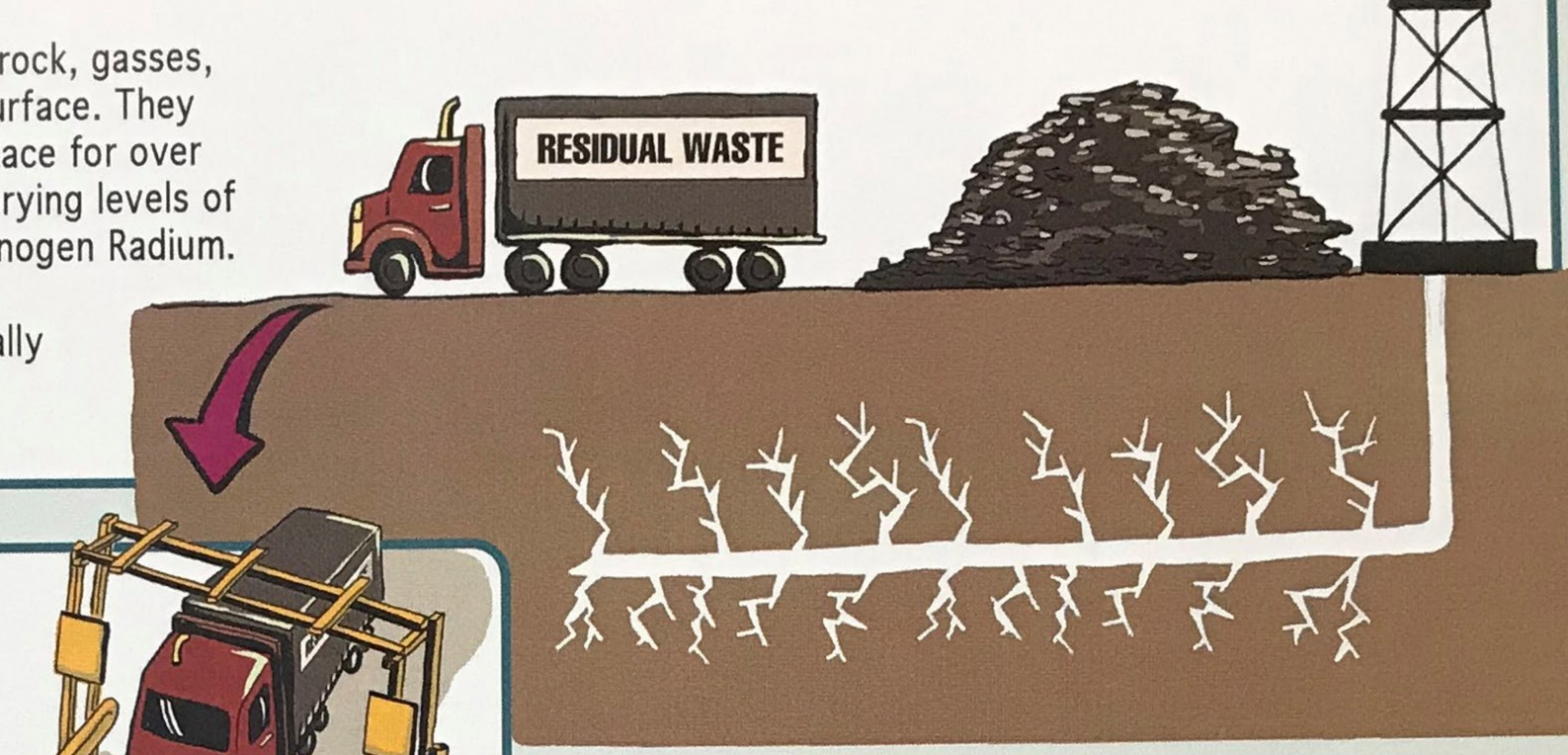
Is Fracking Waste from Municipal Landfills Impacting our Waterways?

Unconventional natural gas development (fracking) produces vast amounts of waste. This waste comes in the form of brine and drill cuttings, both brought up from deep shale layers that can contain high amounts of Radium. Despite the potential presence of radioactivity, and chemicals poisonous to humans, fauna and flora, this toxic waste is classified as residual waste and permitted to be disposed of in landfills that are intended for the collection of non-hazardous waste.

Leachate is the result of rainwater and moisture percolating through waste at a landfill and leaching chemicals, organic matter, and other particles from the waste. Landfill tea. The leachate is then classified as residual waste at the landfill and sent to sewage treatment plants. But the leachate is not adequately treated for potential radioactive materials, leaving concerns that discharged treated water could be polluting rivers and streams. **Our drinking water comes from the same waterways.**

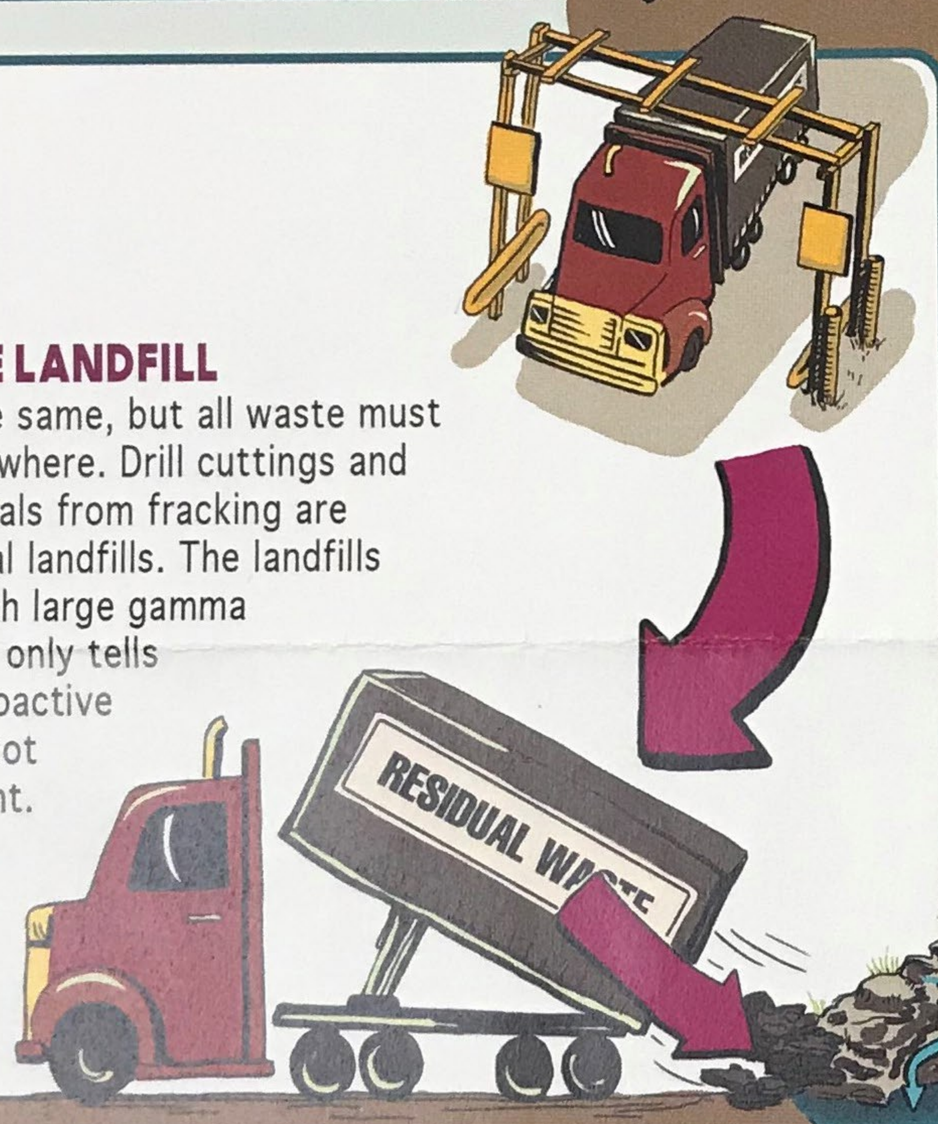
1 DIG UP THE EARTH

When a gas well is drilled, shale rock, gasses, and liquids are brought to the surface. They have been far below Earth's surface for over 500 million years and contain varying levels of radioactivity, including the carcinogen Radium. You may know this as TENORM, Technologically Enhanced Naturally Occurring Radioactive Material.



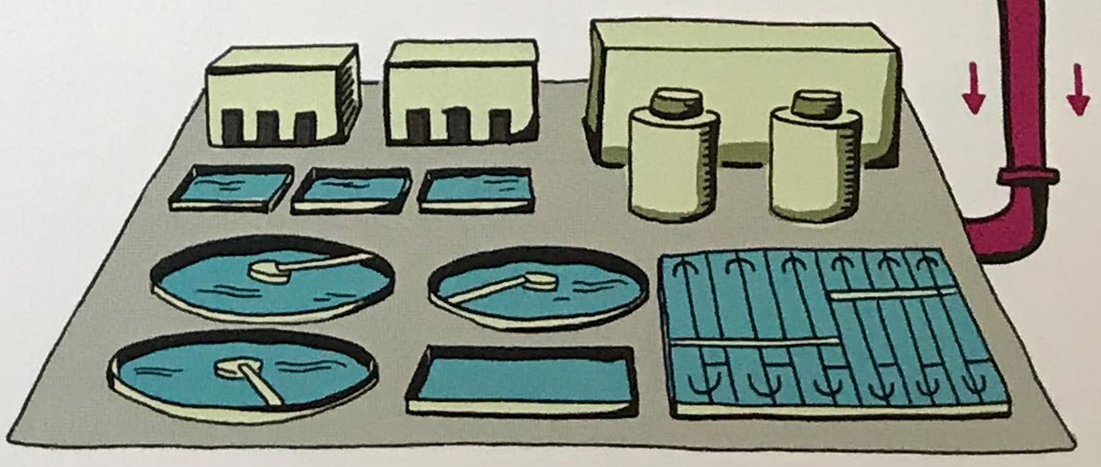
2 DUMP IT AT THE LANDFILL

Not all waste is the same, but all waste must be deposited somewhere. Drill cuttings and other waste materials from fracking are brought to the local landfills. The landfills scan the trucks with large gamma detectors, but this only tells us if there are radioactive isotopes present, not how much is present.



3 TREAT TOXIC LEACHATE

Leachate is the liquid runoff from landfills. This accumulates after the rain has fallen and seeped through radioactive landfill piles. This leachate is notoriously hard to clean and is a major threat to ground and surface water. Leachate is sent to sewage treatment facilities that discharge into our streams.



4 AND THEN WE DRINK IT

Sewage treatment facilities in PA are not adequately equipped to filter out all of the radioactive material. Nevertheless, this proclaimed "clean" water is pumped into rivers and streams, which then feed our drinking water systems.