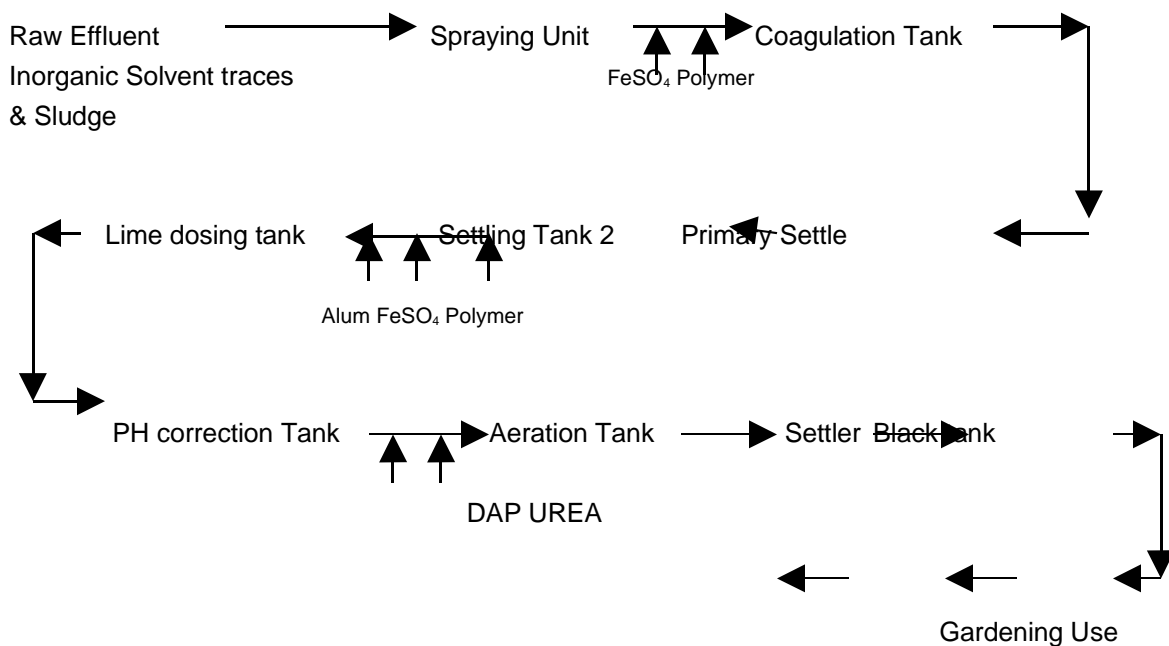

IESL TECHNICAL BULLETIN

AUGUST 2005

Another Technical Bulletin, another knowledge / experience sharing with all of you. This time we have come out with a new product **SERCON BIOLOGICALS!** And Lab trials were conducted @ **M/s. IPCA Laboratories, Indore & M/s. Godrej Foods, Bhopal, M.P.**

CASE I: M/s. IPCA Laboratories Indore

Plant scheme: -



MGF ACF

Capacity of Plant: - 150 KL/DAY

The IESL had conducted the lab trials of SERCON BIOLOGICALS in order to reduce down the COD of Effluent. The lab trials details were as follows,

Sample – Effluent sample taken: - 2 Liters

Lab trials-

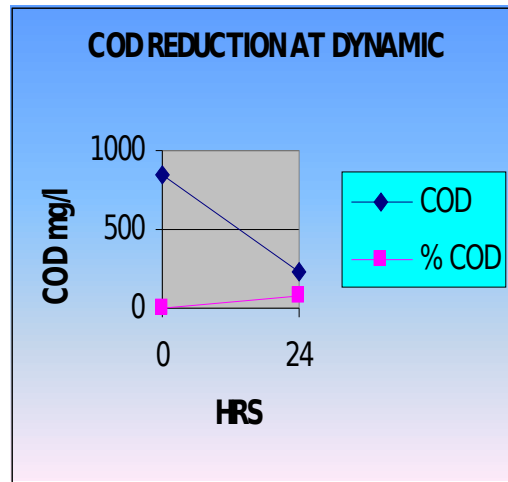
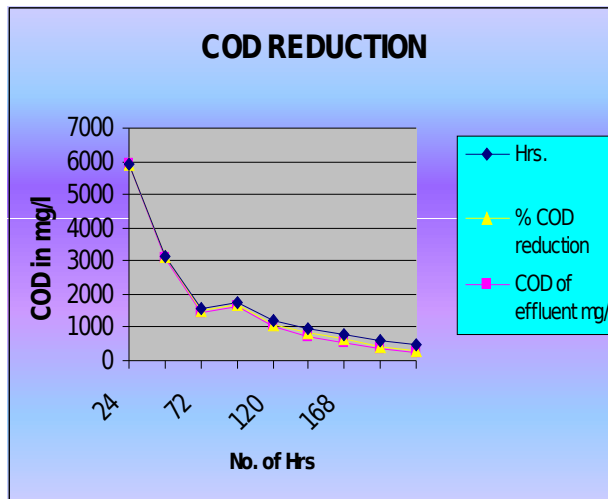
SERCON BIOLOGICALS- BICHEM DC 1008

TECHNICAL SERVICES, ION EXCHANGE SERVICES, BANGALORE

Concentration of solution- 4 %
 Bacteria solution added – 300 ml.

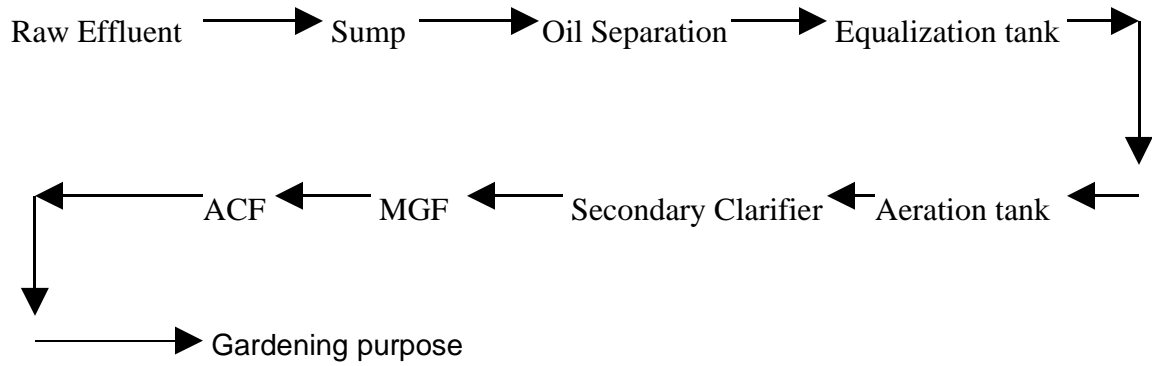
Hrs	COD of effluent	% COD reduction	Biologicals added
Initial	5920	0	300 ml
24	3060	48	
48	1456	75	200 ml
72	1632	72	
Hrs	COD of effluent	% COD reduction	Biologicals added
96	1027	82	200 ml
120	750	87	
144	544	90	200 ml
168	345	94	
192	216	96	
Dynamic mode with addition of 200 ml Bacteria culture			
Initial	850	0	
24	240	71	

*Dynamic Mode: - We had mixed fresh raw effluent and continued the trial with addition of bacteria.



CASE 2: - M/s. Godrej Foods, Bhopal

Plant Scheme: -



Capacity: - 250m³ /day

Sample – Effluent sample taken: - 2.0 Litre

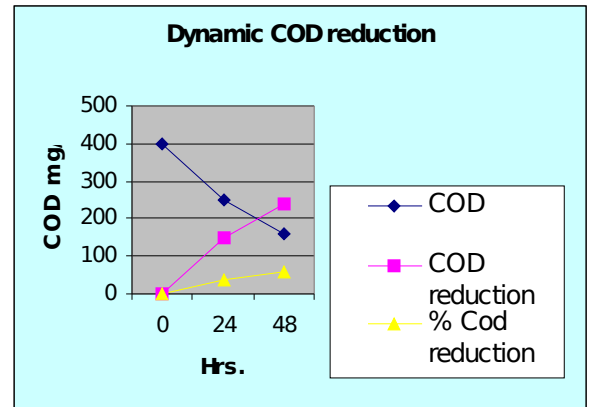
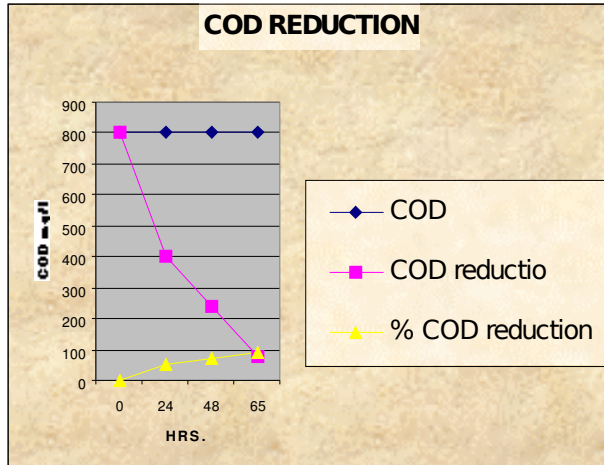
Lab trials-

SERCON BIOLOGICALS-

Concentration of solution- 1.5 %

Bacteria solution added – 200 ml.

Hrs.	COD of effluent mg/l	% COD reduction
Initial	800	0
24	400	50
48	240	70
65	80	90
Dynamic mode with addition of 200 ml bacteria addition		
Initial	400	-
24	250	37.5
48	160	60



* Dynamic Mode: - We had mixed fresh raw effluent and continued the same.

During lab trial we had not used any additional source of Nitrogen like Urea or DAP for growth of bacteria. These dormant bacteria culture had done the job of reduction in COD.

From above two case studies we conclude that **SERCON BIOLOGICALS** are effective for COD reduction in Effluent treatment Plant. Benefits of SERCON Biologicals will be,

1. Maximum COD reduction of effluent up to 90 to 95%.
2. No need of additional Nitrogen source like Urea or DAP.
3. We can use this SERCON BIOLOGICALS for COD reduction.
4. This proves that, “ **NATURE CURES NATURE**”.

Kudos to IESL Indore service team (Nilesh, Suresh, Gajanand) under the guidance of Technical Services (Pramod & Joby) and under the supervision of Mr. K. Manoj (Branch Manager, Indore) for their initiative and successful trial of **SERCON BIOLOGICALS**.

We are forwarding this case study to Technology so that they can study and standardize this **SERCON BIOLOGICALS** as COD reducing agent.

