

CASE STUDY

INTRODUCTION

GreEnviro Environmental Solutions has designed, supplied, commissioned 10 KLD Zero Liquid Discharge (ZLD) Ultra Filtration, Reverse Osmosis and Evaporator process for a mechanical industry.

CHALLENGE

To produce reusable treated water from tertiary treated effluent of mechanical Industry.

SOLUTION OFFERED

To achieve results compatible to RO feed water, Ultra Filtration process was employed. After the reduction of COD and suspended impurities (from UF) the water was fed to Reverse Osmosis System (Two stage RO). The water was recycled to be used for the process and boiler feed. Reject was then feed to Evaporator, wherein condensate water is used for boiler/ cooling tower purpose.

RESULTS ACHIEVED

The product water after UF

- Free from organic pollutants & suspended solids
- Turbidity < 0.1 NTU

The product water after Reverse Osmosis:

- Free from Color
- Recovery 80%
- TDS less than 50 mg/I

The product water after Evaporator:

- Free from Color
- Recovery 95%
- TDS less than 10 mg/I

BENEFITS TO CLIENT

- Restricts pollution and saves environment.
- High purity treated water being used for various applications
- Fully automatic system with minimum manual intervention
- Maximum recovery with minimal discharge
- Small footprint saved area is used for other utilities

