Data Quality Screening Protocol

Total phosphorus measurements utilized for purposes of assessing ambient water quality conditions shall be screened based on 1) Sample collection depth, 2) data qualifiers/comments, 3) blank contamination, and 4) reversals as described below to assure that the data is of adequate quality to accurately access the phosphorus status of a water body.

Depth Screening

Total phosphorus data shall not be collected at a station when the total depth at that station is less than 10 cm. Any data collected below this minimum depth shall be rejected for use.

Data Qualifiers/Comments

Data qualifiers for individual parameter results shall be checked for fatal remarks or comments that would necessitate the disqualification of the data. Any data qualified with a code of H, J, K, N, O, Q, Y, or ? as described in Chapter 62-160 of the Florida Administrative Code are rejected for use. Additionally, data with designated with a qualifier code of U or T are replaced with a value equal to one-half of the minimum detection limit (MDL) for that parameter. Further, field and laboratory comments that accompany the data are reviewed for any indication that the sample collected or the laboratory results are not representative of the true conditions (*e.g.*, a comment indicating that the sample contained a large portion of sediment). Any data that are indicated not to be representative of the true conditions are also rejected for use. The remaining data are then evaluated for blank contamination.

Blank Contamination

A blank will be considered contaminated if the laboratory result is greater than the MDL (*i.e.*, the parameter was detected). If any analytical result associated with a contaminated blank is less than 5 times the value of the contaminated blank, all the associated samples for that parameter for that sampling event shall be disqualified.

Reversals

The final step in the data screening protocol involves the evaluation of reversals within a sample. If a constituent (*e.g.*, filtered parameter such as orthophosphate) and the total (*e.g.*, total phosphorus) are both above the PQL (practical quantitation limit), the pair of values shall be disqualified if the constituent is more than 1.2 times the value of the total. If one or both of the pair are between the MDL and the PQL, a factor of 1.3 shall be used.

The Department/District shall note for the record any data that are excluded and provide details concerning the reasons for excluding these data. Data passing the screening protocol described herein shall be deemed of acceptable quality for purposes of assessing ambient conditions within the water body; however on an annual basis any station with fewer than 6 screened monthly values shall not be utilized in the assessment.