



**TECHNICAL BULLETIN:
RAPID START-UP USING BIOFERMENTATION™**

1. POLLUTION PREVENTION PROGRAMS

Meeting Engineering and Environmental deadlines is becoming a more important part of every day business. ABS introduces a new line of on-site Biofermentors™ and programs to assist your company with complying with NPDES Permits on-time every time. The microbiology of a wastewater treatment system is living, consisting of a consortium of bacteria responsible for BOD removal. ABS has developed a process called Biomass Blue-printing™ which can be used to isolate the key micro-organisms from the biomass of a wastewater treatment plant, which are responsible for BOD removal and floc structure. These microbes can be grown in an on-site Biofermentor™ for incredibly rapid establishment of the biomass. Alternatively some customers prefer to use a “favorite” off-the-shelf bug product – No problem the Biofermentors can grow these too!! Using this valuable technology it is now possible to have new systems meet Environmental Compliance in DAYS NOT WEEKS.

2. BIOFERMENTORS™:

ABS has developed a line of on-site Biofermentors which can grow huge amounts of bacteria on-site to establish a new biomass rapidly to meet engineering construction deadlines and new NPDES permits on-time.

MODEL 250



MODEL 500



MODEL 750



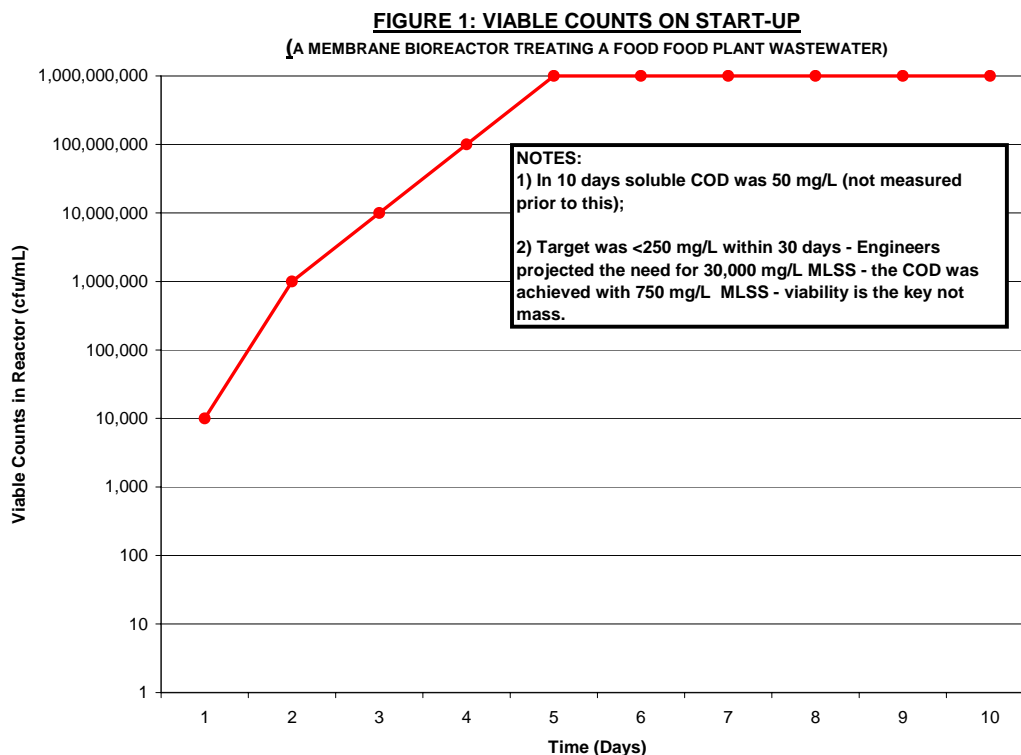
MODEL	250	500	750
Prod. Capacity (Ton/d)	1	2.5	6
Waste Flow (MGD)	<2	2-10	10+
Waste Load (lbs BOD/d)	<20,000	20-45,000	45,000+



These on-site Biofermentors™ are a “Plug and Play Biotechnology™”. Each Biofermentor™ is fully automated only requiring the operator to press the transfer button and add 2.5 lb bags of Bionutrient. All inoculum is screened by ABS ahead of time to ensure compatibility with treatment of the wastewater.

3. RAPID START-UP – SO RAPID THEY WERE IN UNBELIEF!!!

A membrane reactor treating a food plant waste was started up using an ABS Biofermentor™ and concentrated organics with nitrogen and phosphorus. The projected time for start-up by engineers was 30-days and the design requirement to achieve 30,000 mg/L MLSS. This start-up was achieved in 5 days – so fast that the Engineers were not ready to transfer the waste flow to the plant. The viability was held for 5 days further and when the waste flow was finally sent for treatment a final effluent COD of 50-100 mg/L was achieved immediately with a MLSS of only 750 mg/L.



4. BIOFERMENTATION™ PROGRAMS:

Call ABS @ 904-213-7994 to license your Rapid Start-up Program today.