

OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION A

(To be completed, filled in, signed and stamped by the principal)

ANNEXURE 'A'

Material: Methyl Di Ethanol Amini (MDEA) for Dakhni Plant
 Tender Enquiry No: PROC-FA/CB/P&P-4176/2018
 Due Date:
 Evaluation Criteria: FULL PKG.

SCHEDULE OF REQUIREMENT

| Sr No | Description | Unit | Quantity | Unit Price (FOB) | Total Price (FOB) | Unit Price C & F BY SEA | Total Price C & F BY SEA | Deviated From Tender Spec. If Any |
|-------|--|---------------|----------|------------------|-------------------|-------------------------|--------------------------|-----------------------------------|
| 1 | METHYL DI ETHANOL AMINE (MDEA) FOR H2S REMOVAL PLANT. SPECIALTY AMINE SS (DOW),JEFFTREAT M. (HUNTSMAN),GAS/SPEC SS (INEOS) OR EQUIVALENT | Kilo Grams | 150500 | | | | | |

Note:

1- Bid bond: Pursuant to tender clause # 2.2, 11.4, 13 & 35.3.2, bid(s) must be accompanied by an upfront bid bond in the form of pay order/ demand draft or bank guarantee issued by scheduled bank of Pakistan or a branch of foreign bank operating in Pakistan for an amount of US \$6,000/- (United States Dollar Six Thousand Only) or equivalent Pak Rupees, with technical bid and valid for 150 days from the date of opening of the bids. The bank guarantee must be issued in accordance with the format as per Annexure-C of the tender documents.

2. Terms and conditions: Bidders are advised to carefully read all the terms and conditions of the Tender Document available at OGDCL web site in the master tender document.

3- Shipment from ACU member Countries: In case of shipment from ACU member countries, the LC beneficiary should be of that particular country from where the consignment is being shipped.

4. Summary rejection criteria: - The summary rejection criteria at clause # 35 of the tender document may also be examined carefully. Any bid not meeting the criteria spelled in the clause # 35 shall be summarily rejected without any right of appeal. Delivery period of the quoted product should not be more than 90 days after opening of Letter of Credit (LC).

5. Foreign Procurement Payment Terms (also available at OGDCL website (Tenders Tab)):

(i) Tender value less than or equal to US \$200,000:

Payment to the Contractor/ bidder in foreign currency shall be made by establishing in favor of the Contractor an irrevocable Letter of Credit (hereinafter called the L/C). 70 % Payment (s) under the L/C will be made for the FOB/ CFR / CPT (as the case may be) price of material of each shipment upon submission of the shipping documents. Balance 30% Payment will be released after receipt, inspection and acceptance of material.

(ii) Tender value more than US \$200,000:

Payment to the Contractor/ bidder in foreign currency shall be made by establishing in favor of the Contractor an irrevocable Letter of Credit (hereinafter called the L/C). 80 % Payment (s) under the L/C will be made for the FOB/ CFR / CPT (as the case may be) price of material of each shipment upon submission of the shipping documents. Balance 20% Payment will be released after receipt, inspection (in addition of pre-shipment inspection) and acceptance of material.

Methyl Di Ethanol Amine (MDEA)

OGDCL invite bids for the supply of 1,50,500 Kg of selective Methyl Di Ethanol Amine (MDEA) for the selective removal of H₂S and CO₂ at their Dakhni oil & gas processing plant in accordance with the terms & conditions specified in the tender documents.

1. Chemical Specifications

| | |
|--------------------------------|---|
| Chemical Formula | CH ₃ N (C ₂ H ₄ OH) ₂ |
| Appearance | Clear & substantially free of suspended matter |
| Colour | 150 APHA (Max.) |
| Purity or MDEA Wt. % | 99 % by Wt. (Min.) |
| Moisture | 0.2 – 0.5 % |
| Specific Gravity at 20/20 °C | 1.040 – 1.044 |
| Equivalent Mass | 118 – 121 |
| Refractive Index at 20 °C | 1.4694 |
| Viscosity at 20 °C | 101 cPS |
| Boiling Point | 247 °C |
| Solubility in water | 100% |
| Distillation Range at 760 mmHg | L.B.P. 242 °C (Min) |

2. Technical Specifications

The material (MDEA) should meet the specification of following recommended brand(s):

- A. Specialty Amine SS (Dow),
- B. JEFFTREAT M (Huntsman),
- C. GAS/SPEC SS (INEOS) OR
- D. AapT-100 or Equivalent brand as per above brand(s)

Bidder should invariably mention the exact physical and chemical properties of their quoted product. Only to write conforming to or OK will not be acceptable.

3. Basis for the selection of MDEA

Solvent supplier shall offer the chemical (MDEA) based on guaranteeing the product gas specifications as per following data:

3.1. Sour / Feed /Raw Gas Composition

| Components | Mole % |
|------------------|-------------|
| C ₁ | 84.80 |
| C ₂ | 3.49 |
| C ₃ | 1.18 |
| i-C ₄ | 0.28 |
| n-C ₄ | 0.32 |
| i-C ₅ | 0.09 |
| n-C ₅ | 0.06 |
| C ₆₊ | 0.02 |
| N ₂ | 0.384 |
| CO ₂ | 3.90 |
| H ₂ S | 6.28 |

3.2. Treated / Product / Sweet Gas Composition

| Components | Mole % |
|------------------|---------|
| C ₁ | 92.30 |
| C ₂ | 4.50 |
| C ₃ | 1.58 |
| i-C ₄ | 0.14 |
| n-C ₄ | 0.07 |
| i-C ₅ | 0.04 |
| n-C ₅ | 0.04 |
| C ₆₊ | 0.05 |
| N ₂ | 0.41 |
| CO ₂ | < 0.5 % |
| H ₂ S | < 4 ppm |

4. Necessary Data

4.1 Bid Summary Sheet

Bid summary sheet must be listed following information:

| S. No. | Description | |
|--------|-------------|--|
| 01 | A | Name of Bidder |
| | B | Name of authorized signatory of bidder |

| | | | |
|----|---|--|--|
| | C | Complete address, phone, fax numbers and email of bidder | |
| 02 | A | Name of Local agent | |
| | B | Name of authorized signatory of local agent | |
| | C | Complete address, phone, fax numbers and email of local agent | |
| 03 | A | Name of manufacturer | |
| | B | Complete address, phone, fax numbers , email and website of manufacturer | |
| 04 | | Brand Name of Product | |
| 05 | | Country of origin/manufacturing facility | |
| 06 | | Port of shipment | |
| 07 | | Minimum shelf life of product not less than 3 years | |

4.2 Clients / Sales Achievement in Pakistan (oil & gas companies)

Bidder has to furnish two letter of recommendation/performance comments of the client/user from any reputed petrochemical company whom they have supplied not less than 20,000 Kg of MDEA and one letter should preferably from Pakistan while the Bidder who supplied the same chemical to OGDCL through bidding procedure and subsequently having satisfactory performance is not required to submit letter of recommendation while attach the copy of PO with quantity supplied.

| S.No | Name of client with address and phone Nos. | Contract/Purchase order No. with date | Quantity Supplied |
|------|--|---------------------------------------|-------------------|
| | | | |
| | | | |
| | | | |

4.3 Necessary Attachments with Bid

| S.No | Description | Attached / Provided or Not |
|------|--|----------------------------|
| 01 | Complete product data memorandum, application notes and technical specifications. | |
| 02 | Simulation study/report of an identical plant | |
| 03 | MSDS of the quoted product | |
| 04 | Original authority letter issued by the manufacturer to bidder and local agent for quoting their product against the subject tender enquiry. | |
| 05 | Client list in Pakistan as per format (4.2) | |

| | | |
|----|---|--|
| 06 | Valid ISO 9001 and 14001 certificates of manufacturer | |
| 07 | 3 rd party Fresh lab analysis report(s) of the quoted product in respect of specifications of the quoted product | |
| 08 | Compatibility report(s) of the quoted product in respect of in use MDEA and Antifoam as per tender clause 6.4 | |

5. Packing

- 5.1 Material will be supplied in brand new drums. Packing should be of international standard (pelletized packing).
- 5.2 Each drum should be clearly marked with contract no., name of chemical / brand, name of manufacturer, net and gross weights, lot/batch name and expiry date.

6. Instructions to Bidder/Terms & Conditions

OGDCL invite bids for the supply of 150,500 Kg of selective Methyl Di Ethanol Amine (MDEA) for removal of H₂S and CO₂ in natural gas stream to achieve sale gas specs as per Claus 3.2 in accordance with the terms and conditions listed below:

- 6.1 Only genuine manufacturers having manufacturing experience at least 10 years will be considered appropriate for technical evaluation, trade houses and stockiest will not be treated as manufacturers.
- 6.2 Bidder can submit simulation report of a plant identical to our Dakhni plant for their quoted product with bid. Vendor/bidder shall also provide all possible charts/graphs for estimating the performance of Selective MDEA necessary for plant operation during normal and abnormal conditions. Vendor shall recommend percentage of dilution for Selective MDEA and provide the procedure for dilution of Selective MDEA.
- 6.3 Vendor shall guarantee at its letter head that Selective MDEA chemical supplied shall fulfill the process requirements as indicated in Section 3.2. Vendor shall be liable to identify/provide the details of requirements for any equipment/process modification which may be required to meet the requirement provided in Section 3.2.
- 6.4 Bidder will have to confirm equivalency/compatibility of their offered MDEA with Huntsman, INEOS and Dow brands MDEA & AdapT-100 for future mixing of two brands. And also confirm the compatibility of their offered MDEA with currently in use antifoam (UCARSOL GT-8715) and Max Amine 70-B.
- 6.5 OGDCL will conduct a 3rd party pre-shipment inspection at own cost. Bidder will responsible to arrange a fully sponsored visit of 02 OGDCL officials to manufacturing facility for training and in order to authenticate quality control setup

of manufacturer at their manufacturing facility. Bidder will have to quote the visit cost separately which will be included in financial evaluation however payment will only be made if OGDCL avail the visit.

7. Technical Services

- 7.1 Local agent will be responsible to arrange their technical expert visit free of charge to OGDCL Dakhni Gas Processing Plant for troubleshooting throughout the usage of their supplied MDEA on as and when required basis (not more than three visits/year).
- 7.2 Local agent will be responsible to arrange complete analysis of MDEA sample(s) from manufacturer's testing / R&D facility on as and when required basis. Analysis charges must be quoted separately (not included in financial evaluation) and shall be valid for 02 years however payment will only be made for such analysis if availed by OGDCL as per quoted rates. Analysis of MDEA samples includes sample collection, transportation to lab facility and covered all general parameters, gas chromatographic analysis, metal scan and impurities.
- 7.3 Acceptance of following perpetual technical support.
- i. Telephonic / email conversations, no limits
 - ii. Update of new product/development