



Xcelbio Reduces COD in trade effluent by

Working with one of our UK JV partners, Ian Perry we present the actual case study after 3 months assessment.

PARAMOUNT 21, FISH PIE & SEA FOOD “READY MEAL” MANUFACTURING

Objective:

To explore whether changing the dosing bio-stimulant from the previous supplied product to the new Xcelbio would result in further reductions of COD and TSS values. It was hoped that this would have the effect of reductions of Paramount 21 Trade Effluent charges.

Background:

The previous bionutrient had been dosed into the effluent stream since October 2012, with reasonable results. The dosing unit was installed at the inflow point of the fat-trap pit. Additionally, an aeration unit was introduced. The effluent passes through the fat trap into a second trap and is then sampled. As the total daily flow at Paramount 21 is relatively low, there is a good retention in the fat-traps.

Method:

A study of the network of pipes which deliver the effluent from the various departments of the factory was undertaken by ECOTON the Xcelbio partner. It was established that the drain system flowed into 3 Fat-Traps. The dosing unit was installed at the inflow of the Fat-trap pit, additionally an aeration unit was also installed.

The effluent flows through the 1st trap into the second and immediately after the second trap sampling is carried out. Due to the fact that the flow rate is quite low good retention is achieved.

Proposal:

Ecoton proposed that by applying Xcelbio into the system TSS and COD levels would be further reduced. Dosing started on April the 11th 2016 at a rate of 200ml per day.

Xcelbio Reduces COD in trade effluent by 53%.



Results: from 2015

Without Xcelbio

22/10/15 - COD	1285	SS	220
08/08/15 - COD	2000	SS	276
24/08/15 - COD	1466	SS	647
22/04/15 - COD	2400	SS	1200
Ave COD	1788 average	SS	586
All measurements in mg/l			

Results to date 2016

With Xcelbio

16/04/16 - COD	998,	SS	184
22/04/16 - COD	589,	SS	38
05/05/16 - COD	893,	SS	91
26/05/16 - COD	783,	SS	43
Ave COD	816 average	SS	99
All measurements in mg/l			

COD % DROP-2016 compared to 2015 = 53.75%

TSS % DROP 2016 compared to 2015 = 84.8%

Summary:

Although the daily dosing rate of Xcelbio remained unchanged, compared to the previous product dosing rate;

There has been a significant reduction in COD values of 53.75% when this is compared to the previous product.

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