California City Reduces Lift Station Maintenance with MICROBE-LIFT® Technology

Location: **Kerman, CA, USA**

Background:

A city of 14,000, Kerman is located 15 miles West of Fresno, CA. As the business and commercial center for Fresno County, this city was cited as one of the fastest growing cities in central California with 150% growth since 1990. Typically, fast population growth puts a strain on local services and the town's sewer maintenance was no exception.

Kerman's collection system is relatively new with approximately seven years of service to date. It consists of 25 grease traps in the city leading to 2 lift stations. The lift stations empty into five ponds before reaching a final 48 mg pond that is utilized to irrigate silage crops.

Objective:

The grease traps and lift stations were plagued with rapid grease build-up requiring expensive and time-consuming pumping and disposal of grease in most locations.

The wastewater manager stated that he had worked for the city of Kerman for 15 years and although he had "tried everything" he had never seen a technology that worked to clear the grease.

Ecological Laboratories' technical staff developed a program to treat the system with MICROBE-LIFT®/IND beginning with the two final lift stations. The first station was 10 X 15 X 35 feet deep with an auger to keep the fluid mixed. The second was 8 X 20X 30 ft deep. At the time of treatment there was a grease layer 2-3 feet thick covering the width of the station and extending over three-fourths of its length. The grease was physically removed from the well prior to initiation of treatment.

Initially both the wastewater and collection wells were each dosed once with 3 gallons of MICROBE-LIFT®/IND. Thereafter 1 gallon was added to the collection pit daily for four days. Starting on the fifth day, the system was maintained on a dosage of 1/2 gallon per week.

Results Achieved:

The results of treatment with MICROBE-LIFT®/IND were dramatic as depicted by the pictures below. Before treatment on February 8, 2012 the lift station pictured below was heavily impacted with grease and scum.

Fig. 1: *With the grate open, a 2 - 3 foot grease layer is evident prior to treatment.*

Fig. 2 & 3: *These pictures show a side view with gate open and a top view with gate closed.*

Fig. 4: *May 18, 2012 after three months of treatment, the grease cap has not returned.*

Fig. 5 & 6 *These pictures further demonstrate the lack of new buildup of the grease cap when seen from a side view and through the grate from the top.*

After three months with only the maintenance dose of ½ gallon per day being applied, the grease layer has not returned.

The MICROBE-LIFT® program was considered to be such a success that the wastewater manager is budgeting for the treatment program to be expanded to include all grease traps in the city system plus the sewer plant head-works.

For more information on MICROBE-LIFT® Technology contact
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