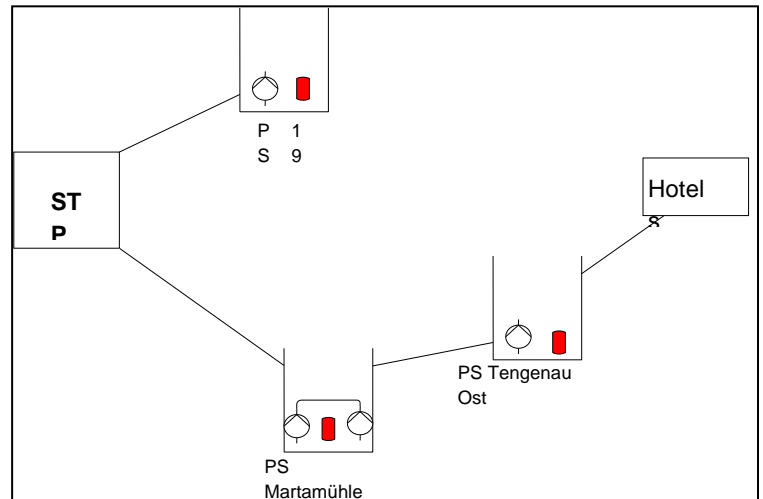


FOG Control in Pumping Station, Sewer Line and Municipal Treatment Plant in Germany

FOG control in a municipal wastewater treatment plant using Microcat® - Bio-POP s BSE 112

Problem

Like many similar installations, the pumping station (PS) “Martamühle” in Germany experienced excessive fat, oil and grease (FOG) build up. As is the custom in Germany, the pumping station is managed by the operating staff of the downstream municipal wastewater treatment plant. The station is relatively small measuring 3.3 feet (1 m) in diameter. The station delivers about 3,700 gallons (140 m³) of wastewater to the sewer line per day. The wastewater is strictly municipal and contains unusually high levels of FOG due to the discharge of two hotels and a local community hall to the station. The downstream municipal wastewater treatment plant (ST P) is not equipped with primary FOG removal.



Application Procedure

During the summer, a BioPOP - 2 (2 pound BioPOP unit) is installed in the pumping station. The BioPOP is simply lowered into the lift station wet well using a rope and tied off at the desired depth below the surface of the water. The purpose of the BioPOP installation was to reduce the FOG accumulation not only in the pumping station but also in the downstream sewer line and municipal treatment plant. The staff desired to reduce the labor required to maintain the station in a clean/deodorized condition. The BioPOPs “natural” makeup also appealed to the staff, since no chemicals would be introduced into the system under their management.

Results and Conclusions

After about 2 months, the first inspection of the treated station is performed to determine if the program objective were accomplished:

- 1) FOG deposits on the walls of the pumping station completely disappeared.
- 2) Grease balls floating on the water surface are now considerably smaller in size and no longer interfere with the pump operation. The BioPOP - 2 dramatically reduced FOG build-up compared to prior experience in this station.
- 3) The station cleaning cycle time was doubled cutting the labor required in half.
- 4) FOG deposits and grease balls in the aeration tank of the treatment plant are reduced by 80%.

Since all the objectives of the program were met, the FOG control program using Bio-POPs has been extended to other parts of the collection system.

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