Bioscience, Inc.
Environmental Products and Services

ISO 9001:2008 Certified

Bioreactor Membrane Filter Cleaning

Reducing membrane fouling using MICROCAT® - SXMRF Grease and Fat Reducer - BSE 081

Before

After

Problem

Membrane filter fouling with organic accumulations was reducing membrane performance, creating foaming and reducing effluent quality in this oxidation pond wastewater treatment system. The treatment objective was to reduce the amount of fouling on the membrane filter, thus improving performance and reducing downtime and maintenance costs.

Product Applied

MICROCAT®-SXMRF Grease and Fat Reduction Bioformula

Treatment System Configuration

The treatment system consists of 3 aerated oxidation ponds in series followed by a conventional, modular membrane micro-filtration plant prior to discharge to a receiving stream

Product Application Program

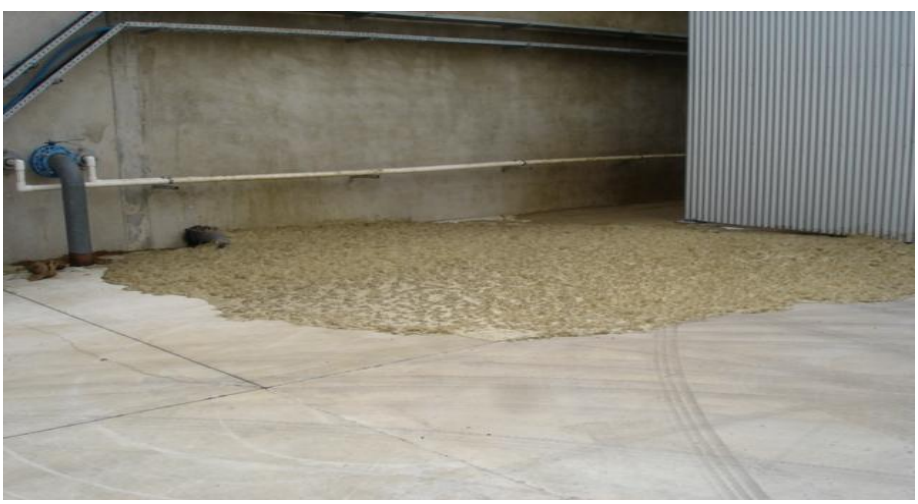
The **MICROCAT®-SXMRF** application program for the pond system is based on the size of the ponds and the amount of organic buildup. **MICROCAT®-SXMRF** addition is made daily by manual addition to the 1st of 3 ponds.

Results

Since beginning the **MICROCAT®-SXMRF** addition to the oxidation ponds, the following benefits have been observed on the membrane filters that follow the oxidation ponds:

1. Organic buildup is dramatically reduced on the filter and cleaning maintenance is not required as often.
2. Foaming on the membrane tanks is eliminated.
3. The amount of chemical needed to clean the membrane is greatly reduced.
4. When the membrane filter is functioning properly, effluent quality exceeds that of the receiving stream.

MICROCAT®-SXMRF is regularly added at maintenance dosages to reduce fouling and minimize foaming.



Foam Overflow BEFORE MICROCAT Addition

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