

## **Protocol for H<sub>2</sub>S Test**

- 1) Add 1000 ml of the effluent to be tested into two test beakers – One beaker will be used for test purposes, a second beaker will be needed as your control**
- 2) Place lid on both test beakers and shake vigorously for 5 seconds**
- 3) Remove lid from the test beaker, blow trapped gas from top of beaker, and immediately cover the opening with the sensor of the H<sub>2</sub>S meter**
- 4) Replace lid after meter stabilizes on the PPM reading and record the reading**
- 5) Repeat the test for the control beaker**
- 6) Remove the lid of the test beaker again, blow trapped gas from top of beaker, and add 1.0 ml of Histosol to the effluent**
- 7) Replace lid immediately and shake vigorously again for 5 seconds (also shake the control for 5-seconds at this time)**
- 8) After 60 seconds remove lid, blow the trapped gas from the top of the beaker, and measure H<sub>2</sub>S – Expected results should be a 50 – 75% reduction in the H<sub>2</sub>S level (with H<sub>2</sub>S levels before treatment of 40 to 50 PPM with BOD levels of 200 to 300 PPM)**
- 9) Test the H<sub>2</sub>S level in the control sample for verification of the reduction following the same testing procedure**
- 10) Repeat steps 8 and 9 as much as needed**

**Note: The dosage rate for this protocol is much higher than the standard rate for actual applications. In most cases, a daily dosage rate of 5 to 50 PPM is sufficient for control of H<sub>2</sub>S. The rate is higher for the test protocol to show immediate results/product efficacy. Actual field applications may require 24 to 48 hours before H<sub>2</sub>S reductions are measurable. Also, in some circumstances, bench testing has shown that Histosol was ineffective in controlling H<sub>2</sub>S, but when the product was field tested for the same application, it performed as expected. OPC prefers an opportunity to conduct a field evaluation.**

**The same steps (1-10 above) can be used with reduced levels of Histosol to determine the optimal dosage rate required to reduce the H<sub>2</sub>S.**