

IFFCO ERCO Effluent Treatment Plant

M/s. IFFCO – U.A.E's Edible Oil wing M/s. ERCO (Emirates Refining company) edible oil refining & packing facility in Port Khalid - Sharjah awarded its effluent treatment facility to MENA-Water under very qualitative cum technically competent and compliant category selection, to convert

its effluent from various processing units into re-claimed water to reutilizes for non-edible application such as cooling water/ chiller & boiler feed water quality.

PLANT
CAPACITY
250 m³/day



MENA-Water's comprehensive detailed engineering, world class premium equipment selection, dedicative onsite team makes the simulation into reality by 9 months duration with state of art technology.

This plant is designed to handle of 250 m³/day of oily effluent with inlet & outlet parameters as follows.

Equipment	Application
Micro Screen	Segregates fine particles
Controlled dosing pumps	Chemical dosing application
In-line pipe flocculator	Breaking of heavier oily molecules
Dissolved Air floatation unit	Removal of FOG, BOD, COD & TSS
Anoxic mixer	Nitrogen group decomposition
Aerobic mixer with air blower	Organic pollutants removal
M.B.R Membrane units	Effluent polishing
Centrifuge unit	Excess Sludge dewatering
Reverse Osmosis system	Desalination to less than 100 mg/l
Field instrumentation	Ease of process monitoring & control
Electrical control panel with PLC / HMI	Ease operation, controls & data logging



Effluents from different origin including domestic sewage ranges from ambient temperature to very hot medium homogenized, pumped to terminal lifting station, screened to 0.25 mm aperture, subjected to free FOG removal followed by D.A.F treatment via coagulation cum flocculation, anoxic chamber, aeration chamber, MBR filtration, reverse osmosis, sludge dewatering makes client's lengthy procedure laden hazardous water disposal in designated zones.



Parameters	Units	Raw Effluent	DAF outlet	MBR Outlet	RO outlet
B.O.D	mg/l	1100	200	5	Nil
C.O.D	mg/l	7250	800	42	15
T.S.S	mg/l	600	150	3	Nil
Free F.O.G	mg/l	150	40	2	Nil
Emulsified F.O.G	mg/l	800	40	3.5	Nil
T.D.S	mg/l	3500	3975	3850	100
pH	-	4 – 5.5	7.5	7.25	7.0

