

*** DRAFT – NOT FOR FILING ***

3745-506-310 Statistical analysis methods.

An owner or operator shall choose a statistical analysis method that shall be appropriate for the monitoring program being implemented.

(A) For a ground water detection program, the owner or operator shall select from the following methods:

(1) Prediction limit procedure.

(2) Control chart approach that gives control limits for each parameter.

(3) Use of a practical quantitation limit (PQL) to define a non-parametric statistical limit. If this method is chosen, the statistical limit shall be set at less than the PQL.

(4) An alternative method as described in paragraph (D) of this rule.

(B) If a ground water assessment program includes statistical analysis, the owner or operator shall select from the following methods:

(1) For deriving a background-based ground water assessment standard, the following:

(a) Tolerance limit procedure.

(b) Prediction limit procedure.

(2) For evaluating elevated parameters, the following:

(a) Confidence interval procedure.

(b) Trend analysis procedure.

(3) For evaluating non-elevated parameters, the following:

(a) Prediction limit procedure.

(b) Control chart approach that gives control limits for each parameter.

(c) Use of a PQL to define a non-parametric statistical limit. If this method is chosen, the statistical limit shall be set at less than the PQL.

(4) An alternative method as described in paragraph (D) of this rule.

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(C) If a ground water corrective actions program includes statistical analysis, the owner or operator shall select from the following methods:

(1) The methods listed in paragraph (B) of this rule.

(2) Use of a maximum contaminant level or health-based limit as the statistical limit.

(3) An alternative method as described in paragraph (D) of this rule.

(D) Alternative methods. The owner or operator may choose an alternative statistical analysis method. At a minimum, the statistical analysis method and variables selected shall meet the performance standards described in rule 3745-506-330 of the Administrative Code.

(E) Retesting methods. If a retesting strategy is to be incorporated into a ground water detection, assessment, or corrective actions program, the retesting strategy shall be described in the statistical analysis plan. The description shall include the number of re-samples to be used.