

ROETECH

CASE STUDY

Treatment of Municipal Wastewater Treatment Plant for Hydrogen Sulfide Control with RoeTech 106 Bacteria Culture

History: This activated sludge waste water treatment plant developed an historical serious problem from hydrogen sulfide, H₂S, and experienced significant odor and corrosion problems. This plant processes 15 million gallons of water per day.

Trial: RoeTech 106, a blend of six patented Bacillus strains manufactured by Roebic Laboratories, Inc. was used for a period of three months to determine whether or not the H₂S could be reduced or controlled.

Application: The RoeTech 106 culture was added at three pump stations upstream of the plant at the rate of 7.5 parts per million of flow, and the water was analyzed at four sampling points for H₂S concentration. This study was performed from February to May 2008.

Results: RoeTech 106 treatment resulted in excellent control of H₂S, reducing the concentration from as high as 500 ppm to less than 1 ppm as seen in Graph 1. The graph also indicates that H₂S levels began to rise by 5/19/08, two weeks after the final addition of RoeTech 106.

Graph 1 also includes data for 5 months prior to the initial application of RoeTech 106 as a baseline for comparison purposes.

Although not a focus of this study, historic data also indicate BOD and TSS loads would be reduced with the use of RoeTech 106 cultures.

Continued treatment with RoeTech 106 was recommended.

Wastewater Treatment Plant



Pump Station #2

