsylvania, which is not anywhere near a fracking site, but the water had been trucked and dumped upstream of my water supply. And I read that in the Associated Press one day, and started to do my homework. And became very afraid to drink my water because I understand from the industry I work in that our wastewater treatment facility plants have absolutely no way of dealing with the chemicals that come out of that wastewater. And even if they

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knew what was in it, which they do not, they wouldn't be able to treat it.

So any of you can understand what it's like to be in your home and be afraid of your own water. It's very, very scary.

I work with as an architect, and I do zero-imaging design, regenerative design. I understand the construction industry. I understand how water infrastructure works.

And what the best and brightest in the private industry, the nonprofit sector, and our governmental agencies are doing.

I do a lot with advocacy work in this area. I do it for profit myself, and I understand what a lot of the non-profits do because I volunteer with

84 1 many of them in Philadelphia. 2 And this energy source 3 that we're going through all of 4 this for is completely unnecessary. We have a lot of 5 other opportunities for energy. 6 7 And we have a lot of other opportunities for a healthy way 8 9 to live and use our water. 10 So I'm not going to use 11 all of my time, so that others 12 can speak. I appreciate the 13 time you've given us. And I 14 urge you to make the right 15 choice and give a regenerative 16 energy plan a chance. Thank 17 you. 18 HEARING OFFICER: 19 The next three speakers 20 would be Joan Farb, then 2.1 Stephanie Herron, and then 22 Nancy Harkins. Your name is 23 Joan Farb? 24 MS. FARB: 25 Yes.

85 1 HEARING OFFICER: 2 Ms. Farb, please. 3 MS. FARB: I'm Joan Farb. I want 4 to thank the Commission for 5 having these hearings in order 6 7 that residents like myself can 8 speak about the proposed 9 regulations for 2018. 10 It is imperative that 11 there is a complete and 12 permanent ban on natural gas 13 drilling, and fracking, and all 14 related activities, which 15 include wastewater processing 16 and discharges from fracking 17 and water withdrawals from 18 drilling and fracking. 19 Why a ban? Because 20 there are many, many 2.1 significant scientific studies 22 showing detrimental impacts to 23 public health and to the 24 environment from these 25 processes.

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1	For example, the
2	Concerned Health Professionals
3	from New York and the
4	Physicians for Social
5	Responsibility assessed 685
6	peer-reviewed papers on gas
7	drilling and fracking. They
8	found that the majority of
9	these studies shows substantial
10	correlation between fracking
11	and illnesses such as cancer
12	and also pollution in air and
13	water.
14	Also, fracking has used
15	5 million to 10 million gallons
16	of water per well, and
17	presently, there is a trend to
18	an increase to 10 to 20
19	million.
20	This tremendous
21	withdrawal of water would go
22	against the DRBC water code
23	policy of protection and
24	preservation that states the
25	waters of the Delaware River

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Thus DRBC, don't let the

1 well go dry for 17 million 2 people in the Delaware River 3 Basin. Ban fracking completely and all related activities. 4 5 Thank you. HEARING OFFICER:

> Stephanie Herron will be next. And then Nancy Harkins. And then Attorney Kim Ong. And let's see. Ms. Herron, when you are ready.

MS. HERRON:

Okay. My name is Stephanie Herron. I'm with the Delaware Chapter of the Sierra Club. I am here with some of our volunteers to testify on behalf of our over 8,000 members in the state of Delaware.

First off, I want to thank you and thank the DRBC for allowing us this opportunity to comment. I also would like to thank the DRBC

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for listening to our voices. We've been, you know, at these DRBC hearings for the past seven or eight years, or in some cases more, calling on the DRBC to make smart, sound science-based decisions that protect our health and our future. I want to thank to DRBC

for hearing our voices and for hearing the overwhelming body of scientific evidence, and calling for a ban on drilling in our watersheds.

I'm a little confused, however, how at the same time the DRBC would be moving to potentially allow wastewater disposal from fracking in our watershed.

You know, I live in Delaware, and we are at the bottom of the Delaware River Basin. And it doesn't matter

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to us, at the end of the day, if our water is contaminated by drilling upstream of us, or by wastewater disposal upstream of us as one of the previous speakers said. At the end of the day, if it's not safe to drink, it doesn't really matter how it was contaminated.

DRBC to completely close the door on that potential for contamination of our drinking water, and our swimming water, and our recreation water, which is the driver of our economy and fully close the door on any opportunity for fracking water supply.

Furthermore, wastewater withdrawals would also have a potentially very serious impact on Delaware and those of us in the lower basin. Obviously, we

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have seen drought conditions in recent memory. And we know that these are going to continue to be more unpredictable, and more common as climate change continues.

Furthermore, I'm very concerned, and the Sierra Club is very concerned out of our commitment to the principles of environmental justice and the principles for democratic organizing.

If it's not safe to do
here, it's not safe in our
community, then it's not safe
to do anywhere. And so for us
to say that water could be
taken from our water supply in
the Delaware River Basin, which
is not only concerning from a
water quantity perspective,
it's deeply concerning from an
environmental justice
perspective. If it's not safe

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1	enough to do here, it's
2	completely in violation of the
3	principles of environmental
4	justice for us to send water
5	other places for fracking.
6	And so I would call on
7	Governor Carney and the
8	governors of all the agencies,
9	and the federal government
10	representatives on the DRBC to
11	support a full and
12	comprehensive ban on all
13	fracking-related activities in
14	the Delaware River Basin.
15	To do anything less is
16	simply unacceptable and putting
17	us at unnecessary risk. Thank
18	you.
19	HEARING OFFICER:
20	Thank you. Next will be
21	Nancy Harkins, and then Kim
22	Ong. And then Jean-Marie
23	Donohue. Nancy Harkins? Nancy
24	Harkins not here.
25	All right. Attorney Kim

93 1 Ong? Ms. Ong, when you're 2 ready. All right. Thank you. 3 MS. ONG: 4 Good afternoon, Judge. 5 My name is Kimberly Ong. I'm an attorney at the Natural 6 7 Resource Defense Council. I'm 8 here on behalf of myself and 9 the over 70,000 NRDC members 10 who live in Pennsylvania, 11 Delaware, New York and New 12 Jersev. 13 Thank you for giving us 14 a chance to speak today about 15 this incredibly important part 16 of the landscape. And 17 Commission Staff, thank you for 18 helping draft a fracking ban on 19 the river basin. 20 I'd like to make three points. First, NRDC strongly 2.1 22 supports a ban of the Delaware 23 River Basin. Fracking can and 24 has contaminated air and 25 drinking water, ruined

landscapes, caused earthquakes,
harms human health, and
contributed to climate change.

over 600,000 jobs or
more than \$12 billion in annual
wages rely on a clean and
protective river basin for
survival. Factoring in
ecosystem services, over \$16
billion are in peril if the
River Basin is opened for
fracking.

The potential value of the natural gas industry, a mere 3.3 billion dollars per year, pales in comparison at nearly a fifth of the economic value of a frack-free basin.

Second of all, we strongly support a ban. The effectiveness of a ban is undermined if the wastewater, one of the most toxic aspects of the fracking process, can still be transported, treated,

and disposed of in the river basin. The fracking process yields wastewater containing over 1,000 contaminants that can cause significant harm to human health and the environment.

Here's a partial list of the chemicals that are found in fracking wastewater. While some of these chemicals are benign, such as water and citric acid, many of these chemicals are toxic to humans and animals and are radioactive and corrosive. They can also imperil ecosystems by depleting oxygen or causing algorithms.

And there is no safe way to handle, treat, and dispose of fracking wastewater. As we've seen just next door in Susquehanna County, even when there are strict regulations in place, where there's

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wastewater, there are spills.

And these spills pollute our

water, destroy our habitats,

and make people sick.

Third, these regulations should not allow for the withdrawal of fracturing elsewhere. Unlike other water uses, almost none of fracking water can be returned to the basin after use, depriving every basin of the use of that water for more beneficial purposes like drinking, farming, and fishing.

Thank you again for taking the time to hear us out today. The decision as to whether or not to permit fracking and fracking wastewater in the river basin is likely one of the most important decisions the Commission will make in the upcoming years.

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We ask that you do the right thing and approve the rule with changes. Make the ban a full ban that bans 4 fracking, fracking wastewater, and the withdrawal of water for fracking purposes. Thank you.

HEARING OFFICER:

The next three speakers I'm sorry. Is Nancy Harkins here? No. Next three speakers will be Jean-Marie Donohue. And then Lena Smith. And then Jean MacFarlane. Ms. Donohue?

MS. DONOHUE:

My name is Jean-Marie Donohue. I am with Water Spirit. Water Spirit is the spirituality empowerment program that educates and advocates on water issues. are sponsored by the Sisters of St. Joseph for Peace, which is a growing Catholic order of

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nuns, but we are inclusive of people of all faiths.

Water is life. We fully support a ban on fracking on the Delaware River Basin watershed and a ban on the storage, processing, and discharge of fracking wastewater, a full ban on the export of water out of the watershed for fracking purposes.

Clean, safe water is a human right and a right for the 15 to 17 million people who get their drinking, and bathing water, and swimming water from the Delaware River Basin.

As you know, the

Delaware River Basin watershed

has a special protection water

status, a designation that

prohibits the degradation of

the water. Fracking, and

fracking waste, and the export

of the water for fracking is synonymous and equals the

Therefore, all of these practices should be banned. personally feel at this point, for the past seven to eight years, that you could actually fill this room with the paper of the scientific studies of the disastrous health effects of fracking on human health.

We particularly and the Sisters of St. Joseph's of Peace would like to give voice to the children and infants that live in this area, that live in the Delaware water basin and draw their bath water from there, their drinking water. And they brush their

We would like to cite one particular 2015 study from the Radiation and Public Health

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Project that was funded by the Pittsburgh Foundation. It was the health hazards to fetuses, infants, young children in heavily fracked areas of Pennsylvania in eight counties. They found that the rise in infant mortality rates in heavily fracked counties was 13.9 percent greater than the rest of Pennsylvania. The rise in cancer incidents from ages 13 zero to four in heavily fracked counties was 35.1 percent greater.

> We find it to be a moral and ethical outrage that you would think that it was safe to bring fracking waste into the Delaware River Basin Commission that serves 15 to 17 million people, and these children whose small bodies cannot handle these chemicals.

> > Thank you for your time.

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And we call for a full ban.

We will pick up in the order that I mentioned. But we're going to take a little break. All right. Okay.

HEARING OFFICER:

Thank you.

(WHEREUPON, A SHORT BREAK WAS TAKEN)

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HEARING OFFICER:

All right, ladies and gentlemen. We will resume. We will pick up. Please take your seats. Okay. We're ready for the next three speakers. And they will be Lena Smith, Jean MacFarlane, and then Walter Jeranek. Ms. Smith, please? Lena Smith? Okay. I'll call her name again. How about Jean MacFarlane? Oh, Lena Smith will not be here? Or will she be here?

AUDIENCE MEMBER:

102 1 She can't come. 2 HEARING OFFICER: 3 She can't? Okay. Thank 4 you. And this is Jean 5 MacFarlane. 6 MS. MACFARLANE: 7 I'm Jean MacFarlane. I 8 live in Havertown, 9 Pennsylvania. It's downstream. 10 I spent many summer weekend 11 escaping the record summer heat 12 that we've had in Philadelphia 13 recently, swimming, kayaking, 14 and tubing in the clean, cool, 15 pristine water of the Upper 16 Delaware River. 17 The proposal to permit 18 fracking discharge or storage 19 in the watershed would 20 basically turn this vital river 2.1 into a toxic waist dump. 22 The discharge will 23 contain known carcinogens and 2.4 naturally occurring radioactive 25 materials that cannot be

treated. The Allegheny River is plagued by downstream pollution from fracking discharge.

A study released three weeks ago by Duke University found levels of radium in the Allegheny River sediment is about 650 degree --- excuse me, 650 times higher below water treatment plants than it is at sampling sites upstream.

In addition, according to the Pennsylvania DEP, 80 percent of water withdrawn from the water will be used in fracking --- to be used in fracking will be trapped underground. It will not return to the hydroelectric cycle. That is the natural movement of moisture from evaporation, condensation, precipitation, and collection in aquifers and rivers.

In addition to providing people, animals, and plants with water, it also moves nutrients, pathogens, and sediment in and out of aquatic ecosystems.

The safety assurances of the oil and gas industry are really a joke. Last summer we saw aquifers punctured and well contaminated in West Pikeland, PA. In November, residential yards were flooded with drilling mud caused by frack-out.

The influence of the oil and gas industry is powerful.

And the DRBC ban must --- have been one fragile barrier that has been protecting us. The DRBC must continue to protect the watershed by clearly stating in the regulations that no water withdrawal for fracking, and no disposal of

1 wastewater be permitted in the 2 basin. 3 HEARING OFFICER: 4 Thank you, ma'am. Next 5 would be Walter Jeranek. And then Corinne Mayland. And then 6 7 Jennifer Coffey. Okay. Walter 8 Jeranek, J-E-R-A-N-E-K? Not 9 here. 10 Next will be Corinne 11 Mayland. And then after her 12 would be Jennifer Coffey and Coralie Pryde. All right. Is 13 14 this Corinne Mayland? 15 MS. MAYLAND: 16 I'm Corinne Mayland. 17 HEARING OFFICER: 18 Corinne. Excuse me. 19 Okay. 20 MS. MAYLAND: 2.1 So my name is Corinne 22 Mayland. I live in Lansdale, 23 Pennsylvania; a municipality 24 within the Delaware River 25 Basin. I strongly support the

proposal to ban fracking in the watershed. I ask the Commission to go further and ban water withdrawals for fracking or fracking-related purposes.

As for the disposal and discharge of wastewater associated with fracking production, I ask for either an outright ban or at least a moratorium.

In regards to the fracking produced water by a CWT, I applaud the Commission's efforts to increase the quality standards for monitoring this type of water. But I believe it doesn't go far enough. The Commission can't be confident in their monitoring proposal to deliver safe water quality, if they don't really know what it needs to be monitored for.

For years, other

1 agencies have fought to have 2 companies disclose their 3 composition of fracking fluid additives. The EPA wanted to 4 5 do prospective studies and 6 produce the water composition. 7 But the oil and gas industry so 8 whittled away the study's scope 9 that it will not be acceptable. 10 The DRBC proposes to use 11 the results of the EPA list a s 12 the basis of approvals of 13 concern. That's not enough. 14 We all know that chemicals 15 remain undisclosed because they were deemed confidential 16 17 business information. 18 The EPA confirmed this, 19 stating that non-disclosure 20 occurred along the majority of 2.1 the wells reporting to frack 22 ---. 23 Lichen leaking out of just a handful of chemicals is 2.4

no big deal, but many chemicals

are hazardous at levels in the parts per million. So looking to the EPA published list is indeed necessary, but it is not sufficient.

Therefore, I don't

believe it meets the DRBC

Commission of basing its

decision on sound science. I

ask that the Commission either

ban the discharge of

fracking-produced water by CWT,

or impose a moratorium on it

pending further scientific

data. That data should be

multiple independent studies

regarding the composition of

produced water.

So management of the water resources in the Delaware River Basin promulgates having a long view. This Commission responsibly took the time to get the data that now supports the draft ban of fracking the

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watershed. I believe it's also enough to support banning water withdrawals for fracking or fracking-related purposes. As for the disposal and discharge of wastewater, either ban it or impose a moratorium so the Commission can again take the

time to get the data.

So in regards to the supposed data that Mr. Lutz was citing, the Susquehanna River Basin's remote water quality, that's just one system. report is a preliminary trend analysis. It tests surface water only, not groundwater wells. Only 39 of the 59 monitoring stations have actively fractured wells. Since small samples, even smaller --- only six leading indicators are tested at every station. And their conclusion that they have not detected

1 impacts on the quality of the 2 basic water. That's not 3 synonymous with no impacts ---. 4 HEARING OFFICER: 5 Thank you. Jennifer 6 Coffey would be next. And then 7 Coralie Pryde. And then Clio Gates. I'm sorry. I think I 8 9 mis-said your name. It's Jennifer Coffey, C-O-F-F-E-Y. 10 11 Is she present? All right. 12 Then Coralie Pryde would be 13 next. All right. And then 14 after Ms. Pryde would be Clio 15 Gates and Katie Smith. 16 Okay. When you're 17 ready, ma'am. Thank you. 18 MS. PRYDE: 19 I'm Coralie Pryde. And 20 I'm speaking for the League of 21 Women Voters of Delaware. We 22 believe that it is absolutely

22 believe that it is absolutely
23 necessary that the DRBC
24 vigorously protect the waters
25 of the Delaware River.

The watershed supplies

drinking water for some 16

million people. It supports a

myriad species that create a

healthy balance of aquatic life

in the Delaware Bay and along

the Atlantic coast.

And it directly supports almost \$5 billion in annual wages from the region it goes through. In Delaware alone, nearly 16,000 jobs bringing in about \$340 million annually are directly dependent on having a clean, healthy Delaware River.

The Delaware League is concerned that the DRBC's draft fracking regulations will protect neither the quantity nor the quality of water in the Delaware. Leaks from fracking present numerous dangers to our precious water and our environment.

More than 1,000

	112
1	chemicals have been used in
2	fracking in various
3	combinations. Only a few,
4	about 20 percent, have been
5	tested. Many of them are
6	generally poisonous
7	neurotoxins, carcinogens. The
8	others haven't been studied.
9	The identity of many fracking
10	components aren't exposed.
11	And fracking wastewater
12	also contains hundreds of
13	hazardous materials that are
14	reached deep from within the
15	earth.
16	The League is
17	particularly concerned of
18	radioactive elements including
19	radium, thorium and uranium are
20	prevalent in Marcellus shale
21	waste.
22	Because these
23	radioactive elements have a
24	very diverse range of physical
25	and chemical properties, it is

very difficult to separate these from other waste.

There are currently no methods that are economically feasible to purify the two to three million gallons of waste produced in fracking just one large horizontally built well.

Disposal of solids in

municipal landfills will inevitably result in contaminating the river.
Radium is taken up by micro-organisms, then they are ingested by animals further up the food chain.

For Delaware, this will endanger the health of species as diverse as oysters, and swordfish and great blue herons. If the water is contaminated, the effects on Delaware's economy and the quality of our life will be devastating. Once it is

the effects of fracking on the

health and environment of the Susquehanna River Basin, an area directly adjacent to the Delaware River Basin.

Since 2003, the
Susquehanna River Basin has
been open to fracking. We only
need to look there to see how
fracking and its wastewater may
effect the Delaware River
Basin.

Through my research, I concluded that fracking simply cannot happen without accidents. Wastewater spills into water bodies. Gas wells blow out. Both fracking fluid and methane contaminate drinking water.

And these accidents,

despite seemingly strict

regulations on fracking and its

wastewater, happen routinely on

an almost weekly basis. It's

no wonder four miles of the

	116
1	Susquehanna River were
2	downgraded by Pennsylvania's
3	Department of Environmental
4	Protection because they failed
5	to meet water quality
6	standards.
7	I'll share with you just
8	a few of the many incidents I
9	came across in my research. In
10	Dimock, 8,000 gallons of
11	fracking fluid spilled into
12	wetlands from faulty supply
13	pipes.
14	The spill polluted
15	streams and resulted in a
16	massive fish die-off.
17	Residents' drinking water
18	turned brown and flammable.
19	After showering, Dimock
20	residents experiencing
21	dizziness and headaches and
22	suffered from skin sores.
23	In Bradford County, a
24	well spilled thousands of
25	gallons of fracking fluid into

a tributary of the Susquehanna
River. The spill took 12 hours
to contain and seven families
who live in the area had to
evacuate their homes.

Finally, in Wyoming

County, a well spilled hundreds of thousands of gallons of fracking wastewater into the nearby area. The mixture of sand, water, hydrochloric acid, and thousands of other toxic chemicals spewed out of the well at a rate of 25,000 to over 30,000 gallons per hour. The spill took 18 hours to contain. Multiple families had to evacuate and the road to the site was blocked off.

These are just a small sample of the accidents that happened next door in Susquehanna. But they demonstrate the toxicity of fracking, whether that be the

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drilling of wells or the handling of and transportation of wastewater.

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We cannot afford to make the same mistake in the Delaware River Basin. And I implore the Commission to enact a full ban on fracking, inclusive of fracking wastewater and water transfers in the Delaware River Basin. Thank you.

HEARING OFFICER:

Thank you. Katie Smith will be next. And then Maya
Van Rossum. And then Alicia
Dorsey. And Ms. Smith, if you would?

MS. SMITH:

Good afternoon. My name is Katie Smith. And I'm here on behalf of the Pineland Preservation Alliance, a nonprofit organization dedicated to the protection of

the New Jersey Pinelands. Part of which fall within the Delaware River watershed. I am here to support a complete ban on fracking, specifically to urge the Commission to ban export of water and the receipt of fracking wastewater in amendments.

These activities are currently banned under the moratorium and they should remain prohibited. The DRBC already discourages both the exportation of water and the importation of wastewater into the basin.

It is time for these sentiments to become policy.

The Basin experience is not infrequent drought and water scarcity partially due to over allocation of water by state governments.

In New Jersey, 12 of 20

watershed management areas will experience water stress if current allocations are fully utilized.

Each fracked well requires approximately 4.5 million gallons of water, and some require up to 20 million gallons of water, water which is permanently removed from the hydrologic cycle.

It's inappropriate for New Jersey and the rest of the Basin to allow diversions for fracking.

The New Jersey Pinelands is positioned in the Kirkwood Cohansey aquifer, an unconfined 17-trillion gallon aquifer. Withdrawals from unconfined or surface aquifers not only impact future availability for human consumption, but create immediate impacts on wetlands and riparian ecosystems.

Fortunately, there are
rules in place to protect the
Pinelands from water export,
but other areas do not have
these protections.

DRBC currently requires assessment of diversions based on drought flow, which is insufficient to properly protect wetlands, riparian systems, or the biotic communities that rely on them.

For these reasons, a complete ban on export of water is required. Further, the Commission admits that the basin waters have limited assimilated capacity and limited capacity to accept conservative substances without significant impact.

Conservative pollutants such as salt and metals are frequently found in wastewater. A significant risk when dealing

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with produced water waste is
the proprietary nature of the
fracking fluid, which makes it
incredibly difficult for the
DRBC to properly regulate these
effluents.

Additionally, the requirement that companies --- background levels prevents areas of contamination from recovering.

For these reasons and the many more that have been mentioned today, I ask you to put forth a ban on fracking, the export of fracking --- export of water for fracking to be dismissed. Thank you.

HEARING OFFICER:

Maya Van Rossum would be next. And then Alicia Dorsey.
And then Steve Bacher. Ms. Van Rossum, when you're ready, please.

MS. VAN ROSSUM:

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Good afternoon. My name
is Maya Van Rossum. I'm a

Delaware River Keeper, and we
are seeking on behalf of the

Delaware River Keeper Network.

Nobody is safe if we allow drilling and fracking for gas from shale in our watershed. If the fracking industry were allowed to advance in our watershed, we will be signing up for devastating and irreversible harm to our water, air, health, economy, and communities.

Would be damaged for every well pad, including forests, wetlands, and needed water recharge areas. We would sacrifice billions of gallons of water to this industry. We would be increasing methane in the atmosphere, magnifying the pace and impact of climate

instability resulting in more
floods and droughts to our
watershed.

Where fracking happens, water wars are real. We do not want them here.

We do not want our farmers, our eco-tourism business owners, our voters, our fishers, and everyone who depends upon water, which is frankly all of us, to have to be battling with the frackers for water.

But that is what will happen if we allow fracking in our watershed. And that is also what will happen if we allow these regulations to advance as written. Because while they advance the long promise of banning fracking, they include the opportunity to bring frack wastewater into our watershed for disposal, and to

suck water out of our basin in order to support and do fracking elsewhere.

More fracking anywhere means more toxic wastewater and fresh water needs, which means increased pressure on and use of our watershed to renew fracking that is devastating communities elsewhere.

Frankly, this is both an untenable and an immoral stance for the Delaware River watershed to take.

Fracking anywhere also means more pipelines, and compressor stations, and gas export facilities inflicting more harm on our natural resources and communities, both within the watershed and beyond. Too many have already suffered at the hands of this infrastructure.

And so the Delaware

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1	River Keeper Network supports
2	that portion of the regulatory
3	proposal that bans fracking in
4	the Delaware River watershed.
5	But to be fully acceptable, the
6	Delaware River Basin
7	Commission's regulations must
8	say no entirely to every aspect
9	of the fracking industry,
10	including the wastewater and
11	the water withdrawals, so that
12	we cannot allow our watershed
13	to become a sacrifice zone, nor
14	allow our watershed to be used
15	to sacrifice others, including
16	future generations who will be
17	saved or sacrificed by the
18	decision that we are making
19	today. Thank you.
20	HEARING OFFICER:
21	Thank you. Alicia
22	Dorsey. And then Steve Bacher.
23	And then Susan Carty. Okay.
24	Ms. Dorsey?
25	MS. DORSEY:

127 1 Yes. 2 HEARING OFFICER: 3 That's a very 4 well-behaved baby. 5 MS. DORSEY: Thank you. So I'm 6 7 Alicia Dorsey. This is my 8 granddaughter, Katie Dorsey. We are testifying today with 9 10 hopes that we can achieve a 11 complete and permanent ban on 12 natural gas drilling, and 13 fracking, and all related 14 activities including water 15 waste processing, and discharge 16 from the water withdrawals, 17 from drilling and fracking 18 operations through the Delaware 19 River watershed. 20 I, along with others, 2.1 have been advocating for 22 approximately --- the dig for 23 fossil energy is causing major 24 damage to our health when 25 allowing these fracking

companies to dump their waste
into the Delaware River Basin.

A ban on fracking in the
Delaware River Basin would
limit water pollution.

I'm begging you to protect our natural environment and source of life. We need the Delaware River Basin to be fossil waste-free. And we are depending on you, our Commission, our Delaware River Basin Commission, to protect our natural resources at the Delaware River Basin.

My granddaughter and the rest of my grandchildren, along with the rest of us in Pennsylvania, have a right to clean air and clean water. We have laws to govern the quality of our air and our water. And these laws, along with the moratorium, need to be enforced.

After exhaustive

studies, the state of New York

prohibited fracking based on

4 environmental and public health

the state.

5 analysts.

The New York Department of Health conducted that --the overall weight of evidence demonstrated that the likelihood that adverse health outcomes and environmental impacts on fracking could not be prevented, leading to the governors decision to ban high volume hydraulic fracking in

The State of Maryland also currently banned fracking after years of study based on potential or at-risk public health and environmental impacts. And it's really for my grandchildren that I'm here. Because these effects will affect us right now, but it's

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more or less for the future of my grandchildren and their health and their safety.

HEARING OFFICER:

Thank you, ma'am. Steve
Bacher will be next. And then
Susan Carty. And then Karen
Melton. Mr. Bacher,
B-A-C-H-E-R. I might be
mispronouncing it. Not here.
I'll call that name again.
Susan Carty, please. Okay.
Ms. Carty, when you're ready.
All right.

MS. CARTY:

All right. Thank you.

I do have a letter that was sent. I'm the President of the Pennsylvania League of Women

Voters. And I do have a copy of the letter from January 2017 that was submitted to the River Basin Commission from four state leagues. I'll pass that on shortly.

131 1 HEARING OFFICER: 2 Good. 3 MS. CARTY: 4 Okay. Again, I'm Susan 5 Carty, President of the League of Women Voters of 6 7 Pennsylvania. The Pennsylvania League has been deeply involved 8 9 with issues related to shale 10 gas activities and oversight 11 for several years. 12 Over the last ten years, 13 we undertook a series of 14 in-depth studies on the issues 15 covering environmental and 16 economic impacts, regulations, 17 permitting, and most recently, 18 health impacts. 19 Our position supports, 20 quote, the maximum protection 2.1 of public health and 22 environment, in all aspects of 23 Marcellus shale natural gas 24 production, site restoration, 25 and delivery.

And therefore, we are here today to appeal to you with a deep interest in the proposed rule that is under consideration.

The League strongly supports the Commission's proposed prohibition of high volume hydraulic fracking given its determination that the risk to the public health and water quality are significant.

The decision also is consistent with the findings and policy of the New York Department of Environmental Conservation, which found that there are no feasible or proven alternatives that would adequately avoid or minimize adverse environmental impacts, and which prohibits high volume hydraulic fracking in the upper portion of the basin.

We believe that

1 establishing a uniform basin 2 wide policy to maximize the 3 protection of water quality and the public health is of critical significance.

> In light of the Commission's cautious and protective decisions on high volume hydraulic fracturing, we're concerned that the proposed rule appears to offer a degree of leeway in handing of fracking related wastewater. We appreciate the rule proponents which close a loophole in the federal regulation. And we support the Commission in placing stricter conditions on wastewater treatment at these facilities.

We hope to see clearer detail on the permitting conditions that the Commission intends to impose for projects involving treatment and

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1 discharge of wastewater within 2 the basin. 3 We believe that the 4 maximum protection of public 5 health and the environment need 6 to be applied to handling of 7 produced waters, as well as to high volume hydraulic fracturing operations. 9 10 We thank the Commission 11 for the opportunity to comment 12 today on these rules. And we 13 hope that we will be able to 14 feel confident in your 15 decisions in the future. 16 HEARING OFFICER: 17 Thank you, ma'am. 18 MS. CARTY: 19 Thank you. 20 HEARING OFFICER: 2.1 Is Nancy Harkins here? 22 Lena Smith? Let's see. Walter 23 Jeranek? And Jennifer Coffey? 24 Okay. No response on those. 25 And the Steve Bacher is not

	135
1	here. Okay. Let's see. That
2	was Susan Carty. And then
3	Karen Melton would be next.
4	Karen Melton? I'll try that
5	name later. Margery Schab?
6	Margery Schab? Okay. Margery
7	Schab. All right. Eve Miari,
8	MIARI? If you come forward,
9	ma'am. You will be next. All
10	right.
11	I want to make sure I
12	have this right. Karen Melton
13	is not present. Margery Schab
14	is not present. Okay. This is
15	Eve Miari. And Then after that
16	is Harvey Chanin. And then
17	Sister Kate O'Donnell.
18	All right. Ms. Miari,
19	please when you're ready.
20	MS. MIARI:
21	My name is Eve Miari,
22	and I'm an advocacy coordinator
23	with the Clean Air Council.
24	The council is deeply concerned
25	that DRBC's proposed

1 regulations leaves open the 2 possibility that industry could 3 withdraw water for fracking 4 operations and treat or dispose 5 of fracking wastewater within

6 the basin.

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In order to protect the industry. The regulations must clearly state a complete ban on

The Delaware River watershed provides a significant source of clean drinking water for 15 to 17 million people. Extraction of these waters for fracking essentially amounts to a theft

Delaware River watershed and the health and safety of all 10 who live in this region, the 11 regulations must be strict and specific and must hold up against the powerful, private 13 interest of the oil and gas 17 fracking, extraction, disposal, and storage.

of a natural resource shared by millions.

The proposed regulation should clearly state that no water can be removed from the Delaware River Basin to support fracking operations. It should be the policy of DRBC not to issue such permits under any circumstances.

According to the EPA, there are more than 1,000 known chemicals, a serious and well-documented public health impact, that are used in fracking. And many more are considered proprietary and have not been disclosed.

DRBC or DEP cannot
effectively and continuously
test for thousands of known
substances, let alone unknown
chemicals, the content of which
may vary day-to-day and
well-to-well. The reality is

1 that there is no reasonable 2 testing program that would 3 ensure the public health and 4 safety of our citizens. 5 The council is concerned that disposal of fracking 6 7 wastewater may lead to higher 8 than acceptable levels of 9 radioactive material in the 10 watershed. 11 A 2013 study from Duke 12 University indicated that 13 fracking wastewater disposal 14 can lead to an accumulation of 15 radium and stream sediment. 16 Samples from Western 17 Pennsylvania rivers and creeks 18 downstream of treatment plants 19 had levels of radioactive 20 material 200 times higher than 2.1 samples taken upstream. 22 The council is concerned 23 that DRBC's proposed 2.4 regulations did not include a 25 specific ban on the use of

1 injection wells for storing 2 contaminated fracking waste. 3 Fracking wastewater storage, 4 including the use of injection wells, should not be permitted 5 in the Delaware River Basin 6 7 under any circumstances. And this should be explicitly 8 9 stated in the regulation. The risk of ground and 10 11 surface water contamination is 12 too high and the risk to public 13 health unacceptable. And there 14 is no real possibility of effective remediation. 15 16 In summary, the waters 17 of the Delaware River Basin are 18 a precious protected resource 19 that millions of people depend 20 upon for drinking and other 2.1 uses. 22 In Pennsylvania,

In Pennsylvania,
citizens are guaranteed by
Article 1, Section 27, the
right to clean air and pure

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water. The Delaware River

Basin Commission, as a trustee

of these resources, has an

obligation to uphold these

rights and protections.

As a lifelong resident of the Delaware River Basin and as a mother of two small children whose health and well-being depends upon clean, safe, drinking water, I strongly urge the DRBC to enact a complete ban on all fracking operations in the Delaware River Basin, including extraction, disposal, and storage. Thank you.

HEARING OFFICER:

Thank you. Harvey

Chanin. He's here? All right.

And then Sister Kate O'Donnell

will be after him. And then

Paul Roden. Okay. Sir, if you

would please, when you're

ready.

MR CHANIN:

Good afternoon. My name is Harvey Chanin. As a lifelong Philadelphian, I am asking you to protect our water supply. And for our transcriptionist in Philadelphia, water is spelled W-O-O-T-E-R. I'm sorry.

Considering that one percent of the earth's water is drinkable, how we manage water will define our future and the future of the planet. Since 99 percent of the water is groundwater, how we look after our aquifers is the most critical component.

Although not directly addressing the regulations, the rules may allow the injection of wastewater within the basin. The injection of wastewater does not treat waste or remove contaminants. It simply moves

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the potential for the toxic wastewater to cause environmental and water resource pollution and water quality degradation from one place in time to another.

Even if treated, dumping fracked wastewater is dangerous because it contains over 600 different toxic chemicals, many of them carcinogenic.

Also, the danger of radioactive wastewater is a potential to contaminate drinking water or enter the food chain through fishing and farming.

The New York Times

recently found never reported

studies by the EPA, and a

confidential study by the

drilling industry that all

concluded that radioactivity

and drilling waste cannot be

fully diluted from the rivers

student asked me. Quote, why

would the government knowingly
permit corporations to dump
crap into the water and air? I
answered unfortunately, not all
people are interested in
welfare.

All too often, in a capitalist society, profits come before people. If the Eagles can make it to the Super Bowl, then I guess we can count on you to keep our water safe. Thank you very much.

HEARING OFFICER:

Sister Kate will be next. And then Paul Roden. And after Mr. Roden will be Gail Heath. Okay. Sister, please.

SISTER O'DONNELL:

Okay. I am sister Kate
O'Donnell of the Sisters of
Saint Francis of Philadelphia,
a congregation of over 400
women. I thank you for the

opportunity to be here today to publicly speak to a revised set of draft regulations.

Our Franciscan charism calls us to be strong proponents of ecological consciousness with sustainable development goals and the care of creation.

We believe that prohibition of hydraulic fracturing and other shale gas activities within the basin is of upmost importance and a necessity.

Protecting and conserving the water resources, and promoting comprehensive practices for water management is vital in a region that has seen many negative impacts of shale gas expansion and exploitation in the state of Pennsylvania.

And I think this is

worth repeating. The key is in our Pennsylvania Constitution, 3 article 1, section 27. The 4 people have a right to clean air, pure water, and to the preservation of a natural scenic, historic, and aesthetic values to the environment. Excuse me.

> Pennsylvania's public natural resources are the common property of all the people, including the generations to come.

The Commission knows that the socioeconomic value of the Delaware River Basin is beyond description, and the Commission also knows that exposing it to any of the byproducts of natural gas waste and other greenhouse gas emissions would be illogical and detrimental to the life of the River Basin.

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It is imperative that any regulations related to the Delaware River Basin would further protect the water and human right to water for the millions who need access.

This river basin has been the economic engine for over 400 years. Excuse me.

And continued regulation and monitoring is vitally important for future generations.

I applaud the DRBC for taking extensive steps and time to address regulations and presenting them at this and other hearings in our region.

We don't want the beauty
of the basin to be exposed to
toxicity as in butane, methane,
ethane, and other excessive
greenhouse gas emissions that
are associated with hydraulic
fracturing and the extensive
infrastructure that this

	148
1	industry requires.
2	<u>HEARING OFFICER:</u>
3	Thank you, Sister.
4	Okay. Next is Paul Roden. And
5	then Gail Heath. And then
6	Carol Armstrong.
7	Okay, sir. When you're
8	ready, please.
9	MR. RODEN:
10	Good afternoon. My name
11	is Paul Roden. I live in Lower
12	Makefield Township in Bucks
13	County.
14	I am here today to call
15	on the Delaware River Basin
16	Commission to ban fracture
17	excuse me. I have allergies.
18	The compounds that are
19	in the fracking fluids are
20	radioactive. They're deadly.
21	They're toxic. How can you ban
22	fracking and accept the
23	fracking waste? It seems crazy
24	and stupid to me.
25	You have volatile

organic compounds, which only can be separated by activated carbon or charcoal. My municipal waste Authority, Morrisville Municipal Waste Authority cannot handle the existing domestic waste, let along handle industrial waste from fracking. This is insane.

> The fracking industry is exempt from the clean water and the clean air, safe drinking water and other environmental acts. How is that possible? Well, money talks, BS walks.

So how can the DRBC regulate it when they have no inspectors or monitors to do this? This also seems stupid and insane to me.

So it's unsafe to allow drilling of natural gas with fracking pollutants in the Delaware watershed. We have to rely on the wisdom of the

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Commissioners to uphold their
vows and oath of office to the
Compact and fulfill their
mission to protect the water
supply.
And if we have problems

And if we have problems with droughts, and we couldn't even have the re-enactment of Washington crossing the Delaware in the winter, what's going to happen in the summertime if they're drilling 100,000 gallons a day? This also seems stupid and insane to me.

So this is all unsafe.

New York State has seen the wisdom and banned it. So why should we allow it on this side of the river? This also seems stupid and insane.

So we have to fulfill the oath of office to the constitution of the Commonwealth of Pennsylvania,

which has also been alluded to in previous speakers. But I will say it also again.

Article 1, Section 27, it states that people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic, and aesthetic values of the environment.

Pennsylvania's public
natural resources of the
Commonwealth are for all the
people, including generations
yet to come. As a trustee of
these resources, the
Commonwealth shall preserve and
maintain for the benefit of all
the people.

So in conclusion I ask
the DRBC to do the right thing,
ban fracking forever in the
Delaware River Basin. Thank
you.

HEARING OFFICER:

	152
1	Is Karen Melton here?
2	Karen Melton? Is Margery Schab
3	here? That concludes the list
4	of the people that signed up
5	previously or before today.
6	And then for today's list, Gail
7	Heath will be next. And then
8	Carol Armstrong. And then Jan
9	Filios. And Ms. Heath, is that
10	you?
11	MS. HEATH:
12	Yes.
13	HEARING OFFICER:
14	Excuse me, one second.
15	MR. RAPP:
16	I didn't hear my name
17	called.
18	HEARING OFFICER:
19	What's your name, sir?
20	MR. RAPP:
21	I haven't heard my name.
22	HEARING OFFICER:
23	Say your name.
24	MR. RAPP:
25	Rapp, R-A-P-P.

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1	HEARING OFFICER:
2	Say again?
3	MR. RAPP:
4	Rapp, R-A-P-P.
5	HEARING OFFICER:
6	I have not gotten to
7	your name yet. And I'm not
8	sure that it's down here yet.
9	I don't see your name here.
10	MR. RAPP:
11	I was previously signed
12	up.
13	HEARING OFFICER:
14	Okay. We'll see if we
15	can get to it. And I'll check
16	as the speakers are going here.
17	Okay? Okay. Ms. Heath,
18	please.
19	MS. HEATH:
20	Yes. I'm Gail Heath.
21	I'm a resident of Wilmington,
22	Delaware and I'm a member of
23	the Delaware Chapter of the
24	Sierra Club. To have a ban on
25	fracking, but allow the

withdrawal and discharge is absurd. The danger will still be the same. As many speakers have made clear, there is no way to remove many of the hundreds of toxic chemicals in fracking waste.

Delaware has spent

decades cleaning up the

Delaware River to re-establish

native population of aquatic

wildlife, such as the

endangered Delaware species of

Atlantic sturgeon. These

toxins will destroy native

aquatics. And impact the

livelihoods of 160,000 jobs

depending on the clean water.

Not to mention our own health.

Withdrawals will cause low river levels, especially in dry summers resulting in salty ocean water moving further up the river. This is to the detriment of oysters and other

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1	vital aquatic species that
2	people, as well as our abundant
3	birds and wildlife, depend on.
4	Wells in Southern Delaware can
5	become contaminated with salt,
6	as well as fracking chemicals.
7	In conclusion, a ban on
8	fracking but allowing
9	withdrawal and discharge does
10	nothing. Only a total ban of
11	all aspects of fracking is
12	acceptable. Thank you.
13	<u>HEARING OFFICER:</u>
14	Thank you. That was our
15	38th speaker. Mr. Rapp, you
16	are listed here. Carol
17	Armstrong will be next. And
18	then Jan Filios. And then
19	Theresa Heinsler.
20	All right. Go ahead
21	when you're ready.
22	MS. ARMSTRONG:
23	Thank you.
24	HEARING OFFICER:
25	Thank you.

MS. ARMSTRONG:

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2 I'm Carol Armstrong. Ι 3 live in the Delaware River Basin. I'm a 4 5 neuropsychologist, scientist, and healthcare provider. I'm 6 7 also a massive watershed 8 steward and volunteer with the 9 excellent environmental 10 organizations that protect our 11 clean water and biological 12 diversity, which go 13 hand-in-hand and without which, 14 they would be lost. 15 My comments are in 16 support of the DRBC's 17 moratorium of all gas drilling, 18 hydraulic fracturing, water 19 controls, and discharges 20 throughout the Delaware River 2.1 Basin. 22

I am hopeful that the DRBC will rule that these bans are full and permanent in order to restore and conserve our

1 beautiful, exceptional, 2 congressionally designated 3 national wild and scenic river, 4 the Delaware, and the National 5 Delaware estuary, because of 6 their irreplaceable beauty, 7 source of drinking water, and ecological productivity that 8 9 earned them protections from commercial interests that 10 11 threaten them, despite 12 regulations. 13 Once this is damaged, 14 the balance cannot be restored 15 or recovered. 16 The DRBC has recognized 17 that water volumes needed for 18 fracking can adversely effect 19 aquatic ecosystems, river 20 channels, riparian resources 2.1 and wetlands. The entire non-tidal 22 23

Delaware River is protected by DRBC's federal protection water regulations that state that the

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water quality cannot be diminished in any way. DRBC policy is being broken by permitting drilling and fracking, such as the importation of wastewater into the Delaware Basin.

Further, drilling and fracking could not be done safely or without environmental contamination. The method of dilution and sequestration will only --- will and have resulted in slow and continuous decline in groundwater and surface water quality.

The EPA documents that seven to nine percent of the water projected for fracking is permanently removed from the water cycle.

Findings are that 80 to 90 percent more of water is used in Marcellus and other sites is fresh water and

1 developing methods for fracking 2 are requiring increasing volumes of fresh water. 3 There is a shift in 4 social opinion, which is 5 6 merging most clearly in new 7 generations of voters, that the value that comes from 8 environmental rights must not 9 10 take second place to the values 11 that come from commercial 12 development. 13 The risk for human 14 health and nature, the 15 concerned health professionals 16 of New York, and the Physicians 17 for Social Responsibility 18 reviewed at last count 685 19 peer-review papers 20 investigating gas drilling and 2.1 hydraulic fracturing. The 2016 Fourth Edition 22

of their review showed a great majority and growing consensus of scientific evidence that the

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risks of this type of activity include earthquakes, adverse impacts on water, on air, on agriculture, on public health and safety, on property values, on claims, disability, and on economic vitality.

They, quote, uncovered no evidence that fracking can be practiced in a manner that does not threaten human health, end quote.

The long-term effects are unknown because government resisted inquiries, especially about long-term risks. For example, the introduction of hundreds of new chemicals in fracking, most of which are not now and never investigated for long-term effects on humans and ecology is extremely concerning.

There needs to be monitoring of the changes to

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1	water supply in the hydrologic
2	cycle and analysis of how water
3	removal and discharge from
4	fracking is affecting our water
5	resources. A scientific study
6	with resulting knowledge about
7	the health of our environment
8	is one of the most important
9	contributions I can think of
10	for future generations.
11	HEARING OFFICER:
12	Jan Filios will be next.
13	And then Theresa Heinsler. And
14	then Wendy Goetz. Is this Ms.
15	Filios?
16	MS. FILIOS:
17	Yes.
18	HEARING OFFICER:
19	Whenever you're ready.
20	MS. FILIOS:
21	Thank you. Yes. Jan
22	Filios. I'm a Bucks County
23	resident and property owner. I
24	concur completely with the
25	previous speakers.

162 1 The Pennsylvania 2 Constitution states that people 3 have a right to clean air, pure 4 water, and to the preservation of the natural, scenic, 5 6 historic, and aesthetic value 7 of the environment. As trustees of these 8 9 resources, the Commonwealth 10 shall preserve and maintain 11 them for the benefit of all the 12 people. There is a race against 13 14 time to provide us with clean 15 energy. We have painfully 16 discovered that hydraulic 17 fracturing for natural gas can 18 be permanently harmful. It 19 pollutes our air, our bodies, 20 our land, our water, our wildlife, and our values. 21 22 The wastewater is no 23 less toxic. Taking our river water for fracking is 24 25 unacceptable. There is no

1 place in a healthy environment for any of these activities.

> In addition, fracking and its wastewater can cause economic degradation. Tourism thriving. Our fishing, our vineyards, our blueberries, our barns, our bed and breakfasts, our restaurants, our water recreation, all depend on an ample supply of clean air and water. Toxins and tourism don't mix. Thank you for this

> Thank you. Next would be Theresa Heinsler and then Wendy Goetz. And then Michelle

> Theresa Heinsler. Money is power, but knowledge is also empowering. Fracking, I

	164
1	believe, is a death knell, not
2	just to the Delaware River
3	Basin, but to the oil industry
4	itself. Why would the biggest
5	profit maker in the U.S. resort
6	to such a costly extracted
7	method resulting in such a poor
8	quality product? Is it because
9	the U.S. consumes 20 percent of
10	the oil, only having two
11	percent in the U.S.?
12	Partially, yes. But also
13	because oil and gas is a
14	non-renewable resource. Oil
15	and gas from Texas and Oklahoma
16	are rapidly depleted. The
17	2,000 wells or more in the Gulf
18	of Mexico are also being
19	depleted.
20	Oil and gas sees the
21	depletion, but not the
22	solution. Why? Because it
23	also means the gas industry is
24	in the death knell itself. Is
25	this why the conservation of

1 resources or developing clean 2 energy are not being 3 recognized? Why they cannot see it as nails for their own 4 coffin. They prefer to see it 5 as nails in our coffins. 6 7 The Delaware River Basin 8 is already a victim of oil and 9 gas. How? Because of the many 10 refineries, the oil tanks that 11 line the Delaware, of the 12 pipelines that run through, at 13 least I know, Heinz Refuge, 14 which is adjacent to the 15 airport. And also by the 16 airplanes who use the Delaware 17 as a partial landing for the 18 airport, the Philadelphia 19 Airport.

I live here and I can vouch for it. They go over it continually like every two minutes or so at times.

And what is not generally known is that

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1	airplanes have to carry by law
2	an extra supply of fuel for
3	emergency landings. But they
4	need to discharge that fuel
5	before they land. And to
6	where? No one knows. I hope
7	it's not in the Delaware, at
8	any rate, I want to say
9	HEARING OFFICER:
10	I must stop you, ma'am
11	at this point, okay. Just like
12	everybody else.
13	MS. HEINSLER:
14	Okay.
15	<u>HEARING OFFICER:</u>
16	Okay. Thank you very
17	much.
18	Wendy Goetz will be
19	next. Then Michelle Roberts.
20	And then Naomi Laver.
21	MS. GOETZ:
22	Thank you. My name is
23	Wendy Goetz. I'm a citizen of
24	Freeland Heights in New Jersey
25	and I would like to ask you to

wear a mile in my bra. Our country has taken a correct turn in protecting people from 4 harassment and physical harm. I'm here today to ask and demand that we take the correct turn here, too.

> As a constituent, I know that special protection water regulations must be kept in place and honored for the river, the basin, the watershed, the people, and the planet. Our fourth speaker today spoke concerning the unborn as well.

The Delaware watershed holds all the people's and the planet's generations in its mouth. So wear a mile in our bras.

As an older woman, as an older mother, I took a chance at having a child. I waited until I was having the ability

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the respond to a child's needs.

With these types of industries

and practices, we can no longer
respond.

Fracking and all related industries and activities, including water withdrawals, and frack-based water remediation, and the D-minus infrastructure takes away our human rights and abilities to respond.

The shale gas industry
has received unprecedented
extensions from environmental
and public health laws and do
not even have to disclose their
chemicals.

Governor, wear a mile in my bra and protect all of your citizens by not allowing the gas and shale industries in the river, the basin, or the watershed.

Army Corps of Engineers,

wear a mile in my bra by claiming your ability to respond and strengthen our national security of water protections.

Claim your ability to respond by energizing a sane renewable energy economy.

Claim your ability to respond by reducing the risk of disastrous water contamination event. It is your stated mission. Do your job.

I thank the DRBC for doing their job. I commend them for having the banning fracking regulations. Thank you very much. As a mother, a wife, a human, and a constituent, I am razor-focused on justice and equality. You all are employed by me, by us, paid for by our tax dollars, not dirty energy platforms. We need an even ground for

	170
1	sustainable future for the
2	generations, people, and
3	planet. You must provide that.
4	So wear a bra in the
5	mile, for a mile in all the
6	bras of all the mothers who
7	will not be able to respond to
8	their children's basic needs;
9	clean air, water, and soil.
10	Thank you very much.
11	<u>HEARING OFFICER:</u>
12	Michelle Roberts is
13	next.
14	MS. ROBERTS:
15	I have to follow that?
16	HEARING OFFICER:
17	Hold on. Michelle
18	Roberts will be next and then
19	Naomi Laver. And then Alyssa
20	Bradley. Okay. Michelle
21	Roberts, please.
22	MS. ROBERTS:
23	Hello. My name is
24	Michelle Roberts. I'm the
25	national co-coordinator for the

Environmental Justice Health Alliance for chemical policy 3 authority, known as EJHA. I'm also the director of outreach 4 for coming clean. I'm a weapons biologist. I have a background in energy and environmental policy.

> Water is life. Water is sacred. These particular waters along this route have been the realm of many of the people that I serve. Those who bought themselves into freedom. Harriet Tubman, our native brothers and sisters who were forcefully removed from the lands that they call their own. Now, they survive.

> The people that I represent were unfortunately impacted by the entire spectrum of the oil and gas extraction industry. And that must stop. No longer must we bear the

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burden, people of color and the poor. It must be an all right and outright ban. Not just the Delaware River, but across the nation.

We are currently under political times where public health and the environment are under assault. This is indeed an even deeper egregious assault called environmental genocide for the folks that we represent.

The states can't even handle what the feds are about to put down and they know that. So having additional egregious behavior is unconscionable.

We call upon the moral and courageous, the courageous moral authority of each and every governor to honor that of mother earth and her children. Water is the life blood to the mother. And the children who

are living disproportionately should not be.

So we call, and not only call, we demand as voters, as people of color and the poor, who --- actually many of the folks that I represent probably aren't in this room and some of them are.

But what we say
together, we stand for the
rights of mother earth and her
children. And indeed, I leave
you with the fact that water is
life. Water is sacred. And we
will be praying that your moral
heart and courage is pricked to
stand for the true justice that
some folks say this country was
created to be.

So we call for the human rights of those left behind, but in addition to that, those standing in privileged stations right now holding it down for

174 1 their properties. Enough is 2 enough. No more will my people bear the burden of 3 discrimination and harm. Right 4 5 on. 6 HEARING OFFICER: 7 Naomi Laver, please come 8 forward. And then Alyssa 9 Bradley. And then Emily Worth. 10 Okay. Ms. Laver, please. 11 MS. LAVER: 12 Hi. My name is Naomi 13 Laver. And I'm a high school 14 junior at Germantown Friends 15 School. 16 Many passionate speakers 17 we've heard today have offered 18 undeniable evidence that 19 fracking is extremely dangerous 20 for our already deteriorating 2.1 environment and should not be 22 permitted anywhere. 23 Fracking and the 24 processes involved with 25 fracking in the Delaware River

Basin pollute our drinking

water putting all humans and

animals who depend on that

water at risk.

We need to be doing everything we can to preserve our water, not putting frack waste into it.

Therefore, I believe that the Delaware River Basin Commission should instate a full and permanent ban on fracking including banning fracking wastewater disposal and water withdrawals.

To me it's simple.

Clean and safe water is an absolute necessity and a human right. Anything less than a complete ban on all aspects of the fracking industry that put our water at risk of serious contamination is completely unacceptable.

As a member of the

1 rising generation, I am calling 2 on the DRBC to ban fracking and 3 all fracking-related activities 4 now for the safety of my 5 generation and future 6 generations to come. Thank 7 you.

HEARING OFFICER:

Alyssa Bradley. And then Emily Worth. And then Thomas McCaney. And this is Ms. Bradley.

MS. BRADLEY:

Hi. My name is Alyssa Bradley. I'm the energy organizer for Clean Water Action. We have over 150,000 members within the state of New Jersey, but we are a national organization that has consistently and loudly opposed fracking from day one.

Everyone here has said basically all there is to say, but since this is only one of

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two very inconvenient ways of
submitting public comment,
you're just going to have to
sit through my redundancy. I'm
sorry.

I would really love to say thank you for proposing a ban on high volume hydraulic fracking in the Delaware River Basin. But you know what? am not going to. Because the rest of the proposed rules renders that ban useless. know, let's lay this out. we're proposing --- if the DRBC is proposing a ban on fracking because of the damage it can do to the basin, but still allowing the dangerous byproduct wastewater to be treated and disposed of in that same Basin, that's a distinction without a difference.

We need the Commission

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to do its job and protect the

Delaware River on which 17

million people rely on for

their drinking water. Governor

Cuomo, Governor Murphy --
really happy to have your

governor working, by the way.

Governor Wolf and
Governor Carney, if you allow
wastewater discharges and water
withdrawals in the Delaware
River Basin, you are ignoring
the science. You are ignoring
the dangers. You're knowingly
doing irreparable harm to the
Basin that it is your job to
protect and to the people who
you swore to serve.

It is past time. Ban fracking and completely ban all fracking-related activities in the Delaware River Basin. Not tomorrow, not next year, now. Thank you.

HEARING OFFICER:

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Thank you, ma'am. Emily
Worth will be next. And then
Thomas McCaney. And then
Jonathan Lutz.

MS. WORTH:

Hi. My name is Emily

Worth. I'm the national

organizing codirector for food

and water watch. And I'm

speaking here today with the

tens of thousands of members

that we have in New York, New

Jersey, Pennsylvania, and

Delaware.

We're here today. We've been involved in this fight for protecting the Delaware River Basin. And I remember actually standing in Trenton when the Commission made the wise decision not to allow fracking or any of its associated activities in the Delaware River Basin.

And since that time,

what we've seen is states like New York and Maryland ban fracking. But also hundreds of studies that demonstrate the harm that has been really ultimately described here today.

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So we're here today with of 17 million people by banning waste and the water withdrawals

just a minute to focus on the risks allowed by fracking

7 8 9 a simple message for the Commission and for Governor 10 11 Cuomo, Governor Murphy, and 12 Governor Carney and Governor 13 Wolf, that we need to protect the Delaware River watershed 14 15 and the drinking water source 16 17 fracking, but also fracking 18 19 from fracking in other places. 20 This is really the only way 2.1 that we can prevent the harms 22 for this river basin. 23 And I would like to take 24

wastewater processing through these draft regulations. As you have heard from many of the other speakers, there are countless studies that now show that there's no safe or effective way to treat and discharge the highly toxic materials found in the fracking wastewater.

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materials.

And in fact, as others

1 have mentioned, a study 2 released just in the past week 3 --- that's how much research has come out on this issue. 4 Ιt was conducted by researchers at 5 6 Duke University. And they 7 found that levels of radium, 8 again, a known carcinogen, in the river sediment in the 9 10 Allegheny River in Western 11 Pennsylvania are about 650 12 times higher below water 13 treatment plants than at their 14 same heights upstream. 15 And some of this came 16 from treating actually 17 conventional oil and gas waste,

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from treating actually conventional oil and gas waste, but as the leading researcher said in the newspaper, quote, the clear message of the study is that any brine containing radioactivity should not be discharged into the environment.

So the question we have

here today is why would the

DRBC now move to allow the

processing of fracking waste in

the Delaware watershed? It

just makes no sense.

And so we are here today

And so we are here today to call on Governor Wolf,
Governor Cuomo, Governor
Murphy, and Governor Carney to protect your residents'
drinking water by banning fracking and all associated activities.

We will not settle for this compromise you put forward. We will only accept a full ban on fracking. Thank you.

HEARING OFFICER:

Okay. Steve Bacher was not in the room when I called his name. But if he's here, come forward.

MR. BACHER:

Thank you very much for

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It's going to impact our drinking water. We can't be dumping poisons into the river basin, which will eventually get into all of our drinking

1 water. In fact, the whole 2 ecosystem, as well as our 3 people's drinking water. The 4 only way to keep our drinking 5 water safe for these 17 million 6 people who depend on the river 7 is to keep all aspects of 8 fracking out of the Delaware 9 River Basin. Thank you. 10 HEARING OFFICER: 11 Thank you, sir. Thomas 12 McCaney. I might be 13 mispronouncing your last name. 14 But it looks like it's 15 M-C-C-A-N-E-Y. Okay. No 16 response on that. Mr. Rapp 17 will be next. And then after 18 Mr. Rapp is Edward Leydon. And 19 then Bill Cozzens. Okay. When 20 you're ready, Mr. Rapp. 21 MR. RAPP: 22 I'm Mr. Rapp, an 23 impacted property owner in 24 Pennsylvania. A resident of 25 Jackson, New Jersey. And

1 firstly, I would like to call 2 on my new governor to uphold 3 the Compact with the Delaware River Basin Commission and 4 disallow the dumping, and 5 6 storage, and water withdrawals proposed.

> stand before the Delaware River Basin to demand that they not amend the comprehensive management plan. So not to adopt proposed 18 CFR part 440 and 4011.35. Proposed, the introduction of frack waste into the basin is a violation of the Congressional Compact with the American people. The Commission must enforce the comprehensive management plan industrialization of this precious American commodity.

Do not be influenced by the industry's claims of

multi-billion dollar inflow
into Pennsylvania. And the
fact that they have claimed not
to have led to widespread
negative impact.

All you need to is go to at the places where they are fracking currently and you will see plenty of negative impact.

With almost 10,000
public complaints filed with
the Pennsylvania Department of
Environmental Conservation, it
has been a life-altering public
health hazard in Pennsylvania.
685 peer-review studies
conclude that there is evidence
of negative impacts on water,
air, and human health with over
300 documented cases of private
well water contaminations
caused by the oil and gas
operations in Pennsylvania
alone.

The well pad ban is much

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188 1 appreciated and widely 2 supported, but to allow the 3 frack waste to be emptied into the watershed is a violation of 4 5 the comprehensive management Nor was the frack waste 6 plan. 7 considered when the draft environmental impact station 8 9 prepared in 1986 by the 10 national park service. 11 The DRBC considered ---12 the citizens advisory council 13 and many of the public and 14 private interests. It wasn't 15 considered because it didn't 16 exist. Fracking didn't exist. 17 I also have here the 18 environmental impact statement. 19 I was wondering whether the 20 industry has one of those that 2.1 we can get a newer copy of now 22 that we know how fracking 23 influences our environment. 2.4 So I call on the 25 governors not to break with

their clear mission of

conservation for recreation,

and the preservation of the

historical significance of the

Delaware and its role that it

played in the founding of our

great nation.

This will be the greatest miscarriage of justice that ever has been inflicted on the American people. Thank you very much.

HEARING OFFICER:

Edward Leydon will be next. And then Bill Cozzens. And then Victoria Strange. Okay. Sir, when you're ready please.

MR. LEYDON:

Your Honor, thank you very much for the opportunity to speak. I'm speaking as an individual and as a resident of Solebury Township, Bucks
County, Pennsylvania. It's

1 about an hour north of here 2 where my family and I have a small farm. And just to bring 3 4 this down to my individual level, our farm has a lot of 5 6 water on it. We have a spring. 7 We have two streams that flow 8 through our farm. We have a 9 pond. And we also have 10 groundwater that's very close to the surface. We have a very 11 12 shallow well where we have 13 gotten our water for 40 years. 14 According to the oil and 15 gas industry, I should be able 16 to sell the rights to fracking 17 on the land that I own because we're on a shale formation. 18 19 And there might be oil and gas 20 there, but as we all know, 21 there's a ban on fracking in 22 the Delaware Basin. And that 23 has been decided that that's

really not a good idea.

But looking at these

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1 regulations, the proposed rule 2 that has been issued, there are 3 two exception here that say 4 that I can ask, I as 5 individual property owner, can 6 ask for review and approval by 7 the DRBC for their interpretation and discretion 8 9 for approval to sell the water 10 from my farm, the surface water 11 or the groundwater, to people 12 who want to take it out of this 13 area for fracking either 14 Marcellus shale or somewhere 15 else.

Now, I can ask for that and so can anyone else in my position who has the land, and who has the water to sell.

Secondly, I can ask for the review and approval, and their interpretation and discretion for approval of the transport, treatment, storage, and disposal of wastewater from

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fracking. I look here on the summary and it's called produced water, which I think is someone put a euphemism in there for hazardous and contaminated wastewater.

So maybe I can even get that water back and set up a wastewater treatment facility on my property. I have enough acreage. I can do that. I can treat it. I can store it. I can transport it all here in Solebury Township, Bucks
County, Pennsylvania where fracking is not permitted. As everyone before me has indicated, that is a contradiction.

So I say that if you leave the doors open with these proposed rules and regulations, it is going to happen. People like me and other landowners are going to apply for and

	193
1	argue that they have a right to
2	sell water, to dispose of
3	water, to try and treat the
4	water, although I don't believe
5	it can be treated. And as
6	somebody quoted Ben Franklin
7	about the value of water, when
8	you don't have it, when you
9	don't have good drinking water,
10	you realize the value of water.
11	HEARING OFFICER:
12	Thank you, sir.
13	MR. LEYDON:
14	Thank you.
15	HEARING OFFICER:
16	Bill Cozzens will be
17	next. And then Victoria
18	Strange, and Carol
19	Weston-Young. Sir, when you're
20	ready.
21	MR. COZZENS:
22	Good afternoon. My name
23	is Bill Cozzens. I'm a
24	resident of Philadelphia and a
25	member of Germantown Friends

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1	Meeting in the Germantown
2	section of Philadelphia. The
3	meeting approved a minute after
4	meeting for business back in
5	the late part of 2017.
6	As such, the statement
7	that I'm going to read
8	represents the feelings of more
9	than 200 members of our Quaker
10	meeting.
11	Germantown monthly
12	meeting at the Religious
13	Society of Friends, Quakers,
14	urges the Delaware River Basin
15	Commission to ban the
16	extraction of gas via hydraulic
17	fracturing, and related water
18	extraction and disposal
19	activities in the Delaware
20	River watershed.
21	Moreover, Germantown
22	Meeting urges Pennsylvania
23	Governor Wolf to instruct his
24	representative on the
25	Commission to vote in favor of

permanently banning fracking and fracking-related activities in the watershed.

Fracking in the Delaware River Basin would represent a significant threat to the purity and safety of the water supply to millions of residents in Eastern Pennsylvania, New Jersey, New York, and Delaware.

Also, the primary
product of fracking natural gas
or methane is a significant
contributor to climate change
either at the well or as it's
piped to market. Moreover,
natural gas when burned, also
contributes to asthma,
emphysema, and other damaging
respiratory illnesses having an
especially significant impact
on children and the elderly.
Opening the Delaware River
Basin to fracking would
exacerbate these problems.

1 Viable alternatives to 2 burning fossil fuels, for example, solar and wind power, 3 4 particularly of electricity, 5 are far preferable because they are much less detrimental to 6 7 the environment. And would create job growth in our 8 9 region. 10 Friends, Quakers believe 11 that we are called by God to 12 protect the health and wellbeing. We are also called 13 14 on to protect the environment 15 both now and for future 16 generations. Expansion of 17 fracking directly contradicts 18 these elements. Thank you. 19 HEARING OFFICER: 20 Thank you, sir. 2.1 Victoria Strange will be next. 22 And then Carol Weston-Young. 23 And then Emily Davis. Ma'am, when you're ready. Thank you. 24 25 MS. STRANGE:

1 Thank you for Okay. 2 this opportunity to speak. Ι 3 just wanted to add a short 4 comment as a wildlife ecologist 5 and a lifelong Pennsylvania resident who recognizes the 6 7 importance of the Delaware 8 River watershed system as a 9 unique fresh water tidal 10 system. It's unparalleled 11 across this country and a vital 12 resource for the wildlife 13 communities that use this 14 region as a year-round, and a 15 stopover habitat.

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We have already

designated the Delaware River

to an extreme degree, to the

point where many sections are

completely unrecognizable from

what they were before human

settlement. We must consider

the evidence that we've

gathered as to the adverse

affects of hydraulic

fracturing.

Many compounds of which are extracted from shale formations, as well as those that are injected during the fracking process which have the potential to negatively impact the Delaware watershed if Pennsylvania chooses to be involved in the transport and treatment of these hazardous compounds.

We do not need to increase more pressure on our biological diversity and ecological functioning of this region. And there is too much risk of contamination and detriment from the disposal process.

Not only are these persistent environmental concerns important, but there is evidence that the flow-back water contains compounds which

have negative impacts on humans such as neurotoxins and carcinogens, as we've heard from many of the other speakers.

Residents have the right to protect their drinking water from being compromised by the transport and treatment of fracturing wastes. And I support a complete ban of hydraulic fracturing and related activities in the Delaware River Basin. And I urge the Commission to do the same. Thank you.

HEARING OFFICER:

Thank you. Ms. Carol

Weston-Young will be next. And
then Emelie Davis. And then

Daniel Markind. Is Carol

Weston-Young present? I will
call her name again. And then

Emelie Davis would be next.

You're Ms. Davis? Start by

	200
1	saying your name.
2	MS. DAVIS:
3	I am Emilie Davis.
4	HEARING OFFICER:
5	Thank you.
6	MS. DAVIS:
7	I'm a resident of
8	Philadelphia and a member of
9	the Sierra Club. The
10	extraction of hydrocarbon gas,
11	more commonly called natural
12	gas through hydraulic
13	fracturing is a dangerous
14	process and all parts of the
15	process should be banned.
16	I'm going to speak to
17	one particular issue that
18	withdraws water from the
19	Delaware watershed.
20	First, water is a
21	substance without which humans
22	cannot live. The fuel,
23	hydrocarbon gas, is mostly
24	methane, which has a global
25	warming potential of about 32.

Hydrocarbon gas is not necessary for our lives. Our species can live without this gas, as we have for thousands of years.

Many human have died from lack of water or from contaminated water. Not one has died from lack of hydrocarbon gas.

There is a finite amount of water on our plant, the same now as when dinosaurs roamed the natural world. Water is truly a recycled substance. The dinosaurs drank the same water that we're drinking.

But when water is used for fracking, some of it is thrown away forever. And that which comes back is polluted with so many chemicals that not even the corporations that put those chemicals in can get them out.

202 1 Finally, in 2 Pennsylvania, there has been a long history of fossil fuel 3 extractions. And those who 4 5 have profited from it have not 6 shown to be good corporate 7 citizens. 8 In the United States, 9 there are 1,303 supervised 10 sites. The states with the 11 most supervised sites are New 12 Jersey, California, and 13 Pennsylvania. Together, New 14 Jersey and Pennsylvania have 15 about 16 percent of our 16 supervised sites. Most of 17 these sites were initially 18 created because a corporate 19 citizen disposed of its waste 20 improperly. 2.1 The corporations that 22 are currently extracting

The corporations that are currently extracting natural gas are demonstrating that they want to follow this tradition of making the rest of

23

2.4

us to pay for their fracked fuel with our dollars. And more importantly our health.

Why should we give any corporation our water when corporate track records show that they did not take care of the water they've already taken? Thank you.

HEARING OFFICER:

Thank you. Daniel

Markind will be next. And then

Adrienne Taffoni-Margado. And

then after that, Henry Frank.

Okay. Sir, please.

My name is Daniel

MR. MARKIND:

Markind. I'm an attorney here in Philadelphia. I work in the energy industry. And I've really looked at it. I have never however taken a dime from the energy company. And I have no loyalty to any of them. I do, however, very much support

1 the process of hydraulic 2 fracking. 3 I'm sure it will 4 surprise many of you that I 5 agree a lot with what many of 6 you have been saying. 7 believe there is a unique 8 obligation to protect the 9 Delaware River watershed, 10 therefore, I am sympathetic to 11 many of the statements 12 regarding the need for 13 regulations, the need for 14 setback, etcetera in the 15 Delaware River Watershed. 16 However, I think a 17 complete ban is extremely over 18 broad. And I believe it's an 19 improper use of weapon. And it 20 is improper, they may find in 2.1 your favor today, you may not 22 like tomorrow. 23 I fear the energy 24 industry will travel. I 25 believe in the affected

1 regulation. But I fear the 2 government also. If you take a 3 look at the greatest environmental disasters in the 4 5 human history, they've been caused by the federal 6 7 government. The ROC in what used to be the Soviet Union, 8 9 the air in Beijing. 10 If you look at our 11 country, take a look at the 12 Animus River in Colorado or 13 what's happening right now with 14 regard to the Oroville Dam, O-R-O-V-I-L-E, north of 15 16 Sacramento. Almost the 17 greatest environmental and 18 potentially human disaster in 19 our country's history came very 20 close to happening last 2.1 February over a government 22 built, owned and operated 23 project, entirely by the 2.4 government.

If the DRBC is so

concerned about the possible
leakage of banned substances
into the river, what's the
response of the chemical plants
right along the river? Do you
just want to Google it? Just
go to chemical plants near the
Delaware River.

There's been a lot of religious imagery that's been given today. Well, let me give you some of mine. Human beings are imperfect. Therefore, everything done by human beings will be imperfect.

It will always be easy to be against things because there will always a negative downside. As a human being, you will accomplish nothing, but you'll always be ready.

You're going to tell me what you're against. I didn't hear what you're for. If you oppose the hydraulic

	207
1	fracturing, fine. Tell me how
2	you intend to power the economy
3	and don't give me this
4	generalization with renewable
5	energy.
6	How are we going to
7	transmit it? How are you going
8	to generate it? How are you
9	going to store it? It's called
10	renewable for a reason. It's
11	not necessarily environmentally
12	viable.
13	And if you look at all
14	the way through, it may be even
15	worse than hydraulic
16	fracturing. Thank you.
17	HEARING OFFICER:
18	Thank you so much.
19	AUDIENCE MEMBER:
20	The solution's fragile.
21	HEARING OFFICER:
22	Sir, please, you're out
23	of line. Okay. Next will be
24	Adrienne Taffoni-Margado. I'm
25	sure I mispronounced it.

	208
1	MS. TAFFONI-MARGADO:
2	No. You did get it.
3	HEARING OFFICER:
4	Oh, okay. Okay. Henry
5	Frank will be after that. And
6	then Peter Hughes. Okay.
7	Name, please?
8	MS. TAFFONI-MARGADO:
9	Adrienne Margado.
10	Wrightstown, Pennsylvania.
11	Bucks County. I love
12	synchronicity. Yesterday is
13	local little Newtown patch had
14	a they shared the
15	environmental working group's
16	paper on potentially unsafe
17	levels of radium in
18	Pennsylvania drinking water.
19	And then two days before that,
20	Duke University came out with
21	the study of radioactivity from
22	oil and gas wastewater persists
23	in Pennsylvania streams'
24	sediments.
25	So, you know, there's a

lot of that I know comes

naturally. But when you start

drilling it, and raking it up,

it just lifts it to higher

levels. And it becomes unsafe

for everyone.

But I just want to share

a few fun facts with everybody

But I just want to share a few fun facts with everybody today. Okay? So water is the oil of the 21st Century.

That's Andrew Weber, CEO of Dow Chemical Company.

Multibillionaires and elites are rapidly racing to control the world's water supplies. Morgan-Sachs, JP Morgan Chase, CitiGroup, and other financial institutions are making huge investments in water infrastructure.

This I got this morning.

The Bush family has purchased

100,000 acres which sits on top

of an enormous freshwater

aquifer. And this aquifer is

	210
1	larger than Texas and
2	California combined. I thought
3	well, why? Why would they want
4	to do that?
5	Credits you see
6	estimates that two-thirds of
7	the world's population is
8	likely to live under water
9	stress conditions by 2025.
10	California and the
11	western U.S., as well as Brazil
12	and other parts of South
13	America are experiencing
14	historic drought conditions.
15	Meanwhile, many states
16	in the U.S. have now made it
17	illegal to collect rainwater.
18	Companies like Nestle
19	who believe water is not a
20	basic human right are foraging
21	available freshwater resources
22	at unprecedented rates and was
23	caught recently stealing 6
24	million gallons of water per
25	year from national forestlands.

	211
1	The bottled water industry is
2	making 22 billion a year
3	bottling municipal water.
4	Water utilities are
5	increasingly becoming privately
6	owned. For a typical
7	household, privately owned
8	water service costs 1,500
9	percent more than public water
10	service.
11	Because corporations are
12	driven by profits and not the
13	public good, criminalization
14	will likely result in lower
15	environmental standards.
16	Government cannot be
17	trusted when it receives
18	evidence by the police in the
19	Flint, Michigan scandal in
20	which officials approved
21	land-contaminated water for
22	over 100,000 residents.
23	So these statements all
24	lead me to believe and feel
25	that our water supplies are in

	212
1	great jeopardy. So why would
2	we consider allowing elicit
3	contamination to occur in a
4	scenic water basin that
5	supplies water to four states
6	and 17,000 (sic) people?
7	Let's be part of the
8	solution and not part of the
9	problem. The real war will be
10	fought not for oil, but for
11	water. Thank you.
12	<u>HEARING OFFICER:</u>
13	Real quickly. Somebody,
14	when you came through security,
15	dropped their key fob. So I
16	wanted to make sure you got
17	home.
18	Henry Frank. And then
19	after him it will be Peter
20	Hughes. And then David
21	Moscatello
22	MR. FRANK:
23	Henry Frank. Your
24	Honor, welcome to Philadelphia.
25	HEARING OFFICER:

Thank you, sir.

MR. FRANK:

2.1

I'm a member of the

Keystone Trade Association, the

Sierra Club, and many others.

But my remarks are my own

responsibility. I'm like the

fellow who got married for the

third time who said he's hoping

for a good experience.

The history of the Commonwealth of Pennsylvania going back to the 1700s is a cooperation among the industries, the government, and the government agencies which benefited a few people who made a lot of money. Some people who made a little bit of money, such as jobs. Temporary in many cases. And the rest of us, as the military says, is collateral damage. That's from the 1700s.

It started with the

timber industry, clear cut the state, and it's taken us 100 years to approximate what was there before.

The coal industry up in Hazleton, you can see the slag heaps. And now, the fracking industry. They'll take whatever money the can get out of us and they'll leave. And we'll be left with the clean-up.

I'm only asking the

Delaware River Basin Commission

to please defy history and be

responsible and not allow

fracking and anything related

to fracking in the Delaware

River Basin.

Now, I would like to leave you with an old curse.
Used to be the curse was may you swallow on umbrella. And when it reaches your belly, make it open.

1 I revise that curse. 2 May you have a fracking 3 structure on your head. May it 4 be drilled down through your 5 head, your neck, your torso, and your belly. And when it 6 7 gets into your belly, may it be filled with secret ingredients 8 9 until you explode. And so when 10 I say to the industry frack 11 you, that's what I mean. 12 HEARING OFFICER: 13 Is Carol Weston-Young 14 here? No? Okay. And then 15 Thomas McCaney? All right. 16 Next will be Peter Hughes. And 17 after Peter Hughes is David 18 Moscatello. And then Mike 19 Doyle. 20 Mr. Hughes, when you're 21 ready, please. 22 MR. HUGHES: 23 I'm Peter Hughes. I'm 24 with the Valley Forge chapter 25 of Trout Unlimited. And most

of the things I was going to say have already been covered, including from the previous guy. Thank you.

The extraction industry
has a horrible track record
across the country, but
particularly in Pennsylvania.
And whether it was coal, or
timber, or the oil in
Pennsylvania, they absolutely
left a horrible state of the
environment in the wake for the
taxpayer and volunteer groups
to clean up after. That's one
issue.

The other issue is it's never a good idea scientifically to move water from one watershed to another. It's an awful thing to do. Scientifically, you can't justify it, particularly when that water coming back in is filled with contaminants. And

2.1

we have nowhere really to store it.

There is a settling pond in the Upper Midwest. Recently during a cold snap, a lot of the water and other things were frozen, except for this. And snow geese landed on this settling pond and all died as a result of that.

We really have no way to deal with the contaminants coming out of that.

Now, the other point I'd like to make is to address the lawyer who came and said his piece. And I think he left.

No, there he is. Right here. He didn't mention the Exxon Valdez spill, the oil industry spill. And he didn't mention the recent, more recent problem we have in the Gulf of Mexico.

They were not government issues. They were an oil

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1	ind	ustr	y i	ssu	e. Ar	nd you can'	t
2	tru	st t	hе	gen	tlemar	n from the	
3	oil	ind	ust	ry ·	to loc	ok after and	d
4	pol	ice	the	mse.	lves.	Thanks.	
5			HEA	RIN	G OFF	ICER:	
6			Dav	id 1	Moscat	tello will 1	ое
7	n e x	t.	And	t h	en Mi}	ke Doyle.	
8	And	the	n B	ruc	e Biro	chard.	
9			Mr.	Мо	scate	llo, please	?
10			<u>MR.</u>	МО	SCATEI	LLO:	
11			Dav	id 1	Moscat	tello. I'm	a
12	Phi	lade	lph	ia :	reside	ent and a	
13	m e m	ber	o f	the	South	neastern	
14	Pen	nsyl	van	ia (Group	of the	
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19	opp	ortu	nit	y t	o test	tify today o	o n
20	b e h	alf	o f	the	Delav	ware River	
21	and	the	тi	1111	ons of	f Americans	
22	who	dep	e n d	ир	on it.		
23			I ' v	e 1	oved t	the Delaware	9
24	Riv	er s	inc	e I	was a	a boy growin	n g
25	u p	in N	e w	Jer	sey,	especially	

219 1 when I first canoed on the 2 Upper Delaware in New York 3 State. I remember scooping up 4 a cup of water while floating 5 down the river and drinking it 6 directly from the river. As a 7 microbiologist, I wouldn't try that today because I know about 8 giardiasis, beaver fever. 9 10 I still enjoy the river 11 to this day. From paddling the 12 reservoirs, to fishing in the Catskills, to tubing the river 13 14 in the Bucks County, to 15 exploring the wetlands along 16 the Delaware Bay. 17 As beautiful as it is 18 still, it's a shadow of its 19 former productivity. A mere 20 century ago we were a 1,000

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24

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I applaud the
Commission's decision to ban
fracking in the Delaware River

pound sturgeon. We're nearly

extinct now.

Basin. I must protest any water withdrawals for hydraulic fracturing, and especially any disposal of fracking waste or produced water in the basin.

The extensive fracking taking place throughout much of Pennsylvania, particularly in nearby areas, is already fragmenting forests, reducing stream flows, and impinging water quality, and polluting groundwater as shown by proven well contamination.

The only sensible reason for us to withdraw water from the Delaware and its tributaries is for drinking and bathing.

Even if hydraulic fracturing was not exempted by the Safe Drinking Water Act and the Clean Water Act, the belief that the Safe Drinking Water Act, the EPA, or the

Pennsylvania DEP are fully protecting us from contaminated water is dangerously naive.

> regulations covering some of the components in fracking waste fluids cannot be taken as evidence as there's no risk. But is rather due to the power of the industry over our legislature and Congress has prevented the EPA from regulating the vast majority of

> can be monitored by the EPA every five years. And since there are over 80,000 chemicals in use, that means that at this rate, the vast majority will

> Well, okay. We'll only take 16,000 years to study them all. Assuming no new ones are

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222 1 created. 2 So it's simply ---3 excuse me. Treatment plants can't handle the wastewater. 4 5 So it's simply not enough to 6 discourage water withdrawals, 7 and the disposal of fracking waste to the Delaware Basin. 8 9 Both must be unambiguously 10 prohibited. The resource is 11 too vital to risk. Thank you. 12 HEARING OFFICER: Thank you. Mike Doyle, 13 14 please. And then Bruce Birchard. And then Andrea 15 16 Strout. 17 MR. DOYLE: 18 Thank you very much. My 19 name is Mike Doyle. And I come 20 here as candidate for the 2.1 legislative district, the 170th 22 legislative district. 23 I knew I had to come 24 today to express my concern 25 that the Delaware River Basin

1 Commission was possibly going 2 to allow one thing while not 3 allowing the other. 4 And first, let me 5 backtrack and say that we are 6 here in regards to protecting 7 Mother Earth. It is sacred. And water is life, as a speaker 8 9 said earlier. 10 It is important that we 11 are stewards here and we 12 maintain that stewardship. 13 There are people that have laid 14 their lives on the line. Native Americans that 15 16 laid their lives on the line to 17 fight for this most sacred 18 source of life. And we sit 19 here today from our privilege 20 discussing whether it is good 2.1 to allow waste or just ban 22 fracking completely. 23 When people that are 24 from the land are willing to

lay their lives down for that

protection, we have to look and see what we are doing as a society. Right now, Mother Earth is laying sick and dying in her bed. And what we choose to do is instead of giving her medicine, we choose to inject her with poison.

If your own mother was there, I ask the Commission, the Delaware River Basin Commission, if your mother was sitting sick in a bed, would you inject her with poison? Or would you give her medicine that would allow her to live.

It is important that we maintain this. And that we allow the people to speak because if we continue to let corporations dictate how we live on this planet, this planet will soon die.

I come here as someone who has witnessed this

1 firsthand. And to the River 2 Basin Commission, and to you, 3 Your Honor, and to everybody 4 here that allows us to speak 5 today, many thanks. We thank 6 the Creator. 7 And I'm very concerned that Oomcheemaka is not given 8 9 her respect. I'm sad to say 10 that we put corporate interest 11 in front of human interest. 12 And it must end. We must go 13 back and understand what is 14 sacred in life. We must 15 protect what is sacred. We 16 must all. Thank you very much. 17 HEARING OFFICER: 18 Bruce Birchard, please. 19 And then Andrea Strout. And 20 then Marta Guttenberg. 2.1 MR. BIRCHARD: 22 Well, good afternoon. 23 My name is Bruce Birchard. I 2.4 live in Delaware County. I've 25 lived there since --- my life

has been wrapped around the

Delaware River. I was born in

Easton Hospital in 1945. And I

have lived my entire life, with

the exception of a couple years

in Chicago, within a few miles

of the river.

In the mid-1950s, I went to Boy Scout camp. I learned to canoe. In those days, late-1950s, you might see a few dozen canoes on the river. It wasn't --- you know, there weren't many people doing that.

I bought my first canoe when I was 15 years old for \$50 and fixed it up. And I've been doing it ever since. I don't think there has been a summer in my life since the late 1950s when I wasn't in the river, on the river, and then camping beside the river.

Now, though, there are thousands and thousands and

1 thousands. I mean, there are 2 hundred of thousands of people 3 who enjoy the Delaware River, 4 which include the Upper 5 Delaware and down past the water gap. So I mean, there are

hundreds and hundreds, a couple people who come just to swim in

But it's not just economic. I have taken Sunday school kids. I have taken

6 7 canoe liveries that rent out 8 9 of thousand, or 1000 or more 10 11 canoes to people who come to 12 enjoy the river. And that is 13 not counting the people with 14 kayaks and also all those 15 people tubing. And all the 16 17 the river or camp beside the 18 river, or hike, or bike beside 19 the river. So there is an 20 economic interest in 21 maintaining the Delaware River 22 Basin. 23

24

young adults. I've taken many
people out for weekend trips
paddling and camping on the
river.
I remember one Sunday

I remember one Sunday school class where we were paddling from Dingmans Ferry down to Walpack Bend where we were going camping. And all the kids wanted to go in the river.

And then one girl who was really very overweight said I want to swim across the river to Pennsylvania and back again. And she assured me she was a good swimmer.

So I got in the canoe.

And all the adults watched the other kids. And I accompanied her across the river and back.

She was so proud.

The next morning we woke up in fog over the river. And the sun burned through. And it

1 was like heaven. Let's not sacrifice this.

2 3 HEARING OFFICER: 4 Andrea Strout, please. 5 Ms. Strout is coming forward. And then Marta Guttenberg, and 6 7 Carol Ward. 8 MS. STROUT: 9 Thank you. My name is Andrea Strout. I live in 10 11 Buckingham Township. I am here 12 as a private citizen. I 13 apologize for not having any 14 prepared remarks. I didn't 15 know I wanted to speak actually 16 until I got here today. And 17 then I really felt I wanted to 18 very strongly. But I'll be 19 very brief. 20 I just want to thank all 21 the people who did come 22 prepared with facts and 23 figures, and wonderful stories 24 like the one we just heard. 25 Thank you for you eloquence and

230 1 passion. I share it. 2 I would like to add my voice to those who are calling 3 4 for a complete and total ban on 5 fracking and fracking-related activities in our wonderful 6 7 precious basin. 8 And to also mention that 9 I speak for so many friends and 10 neighbors who couldn't make the 11 long slide out to the airport 12 today. Thank you. 13 HEARING OFFICER: 14 Thank you. Marta 15 Guttenberg. Marta Guttenberg 16 is not here. All right. Carol 17 Ward? 18 MS. WARD: 19 Yes. 20 HEARING OFFICER: And then after Ms. Ward 2.1 22 will be Carl Balis and Claudia Crane. Okay. You're second, 23 24 sir. Thank you. Okay. This

is Carol Ward?

	231
1	MS. WARD:
2	It is.
3	HEARING OFFICER:
4	Okay. Thank you, ma'am.
5	MS. WARD:
6	My name is Carol Ward.
7	And I'm a member of the food
8	and water watch. I've been
9	involved with the fracking
10	issue for several years. And
11	what I'm going to say is my own
12	view. I don't speak for food
13	and water watch. I speak for
14	myself.
15	Fracking is not really a
16	benign process. My two major
17	concerns with it are health and
18	environmental considerations.
19	These considerations are urgent
20	as so many people have said in
21	this room.
22	Once a stream, aquifer,
23	or a river is polluted by
24	fracked wastewater or chemicals
25	used in fracking, they are

1 never the same.

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Companies who do the fracking use some or all of 3,062 known chemicals. And I'll just repeat a few of them benzene, boron, diesel fuel, chloralamide, ethylene glycal, hydrochloric acid, sodium hydroxide.

I felt so bad for

Dimock, upstate Pennsylvania,

and some of the people whose

farm animals died immediately

upon drinking one part of a

fracked water pool.

And I felt bad for the people that got continuous seizures from --- they didn't even know that the water they were drinking up there was fracked and contaminated.

Fracking fluid that is pumped out of the ground contains radioactive minerals that can kill animal and plant

life. Negative effects after ingesting or touching fracking fluid can do damage to skin, eyes, sensitive organs, respiratory systems, gastrointestinal system, liver, brain and cardiovascular.

I'm concerned about the reproductive aspect. Babies borne to women who live within ten miles of natural gas wells can be born with congenital heart defects, as well as possibly defects to the brain and spinal cord defects.

For these reasons and because concrete wells in fracking can crack, and pipes burst, and their contamination of wells, methane can cause explosions. And for all these reasons, I favor a complete ban on the fracking of the Delaware River Basin. And this must be permanent. Because the

234 1 population is just too high 2 along the banks of the Delaware 3 River to lose this precious 4 resource. 5 Our health depends on 6 keeping the river safe. Thank 7 you for hearing my remarks. And thank you for making 8 9 available a chance to speak. 10 HEARING OFFICER: 11 Thank you, ma'am. Carl 12 Balis. And then Claudia Crane. 13 And followed by Sandra Folzer. 14 MR. BALIS: 15 My name is Carl Balis. 16 And I live in Glenolden, 17 Pennsylvania, which is only a 18 couple miles from here. I 19 don't have really too much to 20 say here because everything 2.1 that needs to be said has been 22 said by about 50 or 60 people 23 before me.

> just basically want to stand as one more person who

24

lives in this area who endorses
everything they have said.

Just to be one more voice.

that went through my mind as I listened to all of them was common sense. That after a point, you didn't need any scientific studies or any great knowledge, or deep thought.

You just know that when you're putting tons and tons and tons of chemicals into the environment can only have one effect. And that is not good.

You know, it has to be a negative effect. You know, you don't have to be an --- as I was thinking to myself, if you have the common sense of a tree trunk, you can figure this out. Because it is obvious. It's one of those self-evident facts. Sort of like in the Declaration of Independence

1 when they wrote we hold these 2 truths to be self-evident. 3 Well, it's almost the same kind 4 of thing. It is self-evident. 5 And the other thing that 6 went through my mind. 7 wasn't talked about too much 8 today. But it was briefly mentioned. And I read about it 9 before. Is that if this whole 10 11 process is so safe as the 12 fracking industry will tell you, then why is it when you 13 14 ask them what chemicals are you 15 using, their response is we're 16 not going to tell you? Doesn't 17 that tell you something right 18 there? Do you need to know any 19 more than that when someone 20 responds to you in that manner? 2.1 Okay. It's safe. But 22 we won't tell you what 23 chemicals we use. And they 24 even have a law passed saying 25 that they cannot be compelled

1 to tell you.

So again, using that old tree stump, with the analytical reasoning powers of a tree stump, you sort of know something's not right here.

You don't even need to go any further. It's almost like you can say to them I think we're done here. It's over. Because if it's so safe, then they would tell you the chemicals that are used.

Again, it's just one of those self-evident things. You know someone is not telling you the truth. They're lying to you.

So for all of those reasons, I, again, second, third, fourth, and fifth all of the things that have been said here.

I hope that the Delaware River Basin Commission will

238 1 reject any kind of fracking or 2 fracking-related activities. 3 Thanks. 4 HEARING OFFICER: 5 Claudia Crane. And then after Ms. Crane will be Sandra 6 7 Folzer and Sarah Caspar. MS. CRANE: 8 9 Good afternoon. My name is Claudia Crane. I'm an 10 11 registered nurse retired. 12 First of all, I want to 13 thank all of people who have 14 spoken before me and will speak 15 after, a few more, I guess, 16 calling for a complete ban. 17 And I especially want to 18 thank the young people who came 19 out, the high schoolers, and 20 the people of color who came 21 out today to speak. In today's 22 case, women. 23 Very often, it's only

white people of a certain age

and income who can afford the

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time and energy to come to

hearings like this, which makes

me ponder what I and others can

do to enable people of color

who share my concerns for the

planet to participate.

that the new proposed rules prohibit fracking in the Delaware River Basin. It's not so wonderful that providing means to allow the Commission to export its waters. Surface or other waters, including wastewater for the purpose of fracking elsewhere. And they also provide means to allow the community to accept fracked wastewater from outside the Delaware Basin.

The Commission has nicely laid out many good reasons why fracking is not healthy for children. So why would the Commission even think

2.1

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	240
1	about facilitating other
2	jurisdictions to frack? Even
3	if fracking was somehow benign
4	in other regions, as the
5	Delaware River Basin where
6	uniquely and singularly
7	vulnerable, giving away our
8	water to be permanently sullied
9	elsewhere, or accepting sullied
10	water into our own environment,
11	is just plain wrong.
12	Wrong, because there is
13	no way to clean it up. This is
14	not organic sewage that can be
15	mixed and slurried and
16	composted. We all know that.
17	I cannot support
18	anything that encourages or
19	enables the expansion of the
20	use of natural gas because it
21	is another climate changing
22	fossil fuel.
23	I look forward to the
24	day that the Delaware River
25	Basin Commission can turn its

attention away from anything about fracking and turn and direct its attention to promoting actions that enhance and preserve our Delaware River Basin, providing the finest example of promoting the health of our planet from our corner of the world.

There was --- I want to add there was a speaker, I think her name was Joan Farb. She said the industry is seeking to allow using more water per gas well, she said. I can't help but wonder if this is not a simple attempt by industry to dilute the harmful substances, so that the so called slick water and the wastewater produced --- so as to render them less detectable. Pollution is not the solution for pollution. Thank you very much.

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HEARING OFFICER:

Sandra Folzer, and then
Sarah Caspar. And then Megan
Desmedt.

MS. FOLZER:

Hello. I'm here as a private citizen for the most part because I drink water. I think there are probably a few other people who drink water as well from the Delaware River.

Also, I have a farm in Tioga County, which is next to Bradford County. And I've visited farms where the cows have stillborn calves because of the pollution nearby. I have seen the dirty water. I do worry about my well as well.

And given that there has been so much said that's been said about why we cannot clean the wastewater, that's a given.

I think people have given enough facts. I don't have to

1 go about that.

> But I want to say that I believe that we cannot trust the fossil fuel industry to regulate itself or have our best interests. All you have to do is read the newspaper. Every week, at least once a week, you hear about a spill. You hear about an explosion. You hear about something. If you're looking and if you read the small print different places. Even in Pennsylvania, we had more than 4,000 violations. We've had many violations.

> > And if the industry is so caring about the private citizen, then why do they have gag rules? Why do they, when they try to help somebody --- I know even in Pennsylvania, we've had people who have had

1 they're dependent upon the 2 companies. They can't afford 3 to bring in clean water for themselves, these water 4 5 buffalos. So in order to get 6 money from the industry, they 7 have to take a payment and they have to file --- they have to 8 9 promise that they will not 10 speak about all the injuries 11 that they have suffered. 12 If this is so common, 13 then why is it so safe? 14 think that it's a given that we 15 need to take a look at that. 16 And finally, what I 17 wanted to end with is why would 18 we want to allow wastewater to 19 be put in our drinking water? 20 Why?

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we want to allow wastewater to be put in our drinking water?
Why? What would be the benefit given we know that it can't be cleaned. It's radioactive.
There is not one good reason I can think of for allowing wastewater into our water

1 system. Thank you.

HEARING OFFICER:

Thank you, ma'am. Sarah Casper, and then Megan DeSmedt, and Alex Cupo.

MS. CASPAR:

My name is Sarah Caspar. And I thank you. And I thank everybody who has hung in here and for what you all said. I am only going to confirm that what you have said is true.

I worked for EPA for 16 years in this region. I saw everything that has been talked about. We cannot allow it because it doesn't work. We cannot allow self-regulation because it's too big a temptation for people to abuse that privilege.

So that's why agencies like EPA, DEP, et cetera have been created. So regulations are meant to protect us and to

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1 protect those who are need the 2 regulation from doing the wrong 3 thing. 4 It would be wrong to 5 permit, have the wastes from 6 fracking to go into the 7 Delaware River. They are wastes that are untreatable. 8 9 Because they are untreatable, 10 it has been the tendency for 11 these fracking companies to 12 dispose of them in streams and 13 rivers, thereby polluting our 14 streams and rivers, from which 15 our wildlife survives, from 16 which we fish, et cetera. 17 So this is my one 18 recommendation. Please don't 19 permit that. It's an 20 invitation for all kinds of 21 hell to happen. Thank you. 22 HEARING OFFICER: 23 Megan DeSmedt. 24 MS. DESMEDT: 25 Good afternoon. And

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1	thank you for the time to speak	
2	here today. My name is Megan	
3	DeSmedt. And I'm the clean	
4	water director with Environment	
5	America. We are a citizen	
6	based environmental advocacy	
7	group with presence in states	
8	across the country.	
9	And I'm here today in	
10	particular to represent our 1.5	
11	million members, supporters,	
12	and activists across the	
13	country including almost	
14	300,000 here in the Delaware	
15	River Basin.	
16	And also organizations	
17	our state organizations,	
18	Penn Environment, Environment	
19	New Jersey, and Environment New	
20	York. And I'm also here as a	
21	resident.	

I live with my family in South Philly just a couple miles away.

So today I'm here to

deliver a message from our

supporters and from myself. We

applaud your proposal to ban

fracking of the Delaware River

Basin and protect drinking

water for over 15 million

people, as well as the habitat

for countless wildlife.

And the special places that we like to go hiking, fishing, swimming, and boating, I can't wait for warmer weather and get out with my family. So we can get out and enjoy some of the precious life, the wildlife refuge, River Creek, the places that people all across the watershed love to enjoy.

And I'm very pleased to see that the DRBC and the governors of some of the basin states moved to ban fracking, recognizing that the public is demanding protection for our

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health, our environment, and the drinking water for over 15 million people.

Here in Pennsylvania,
we've had 65 drilling companies
that have committed more than
6,200 violations of
Pennsylvania's environmental
laws. And there's a growing
mountain of evidence that's in
reference today, that shows
that fracking threatens our
air, our water, our land, and
our health. And considering
the gas industry's track record
of pollution in Pennsylvania,
to ban is absolutely the right
move.

While we support the DRBC's move to prohibit fracking across the watershed, we also call on the DRBC to strengthen the proposal to ensure that our watershed is protected from the dangers

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inherent in all the activities related to fracking.

So the disposal,
storage, treatment, or
discharge of fracking
wastewater as well as water
withdrawn from the basin for
fracking or really any purpose.
If water is being taken out of
the basin, it doesn't really
matter what they're going to do
in terms of impacts that are

seen.

These activities pose a very serious threat to water quality and the health of the basin and must not be allowed.

And we are looking forward to working with you to strengthen the proposal as the process moves ahead.

Since efforts to allow fracking in the Delaware River watershed were first broached nearly ten years ago, our

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organizations have played a key
role in highlighting both the
risks of fracking, and the
public support contributions
from its residents to protect
the basin from this harmful
activities.

And given the harm

caused by fracking and the risk

it poses for our environment

and health, it's not surprising

that tens of thousands of

people have wastewater

opposition discussions in the

past. And we want to see that

continue, vigorous public

engagement moving forward. So

thank you.

HEARING OFFICER:

Okay. Thank you. Alex Cupo. Alex Cupo. Okay. Thank you. Okay. So would you start by saying your name, please?

MR. CUPO:

Alexander Cupo.

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1	HEARING OFFICER:
2	Thank you. Okay.
3	MR. CUPO:
4	Which you have correct.
5	HEARING OFFICER:
6	Okay. Good. Thank you.
7	MR. CUPO:
8	Thank you very much. So
9	my name is Alexander Cupo. And
10	I am the Southeast PR
11	coordinator for Penn Future.
12	Penn Future is a
13	Pennsylvania statewide
14	organization dedicated to
15	protecting our environment and
16	supporting a clean energy
17	economy in Pennsylvania.
18	We thank you for holding
19	these public hearings. The
20	comments I make today are in
21	addition to the comments that
22	we will be submitting through
23	our organizations.
24	My colleague commented
25	earlier this week about Penn

1 Future support on the DRBC's 2 proposed ban on fracking 3 operations in the basin, which 4 is absolutely necessary to 5 protect the Delaware River's 6 unique water resources, 7 recreational and industrial tidings, and the drinking water 8 9 of over 15 million people. However, the DRBC must 10 11 also ban the use of Delaware 12 River water for fracking 13 outside the basin. A single 14 fracked well uses 5 to 10 15 million gallons of water with 16 10 to 20 million gallons 17 requiring more the norm. 18 The amount of water from 19 the basin --- removing the 20 amount of water from the basin 2.1 upsets the balance of water 22 available for the protected 23 uses and other uses in the 2.4 basin. 25 But the DRBC are already

struggling to maintain

sufficient levels in ---. It

is incomprehensible that they

would allow such an export to

occur in the first place.

The DRBC must also ban the transport, storage, treatment, or disposal of fracking wastewater within the Delaware River watershed. The potential risk to water quality of the Delaware River from these activities is too great. And the threat to the drinking water of Philadelphia and so many other residents, including myself, is too real.

To allow this within the basin would be absurd. And to say that it is also absurd that the DRBC would ban fracking, but allow for the treatment and disposal of the extremely toxic fracking wastewater to occur in the first place.

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1	Because there is no way
2	to regulate water transfers or
3	the treatment of fracking
4	wastewater within the Delaware
5	River Basin, while sufficiently
6	protecting the Delaware River's
7	resources, the DRBC must not
8	allow these activities to take
9	place. Thank you.
10	<u>HEARING OFFICER:</u>
11	Thank you. The last two
12	people, each one has two
13	minutes because we are almost
14	at 4:30. And these people have
15	spoken previously. Sharon
16	Furlong. Is she here?
17	MS. FURLONG:
18	Yes.
19	HEARING OFFICER:
20	Okay. Well,
21	unfortunately, you're only
22	getting two minutes, ma'am.
23	MS. FURLONG:
24	Sharon Furlong with
25	Environmental Action, Sierra

1 Club. We seem to take water 2 for granted here in the wet 3 Northeast of the country. But I've walked where there is 4 5 water. Places where water can kill you if there is a sudden 6 7 storm. Where suddenly, it 8 disappears into the ground, 9 only to reappear a short 10 distance away. 11 Where water looks 12 pristine, but it is dangerous 13 to drink because it has been 14 fouled. And weird, strange, 15

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unnatural colors because of acid leeching coming from long-abandoned mines where companies were allowed to just walk away from their responsibilities. And our government let them. Just let them walk. Water is magical because water is life.

You, the DRBC, are protectors of water. And in doing so, you are protectors of lands, and plants, and everything around it.

Therefore, how can there even be a hint of a proposal to abandon your significant role of protector, and open up this intricate system that so mimics the arteries, veins, and capillaries of our own bodies, to the possibility of being the catch-all of polluting contaminating frack water.

How can this Commission even consider allowing such a toxic brew to come close when most of the components of this ugly water are unknown? We don't even know their names.

And why are you willing to take this risk? You and only you stand between an industry devoted to profits, and shareholder happiness. And all of us. Companies come and

go, but water remains. And so does our need of it because without it, we all die.

your heritage and be the first of Commissions of this nature, and stand against a Goliath and what it wants? Because what it wants is to do what it pleases with our water, our lands, and our lives. Who do you stand for? Who do you stand with? What do you want your legacy to be?

HEARING OFFICER:

Wesley Coolingham.

MR. COOLINGHAM:

Thank you for this second opportunity to speak. I want to address, as I did at the other hearing, we were told there was a special interest to protest this. And someone from the industry again today said I want to know what you're for.

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1	We are for clean water.
2	We are for healthy communities.
3	We are for building a just
4	transition away from fossil
5	fuels and toxic legacies. A
6	legacy that has pushed on our
7	communities. I am going to
8	read from the new regulations.
9	Controlling future pollution by
10	prohibiting such activity in
11	the basin is required to
12	effectuate the comprehensive
13	plan, avoid injury to the
14	waters of the Basin.
15	That's a really
16	important line in these
17	regulations. That's referring
18	to the ban on hydraulic
19	fracking in the region. Thank
20	you. Thank you, Delaware River
21	Basin Commission for doing the
22	right thing, making that good
23	decision on time.
24	Later in the
25	regulations, though, talking

about it's the policy of the Commission that there's no measurable change in the existing water quality. Effluents shall not create a menace to the public health or safety.

> Those are all good regulations. It's just an editing thing. People read this and see discouraged, and not know what that means. It's much easier if you put the word prohibit. Not here, not ever. Thank you.

HEARING OFFICER:

Ladies and gentlemen, you were terrific. I mean, as following the rules, thank you very much.

Remember if you are parked in the hotel parking lot, the hotel will be opening the locks, the locks exit B to allow for free parking.

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CERTIFICATE

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

Kimberly Chatburn,

Court Reporter

Bumberly Chatter