## Dear sir,

We greatly admire more of engineering company and ACWA, OVIVO wise decision to use flat sheet membrane module in the wastewater treatment plant, smoothly operation and permeation the high superior effluent.

Ecologix Asia has successfully produced #EK-08 PVDF membrane plate (element) since it received suggestion with Japanese expert 10 years ago and encapsulated PVDF 0.05micron membrane authorized by Microdyne Germany. The size is same as Kubota membrane cartridge #510 and #7-510, which can be quickly replaced. Over the years, #EK-08 PVDF has replaced about 50,000 pieces of Kubota #510, #7-510 cPVC (0.2micron) membrane plate around the world, winning the appreciation and recommendation of users.

Information from the customer: Since the Kubota air diffuser is easy to be blocked by sludge, even according to Kubota's operation manual, an attempt is made to suck out the blockage sludge with "Venturi effect" 5 minutes per day, But this is ineffective, even if it takes 1 hour, it can only suck out the sewage, and it is impossible to suck out the sludge!

Without air bubbles entering the pitch (6mm) of each membrane plate, the membrane surface will be quickly stick by sludge, then the TMP is raised and the water discharged from the MBR module is reduced by 50%, which is the experience of most customers. The customer told us that the surface of PVDF membrane is not easy to stick by sludge, but, the Kubota element (cPVC membrane surface) is very easy to stick by sludge.



Kubota #510 element sludge caking



Ecologix PVDF element insert to Kubota module



PVDF element-without sludge caking!



## **Ecologix Element size and effective Area**

Element type: ■EK-08/PVDF, ■EK-08/cPVC Size: 490mm x 1,000mm x t.6mm Eff. Area: 0.86 m<sup>2</sup>/ each element

- EK-08 encapsulated PVDF membrane: we have replaced ~50,000 pieces of Kubota #510 element (cPVC membrane) in the Asia, Middle East, and United States.
- EK-08/cPVC (cPVC membrane): similar Kubota#510, #7-510

Element Type: EW-14, packing PVDF membrane

Size : 490mm x 1,500mm x t.6mm Eff. area :  $1.33 \text{ m}^2$ / each element

## It is well known that:

The chemical resistance and durability of Germany PVDF membrane is better than Kubota cPVC membrane, When the PVDF membrane is encapsulated to a membrane plate(element), it is extremely strong and not easy to be broken and damaged during pulled out and scrubbed!

The following 4 photos were taken when we replaced the Kubota cPVC membrane cartridge(element)

















## Sincerely suggest you,

switch to PVDF membrane cartridge at a best price as soon as possible, We look forward to hearing from you...