TVA's Coal Ash in Memphis

The Tennessee Valley Authority (TVA) generates power at their TVA Allen Facility in South Memphis, just five miles south of downtown. There, nearly 60 years of dumping toxic coal ash has generated a mountain of threats to human health and our Aquifer.

A History of Health Impacts

- **1956**: MLGW builds Allen Fossil Plant, a coal-fueled power plant
- **1984**: TVA buys the plant, burning 7,200 tons of coal/day for 59 years and dumping the waste in unlined ponds onsite
- **2011**: TVA settles with the EPA on their Clean Air Act violations, agreeing to reduce their toxic emissions by 2018
- **2014**: TVA decides to replace the coal plant with a new gas plant
- **2016**: TVA drills 5 wells to pull Aquifer water for the new plant & community groups elevate concern with water impacts.
- **2017**: TDEC orders a well pump test onsite
- **2018**: TDEC releases their findings: arsenic in the shallow aquifer, prohibiting TVA from using wells near contamination
- **2019**: TVA begins “dewatering” the ponds into the Mississippi, community pushes TDEC to require water treatment
- **2020**: TVA considers two options to deal with the 3 million tons of coal ash: cap it & leave it, or move it to a lined landfill
- **2021**: With no community input, TVA chooses to truck the coal ash 19 miles across South Memphis to South Shelby Landfill
- **2023**: TVA implodes 3 chimney stacks onsite with little warning
- **2030**: Projected date when coal ash haul will be complete

What is Coal Ash?

Coal ash is the waste produced from burning coal. It is highly toxic and comes in many forms: “fly ash,” a very fine powder, “bottom ash,” the residue left in the bottom of the furnaces, and more. It can also be referred to as “CCRs”, or coal combustion residuals.

What’s the threat?

At Allen, they disposed of coal ash using water to push leftover ashes through a pipe and into two ponds. These ponds were not lined, meaning there was no protective barrier under them. This poses a threat to our Aquifer, as it allows ash to leach into the ground. Already, it has contaminated the shallow aquifer atop known breaches in the clay layer.
The Fight to Stop the Wells

In 2016, TVA drilled 5 deep wells into the Memphis Sand Aquifer, planning to pump 3.5 million gallons of our drinking water per day to cool their new gas plant. Notably, this new plant was located just across the street from the old plant, surrounded by coal ash.

Originally, TVA had planned to use treated wastewater to cool their system, a plan supported by the public. However, in an attempt to save money, they changed their plans.

A public outcry launched a movement to stop TVA from using these wells, which would not only strain our drinking water supply, but also draw toxic coal ash into our Aquifer. After a lengthy legal fight, it was determined that the wells would, in fact, pull toxins down into our drinking water. Instead, TVA buys its water from MLGW. Though they are still overpumping our Aquifer, the threat of contaminant “drawdown” onsite was reduced.

Today, the wells remain onsite, and TVA is only legally allowed to turn them on in case of a water supply emergency. Given recent extreme weather events, this threat grows more likely by the day.

Take Action Now!

TVA is currently MLGW’s largest water user. Protect Our Aquifer is urging TVA leadership to stop overpumping the Memphis Sand Aquifer.

There are other water sources nearby, like the Maxson Wastewater Treatment Plant next door. TVA has considered using treated wastewater before! It’s time to revisit that plan and reduce our Aquifer usage.

Send a 1-Click Email to TVA demanding they diversify their water supply and reduce their Aquifer dependence at the Allen Gas Plant in Southwest Memphis.

Send a 1-Click Email to TVA at ProtectOurAquifer.org/NOW

What are the toxins?

Coal ash is comprised of a slew of toxic contaminants. If these toxins reach the Memphis Sand Aquifer, our drinking water supply could be compromised. Monitoring wells drilled around the coal ash ponds have reported the following:

**Arsenic at 300x the legal limit**
Causing skin, lung, urinary, kidney, and other cancers

**Unsafe levels of Lead**
Causing neurological & development disorders in youth, hearing loss, kidney damage, hypertension, and more

**Unsafe levels of Flouride**
Causing bone disease, thyroid issues, cardiovascular problems, and more

The Fight against the Coal Ash Haul

In 2021, TVA decided to move the coal ash to a lined landfill with no public input. That decision means that, for the next eight years, communities along the coal ash route will watch 240 dump trucks filled with toxic toal ash pass by their homes, daycares, and schools.

In its environmental review process, TVA did not say where it was planning to put the ash, or even whether it would move the ash by truck, train, or boat. So, when they announced their decision to City Council in July 2021, there had been no opportunity for the public to give meaningful input.

The coal ash is being hauled to the South Shelby Landfill, a lined landfill that is 19 miles from the plant (but still atop the Memphis Sand Aquifer). Along the main landfill route, there are over 1,500 single family residential parcels and over 200 apartment complexes within a quarter mile (1,320 feet) of the road. The communities along this route will see increased traffic, noise, more dust, and exhaust fumes. Risk of accident on the road also poses a threat through airborne release of the toxic fly ash.

FACT SHEET PRODUCED BY PROTECT OUR AQUIFER & SELC. FOR MORE INFORMATION, VISIT PROTECTOURAQUIFER.ORG