Chester Tester Monitoring Program
Dilution Procedures for "Over Range" Readings

If an "over range" reading is obtained on the colorimeter when a sample is read, the water must be diluted and retested. Two clean test vials (either 0290 or 0967), and a *clean* paper cup, plastic cup or graduated cylinder are needed for this procedure.

1. Fill clean test vial to the very top with fresh [field] sample water and empty into a *clean* paper cup, plastic cup or graduated cylinder.

2. Fill the same test vial to the very top with distilled water and empty into the cup with the field sample water from step #1. Swirl to mix.

3. Fill one test vial with the diluted sample from the cup to the 10 ml line and cap. This will now become your "*blank*" (yellow cap).

4. Fill the second test vial with the diluted sample from the cup to the 10 ml line and retest according to the procedures for the test which produced the "over range" reading. Multiply the colorimeter value by "2" and record this value.

If you still obtain an "over range" reading on the colorimeter when the diluted sample is read, the water must be diluted again and retested. Two clean test vials (either 0290 or 0967), and a *clean* paper cup, plastic cup or graduated cylinder are again needed for this procedure.

5. Using the "blank" sample (vial) from step #3 above, fill the remainder of the vial, to the very top with the remaining diluted sample water from the cup used in the first dilution. Empty into another *clean* paper cup, plastic cup or graduated cylinder.

6. Fill the same test vial to the very top with distilled water and empty into the cup with the field sample water from step #1. Swirl to mix.

7. Fill one test vial with the newly diluted sample from the cup to the 10 ml line and cap. This will now become your "*blank*" (yellow cap).

8. Fill the second test vial with the diluted sample from the cup to the 10 ml line and retest according to the procedures for the test which produced the "over range" reading. Multiply the colorimeter value by "4" and record this value.