

STATISTICAL METHOD CERTIFICATION

40 CFR §257.93(f)(6)

LAKELAND ELECTRIC – C.D. MCINTOSH POWER PLANT BYPRODUCT STORAGE AREA

As required by 40 CFR §257.93(f)(6), the following narrative descriptions of the statistical methods selected to evaluate the groundwater monitoring data are provided. These brief descriptions must be considered in the context of the overall statistical objectives. Furthermore, if the data characteristics require procedural modifications, the methods and procedures can be modified, consistent with various guidance documents, including:

- The CCR Rule [40 CFR 257, Subpart D, Published in Federal Register/ Vol. 80, No. 74/Friday, April 17, 2015/ Rules and Regulations].
- USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data At RCRA Facilities: Unified Guidance*. EPA 530/R-09-007.
- ITRC, 2013. Groundwater Statistics and Monitoring Compliance, Statistical Tools for the Project Life Cycle. GSMC-1. Washington D.C.: Interstate Technology and Regulatory Council, Groundwater Statistics and Monitoring Compliance Team. <http://www.itrc.org/gsmc-1/>.

The statistical method selected for detection monitoring is the prediction limit for individual observations with a 1-of-2 approach to retesting (Unified Guidance, Chapters 6 and 19). This method will be based on parametric procedures if the data are normal or can be normalized, and will be based on non-parametric procedures if the data cannot be normalized.

For those parameters that have a groundwater protection standard (GWPS) based on an established maximum contaminant level (MCL), the statistical method selected for assessment monitoring is the confidence interval procedure (Unified Guidance, Chapters 7 and 21). If the GWPS is based on background concentrations (either because there is no established MCL or background is above the MCL), the GWPS will be established based on the upper tolerance limit with 95% confidence and 95% coverage (parametric or non-parametric, as appropriate); and the compliance data will be compared to the GWPS using the confidence interval procedure.

I hereby certify that the recommended procedures and the selected statistical methods described in this certification are appropriate for evaluating the groundwater monitoring data for the CCR management area.


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Certificate of Authorization No. 1670
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Date

