

# Case Study

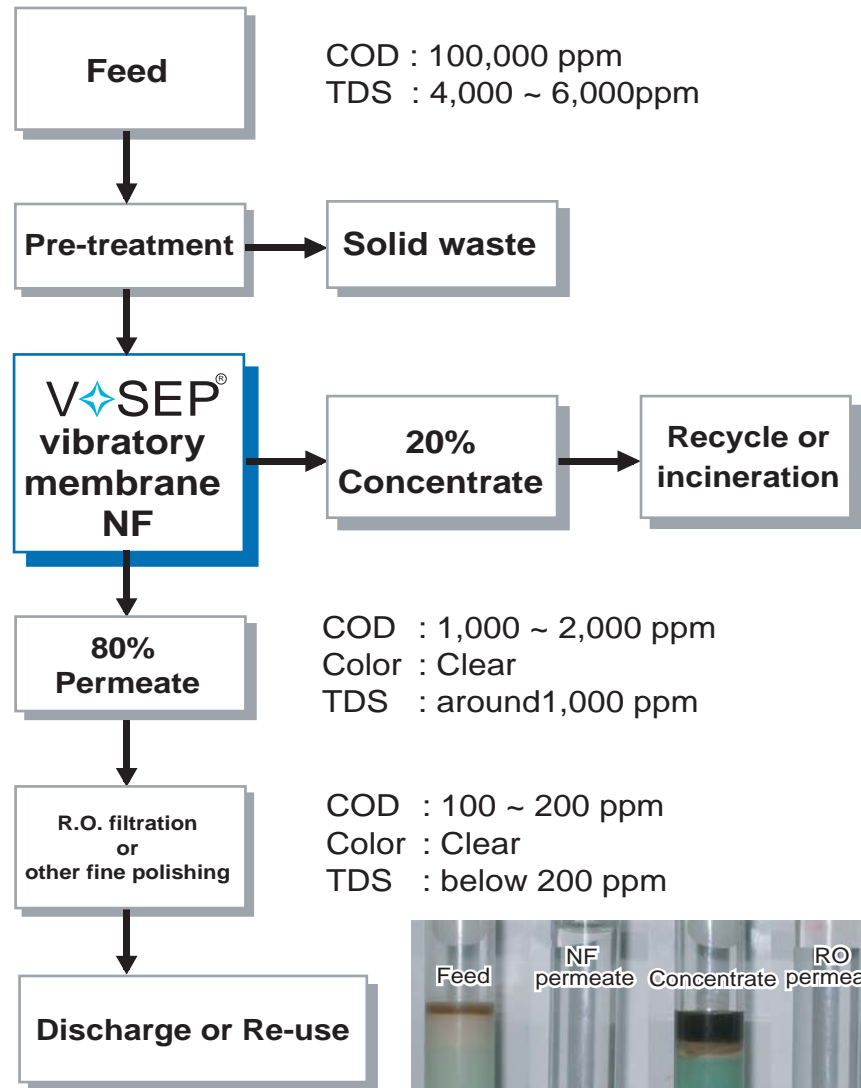
## Waste Emulsified Cutting Fluid Disposal

Disposal of emulsified cutting fluid is a very tough environmental pollution issue. It has high COD and oil / water fully emulsified. Conventional bio-chemical treatment consumes large amount of chemicals and high running cost yet still requires multiple post-treatment steps.

Conventional membrane treatment faces low flux and severe fouling issues.

VSEP vibratory membrane technology can simplify treatment process. It has high anti-fouling ability and high recovery ratio.

Concentrate can be put as fuel and permeate can achieve discharge standard.



V<sup>+</sup>SEP Membrane      Nano-filtration (NF)

Feed      Emulsified Cutting Fluid

Steady Flux      15 GFD or 25.5 LMH

Temperature      Room Temp. or 40°C

Pressure      400psi

Recovery Rate      70% ~ 80%

Flow Rate	40L /hr	660L /hr	1660L /hr
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Membrane Area	1.5 m <sup>2</sup>	40 m <sup>2</sup>	100 m <sup>2</sup>
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