

Iran Transformer Research Institute

The methodology of Biological (OSE) reduction of PCB

Herewith , on 15.May.2010 a pilot test conducted by BESCO company which is represented by Dr.Azizi and Eng.Habibi in ITIR laboratory in the presence of Dr. Bakery, Eng. Sharifi, Eng. Heidarzadeh as representative of ITIR in order to eliminated PCB in escarole oil by Biological method (OSE) as following :

- The Lab temperature : 25°C
- The quantity of Oil polluted sample by PCB : 300 ml
- Method of PCB test: 1262
- Lab Equipment : Dexill 2000 analyzer
- PCB concentration: 436 ppm

First prepared 300 ml OIL and add up by the same volume diluted biological product (2% OSE) and mix it by an agitator in an erlen meyer flask for a week. After the first week the one sample was sent to ITRI lab and in the result observed that the concentration of PCB is reduced.

As a recommendation by BESCO the bioremediation in was continued till 4th weeks. At the end of 4th week the sample was tested again to evaluate the PCB concentration. In the second test result observed further reduction in PCB (≤ 150) which proved that OSE is able to reduce the PCB and by the time lower concentration of PCB could be achieved.

Technical manager

Rohollah Heidarzadeh

Reference : BESCO. Contact person Dr.Azizi 00971555020002