# ORGANO-FLOC OP

**Organic Polymer** 



## CASE STUDY WWT - MDF INDUSTRY

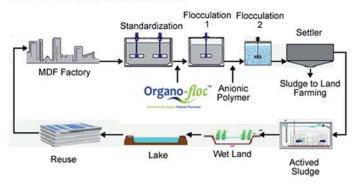
## CHALLENGE/OPPORTUNITY

A Medium Density Fiberboard (MDF) producer located in the south of Brazil outputs 240,000m3 of MDF panels per year. In the production process, woodchips are washed to remove of contaminants and then sent to a digester, where they are made into fibres by boiling. Then, the water used for washing and boiling the woodchips is sent to the WWT.

The Physical and chemical treatment was achieved by using  $Al_2(SO_4)_3$ , hydrated lime and a polymer. The treatment was considered unsatisfactory and generated sludge with high quantities of aluminium residue.

Organic Coagulant Organo-floc was tested with the purpose of improving treatment efficiency and eliminating aluminium residue. Tests passed, Organo-floc was approved for permanent use.

#### APPLICATION FLOWCHART



#### WASTEWATER CHARACTERISTICS

Flow	COD	SS	
25 m³/h	41.430 mg/l	5.840 mg/l	

### TREATMENT COMPARISSION

	Coagulant		
	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub>	Organo-floc	
Dosage	1500 ppm	800 ppm	
Lime	400 ppm		
Polymer	6 mg/l	2 mg/l	

## **EFFLUENT AFTERTREATMENT**

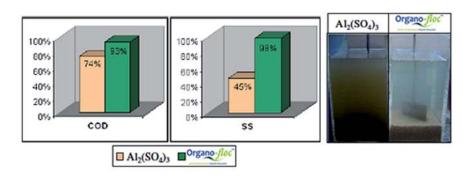
TREATMENT	COD	SS	Aluminium Residue
Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	10.735 mg/l	3.220 mg/l	4,1 mg/l
Organo-floc	2.995 mg/l	140 mg/l	n/d



## ORGANO-FLOC OP Organic Polymer



#### REMOVAL PERCENTAGES



### BENEFITS DERIVING FROM THE APPLICATION OF ORGANO-FLOC

- Reduction of the volume of sludge generated;
- Production of biodegradable sludge for unrestricted use as fertilizer;
- Elimination of the use of lime;
- Treatment efficiency treatment;
- Use of a biodegradable product compatible with the subsequent biological treatment;
- Rationalised manpower use;

## Organo-Floc

The Organo-floc product range is essentially natural in origin and competitive when compared to products traditionally employed in water treatment with the additional advantage of being totally biodegradable allowing complete digestion at the various biological stages of the process.

Organo-floc products have effective action on several types of water as well as various sorts of industrial effluent. They are usually employed in drinking water treatment and in the treatment of effluents from several sector including petrochemical, ceramic, food, sugar, metal and cellulose industries, oil refineries, mining and domestic sewage.

Organo-floc is compatible with most products on the market and may be used in combination with such products.

Organoc-floc works with minimal interference with the environmental and offers various economic advantages.

