SCDHEC Water Quality Section Comments

Section A7.1 D:

To be comparable to SCDHEC Methods should state "collected at a depth of 0.3 meters"

Section A7.6:

"100% completeness is required" Table 2 lists completeness for DO and Water temperature at 95%

Table 2:

Parameter E. coli column MDL "1 C1"? Believe C1 should be deleted

Table 3:

Sterile plastic the only container typed mentioned here. Last sentence on page 16 states sterile glass or sterile plactic.

Section B3:

Should be deleted "Comments say "how will the sample collector provide a unique identifier for each sample?" Tracy's notes say to ask the lab:"

Section B5

Section Labels stop after B5.1

Section "Quantitation/Reporting Limits" – First paragraph abbreviation EQL used with no prior definition

Section "Rejection of Data" – We would like some clarification. Are sample results rejected because the result or one of the replicates falls in the 99% significantly different? Is just the replicate value rejected? If a data point is an outlier that is not a reason to reject unless there are some other reasons to be suspicious that data point.

Table 7:

To be consistent with SCDHEC methods

Calibration check for DO should be ± 0.2 mg/L expected value

Table 9:

To be consistent with SCDHEC methods

Calibration check for DO should be ± 0.2 mg/L expected value

Table 10:

EQL used with no prior definition

Page 35:

"Tracy's notes say "if something is found, write a brief narrative describing the inconsistencies/problems noted. Anomalies investigated/no" Should be deleted.

Page 38:

Section A: "E.Coli in waste water" remove the word "waste"

Page 39:

"5. After sample is added to sample" Believe this to be an error

Page 44:

"4. Enter the local altitude in hundreds of feet. For our laboratory, the altitude is entered as 0. Use the arrow keys to increase or decrease the altitude. Press ENTER once the proper altitude is entered." – Altitude cannot be zero unless another barometric pressure is being entered elsewhere and that does not seem to be the case.

Major concerns with no reference

No end of day verification is listed in the methods or SOPS for DO. This should also be done at the $\pm\,0.2$ mg/L expected value

Do not recommend using the YSI Model 55:

From the manual:

Dissolved Oxygen mg/L Sensor Type......Calculated from % air saturation, temperature and salinity.

Range.....0 to 20 mg/L

Accuracy ± 0.3 mg/L

Resolution0.01 mg/L

The accuracy is not within the ±0.2 mg/L to be comparable to current SCDHEC equipment