**Comments to ODNR on Deep Rock**

In 2019 Washington County had the second-highest level of injection well activity in the state at 8.1 million barrels of brine waste, 68% of which was from out-of-state (PA & WV) sources. Our county has among the highest number of wells in the state. In 2011 there were 1.9 million barrels of brine waste injected in our county.

I am aware that injection wells have cement casings and annulus controls and that they are customarily drilled to a depth of approximately 3,000-6,000 feet while aquifers, from which drinking water is obtained normally are drilled at 200-300 feet. This means that, if properly done, injection wells should not pose any risk to aquifers or surface water. The keyword in this conclusion is “properly.” Spills. leaks, discharges, excessive amounts of brine, and other potentially harmful events are not uncommon at injection well sites, especially given the vast proliferation of injection wells in Washington County and throughout eastern Ohio.

In a September 5, 2020 article in the Columbus Dispatch, there was a report on the Redbird #4 spill indicating that fracking waste had seeped into natural gas production wells but not into drinking water. But an article in Consumer Reports (December 3, 2020) stated: “The risk to drinking water comes in two major ways. First, water used in the hydraulic drilling process can leak into aquifers and other groundwater supplies. Second, the wastewater that fracking produces can contaminate supplies when waste leaks from landfills that accept oil remain when waste spills from trucks or pipelines moving it, when equipment fails, or when waste leaks from unlined disposal pits.”

There was a spill near Marietta in a Deep Rock injection well facility in January 2021. This is in addition to the RedBird Well spill a couple of years ago in western Washington County. There is also evidence that brine waste from injection wells is entering into oil& gas production wells, resulting in damage and even destruction of these wells. Owners of these production wells are taking action themselves and can speak on their own behalf about the risk of yet another injection well in Washington County.

As a concerned resident of Washington County and one who has reviewed the numerous reports of Class II injection wells in the county, it is my observation that ODNR does not have the human or physical resources to conduct a complete regimen of inspection (which they are supposed to do every 11-13 weeks), follow-up, and enforcement required of these facilities which pose environmental and health risks to the county and indeed to the entire state. Until ODNR answers the numerous questions which I and others have posed to them, it my recommendation that all activity at injection wells be halted—or at the very least no additional permits for Class II injection wells be approved.