# **Groundwater Monitoring: Paradise Fossil Plant**

Ensuring the protection of water resources

#### Why We Monitor

As part of our commitment to environmental stewardship and in compliance with state and federal regulations, TVA continues to monitor the groundwater quality at the site to ensure water resources are not impacted by our coal ash management units. This fact sheet summarizes TVA's robust monitoring program and provides the most recent monitoring results reported under federal regulations.



#### **How We Monitor**

We maintain a robust network of monitoring wells that we sample regularly for groundwater quality. Many of the constituents in coal ash are naturally occurring in rocks and soil, which makes it important to understand groundwater quality before it reaches the site. That's why we typically install monitoring wells both before and after groundwater reaches the site. We proactively report the results to regulators and post the results on the TVA website.



### **Results of Assessment Monitoring for 2023\***

2023		GROUNDWATER QUALITY MONITORING WELL LOCATIONS												
		Background Wells								CCR Monitoring Wells				
Constituent	GWPS mg/L	95- 48A	PAF- 101	PAF- 104	PAF- 108	PAF- 109	10-5	PAF- 105	PAF- 106	94- 35A	PAF- 114	PAF- 103	PAF- 115	PAF- 116
Antimony	0.006													
Arsenic	0.010 <sup>A</sup> 0.0102 <sup>B</sup> 0.0107 <sup>C</sup>	, В, С	A	A	В	в	¢	C	¢c	A	A	A	A	A
Barium	2													
Beryllium	0.004													
Cadmium	0.005													
Chromium	0.1													
Cobalt	0.0897 <sup>A</sup> 0.0889 <sup>B</sup>	🔴 А, В	A	A	A	A	в	в	в	A	A	A	A	A
Fluoride	4													
Lead	0.015													
Lithium	0.179 <sup>A</sup> 0.173 <sup>B</sup>	<b>A</b> , B	A	A	A	A	в	в	в	A	A	A	A	A
Mercury	0.002													
Molybdenum	0.1													
Rad226+228	5 pCi/L													
Selenium	0.05													
Thallium	0.002													

2023		GROUNDWATER QUALITY MONITORING WELL LOCATIONS										
		CCR Monitoring Wells										
Constituent	GWPS mg/L	PAF- 110	95- 47C	PAF- 113	PAF- 112	PAF- 119	10-6	PAF- 118	PAF- 117	PAF- 107	10-4	
Antimony	0.006											
Arsenic	0.010 <sup>A</sup> 0.0102 <sup>B</sup> 0.0107 <sup>C</sup>	в	В	В	В	¢c	c	C	C	¢	C	
Barium	2											
Beryllium	0.004											
Cadmium	0.005											
Chromium	0.1											
Cobalt	0.0897 <sup>A</sup> 0.0889 <sup>B</sup>	A	A	A	A	в	в	в	в	В	в	
Fluoride	4											
Lead	0.015											
Lithium	0.177 <sup>A</sup> 0.173 <sup>в</sup>	A	A	A	A	в	в	в	в	в	в	
Mercury	0.002											
Molybdenum	0.1											
Rad226+228	5 pCi/L											
Selenium	0.05											
Thallium	0.002											

#### **Color Coding Key**

- Monitoring data results are below groundwater protection standards (GWPS)
- Monitoring data results exceed GWPS (TVA completed assessment of corrective measures report)
- \* The results shown here are representative of the results in the Semiannual Reports submitted on January 12, 2024 and the Annual Groundwater Monitoring and Corrective Action Reports submitted on January 31, 2024 and may not be the most recent documented result.

### **Monitoring and Remedy Process Under Federal Regulations**

Below are the steps that TVA takes to understand groundwater conditions and resolve any issues that are detected as a part of our robust monitoring.



Should action be required to address an issue, the public is notified and corrective measures are taken. As the issue is resolved, monitoring continues. This is a cycle that continues as part of our robust monitoring program.

## **Next Steps**

TVA will continue to monitor and assess groundwater testing results and take the steps necessary to preserve and protect the quality of the environment and surrounding community.

TVA will not waver from our commitment to protecting water resources.