

\*\*\* DRAFT – NOT FOR FILING \*\*\*

3745-506-300      Statistical analysis plan.

The statistical analysis plan shall include the following:

- (A) A table listing each ground water monitoring well to be sampled including the frequency of sampling and the gradient location of each monitoring well relative to the limits of potential sources of contamination.
- (B) Detailed descriptions of the statistical analysis and retesting methods selected in accordance with rule 3745-506-310 of the Administrative Code including specific decision criteria to be followed when deciding which method to use.
- (C) A demonstration that the statistical analysis methods listed in the statistical analysis plan comply with the performance standards listed in rule 3745-506-330 of the Administrative Code. The statistical analysis plan shall include a description of the test for normality used by the owner or operator and a table listing the parameters, background data for the parameters, and the results of the test for normality based on the background data listed.
- (D) A table listing the background data used with the statistical analysis methods for each parameter including ground water monitoring wells and date of sampling.
- (E) Documentation that the background data set in the statistical analysis plan complies with rule 3745-506-320 of the Administrative Code.
- (F) A procedure for updating the background data set that complies with rule 3745-506-320 of the Administrative Code.
- (G) A list of the statistical limits for each parameter for each ground water monitoring well.
- (H) A statement that when a new ground water monitoring well or replacement ground water monitoring well is added to an existing ground water monitoring system, the owner or operator shall begin statistically analyzing data from the ground water monitoring well in accordance with the following schedule:
  - (1) If additional background data are not required to be collected by rule 3745-506-320 of the Administrative Code, statistical analysis shall begin with the first semiannual sampling event following addition of the monitoring well to the ground water monitoring system.
  - (2) If additional background data are required to be collected by rule 3745-506-320 of the Administrative Code, collection shall be completed not later than one year after adding the monitoring well to the ground water monitoring system.

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Statistical analysis shall begin with the first semiannual sampling event following collection of the background data.

(3) If an alternate time frame for collection of background data has been approved in accordance with rule 3745-506-450 of the Administrative Code, statistical analysis shall begin with the first semiannual sampling event following collection of the background data.

(I) A statement that the owner or operator shall make a statistical comparison of the background data and downgradient ground water detection monitoring analytical results to determine if there is a statistically significant change between background data and the downgradient analytical results. For organic parameters not detected in background at the facility, a quantifiable detection in a downgradient ground water monitoring well shall be considered a statistically significant change from background.