**PHOSPHATES**

Excess phosphates create water that's cloudy and low in oxygen. All plants need phosphates to grow, but phosphorous is normally present in surface water at a rate of only 0.02 parts per million. Introducing additional phosphates into water results in a massive growth of algae, which are aquatic plants including many single-celled, free-floating plants. Excessive amounts of algae cloud the water in an effect called an algal bloom, which reduces the sunlight available to other plants and sometimes kills them. When the algae die, the bacteria that break them down use up dissolved oxygen in the water, depriving and sometimes suffocating other aquatic life.

Phosphates usually get in water through soil erosion.

1. **Fill the sample cup to the 25 mL mark with the water sample to be tested.**
2. **Add 2 drops of A-8500 Activator Solution. Cap the sample cup and shake**

**it to mix the contents well.**

1. **Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip.**

**The ampoule will fill leaving a bubble for mixing.**

1. **Mix contents of ampoule by inverting several times, allowing the bubble**

**to travel from end to end.**

1. **Dry the ampoule and wait 2 minutes for color development.**
2. **Hold the comparator in a nearly horizontal position while standing**

**Directly beneath a source of light. Find the color match.**