



Veolia MPPE Technology

Woodside Pluto LNG - Australia

Woodside Pluto Project

Burrup Peninsula

- Pluto LNG has a production capacity of 4.3 million tons a year
- Operational since 2011

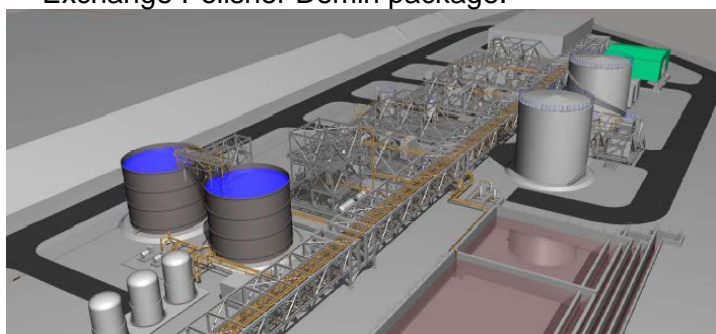


Challenge

Treatment of Produced Water and site Waste water for high standard discharge to sea and partial use for Boiler feed Water.

Veolia provided D&B of WW & Demin package:

- CPI & MPPE unit for toxic Hydrocarbon removal
- Membrane Bio Reactor for COD/BOD removal
- Tertiary Membrane Filtration
- Oxidation/Ozone & Activated Carbon filtration for polishing and feed to the 14 m³/h RO and Ion Exchange Polisher Demin package.



The MPPE process

MPPE stands for Macro Porous Polymer Extraction. Polymer beads contain a specific immobilized extraction liquid. Hydrocarbon contaminated water is passed through a column packed with MPPE particles. The hydrocarbons are extracted from the water at any designed efficiency up to 99.999%. The MPPE particles can simply be regenerated by heating with steam. The removed hydrocarbons are recovered as an almost 100% pure product. No other waste stream is created. No chemicals required, no off gasses produced.



Performance

MPPE unit removes:

- Dispersed oil (aliphatics)
- Dissolved and dispersed aromatics (BTEX) 99.5%
- Poly Aromatics (PAHs)

MPPE unit capacity 43 m³/h

- 100% extraction redundancy by one set of 2 columns
- Fully Skid mounted
- Full run test before shipment
- Size 12 x 10 x 11 m (L x W x H)
- Operational since 2011 to full satisfaction of client
- Chairman's award 2013

MPP & TiPSS Technologies

Veolia Water Technologies

Techno Center Netherlands B.V.

Celsiusstraat 34

6716 BZ Ede

The Netherlands

Phone: +31 (0) 318 664010

Email: mppsyste.ms@veolia.com

www.mppstechnology.com & www.tipsstechnology.com