

MRPL Mangalore Refinery & Petrochemicals Ltd (A subsidiary of Oil and Natural Gas Corporation Ltd)



EXPRESSION OF INTEREST (EOI)

For

Supply, Installation and Commissioning of system for Onsite Continuous Heat Stable Amine Salt Removal from Aqueous Amine Solution



EOI NO.: MRPL/2020/TS/PE/47

Mangalore Refinery and Petrochemicals Limited (MRPL) is a subsidiary of M/s Oil and Natural Gas Corporation Limited (ONGC).MRPL proposes to invite Expression of Interest.

EOI Details as follows

EOI No	MRPL/2020/TS/PE/47
EOI on Website	From 06.04.2020 To 06.05.2020
Closing date for submission of	Up to 17:00 Hrs. (IST) on 06.05.2020
EOI Documents available at	www.mrpl.co.on/eoi

Please contact below mentioned personnel for further details

Designation	Contact No	E-mail id
GM (Process)	+91-824-2882906	mathew@mrpl.co.in

All credentials/ Documents shall be addressed to

Group General Manager Materials Department Mangalore Refinery & Petrochemicals Ltd. Kuthethur PO, Via Katipalla, Mangalore – 575030. Karnataka - India

The envelope containing the document shall be superscribed <u>"Documents For Supply. Installation and Commissioning of system for Onsite Continuous Heat Stable Amine Salt Removal from Aqueous Amine Solution"</u>

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Expression of Interest (EOI)

For Supply, Installation and Commissioning of System for Onsite Continuous Heat Stable Amine Salt Removal from Aqueous Amine Solution at MRPL, Mangalore

Mangalore Refinery and Petrochemicals Limited (MRPL) is a Schedule 'A' Miniratna, Central Public Sector Enterprise (CPSE) under the Ministry of Petroleum & Natural Gas, Government of India. The 15 Million Metric Tonne Refinery has got a versatile design with complex secondary processing units and a high flexibility to process Crudes of various API, delivering a variety of quality products.

MRPL intends to install System for Onsite Continuous Heat Stable Amine Salt (HSAS) Removal from Aqueous Amine solution. Vendor's scope of work includes design, engineering, fabrication, supply, installation, commissioning and proving the performance of system to achieve HSAS Anion concentration < 0.5 % by weight in the amine network at MRPL, Mangalore as specified below,

Type of Amine = Methyl Di-ethanol Amine (MDEA)

Lean Amine strength = 35-42 %

Lean Amine Temperature = 45-55 Deg C

Available Lean Amine Pressure = ~ 10 kg/cm²

Lean Amine H_2S Loading = 0.01 mol H_2S /mol MDEA

Amine Inventory = 1650 m^3

Amine Circulation Rate = 500 m³/h

Estimated HSAS buildup rate = 6000 - 10,000 g/h as MDEA

Present HSAS Anion level = $\sim 1.8 \%$ by weight of total solution (4.5 % by weight as MDEA)

The effluent/waste from the HSAS Removal System should comply with Indian Environmental norms for disposal.

The objective of this EOI is to assess the availability of Proven Commercialized HSAS Removal Technologies and gather data for technology selection. Vendor should meet the following Qualification Criteria,

- 1) HSAS Removal Technology being offered must be commercially proven for HSAS Removal from Amine (MDEA) Treatment Application in Crude Oil Refinery. Vendor must have supplied installation for Amine treatment system with min. 250 m³/h MDEA circulation and 800 m³ inventory. Such installation(s) must be working continuously since the past 3 years. Vendor should provide details of such installation(s) along with the contact information of the reference company for clarification of MRPL queries, if any.
- 2) Vendor should be willing to share the information requested by MRPL, necessary to aid technology selection.
- 3) Vendor should not be under a holiday list/blacklist of any state/central government department or undertakings (including PSUs) in India. A declaration to this effect shall be submitted in the form of an affidavit along with the EOI.