

1 to 70,000,000 people, you can't ignore these numbers.  
2 Thank you.

3 HEARING OFFICER:

4 Thank you, Mr. Gorman. Ms. Tamara  
5 Clements.

6 MS. CLEMENTS:

7 My name is Tamara Clements. The Delaware  
8 River is protected by the DRBC special protection water  
9 regulations, which does not allow water quality to be  
10 diminished in any way. Banning the acceptance of  
11 fracking waste water must be clearly stated in the  
12 regulations. Waste water plants do not know which  
13 chemicals they are treating from fracked water. And  
14 their attempts to disinfect water may have negative  
15 consequences for our waterways.

16 Duke University researchers found that  
17 waste water from fracking often spills into rivers and  
18 streams during storage and shipment. I give you an  
19 example from the Allegheny River, which is the river I  
20 grew up on. In 2016, fourth year results of the TRQ,  
21 one of the most comprehensive surveys in the region,  
22 continued to turn up high levels of bromide, which is a  
23 salt often associate with waste water from the  
24 Marcellus shale fracking, and abandoned mine drainage  
25 in Blackjack Creek. The creek has the region's highest

1 concentration of bromide, the most persistent pollutant  
2 in the study since it began.

3           Water from the Blackjack ends up in the  
4 Allegheny River, the drinking water source for 400,000  
5 residents. The Pittsburgh Water and Sewer Authority  
6 can deal with discharges of oil and natural gas waste  
7 water from both fracking and conventional wells with  
8 major source of bromide in the Allegheny River.  
9 Disinfecting these bromides with chlorine creates  
10 trihalomethane, also known as THM. THM causes liver,  
11 kidney, and central nervous system problems, bladder  
12 cancer, miscarriage, still births, and induces cancer  
13 lesions in lab animals.

14           Pittsburgh substituted chloramine for the  
15 chloride in the disinfection process. The chloramines  
16 produced less toxic treatment by-products. But those  
17 produce other problems, including letting lead and  
18 copper to leech out of old water pipes. University of  
19 Pittsburgh Center for Healthy Environments and  
20 Communities Director, Conrad Dan Holls said to remove  
21 ruminated THM, that's going to break the bank for  
22 public water systems.

23           Currently, the Pittsburgh Water and Sewer  
24 Authority remain in noncompliance with the federal led  
25 threshold. The levels have exceeded the federal

1 threshold since the summer of 2016. Fracking waste  
2 water is a huge problem for which there is simply no  
3 adequate solution, but to ban it. In Psalm 107, verse  
4 43 we are reminded God can turn a fruitful land into a  
5 salty waste for the wickedness of those who live  
6 therein. It is in your hands to maintain a fruitful  
7 land.

8 HEARING OFFICER:

9 Thank you, ma'am.

10 MS. CLEMENTS:

11 These are newspaper articles.

12 HEARING OFFICER:

13 The way to do that - I'm glad you asked,  
14 is to submit it. And I failed to note - this may  
15 assist you as you're speaking. We have the time listed  
16 up there. Okay. That was Ms. Clements. Is Steve  
17 Cickay here? C-I-C-K-A-Y. All right. How about  
18 Hannah Ryan? Hannah Ryan? Richard Desvernine? Sir,  
19 if you will come forward, please.

20 MR. DESVERNINE:

21 Sure.

22 HEARING OFFICER:

23 Great. Thank you. I don't know how badly  
24 I butchered your name there, sir.

25 MR. DESVERNINE: