केन्द्रीय नमक व समुद्री रसायन अनुसंधान संस्थान
CENTRAL SALT & MARINE CHEMICALS RESEARCH INSTITUTE
वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

CSIR
The Innovation Engine of India
CSMCRI

Technology for demonstration

Treatment of ETP wastewater of oil industry

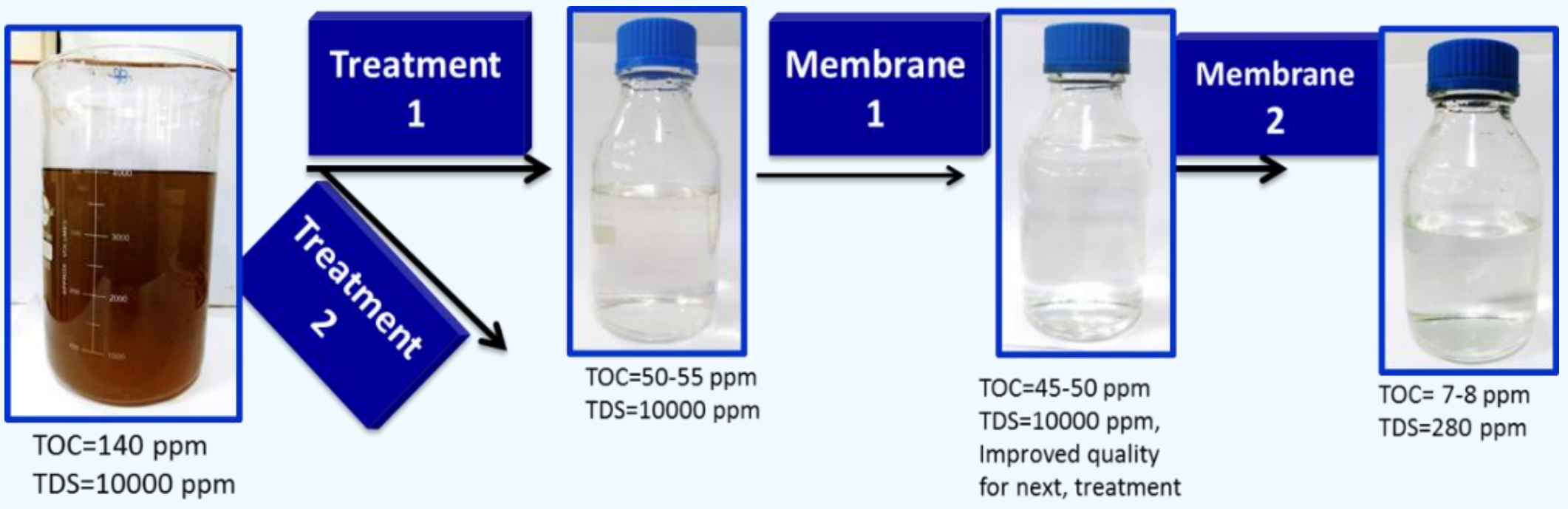
ETP Waste Water treatment

- Oil and gas recovery operations and similar industries
- The wastewater contains oil, gas, inorganic salts and soluble organics.

Conventional ETP outlet stream of oil industry, contains oil and gas (TOC=100-200 ppm), total dissolved solid (10000-120000 ppm) and soluble organics.

CSIR-CSMCRI has developed a hybrid process for the treatment of ETP outlet water. The process is based on pre-treatment followed by treatment with modified membrane. This process has been demonstrated at Mehsana, ONGC.

Example of treatment of ETP outlet water



Features of the process

- Hybrid process: Pre-treatment and membrane based treatment.
- Applicable for produced water.
- Reduces the TOC to about 2 ppm or less depending on the nature of the ETP outlet water.
- Reduces the TDS to 500-800 ppm.
- Water recovery of 60-70% depending on the TDS and organic load.
- Easy cleaning of the membrane system.

Scope

CSIR-CSMCRI always welcomes your participation to validate our technology for scaling up. We also welcome your proposal for co-development.

TRL-6

For enquiries please contact Dr. S. Kannan, Director, CSIR-CSMCRI, e-mail:director@csmcri.res.in, https://www.csmcri.res.in/