

RADIOACTIVE WASTEWATER, JUST UNDER YOUR FEET

What is injection welling?

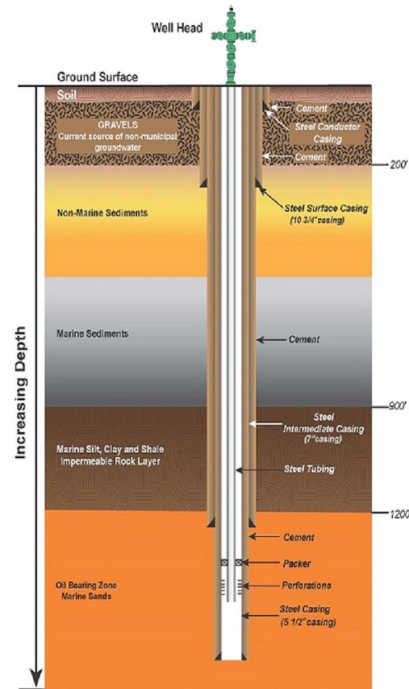
Injection wells store hazardous wastewater from fracking and other sources in permeable underground rock layers. During the fracking process, companies use a salty, chemical-laden water and sand mixture to help release natural gas from underground reserves. When this slurry returns to the surface, it can carry naturally occurring radioactive isotopes, chemical additives, heavy metals, and carcinogens from deep underground. This toxic wastewater is then pumped back into the earth in injection wells.

What are the dangers?

Injection wells pose many threats. The fluids that are used in oil and gas extraction contain toxic metals and radioactive chemicals. **Radium-226** and **Radium-228**, chemicals found in fracking waste, are known carcinogens and can cause bone, liver, and breast cancer at high concentrations. Once fluids are injected into geologic formations, it is difficult to track where these fluids can migrate. Injection wells are designed to inject in layers of permeable rock that are capped by impermeable rock, however fluid can move laterally. When this happens, toxic fluid can seep into cracks from other wells or cracks in rock layers. Injected fluids can also migrate up abandoned wells under pressure. In many of the older unregulated abandoned wells, cracks in well casings can allow toxic fluids to seep into different layers. **This lets toxic fluid seep into places it shouldn't be.** Leaking injection wells can contaminate aquifers, rivers, and lakes with radioactive toxins, endangering communities' drinking water supplies and posing serious threats to human health.



How do injection wells work?



Injection well threats:

- Odors
- Air pollution
- Methane leaks
- Earthquakes
- Leaks
- Spills
- Explosions
- Subsidence
- Groundwater pollution
- Increased truck traffic

Prevention takes teamwork.

Contact the groups below to learn more and get involved.



Three Rivers Waterkeeper

<https://www.threeriverswaterkeeper.org/>



Center for Coalfield Justice

<https://centerforcoalfieldjustice.org>



FreshWater Accountability Project

<https://fwap.org/about/>



Protect Penn-Trafford

<https://www.protectpt.org/>