

**Testimony of
Environment and Human Health, Inc.**

By
Nancy Alderman, President

Bill No. 6533

AN ACT CONCERNING BANNING FRACKING-WASTE IN CONNECTICUT

Senator Bob Duff, Representative Lonnie Reed and Members of the Energy and Technology Committee:

Environment and Human Health, Inc. is in strong support of Bill 6533 that would ban fracking waste from coming into Connecticut.

There are presently 8,848 either active wells or well permits for drilling for natural gas in Pennsylvania – and of that number 6,391 are drilled and active.

A typical natural gas well takes between 2 to 5 million gallons of fluid to frack. Of that, 10 to 50 percent of the toxic fluid returns to the surface. The returning fluid not only contains the toxic chemicals that were in the fracking fluid — but when it returns to the surface it contains radioactive materials and salts that it picked up from deep inside the earth. The waste fluid sometimes also contains arsenic from deep inside the earth.

Think how much toxic fluid that is – and where is it going to go? Lets do the math. Let's be conservative and take 6,000 active fracked wells in Pennsylvania and multiply it by 3 million gallons of fluid with toxic chemicals in it. That's 18 billion gallons of toxic fluid. Of that, let's take 30% that comes back to the surface – that is 5.4 billion gallons of toxic fluid – and now that fluid contains radio active materials and salts. Where will all that fluid go?

[The Institute for Energy and Environmental Research](#) in Pennsylvania reports that the Marcellus shale deposits contain natural radioactivity from the elements uranium and thorium, and their radioactive decay products, notably radium-226. Researchers warn, "In theory, Marcellus shale development can release radioactivity into the environment in three ways. First, rock cuttings from drilling may be improperly disposed. Second, wastewater may be improperly treated and discharged into streams and rivers. Third, wastewater may be intentionally released into the environment - such as by spreading it on roads as deicing material. In each case, radioactivity can potentially harm plants and animals in natural ecosystems." The radioactivity found in much of the fracking waste consists of radium-226, which has a 1/2 life of 1,600 years.

According to a minority staff report the U.S. House of Representatives Committee on Energy and Commerce, more than 650 commonly used fracking products contain chemicals that are "known or possible human carcinogens, regulated under the Safe Drinking Water Act, or listed as hazardous air pollutants." At present, federal laws do not protect the health of either the environment or people.

Billions of gallons of toxic fracking fluids are going to have to go somewhere – let us make sure they do not come into Connecticut.

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March 2013