

CASE STUDY # 69

CONTROL OF HYDROGEN SULPHIDE (H₂S) ODOURS FROM MUNICIPAL LIFT STATIONS

SUBJECT:

Odour by hydrogen sulphide (H₂S) reduction in two lift stations of a municipal collection system.

PRODUCT APPLIED: MICROCAT®-ANL Microbial Odour Control Bioformula



LIFT STATIONS:

Lift Station #1 (8'x12'x2') Flow: **113 m³/day** of domestic wastewater.

Lift Station #2 (8'x12'x18') Flow: **226 m³/day** of domestic wastewater.

This section of the municipal collection system consists of two lift stations located in a residential section along a lake. Lift station #1 has a daily flow of 113 m³. Lift Station #2, which is located approximately one mile (1,5 KM) downstream from the first station, has a daily flow of 226 m³. Odour complaints from the residences near these lift stations were common.

OBJECTIVE:

The treatment objective was to reduce and control odour from the lift stations. More costly alternative odour control systems were also being considered.

PROGRAM:

The treatment program consists of daily automatic dosing of **MICROCAT-ANL** directly into the wet well of each lift station. Application of 0.60 Litres of **MICROCAT-ANL** is made into each station by a programmable pump at 2:00 a.m. every night. The combined total monthly usage of **MICROCAT-ANL** in both lift stations is 37.8 Litres.

RESULTS:

H₂S odour from the lift stations is no longer detectable according to municipal employees responsible for maintenance of the collection system, and complaints from the residents has ceased.

MICROCAT-ANL has met the objective of this program to reduce H₂S odour from the lift stations.

An added benefit of the **MICROCAT-ANL** application has been a decrease in fat, oil and grease accumulations in the wet wells of each lift station.

A yearly savings of more than 50,000 Euro's is projected with the **MICROCAT-ANL** program, as compared with alternative odour control treatment programs that were considered.