## Erin Crump

A permanent ban on hydraulic fracturing in the Delaware River Basin should occur. I can afford a reverse osmosis water filter, but not everyone can. I also worry that I am removing healthy minerals from my water JUST to avoid radioactive contaminants that are going to be found in drinking water. It is well known and long understood that the Marcellus Shale formation is radioactive. Wastewater contaminated with radioactivity is unavoidable. Exposure to these radioactive materials by the public will occur as a result of flowback produced by fracking through one pathway or another, as discussed in this document, increasing the likelihood of cancers. Radium-226 has a half-life of 1,600 years, so it will be present in the environment for thousands of years. It is also water soluble, meaning it easily travels with water. Radionuclides can also be trapped in drill cuttings and residual solids, providing another pathway for the release to the environment, increasing human exposure and a legacy of enduring environmental contamination.

Not only should be make this permanent, we should NOT accept waste from hydraulic fracturing to enter the De River Basin.