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

25

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

23

24

25

radon, which also causes cancer.

2.1

2.4

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,

which will therefore be

unlikely to be removed.

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

25 mixed with chlori

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,

miscarriages, and delayed

neo-development. We cannot

2.4

25

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