

STATISTICAL ANALYSIS METHOD CERTIFICATION (REV 01)
GEORGIA RULE 391-3-4-.10(6) and 40 CFR §257.93(f)
PLANT BOWEN ASH POND 1
GEORGIA POWER COMPANY

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule (40 CFR Part 257 and Part 261), § 257.93, and Georgia Department of Natural Resources, Environmental Protection Division (EPD), Rule 391-3-4-.10(6), require the owner or operator of an existing CCR Unit to identify a statistical method to be used in evaluating groundwater monitoring data for each specified constituent. The owner or operator must obtain a certification from a qualified professional engineer stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area meeting the requirements of 40 CFR § 257.93 and EPD Rule 391-3-4-.10(6).

Statistical Methodology

The selected statistical method for Plant Bowen Ash Pond 1 was developed and updated in accordance with 40 CFR § 257.93(f) and EPD Rule 391-3-4-.10(6) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, EPA 530/R-09-007 (Unified Guidance) and as requested by EPD.

For the detection monitoring program, the statistical test used to evaluate the groundwater monitoring data will be the interwell prediction limit (PL) method combined with a 1-of-2 resample plan. The interwell PLs pool background data from the network of upgradient wells to calculate a PL. An "initial exceedance" occurs when any downgradient well data exceed the PL.

If data from a sampling event initially exceed the PL, the resampling strategy will be used to verify the result. In 1-of-2 resampling, one independent resample will be collected and evaluated within 90 days to determine whether the initial exceedance is verified. If the resample exceed the PL, the initial exceedance is verified. When the resample result does not verify the initial result, the initial exceedance is considered an erroneous result and the resample values will replace the initial result. When the resample confirms the initial finding, a statistically significant increase (SSI) is determined.

An SSI is determined only if the resample verifies the initial exceedance (i.e., the resample also exceeds the PL).

If a confirmed SSI over background is identified, assessment monitoring will be initiated within 90 days unless a demonstration is made within that same timeframe that the SSI resulted from a source other than the CCR Unit.

In addition to the interwell PL statistics, other statistical methods consistent with the Unified Guidance may be used to further evaluate apparent SSIs or support alternative source demonstrations.

CERTIFICATION

I hereby certify that the groundwater statistical method for the CCR Unit located at Georgia Power's Plant Bowen located at 317 Covered Bridge Road, Euharlee, Georgia 30120, and designated as Ash Pond 1, has been designed and constructed to meet the requirements of 40 CFR § 257.93 and EPD Rule 391-3-4-.10(6).



Qualified Professional Engineer's Signature

January 9, 2020

Date