



रामागुण्डम फर्टिलाइजर्स एण्ड केमिकल्स लिमिटेड

Ramagundam Fertilizers & Chemicals Limited

(A Joint venture company of NFL, EIL & FCIL)
3rd & 4th Floor, Mohta Building, 4, Bhikaji Cama Place
New Delhi - 110 066

**BIDS ARE INVITED
FOR SUPPLY, INSTALLATION & TRAINING OF
"GAS CHROMATOGRAPHS FOR CHEMICAL LABORATORY"**

E-Tender No: RFCL-21

AUGUST-2020



Ramagundam Fertilizers & Chemicals Limited

(A Joint venture company of NFL, EIL & FCIL)

3rd & 4th Floor, Mohta Building, 4, Bhikaji Cama Place, New Delhi - 110 066

Phone: +91-11-26701441/1442

Email: siva@rfcl.co.in, sprakash@rfcl.co.in

Ref. No. RFCL/C&P/GAS Chromatographs/2020/1

Date: 19.08.2020

SUPPLY, INSTALLATION, COMMISSIONING & TRAINING OF "GAS CHROMATOGRAPHS FOR CHEMICAL LABORATORY"

SPECIAL INSTRUCTIONS TO TENDERERS

1. Mode of Tendering:

Ramagundam Fertilizers And Chemicals Ltd. NEW DELHI (A Joint Venture of NFL, EIL, FCIL, HTAS, GAIL & Govt. of Telangana) has decided for **Supply, Installation, Commissioning & Training of "GAS Chromatographs"** through e-tendering. The NIT will be posted on website www.tenderwizard.com/RFCL from where the registered vendors will be able to download the tender documents for participation in the tender and submit their bids online. The tender submission, tender closing and opening will be done electronically and online. The NIT shall also be posted on company's homepage i.e., www.rfcl.co.in

RFCL has appointed **M/s. Antares Systems Limited, Bangalore** as service provider for carrying out e-Procurement. Also, as per IT ACT 2000, use of digital signature certificate shall be mandatory for participating in e-tendering process.

It is presumed that accordingly, you can submit your bid and participate in this tender as per the requirements of the system. However, in case of any help/clarification, you may contact any one of the following:

a) RAMAGUNDAM FERTILIZERS AND CHEMICALS LTD-

1) Mr. Siva Kumar, CM (C&P) RFCL, Corporate Office, 4 th Floor, Mohta Building, Bhikaji Cama Place, NEW DELHI-110066 Mob No. 9980699556 E mail: siva@rfcl.co.in	2) Mr. Shashi Prakash, M (C&P) RFCL, Corporate Office, 4 th Floor, Mohta Building, Bhikaji Cama Place, NEW DELHI-110066 Mob No. 9717731580 E mail: sprakash@rfcl.co.in
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b) M/s. Antares Systems Limited, New Delhi

1	e-Tendering Registration/ Sign Up Queries	Registration Help Desk	011-49424365	twhelpdesk680@gmail.com
2	DSC Queries	Help Desk	011-49424365	twhelpdesk377@gmail.com
3	For e-Tendering Support	Help Desk	011-49424365	rfcleprochelpdesk@gmail.com
4		Mr. Kamal Mishra Mr. Shankar Kumar	8800115821 8800378610	kamalmishra@antaressystems.com shankar.k@antaressystems.com

2. (a) Pre-Requisites for System using e-Procurement sites:

- Windows 7, 8, 10 professional or higher version
- A computer system with at least 1 GB RAM and Internet Connectivity.
- Internet Explorer 8.0, 9.0 and above or Mozilla Firefox 51 and above.
- Google Chrome Version 42 and above.
- Internet Connectivity with at least 2Mbps speed.
- Java Run Time Engine (JRE – 1.8.0) or higher.
- Microsoft Office 2003 with MS Word and MS Excel
- Adobe Acrobat Reader, PKI Installation Driver for Digital Signature

(b) Pre-Requisites for DSC Registration:

- The Vendor becomes a valid Vendor only after the registration of the DSC
- Vendors need to possess a valid DSC for participating in e-Tendering (class II/III DSC)
- Vendors need to procure DSC 24 hrs prior to DSC Registration.
- It can be procured from any of the Certifying Authority registered under CCA India. eg Sify, nCode, eMudra etc
- DSC can also be procured from the e-tendering service provider i.e. M/s Antares Systems Limited.
- Respective DSC Drivers needs to be installed.
- DSC needs to be physically inserted into the system.
- DSC should appear in the Browser.
- DSC of the Vendor will mapped with their User Id once they Login first time.

Note - For more details, refer User Manual section on Home Page of e-procurement portal i.e. www.tenderwizard.com/RFCL

(c) Pre-Requisites for Login Credentials:

- For Login credentials, Vendor need to register/ Sign-up on the e-procurement portal by clicking on Sign Up link available at home page.
- Vendor shall safely keep their User ID and password, which will be issued by the service provider upon registration/ Sign-up.
- Vendors are advised to change the password immediately on receipt from the e-Procurement portal.
- Vendor shall not disclose their User ID as well as password and other material information relating to the bidding to any one and safeguard its secrecy

3. All the vendors participating in the online e-procurement have to abide by the process involved in the entire workflow of the e-procurement.
4. RFCL is not responsible for any mistake made by the vendor at the time of bidding process. In case any vendor submits an invalid bid due to any reason including typing mistake / human error, such invalid bid will be disqualified and such vendor shall not be allowed to further participate in that tender. The remaining process shall be completed considering the other valid bids.
5. For submitting price bid through e-Auction, the successful Pre-qualified Vendors will have to use a Class II/ III Digital Signature Certificate issued by any India CA approved by CCA of India as per IT Act 2000.
6. It is mandatory for the vendors to use the digital certificate in all their bidding Process.
7. It is the entire responsibility of the vendors to protect their own login id and Password and keep their digital certificate safe so that is not misused by any other person.

8. Tender Schedule:

The notice of issue of enquiry and detailed schedule for downloading the NIT documents, submission of bids, tender closing, tender opening, and subsequent clarification/amendment in schedule etc. shall be available on the above mentioned website against this tender.

Tender Schedule for Supply, Installation, Training, Testing and Commissioning of "GAS Chromatographs" is –

Sr. No.	Tender Stage	Date & Time
1	Start Tender Document Download	19.08.2020 at 11:00 hrs.
2	Pre-bid meeting	25.08.2020 at 11:00 hrs
3	End Tender Document Download	01.09.2020 at 15:00 hrs.
4	Due/ last date of submission Bids	01.09.2020 at 15:30 hrs.
5.	Techno-commercial Bids Opening	01.09.2020 at 15:45 hrs.
	Price Bid Opening	To be intimated

Note: After expiry of date & time for a particular activity as mentioned above, that particular activity cannot be done unless the schedule for the same is extended/amended. Similarly, no activity can be done before start date & time specified for that particular activity unless the schedule for the same is postponed/amended.

9. The activity defined for vendors are Download of Tender document, Bids Preparation, Uploading of bids and Reverse Auction. Matching of Prices will be done manually.
10. During the Download sequence, the vendors who have been invited will be able to download the main tender document and the supporting documents.

11. Tender Opening:

The tenders will be opened electronically by us from our NEW DELHI office in the presence of representatives of Vendors who wish to attend the price bid opening. The submission of bids may however be done by vendors from their office or from place of their choice or they can visit our NEW DELHI office and use RFCL's facilities for preparation and submission of their bids. However, bids can't be submitted after the bid submission due date & time as per the schedule.

- 12 RFCL takes no responsibility for delay, loss or non-receipt of EMD sent by post/courier.
13. RFCL reserves the right to reject or accept any tender without giving any reason.
14. The bids not accompanied with the requisite Earnest Money may not be opened.

15. SYSTEM FAILURES AND REMEDIAL MEASURES THEREOF/COURSE OF ACTION TO BE FOLLOWED

RFCL shall make all out efforts to rectify the problem(s) leading to system failure during the live tendering. However, in case the system could not be restored within the reasonable time period as deemed fit by RFCL, the following remedial measures shall be taken under such an eventuality:

1.	Tender is prepared and released but vendors are not able to submit their bids.	The due date of closing/opening shall be extended suitably.
2.	Bids have been submitted but the same cannot be opened by RFCL.	The due date of opening shall be extended suitably.
3.	Bids including price bid have been opened and reverse auctioning could not start.	Under such eventuality, the reverse auction event shall be rescheduled and the new schedule shall be informed to all the bidders who have participated in the tender &



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	submitted their bids online.
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16. **Name & Address of Consignee:**

GM (MECH.), Ramagundam Fertilizers And Chemicals Ltd Distt- Pedapalli, Telangana
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17. **Payment Mode:**

Payment shall be released by ECS (Electronic Clearing System) or EFT (Electronic Fund Transfer). Successful vendors shall provide the requisite details of their Account No., Name & Branch code of Bank, Acceptance/request for release of payment by ECS/EFT, along with their 'Bank mandate form and cancelled cheque', within 10 days of issue of LOI/PO to the Finance and C&P deptt of RFCL, Ramagundam Plant.

18. **GST Nos.**

Unit	GST NO.
Ramagundam, Telangana	36AAHCR2335P1ZY

19. The offers submitted by MSE, shall be considered in Accordance With Public Procurement Policy for MSEs of March 2012. The parties claiming benefits Under MSEs policy must enclose requisite valid Registration Certificate as per said policy along with their offer. Please also indicate whether the MSEs owned by SC/ST Entrepreneurs. If yes, please attach relevant certificate issued by authorities concerned. However, RFCL reserve the right to cancel the order (if any) and blacklist/debar a firm in case it is determined that the firm benefitted wrongly from the Public Procurement Policy. Few Highlights of the benefits proposed to MSMEs are as under:

- *There is an exemption from payment of earnest money to registered MSEs (Applicable only for Manufacturers and not to dealers).*
- *MSEs quoting price within price band L-1 + 15%, when L1 is from someone other than MSE, shall be allowed to supply at least 20% of tendered value at L-1 subject to lowering of price by MSEs to L-1.*

20. The rates should be quoted as per price bid given in the enquiry only. Quotation should be valid for a minimum period of 120 **days** from the date of opening of the tender (Technical bid) and should be on FOR **RFCL Ramagundam** (Telangana), **including transit insurance**. Transit Insurance shall be covered by supplier. The rates should be quoted both in figures and in words.
21. Your GST Registration No. and Permanent Account No., allotted by the concerned Department should be mentioned in the quotation positively.

Thanking You

For & On Behalf Of Ramagundam Fertilizers and Chemicals Limited

(C. Sivakumar)

Chief. Manager (C&P)

ANNEXURES

S. No.	Annexures	Particulars
1.	Annexure- I	List of Items and Eligibility Criteria
2.	Annexure- II	General Terms & Conditions of Notice Inviting Tender
3	Annexure-III	Technical Specifications
	Annexure- IV	Checklist For Bidder's Confirmation
3.	Annexure- V	Price Bid Format
4	Annexure- VI	BG Format for EMD
5	Annexure- VII	BG Format for SD
6	Annexure- VIII	Integrity Pact



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ANNEXURE-I

List of Item for which bids are to be invited

Sr.No.	Item Description	Qty.	UOM
GAS CHROMATOGRAPHS AS PER ANNEXURE-III			
1	Natural Gas & Product H ₂ , Flue gas (Ar & O ₂) with suitable detectors, columns and other standard accessories	1	No.
2	Process gas & Syngas (along with NH ₃) with suitable detectors, columns and other standard accessories	1	No.
3	Trace CO & CO ₂ and Process gas, product CO ₂ with suitable detectors, columns and other standard accessories	1	No.
4	Sulphur compounds in Natural gas (with SCD) with suitable detectors, columns and other standard accessories	1	No.
5	For trace amounts of dimethyl ether, methanol, water, methyl format, acetone, methylethylketone, higher alcohols and air in gases containing Hydrocarbons with suitable detectors, columns and other standard accessories	1	No.
6	Gas distribution panel for He, N ₂ , H ₂ , zero air	5	No.
7	Gas purifier panel for He, N ₂ , H ₂ , zero air	5	No.
8	SS tubing with sleeves (1/4 inch diameter) for each gas from gas cylinder to GC	5	No.
9	Single stage/two stage regulators with gauge	5	No.
10	Manual Changeover arrangement for gas cylinders	5	No.
11	2-Microns filters for sample line	5	No.
12	One complete set of columns as spare for each GC	1	SET
13	Software as mentioned in Technical Specifications	5	No.
14	Desk top computer for GC	5	No.
15	Network compatible One laser jet printer with auto duplex print	1	No.
16	Operational Manuals/Valve Diagrams for each GC	1	SET
	Documentation : IQ / OQ	5	SET
17	Installation and Training at RFCL		
18	Standard OEM Warranty for 1 year for each GC		
19	Technical data sheet/brochure/ catalogue for the quoted model GCs		
CALIBRATION GAS MIXTURE CYLINDERS 10 LIT CAPACITY AS PER ANNEXURE-III			
20	Natural gas composition and sulphur compounds	1	No.
21	Primary reformer outlet	1	No.
22	Secondary reformer outlet	1	No.
23	High temperature shift converter outlet	1	No.
24	Low temperature shift converter outlet	1	No.
25	CO ₂ Absorber outlet	1	No.
26	Ammonia Converter outlet	1	No.
27	Product CO ₂	1	No.
28	Flue gas	1	No.
29	Trace CO & CO ₂	1	No.
30	Trace Sulphur component in NG	1	No.
31	Trace Organic Impurities in gas	1	No.

Eligibility Criteria for SUPPLY, INSTALLATION & TRAINING OF
"GAS CHROMATOGRAPHS FOR CHEMICAL LABORATORY"

S. No.	Conditions	Documents required (To be submitted along with Technical bid)
1.	<p>Bidder should be either manufacturer / Authorized dealer / supplier having successful experience during the last Five (5) years.</p> <p>Note: "The last 5 years shall be counted from last date of the preceding month in which tender has been Issued."</p>	<ul style="list-style-type: none"> i) Bidder must submit the copy of valid industrial Licence issued by Statutory authority for being a manufacturer along with ISO certificate/ GST Registration certificate / Udyog Adhaar / certificate issued by statutory authority / NSIC certificate or equivalent certificate. ii) In case the manufacturer wants to quote through their authorized dealer/distributor or their authorized dealer wants to quote separately then authorization certificate from the manufacturer is required in addition to (i) above . iii) Authorization letter from the company on behalf of the person signing the document be provided with technical bid. iv) For Proprietorship firm - Name of the proprietor to be mentioned. Affidavit of proprietorship in original duly notarized (Latest). v) For partnership firms –Affidavit in originals duly notarized, confirming the current status of the firm along with names of the partners. Copy of partnership deed duly notarized (latest) to be submitted.
2.	<p>The bidder shall submit documentary evidence with respect to experience of having successfully completed / executed at least one Order having two Qty: 2 of Gas Chromatographs during the last two years.</p> <p>Note:</p> <ul style="list-style-type: none"> • "The last 2 years shall be counted from last date of the preceding month in which tender has been Issued." • The value & Qty should be corresponding to the 100% value of the each item(s) quoted by the bidder. 	<ul style="list-style-type: none"> • Documentary evidence (Relevant P.O. and Copies of Invoices Or Delivery Orders) should be enclosed from respective customer(s). • The contact details of Customer(s) may be mentioned in order to verify the antecedents.
3.	<p>The Minimum Annual financial turnover shall not be less than Rs 305 Lakhs (<i>Rupees Three hundred and Five lakhs only</i>) in at least one of the immediate Three preceding financial years as on the date of issuance of this Tender/Enquiry.</p>	<p>Bidder shall submit financial standing through Audited* Balance Sheet/ Profit & Loss Account for the last three financial years. (For 2017-18, 2018-19 & 2019-20)</p> <p>* Where audited accounts are not mandatory as</p>

	<p>Note:</p> <ul style="list-style-type: none"> In case financial year closing date is within 6 months of date of issue of enquiry and audited annual report of preceding financial year is not available, bidder has the option to submit the financial details of the three previous years immediately prior to the last financial year. Otherwise, it is compulsory to submit the financial details of the immediate three preceding financial years. (Example, In case ,audited annual report of immediate preceding financial year (year ending 31st March) is not available and where enquiry issue date is up to 31st December, the financial details of the three previous years immediately prior to the last financial year may be submitted. However, in case the enquiry issue date is after 31st December, it is compulsory to submit the financial details of the immediate three preceding financial years only.) In case bidder is having subsidiaries but only a single consolidated annual report is prepared as per prevailing law of land and audited which includes the financial details of their subsidiaries, consolidated audited annual report shall be considered for establishing the financial criteria subject to statutory auditor /chartered accountant of the bidder certifying that separate annual report of Bidder (without the financial data of subsidiaries) is not prepared and audited. <p>Further, in case a bidder is a subsidiary company and separate annual report of the Bidder is not published, but only a consolidated annual report of the parent company is available, consolidated annual report shall be considered for establishing the financial criteria subject to statutory auditor of Parent Company /Chartered accountant of the Bidder certifying that separate annual report of the Bidder is not prepared and audited.</p>	<p>per law, bidder can submit financial standing duly certified by practicing Chartered Accountants (not being an employee or a director or not having any interest in the bidder's company).</p>
4.	<p>The net worth of the bidders should be positive for the Financial year 2019-20 ending 31.03.2020.</p>	<p>A Copy of Audited* Balance Sheet should be submitted in support of your claim.</p> <p>* Where audited accounts are not mandatory as per law, bidder can submit financial standing duly certified by practicing Chartered Accountants (not being an employee or a director or not having</p>



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		any interest in the bidder's company).
5.	<p>Bidder should have minimum working capital of Rs. 30.46 lakhs as per Audited Financial result of FY (Current Financial year in which tender has been issued).</p> <p>"Working capital should be current assets minus current liabilities.</p>	<p>Copy of audited balance sheet for the Financial year ending 31.03.2020 should be submitted.</p> <p>Or, Requisite document issued either from any Indian scheduled Bank (except co-operative bank and Gramin Bank) for availability of unutilized fund based line of credit for at least of Rs 80 Lakhs as on preceding month in which tender has been issued.</p>
6.	<p>I. Bidder Must not be black listed by any government department/public sector undertaking/co-operative Unit.</p> <p>II. Bidder must not be delisted / on Negative List by any government department/public sector undertaking/co-operative Unit in the last two years, as on date of participating in the tender.</p> <p>III. Bidder must not be on the Holiday list of RFCL.</p>	<p>Self-certification(s) for both should be submitted on Party's letterhead for the same.</p>



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ANNEXURE-II

GENERAL TERMS & CONDITIONS

1.00 SUBMISSION OF TENDERS

- 1.01 The tenders duly accompanied with bids, offered product catalogue as well as all necessary documents will be submitted Online at : www.tenderwizard.com/RFCL All letters/ Correspondence are addressed to:

Chief Manager (C&P)

Ramagundam Fertilizers and Chemicals Ltd,
3rd & 4th Floor, Mohta Building, Bhikaji Cama Place,
New Delhi – 110066.

- 1.02 Tenderers are requested to scrutinize the terms and condition of this tender thoroughly along with the General Terms and conditions etc. as given in tender documents.

- 1.03 No amendment to the tender would be admissible under any circumstances, whatsoever after the closing date and time of receipt of tenders.

2.00 COMPENSATION FOR SUBMISSION OF TENDERS:

The tenderer shall not be entitled to claim any cost, charges, or incidentals for/or in connection with the preparation of and submission of their tenders, though RFCL may withdraw invitation to tenders, or reject any, or all tenders without assigning any reason thereof.

3.00 CHANGES IN TENDER SCHEDULE:

RFCL reserves the right to change/amend the tender schedule (date and/or time) and shall intimate all the tenderers well in time by email, of such changes along with notice of revised schedule. However, it shall be the responsibility of the vendor to visit the designated website regularly as per the time schedule to get the details of any such changes, as the same shall be available against this tender on the said website. RFCL shall not be responsible if a vendor is not able to participate in any activity related to this tender due to change in tender schedule.

4.00 ACCEPTANCE/REJECTION OF BIDS:

RFCL reserves the right to accept or reject, at their sole discretion, any bid/all bids in whole or in part without assigning any reasons thereof.

5.00 VALIDITY OF TENDERS:

The tenders must be valid for acceptance for 120 (One Twenty) days from the techno-commercial bid opening date.

6.00 EARNEST MONEY:

- 6.01 Tenderers must submit Earnest money deposit of Rs. **1,00,000/-** (Rupees One Lakh Only). The tenderers will have the option of submitting the EMD either in the form of a Crossed Demand Draft favouring Ramagundam Fertilizers and Chemicals Ltd. and issued by any scheduled/nationalized bank payable in New Delhi (under this option the details of DD No. & Date, amount, bankers name etc has to be submitted in relevant field/column of online module) or by online payment mode. The charges, if any, for online payment or for DD for submission of EMD will be borne by bidder. Tenders without earnest money deposit are liable to be rejected. In case of submission of EMD by DD, it should be ensured by the vendor that the original DD is received by RFCL before opening time of techno-commercial bids for verification of the details of DD given online by the vendors.



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EMD can be deposited in RFCL's account through RTGS/NEFT & details of this transaction with UTR No. To be submitted along with technical bid for verification. RFCL's Bank details for RTGS/NEFT are as follows:

- | | | |
|---------------------|---|---|
| a) Beneficiary Name | : | M/S. RAMAGUNDAM FERTILIZERS AND CHEMICALS LIMITED. |
| b) Name of Bank | : | STATE BANK OF INDIA, |
| c) Branch | : | Commercial Branch, 70, The Great Eastern Centre, Nehru Place, New Delhi- 110 019. |
| d) Branch code | : | 04298 |
| e) IFSC No. | : | SBIN0004298 |
| f) Current Account | : | 36530729001 |

NOTE: If bidder opts to submit EMD through RTGS/NEFT then he/she shall submit copy of such transaction details immediately to siva@rfcl.co.in and sprakash@rfcl.co.in.

- 6.02 Earnest money shall be forfeited at the sole discretion of RFCL in case tenderer after intimation from RFCL of the acceptance of his tender, either wholly or in part, refuses to accept the Purchase Order/or changes any of the conditions of the tender or changes the price and/or terms and conditions of the tender within validity period.
- 6.03 Earnest money of the successful tenderers shall be returned on submission of security deposit.
- 6.04 Earnest money deposited by unsuccessful tenderers shall be returned as early as possible.
- 6.05 No interest will be paid on the Earnest Money Deposit.
- 6.06 Parties can opt for electronic refund of EMD. Under this option, charges if any shall be borne by the vendor.
- 6.07 Parties can also submit EMD in the form of Bank Guarantee. Format of EMD-BG is as per Annexure-IV.
- 7.00 **CLARIFICATION:**
For any clarification against this invitation of bid, please contact CM (C&P) RFCL NEW DELHI on Mobile No. 09980699556 Email- siva@rfcl.co.in or Mgr (C&P) RFCL NEW DELHI on Mobile No 09717731580, Email – sprakash@rfcl.co.in.

8.00 **SECURITY DEPOSIT:**

- 8.01 Security Deposit will be paid by every successful tenderer irrespective of the fact whether he is registered as SSI etc. **The security deposit to be furnished by the successful tenderer for the faithful and proper fulfilment of the contract shall be 10% of the value of the Purchase Order.** The security deposit for the each order value will be deposited by supplier with RFCL, C.O. NEW DELHI .In case of default, the entire S.D. shall be liable for forfeiture under particular Purchase Order.
- 8.02 A period of 10 days for depositing security money direct to RFCL C.O. NEW DELHI will be allowed.
- 8.03 The tenderer have the option to submit security deposit through Bank Guarantee. The tenderer shall furnish a Bank Guarantee (Annexure-V) from any of the Scheduled Bank excluding Gramin/Cooperative Bank in the form specified by RFCL against Security Deposit for the faithful and proper fulfilment of the contract. The Bank Guarantee should be valid for total Warranty period of Equipment effective



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from the date of Installation of that equipment + three (3) months claim period as defined at clause No-37 of 'General Terms & Conditions'. **The Bank Guarantee should be submitted by Bankers directly to RFCL in a sealed cover and not through supplier. The party shall also arrange confirmation of Bank Guarantee (including all amendments) by their issuing bank through SFMS mode directly to "State Bank of India, Commercial Branch, 70, The Great Eastern Centre, Nehru Place, New Delhi- 110 019. (Branch Code: 04298), RTGS/IFSC Code: SBIN0004298"**

- 8.04.0 The security deposit shall be retained by RFCL during the currency of contract or till settlement of all the accounts there of, whichever is later. In case of any dispute or difference not settled within the validity of Bank Guarantee, Tenderer shall arrange to get the bank Guarantee extended as asked. RFCL shall have the sole discretion to 'Call in' the Bank to pay the whole or part of the amount of Bank Guarantee.
- 8.05 The above deposit shall be deemed to be security for the faithful performance of the contract and for the purpose of Section 74 of the Indian Contract Act, 1872 and for the extension of that section. The contract shall be deemed to be bond given by the tenderer for the performance of an essential duty.
- 8.06 In the event of any breach of any terms and conditions of the contract, RFCL shall have the right to draw from the Bank guarantee/security deposit either the whole or part of value of Bank Guarantee or Security Deposit and tenderer shall make good the value of Bank Guarantee/Security Deposit to the extent of the amount so drawn within 15 days of receipt of intimation from RFCL to this effect.
- 8.07 The amount so drawn shall not in any way effect any remedy to which RFCL may otherwise be entitled or any liability incurred by tenderer under the contract or any law for the time being in force relating thereto or bearing hereupon.
- 8.08 In the event of the forfeiture of whole or part of the security deposit, the tenderer shall deposit further sum/sums with the Finance Department, of RFCL C.O. NEW DELHI so as to maintain the full security amount deposit as per clause 8.01.
- 8.09 The security deposit shall be refunded after Purchase Order has been successfully completed and Warranty + 3 months claim period has expired. It shall be lawful for RFCL, if any difference or dispute is likely to exist, to defer payment of the security deposit or any portion thereof which may be due for release untill such difference and dispute had been finally settled or adjusted.
- 8.10 The security deposit shall not carry any interest.
- 9.00 THE TENDERERS MUST SUBMIT/UPLOAD ONLINE, ONE SET OF THE TENDER DOCUMENT DULY DIGITALLY SIGNED BY USING DIGITAL CERTIFICATES IN TOKEN OF ACCEPTANCE OF ALL THE TENDER CONDITIONS ALONGWITH THEIR TECHNO-COMMERCIAL BID FAILING WHICH THEIR TENDER MAY NOT BE CONSIDERED.
- 9.0 **CLEAR UNDERSTANDING:**
When a tenderer submits his tender in response to this tender, he will be deemed to have understood fully all requirements, terms and conditions. No extra payment will be made on a pretext that the tenderer did not have a clear idea on any particular point and/or a clause of the tender.
- 10.0 **AWARD OF CONTRACT:**
- 10.01 Award of contract is at the sole and absolute discretion of RAMAGUNDAM FERTILIZERS AND CHEMICALS LTD, which shall not be disputed. Purchase Order issued on the basis of this tender will be called the contract.

10.02 The terms and conditions as embodied in the Purchase Order shall be final and shall supersede any other term and condition that might have been indicated in the tender submitted by the tenderer. The general conditions printed on the back of the Purchase Order/proforma will be applicable except where these are expressly waived/modified in the Purchase Order.

11.00 **DELIVERY PERIOD:**

- The Purchase Order will remain in force from the date of issuance of LOI/order for SUPPLY, INSTALLATION & TRAINING OF "GAS CHROMATOGRAPHS FOR CHEMICAL LABORATORY".
- The SUPPLY, INSTALLATION & TRAINING OF "GAS CHROMATOGRAPHS FOR CHEMICAL LABORATORY" shall be Seven (7) weeks from the date of issuance of LOI/PO whichever is earlier.

12.00 **ARBITRATION:**

For any disputes, efforts to be made to resolve with mutual discussion and in case the dispute persists, the arbitration proceedings shall be followed as per following provisions:

Except where otherwise provide in the contract all matters, questions, disputes or differences whatsoever, which shall at any time arise between the parties hereto, touching the construction, meaning, operation or effect of the contract, or out the matters relating to the contract or breach thereof, or the respective rights or liabilities of the parties, whether during or after completion of works or whether before or after termination shall after written notice by either party to the contract to be referred to Chairman & Managing Director, RAMAGUNDAM FERTILIZERS & CHEMICALS LTD for appointment of Arbitrator.

The Arbitration proceeding shall be governed by the Arbitration & Conciliation Act, 1996, The Arbitration & Conciliation (Amendment Act 2015) or any further statutory modification or re-enactment thereof and the rules made there under.

If the arbitrator, to whom matter is referred, vacates his / her office by any reason whatsoever then the next arbitrator so appointed by the authority referred above may start the proceedings from where his predecessor left or at any such stage he may deem fit.

It is agreed by and between the parties that in case a reference is made to the Arbitrator or the Arbitral Tribunal for the purpose of resolving the disputes / differences arising out of the contract by and between the parties hereto, the Arbitrator or the Arbitral Tribunal shall not award interest on the awarded amount more than the rate of SBI MCLR/RLLR rate applicable to RFCL on the date of award of contract.

13.00 **JURISDICTION:**

All actions at law or suits arising out of or in connection with this contract or the subject matter thereof shall be instituted in a court of Pedapally, in the state of TELANGANA.

14.00 **DELIVERIES/DESPATCHES:**

Timely Supply, Installation, Testing and Commissioning will be considered as the essence of the purchase order. The actual date of successful SITC of the "GAS Chromatographs" at the consignee's place will be considered as the date of Completion, as the terms of the Purchase Order are on F.O.R. destination basis.



The Installation report date of concerned Engineer-in-charge / Official of RFCL shall be treated as final date / report for Completion period of Purchase Order.

If the delivery & Installation of "**GAS Chromatographs**" is delayed by the successful tenderer beyond 15 days from date(s) stipulated, RFCL can also notify the concerned successful tenderer by email, followed by a letter that the goods have not been delivered and Installed. RFCL shall there upon have the right to exercise the following option, seven days after such email intimation of default to the concerned successful tenderer:

"To treat the default as a breach of contract and to terminate the contract forthwith forfeiting security deposit and taking other action against the tenderer within the provisions of the contract."

15.0 FORCE MAJEURE:

Neither party shall be liable for any claim on account of any loss, damage or compensation, whatsoever, arising out of any failure to carry out the terms of this contract where such failure is caused due to war; rebellion, mutiny, civil commotion, fire riot, earthquake, drought, floods, crop failure, or Act of God or due to any restraint or regulation of the State or Central Government or a local authority/authorities provided a notice of such occurrence is given to the other party in writing within 10 days from the date of occurrence of the force condition, furnishing therewith a documentary evidence supporting the invoking of the force majeure clause. On cessation of the force majeure the party invoking force majeure shall inform the other party of the period for which the force majeure condition continued and shall also give documentary evidence thereof to this effect.

16.0 EXTENSION OF TIME OF DELIVERY (DUE TO FORCE MAJEURE CLAUSE ONLY):

If failure as aforesaid in clause 15.00 shall have arisen from any cause which RAMAGUNDAM FERTILIZERS AND CHEMICALS LTD may admit as reasonable ground for extension of time, RFCL will allow such additional time as it considers to be justified by circumstances of the case and will forgo the whole, or such part of the penalty as it may consider reasonable, or applicable by successful tenderer. Same will apply to force majeure invoked by RFCL also.

17.00 SUBLETTING OF CONTRACT:

The successful tenderer shall not sublet or assign the contract or any part of it without obtaining the written permission of the RAMAGUNDAM FERTILIZERS AND CHEMICALS LTD in advance. In the event of the successful tenderer's subletting or assigning the contract or any part thereof without such permission. RAMAGUNDAM FERTILIZERS AND CHEMICALS LTD shall be entitled to cancel the **Contract & forfeit the Security Deposit**. Even in case, subletting is permitted. RAMAGUNDAM FERTILIZERS AND CHEMICALS LTD shall not recognize any contractual obligations with the person or party to whom subletting is permitted and shall look to the successful tenderer for satisfactory, due and proper fulfilment of the contract.

18.0 PRE -DISPATCH INSPECTION/ REJECTION OF SUPPLIES (AFTER PRE-DISPATCH INSPECTION):

- 18.01 Vendor shall perform tests and inspection necessary to ensure that the material and workmanship conform to the requirement of this specification and submit the Pre-delivery inspection report to RFCL before dispatching the "**GAS Chromatographs**" not conforming to specifications shall be rejected by RFCL and shall be replaced by the suppliers immediately. The rejected "**GAS Chromatographs**" which shall lie with RFCL at the risk and cost of the suppliers and removed by supplier within 15 days

from the date of notification of rejection, failing which RFCL shall have the right to exercise one or more of the following options:

- (i) To return the rejected **"GAS Chromatographs"** on "freight to pay" basis at suppliers risk and cost and to recover the cost against payment to be made to supplier available with RFCL and / or invoking the BG of Security Deposit.
- (ii) To dispose of such **"GAS Chromatographs"** at the supplier's risk and cost and the suppliers in such cases shall be deemed to have not supplied the rejected quantity of **"GAS Chromatographs"** and shall be liable to the penalty in terms of the contract.

18.02 If any supplier again supplies sub-standard **"GAS Chromatographs"** (Against replacement of Rejected item), they would be liable to be delisted and debarred from participating in future tenders of RFCL. If debarred the suppliers would be notified of the same.

19.00 **PAYMENT TERMS:**

- a) 100% payment within 30 days from the date of, Supply, Installation, Testing, commissioning and Training of **"GAS Chromatographs"** at RFCL, Ramagundam.
- b) The processing of payment is subject to submission of bills by the supplier for supplies made as per delivery schedule.
- c) All documents, for payment must be submitted addressed to Chief Manager (F&A), RFCL, Ramagundam, Fertilizer City (Telangana) for payment. No document will be accepted through Bank.
- d) The documents which shall be enclosed while submitting Invoices are as under:

1.	GST Compliant Invoice	Original + 2 Copies
2.	Guarantee / Warranty Certificate	Original
3.	Pre-dispatch Inspection Report	Original
4.	Installation Certificate Issued by RFCL's Engineer	Copy
5.	User Instruction Manual for said "GAS Chromatographs"	Original / Copy
6.	Packing List	Copy
7.	Bank Mandate Form	Original
8.	Proof of Training imparted to RFCL people for it's Operation and Maintenance	Original
9.	Consignee Copy of GR/LR	Original

- e) This will, however, be without prejudice to RFCL's right to withhold payment if the **"GAS Chromatographs"** supplied against the order prove to be unsatisfactory and/or not in accordance with RFCL's ordering instructions.
- f) Payment shall be subject to applicable GST TDS.
- g) **In case 'Security Deposit' is not submitted by the supplier then payment will be released after deducting equivalent amount of Security Deposit from their Invoice(s).**

20.00 **RESEARCH AND DEVELOPMENT:**

The supplier shall render all assistance and facilities to RFCL with regard to research and development work relating to the modification of the quality and design



रामगुंडम फर्टिलाइजर्स एंड केमिकल्स लिमिटेड

Ramagundam Fertilizers & Chemicals Limited

(A Joint venture company of NFL, EIL & FCIL)

3rd & 4th Floor, Mohta Building, 4, Bhikaji Cama Place, New Delhi - 110 066

Phone: +91-11-26701441/1442

Email: siva@rfcl.co.in, sprakash@rfcl.co.in

specifications of the "**GAS Chromatographs**" and shall also render all possible assistance to RFCL in carrying out manufacturing trials if any, when required by RFCL.

21.00 **SECRECY:**

Any information derived or otherwise communicated by RFCL to supplier in connection with the contract shall be regarded as secret and confidential and shall not, without the written consent of RFCL, be published or disclosed to any third party or made use of by the supplier except for the purpose of implementing the contract.

22.00 **LAWS GOVERNING PURCHASE ORDER:**

The purchase orders placed against this NIT shall be governed by the Indian laws.

23.00 RFCL shall mean and include Administrative and Executive Officers of Ramagundam Unit who are authorized to deal with all matters relating to these presents on its behalf.

24.00 **CLAIMS:**

RFCL shall be entitled to retain the amount of any of its claim against the successful tenderer, whether liquidated or unliquidated arising out of the contract under reference or otherwise, however and set off the same prorata against any amount payable to the successful tenderer under the contract under reference, without prejudice and in addition to the other rights of RAMAGUNDAM FERTILIZERS AND CHEMICALS LTD or recover the amount of any such claim by other remedies legally available.

25.00 RFCL reserves the right to examine and call for supplier's book of accounts and other related records to ascertain the correctness of price and its variation, specification of materials used etc.

26.00 **GST (GOODS & SERVICE TAX):**

(a) RFCL unit is registered under the GST ACT. The Unit's registration No. is provided in these documents. The Goods & service tax as applicable will be paid by us.

(b) The current rate of GST on the "**GAS Chromatographs**" as on the date of quotation are to be indicated by the tenderers. Any subsequent increase/decrease in the above rate of GST on the "**GAS Chromatographs**" will be to RFCL Accounts within the Contractual period. A certificate together with documentary evidence in support of variation in GST will be submitted by the supplier to RFCL.

(c) In case of any statutory increase/decrease in the GST beyond the rates prevalent on the date of tendering / within the contractual period for "**GAS Chromatographs**", the Suppliers will give a certificate quoting the number and date of the notification and the effective date for the change and furnish a copy of the notification for any such increase/ decrease. Any such increase in the GST or any statutory new imposition of GST will be to RFCL's account within the Contractual period. Similarly any benefit of statutory decrease in the rate of GST would be passed on to RFCL by the suppliers till the actual date of supply.

The benefit due to set-off of GST if any, shall be taken by RFCL and the same shall not be considered while evaluation of bids.

27.00 DELETED.

28.00 **TERMINATION OF THE CONTRACT**

The Contract is liable to be terminated if the Contractor:

- 1) becomes bankrupt or insolvent or goes into liquidation or is ordered to be wound up or has a receiver appointed on its assets
- 2) makes an arrangement with or assignments in favour of his/their creditors or agrees to carry out the contract under a committee or inspection of his/their creditors; or
- 3) abandons the work; or
- 4) persistently disregards the instructions of RFCL; or
- 5) fails to adhere to the agreed schedule of work; or
- 6) assigns or sublets the work in whole or in part thereof without prior written consent of RFCL; or
- 7) defaults in the performance of the contract; or
- 8) at any time contractor makes default in proceeding with the work/job under the contract with due diligence and continue to do so after a notice issued by RFCL; or
- 9) If the contractor obtains the contract with RFCL as a result of ring tendering, or with illegal measures;
- 10) Information submitted by the contractor is found to be incorrect.

Such termination shall be by 15 days notice in writing and no claim/compensation shall be payable by RFCL as a result of such termination.

CONSEQUENCES OF TERMINATION

If the contract is terminated by RFCL for the reasons detailed above or for any other reasons whatsoever:

- i) Performance Guarantee Bond/Security in any form submitted by the contractor shall stand as forfeited.
- ii) The contractor shall have no claim to compensation for any loss sustained by him by reason of having entered into any commitment or made any advances on account of or with a view to the execution of work or on account of loss of expected profits.
- iii) All the dues payable to the contractor for the supplies executed by him before and up to termination shall only be released after making adjustments for the expenses, charges, demands etc. incurred by the owner as a consequence of termination of the contract.

29.0 The prospective tenderers having any common partners/ Directors/managing Partners, etc. or having other common criteria shall be considered as Sister/Group/Associates Company. In such cases, only one of them will be eligible for participation in the tender. Tenderers has to submit a declaration along with the technical bid that:

- a) No other Firm/Sister concern/Associate belonging to the same group is participating /submitting this tender.
- b) That the bidders, their associates, Sister Concern, etc. have not been black listed by any institutional agency/Govt. Dept./Public Sector Undertaking in the last two years.

In case of concealment of any fact, if detected later on, such tenderers will be debarred from all future dealings with RFCL.

30.0 One person will be allowed to represent only one company during discussions with RFCL. If same person is representing different companies with authorization letter from more than one company, such person will be allowed to represent only the first company called for discussions.



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31.0 Bidders should ensure that the tender documents /offer has been signed by appropriate/authorized representative of the Company. Withdrawal of offer/non-acceptance of orders placed based on the offers submitted by bidders on their letter head; will not be allowed on the ground that offer was not signed by authorized person.

32.0 The tenderer shall quote the price strictly as per the Proforma provided in NIT. The tenderer should quote one rate for specific quantity quoted by them. Tenders with quotations of different rate for different quantities shall be rejected without any further reference.

33.0 The bidder shall indicate the rates of GST applicable in their bid, for the quoted items indicating clearly the HSN code of item and applicable category of GST (i.e. whether IGST, CGST, SGST, UGST).

A proper invoice in the form and manner prescribed under relevant section of GST Act shall be provided by the supplier along with the supplies.

34.0 If a tenderer resorts to any frivolous, malicious or baseless complaints/allegations with an intent to hamper or delay the tendering process or resorts to canvassing / rigging/influencing the tendering process, RFCL reserves the right to debar such tenderer from participation in the present / future tenders up to a period of 2 years.

35.0 **'Price Reduction Schedule (PRS)'**

It shall be obligatory on the part of suppliers to adhere strictly to the deliveries quoted (SITC) and accepted by RFCL in their orders. In case of delay in supplies, unless extension of delivery has been granted by RFCL on application by the suppliers.

In case of delay in supply , Installation, Testing & commissioning beyond the delivery date mentioned in PO, Seller shall claim payment after reducing the invoice value on account of price reduction schedule due to delay in completion of Purchase Order (@ half percent (1/2%) for every week of delay or part thereof, limited to a maximum of Five percent (5%) of the **delayed portion of SITC (Supply, Installation, Testing and Commissioning)**.

- In case, while raising the invoices, the seller does not reduce the invoice value in the above manner, such deduction shall be effected from the seller invoices by purchaser while releasing the payment and Credit Note (GST compliant) is required to be raised and submitted by the supplier.
- No payment of GST shall be released in case credit note is not received by RFCL, in case of applicability of PRS.

36.0 **'RISK & COST':**

In case of delay in supplies, RFCL reserves the right to:

- Purchase "**GAS Chromatographs**" elsewhere from open market on account and at the risk and cost of the suppliers the stores not delivered
- or
- RFCL shall there upon have the right to terminate the contract forthwith forfeiting security deposit and taking other action against the tenderer within the provisions of the contract.

37.0 **GUARANTEE / WARRANTY PERIOD**

Guarantee / Warranty period shall be 12 months from the date of commissioning /satisfactory operation checking , after the "**GAS Chromatographs**" have been put in service (as per NIT requirement) or 18 months from the date of delivery, whichever is earlier.

37. Bid Evaluation:

Following shall be considered for the purpose of bid evaluation only:

i) TECHNICAL EVALUATION (TQC):

- Offers of all the prospective bidders will be evaluated considering 'Eligibility Criteria (BQC)', Refer ANNEXURE-I.
- All Offers have to conform to Technical specifications mentioned in Job Specifications (Annexure-III) and Checklist mentioned as Annexure-IV.
- Technical bids of all participating vendors shall be evaluated considering both BQC and Technical specifications mentioned in Job Specifications (Annexure-III) of NIT.

ii) PRICE EVALUATION (POC)

- Price bids of only those bidders shall be opened who qualifies Technical bid evaluation as mentioned above and based on the following:
- For the purpose of evaluation, cost of procurement, installation, commissioning and Training of "**GAS Chromatographs**" shall be calculated considering all Taxes and duties on FOR, Ramagundam basis.
- **The benefit due to set-off of GST if any, shall be taken by RFCL and the same shall not be considered while evaluation of bids.**

38. DELETED.

39. RFCL reserves the right to negotiate with L1 bidder at its sole option. In such case, the negotiations shall be held with L1 bidder only at RFCL's NEW DELHI office and prior intimation shall be given by RFCL to such bidder.

40. RFCL reserves the right to reject or accept any tender without giving any reason.

41. The bids not accompanied with the requisite Earnest Money may not be opened.

42. Integrity Pact.

Bidders will sign the Integrity Pact as per enclosed format which is an integral part of The tender documents, falling, which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder is rejected. Details regarding Integrity Pact can be viewed on our website: www.rfcl.co.in.

The name & e-mails address of IEMs are as under:

- | | |
|--------------------------------|--|
| 1) Sh. Rakesh Chopra, e-mail | : chopra.rakesh@gmail.com |
| 2) Sh. Chandra Prakash, e-mail | : chandraprakash@gargs.com . |

Kindly upload duly signed copy of Integrity pact along with other documents.

(C. Siva Kumar)
Chief Manager (C&P)

ANNEXURE- III

TECHNICAL SPECIFICATIONS

Fully automated microprocessor-controlled gas chromatograph systems for analysis of samples as mentioned in annexure with suitable columns – packed or capillary as desirable, detectors, GC operating software & other additional software (BTU calculation etc.), data management & acquisition system, all required accessories and additional requirement as mentioned.

- 01. Natural Gas & Product H₂, Flue gas (Ar & O₂) – 1 No**
- 02. Process gas & Syngas (along with NH₃) – 1 No**
- 03. Trace CO & CO₂ and Process gas, product CO₂ – 1 No**
- 04. Sulphur compounds in Natural gas (with SCD) – 1 No**
- 05. For trace amounts of dimethyl ether, methanol, water, methyl formate, acetone, methylethylketone, higher alcohols and air in gases containing Hydrocarbons – 1 No**

All gas chromatograph systems should be factory tested and guaranteed for above specified applications.

Detailed Analysis parameters and range for each GC are mentioned in annexure –III.

3.1) Other additional requirement/features/specifications

- I. Vendor should provide below specified **Gas standard mixture in 10L water capacity** cylinders of suitable material for the specified gases compositions with certificate as mentioned in the annexure II. Suitable two stage gas cylinder regulator with ss diaphragm should be provided with each calibration gas mixture cylinder.
 - 1) Natural gas composition and sulphur compounds
 - 2) Primary reformer outlet
 - 3) Secondary reformer outlet
 - 4) High temperature shift converter outlet
 - 5) Low temperature shift converter outlet
 - 6) CO₂ Absorber outlet
 - 7) Ammonia Converter outlet
 - 8) Product CO₂
 - 9) Flue gas
 - 10) Trace CO & CO₂
 - 11) Trace Sulphur component in NG
 - 12) Trace Organic Impurities in gas
- II. The vendor should provide and install **gas distribution panel** and **gas pipe line** from gas cylinder storage room to the location of each GC with all necessary accessories, like ss tubing, single stage regulator with gauge, on/off valve and gas purifiers. Two stage gas cylinder regulator of suitable type for all the required utility gases for the proposed gas chromatographs.
- III. Manual change over arrangements for all gas cylinders.
- IV. 2-micron filters should be provided for sample line.
- V. Each proposed gas chromatograph should be provided with desktop computer.
- VI. **One complete set of columns should be included with each GC as spare.**
- VII. **Network compatible One laser jet printer with auto duplex print.**
- VIII. **Warranty: 1 year OEM warranty.**
- IX. Installation and Demonstration & training for 10 members at RFCL, Ramagundam.
- X. Operational manual, schematics and other charts etc.
- XI. **Tenderer shall submit the following details along with Bid, failing which the tender will be liable for rejection.**

Complete technical details (make, model, specifications etc.), detailed valve diagrams, detector specifications, detectable/measurable ranges (minimum – maximum) for each required parameter of target sample in each GC and details of accessories, all the details of other additional accessories and spares.

- XII. Except supply of He, H₂, N₂, Zero air gas cylinders, supply of all other required accessories will be under the scope vendor**

3.2 Common specification for all GC:

3.2.0) GC MAINFRAME:

- Gas Chromatograph with Advanced / Electronic /Programmable Flow control technology for Simultaneous Pressure, Temperature and Flow Programming
- Graphical user interphase with touch screen display of 7inch or better. Insightful Graphical User Interface (GUI) Interactive Communication Mode (ICM)
- Large Column Oven with temperature range from Ambient +4°C to 450°C or better
- Temperature Accuracy: $\pm 1\%$
- Retention time repeatability: < 0.0008 min
- Peak area repeatability: $< 1\%$ RSD
- Constant Linear velocity mode, constant pressure mode & constant column flow mode should be available
- Auto Ignition facility is should be available
- Self-diagnostic function with GLP/GMP support
- Fast data transfer, acquisition speed of 500Hz (2ms) or more- should be able to “catch” very sharp peaks
- System should have the capability to accommodate Narrow Bore (0.1 mm i.d) to Wide bore capillary Columns (0.53mm i.d) columns
- System should have the capability to accommodate simultaneous 2 injection unit & 4 detector unit

Column Oven:

- Oven volume: 13 L or more
- Column oven with inbuilt LED light for easy replacement of columns
- Fits up to two 100 m \times 0.530 mm I.D. capillary columns
- Ambient rejection: $< 0.01\text{ }^{\circ}\text{C}$ per $1\text{ }^{\circ}\text{C}$
- Max run time: 9999.99 min
- Temperature range: (ambient +2 $^{\circ}\text{C}$) to 450 $^{\circ}\text{C}$
- Cryogenic cooling range (with CO₂): -50 $^{\circ}\text{C}$ to 450 $^{\circ}\text{C}$
- Temperature Set point Resolution: 0.1 $^{\circ}\text{C}$
- Temperature accuracy: set value (K) $\pm 1\%$ (calibration at 0.01 $^{\circ}\text{C}$)
- Temperature deviation: $< 2\text{ }^{\circ}\text{C}$ (on 200 mm dia. Circumference 30 mm from rear)
- Programmable temperature ramps: 32 ramps or better
- Settable time for each step: 9999.99 min
- Programmed rate settings range: -250 to 250 $^{\circ}\text{C}/\text{min}$
- Oven cool down time: 450 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$ within 4 min

Split/ Splitless Injector:

- Injection mode: Split/Spitless; High pressure injection
- Split ratio: Up to 9999.9:1
- Pressure range: 0 to 1035 kPa
- Maximum operating temperature: 450 $^{\circ}\text{C}$

Advanced Flow Controller (AFC):

- Pressure units : psi, kPa, bar
- Pressure range : 0 to 1035 kPa (0 to 150 psi)
- Pressure setpoint resolution : 0.1 kPa (0.001 psi)
- Pressure program ramps : 7
- Pressure sensor accuracy : $< \pm 2.0\%$ (full scale)
- Pressure sensor repeatability : $< \pm 0.34$ kPa
- Temperature coefficient : $< \pm 0.068$ kPa per °C
- Pressure drift : $< \pm 0.68$ kPa/6 months

Advanced Pressure Controller (APC):

- Flow accuracy : $< \pm 3$ mL/min or 7% of set point
- Flow repeatability : $< \pm 0.35\%$ of set point
- Temperature coefficient : $< \pm 0.2\%$ per °C

FID Detector:

- MDQ: < 1.2 pg C/s (dodecane)
- Linear Dynamic Range: 1×10^{-7}
- Acquisition Rate: 2ms (500Hz)
- Max. Operating Temperature: 450°C
- Automatic flame out detection and re-ignition feature must be available

TCD Detector:

- Sensitivity : > 20000 mV \times mL/mg (decane)
- Dynamic range : 1×10^5
- Max operating temperature : 400 °C
- Max acquisition rate : 2 ms (500 Hz)

SCD Detector:

- MDQ < 0.3 pgS/sec
- Stability $< 3\%$ RSD (24hrs)
- Horizontal Redox Cell with triple tube burner for better sensitivity, stability & selectivity
- Full automation control by GC Operating software
- Dry Diaphragm Vacuum Pump
- Inner tube maintenance ~ 5mins

3.2.1) Accessories that must be included into the system

- GC start-up kit for each GC according the proposed configuration.
- One unit of moisture trap, oxygen trap and hydrocarbon trap for each gas lines wherever is essential for stable detector signal.
- Sulphur trap for the associated gases with SCD, for trace level sulphur detection. **The injector and associated tubing, loop in gas sampling valve should be sulfinert coated in GC/SCD.**
- All gas sampling valve should be heated and pneumatically automated.
- Gas tight syringe for gas samples – volume- 1ml and 10ml, each 10 numbers.

3.2.2) GC operating software

- The system should be an easy-to-use next generation 32-bit/64-bit software that incorporates the latest windows technology.
- Equipped with multiple functions like graphical user interface, assistant bar, data explorer, wizard software and long-filename compatible.
- Flexible graphical user interface to display instrument status, show real time plot and change all instrument set points.
- Able to identify target analyte correctly in the event where retention time has shifted from the originally supposed retention time.
- The software package should allow for the complete control of the GC. Furthermore, the software must include the capability to control up to 4 GCs at any one time (9 detectors simultaneously),

method development and automation, data acquisition, data analysis, generation of custom reports, etc.

- Should have full glp/gmp support in terms of security, audit-trail and validation support.
- Must have the following data acquisition capabilities: Snapshot function, supports single analysis and batch analysis, batch table wizard, add or insert analyses, Supports extended analysis time, automatic time, automatic data file creation QA/QC (statistical) functions, batch auto-stop function, run user program function, supports pre-run programs, ole automation compatibility (batch analysis, etc).
- Must have the following data processing and data analyses functions:
Peak integration manipulation, identification (supports multiple relative retention times and grouping)
Quantitation (percentage area method, corrected percentage area method, internal standard method, external standard method, standard addition method, index calculation, manual coefficient input)
Calibration points and levels (16 levels x 10 points), manual calibration curve creation, column performance calibration, data comparison functions.
- Must have more than 10 types of report items – sample information, environment settings, methods, chromatograms, peak tables, calibration curves, grouping results, diagrams, text, etc.), ole object compatibility, layout customization and preview functions, summary report.
- Must allow clock-time programming with the ability to automatically start/stop a GC at the user-specified scheduled time.
- Must be capable of performing detector auto-ranging.
- System check (GC self-diagnosis), status log must be available to allow continuous monitoring of GC in real time to alert user maintenance needs and instrument problems

3.2.3) Data management and acquisition system – Total 5 sets

Should be compatible with Software and GCs

- Dell or Equivalent (But not All in one desktops)
- Data management
- Intel core i5/above, 3ghz or better
- Windows 10 or above
- 4.0 gb ram memory
- 500 gb hard disk storage/higher storage capacity
- DVD-RW ROM
- 17" LCD monitor or better
- 101 keys keyboard
- Mouse & mousepad
- MS office – 2016 or above

PARAMETERS AS PER DESIGN BASIS

1. NATURAL GAS COMPOSITION				
Sr.No.	Parameters/Components	Units	CASE-1	CASE-2
1	CH ₄	Mole %	99.59	84.5
2	C ₂ H ₆	Mole %	0.07	9
3	C ₃ H ₈	Mole %	0.02	3
4	i- C ₄ H ₁₀	Mole %	0	2
5	n-C ₄ H ₁₀	Mole %	0	0
6	i-C ₅ H ₁₂	Mole %	0	0.25
7	n-C ₅ H ₁₂	Mole %	0	0



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8	C6	Mole %	0	0
9	N2	Mole %	0.15	1.25
10	CO2	Mole %	0.17	0
11	Sulphur content as H2S, Vol. ppm, (max) : 20			
Calculated Values required as mentioned below:				
Specific gravity				
Molecular weight				
Z-Factor				
LHV Idel KCAL/SM3				
LHV-Corrected KCAL/SM3				
GHV KCAL/SM3				
LHV KCAL/SM3				

2. SULPHUR COMPOUNDS IN NATURAL GAS

Sr.No.	Parameters/Components	Units	CASE-1	CASE-2
1	H2S – Hydrogensulphide	ppm	0.01	10
2	COS – carbonylsulphide	ppm	0.01	10
3	CH3SH – Methylmercaptan	ppm	0.01	10
4	C2H5SH – Ethylmercaptan	ppm	0.01	10
5	CH3SCH3 – Dimethylmercaptan	ppm	0.01	10
6	C3H8S – 1-Propanthiol	ppm	0.01	10
7	Butylmercaptan	ppm	0.01	10
8	Thiophene	ppm	0.01	10
9	CH4 – Methane	ppm	Balance	Balance
	DRY TOTAL	%	100	100

3. PROCESS GAS, SYN GAS, AMMONIA AND FLUE GAS SAMPLES

SAMPLE DESCRIPTION		Parameters	Ar	C2 +	CH4	CO	CO2	H2	N2	NH3	O2
		Units	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %
PROCESS GAS	PRIMARY REFORMER O/L	CASE 1	52 ppm		15.33	8.88	9.63	65.67	0.48		
		CASE-2	53ppm		15.01	9.37	10.45	64.36	0.8		
	SECONDARY REFORMER O/L	CASE 1	0.33		0.21	13.56	6.42	52	27.48		
		CASE-2	0.33		0.22	13.9	6.87	51.36	27.32		
	HTER O/L	CASE 1	0.29		0.34	13.83	6.52	55.3	23.72		
		CASE-2	0.28		0.35	14.18	6.98	54.6	23.61		
	HTSC O/L	CASE 1	0.26		0.31	3.25	15.21	59.45	21.52		
		CASE-2	0.25		0.32	3.33	15.82	58.91	21.37		
	LTSC O/L	CASE 1	0.25		0.3	0.24	17.68	60.64	20.89		
		CASE-2	0.25		0.31	0.24	18.33	60.14	20.73		
	CO2 ABS I/L	CASE 1	0.25		0.3	0.24	17.64	60.67	20.9		
		CASE-2	0.25		0.31	0.24	18.29	60.17	20.74		
	CO2 ABS O/L	CASE 1	0.31		0.36	0.29	0.05	73.59	25.4		
		CASE-2	0.3		0.37	0.3	0.05	73.57	25.41		
	MAKEUP SYNGAS TO LOOP	CASE 1	0.34		0.7			74.2	24.76		
		CASE-2	0.34		0.71			74.2	24.75		



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SYNGAS AND AMMONIA, OFF GAS SAMPLES	AMMONIA CON-1 O/L	CASE 1	3.09		6.03		54.16	18.05	18.67	
		CASE-2	3.02		6.1		54.16	18.05	18.67	
	AMMONIA CON-2 O/L	CASE 1	3.15		6.15		52.27	17.43	21	
		CASE-2	3.08		6.22		52.27	17.43	21	
	PURGE GAS	CASE 1	3.81		7.42		63.45	21.14	4.18	
		CASE-2	3.72		7.5		63.45	21.14	4.19	
	INERT GAS TO LETDOWN VESSEL	CASE 1	4.59		3.01		2.55	9.18	80.66	
		CASE-2	4.5		3.05		2.56	9.18	80.71	
	LETDOWN GAS TO AMMONIA RECOVERY	CASE 1	4.23	11.22	46.63			20.26	17.66	
		CASE-2	4.14	11.34	46.59			20.24	17.69	
	OFF GAS ABS O/L	CASE 1	5.14		13.62		56.62	24.61	76ppm	
		CASE-2	5.02		13.77		56.61	24.59	78ppm	
PRODUCT HYDROGEN	RECOVERED H2 FROM HYDROGEN RECOVERY UNIT	CASE 1	0.87		0.43		90.15	8.55		
		CASE-2	0.85		0.43		90.17	8.55		
FLUE GAS	PRIMARY REFORMER FLUE GAS	CASE 1	1.45			6.95		89.59		2.01
		CASE-2	1.44			8.38		88.17		2.01
PRODUCT CO2	PRODUCT CO2	CASE 1			11ppm	5ppm	99.65	0.14	0.01	0.2
		CASE-2			11ppm	5ppm	99.65	0.14	0.01	0.2
	FLASH GAS TO REFORMER FUEL HEADER	CASE 1	46ppm		0.18	0.11	64.97	29.38	5.36	
		CASE-2	46ppm		0.18	0.12	64.91	29.45	5.34	

4. TRACE CO AND CO2 IN METHANATOR O/L

Sr.No.	Parameters/Components	Units	MOLE % CASE-1	MOLE % CASE-2
1	Ar	Mole %	0.31	0.31
2	C2 +	Mole %		
3	CH4	Mole %	0.71	0.73
4	CO	Mole %	0.1 ppm	10 ppm
5	CO2	Mole %	0.1 ppm	10 ppm
6	H2	Mole %	73.3	73.27
7	N2	Mole %	25.68	25.69
	DRY TOTAL	Mole %	100	100

5. TRACE LEVEL ORGANIC COMPOUNDS IN GAS SAMPLES

Sr.No.	Parameters/Components	Units	MIN	MAX
1	DIMETHYLETHER	ppm (m/m)		1000
2	METHYLFORMATE	ppm (m/m)		1000
3	ACETONE	ppm (m/m)		1000
4	METHYLETHYLKETONE	ppm (m/m)		1000



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5	METHANOL	ppm (m/m)		1000
6	HIGHALCOHOLS	ppm (m/m)		1000
7	AIR	ppm (m/m)		1000
8	WATER	ppm (m/m)		1000

However, the above-mentioned values in Table No-1 to Table No-5 are Indicative only as per Design, the bidder has to provide the equipment/Detector to cover the Min and Max ranges, and should mention the detectable ranges (Min and Max) for each parameter of target sample of each equipment.

CALIBRATION GAS MIXTURE STANDARDS FOR GC

CALIBRATION GAS MIXTURE FOR NATURAL GAS IN NEW 10 LTR W/C ALUMINIUM CYLINDER WITH SS VALVE

Filling Pressure	-60.00 kg/cm ²
Content	-600.00 ltrs
Preparation Tolerance	-+/-20%
Certificate Accuracy	-+/-2%
Stability	-12 Months
Cylinder Basis	- Outright

1. Natural gas composition and H ₂ S	
Parameters/Components	Mole %
CH ₄	84.5
C ₂ H ₆	9
C ₃ H ₈	3
i- C ₄ H ₁₀	2
n-C ₄ H ₁₀	0
i-C ₅ H ₁₂	0.25
n-C ₅ H ₁₂	0
C ₆	0
N ₂	1.25
CO ₂	0.1
Sulphur content as H ₂ S, Vol. ppm	20

PROCESS GAS, AMMONIA, PRODUCT CO ₂ , FLUE GAS, Trace CO & CO ₂										
Sr. No.	SAMPLE DESCRIPTION	Parameters	Ar	CH ₄	CO	CO ₂	H ₂	N ₂	NH ₃	O ₂
		Units	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	Mole %	
2	PROCESS GAS	PRIMARY REFORMER O/L	52 ppm	15.33	8.88	9.63	65.67	0.48	-	
3		SECONDARY REFORMER O/L	0.33	0.21	13.56	6.42	52	27.48	-	
4		HTSC O/L	0.26	0.31	3.25	15.21	59.45	21.52	-	
5		LTSC O/L	0.25	0.3	0.24	17.68	60.64	20.89	-	
6		CO ₂ ABS O/L	0.30	0.36	0.29	0.05	73.59	25.4		
7	AMMONIA CON-1 O/L		3.09	6.03	-	-	54.16	18.05	18.67	
8	PRODUCT CO ₂		-	11ppm	5ppm	99.85	0.14	0.01	-	



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9	FLUE GAS	1.45			6.95		89.59		2.01
10	TRACE CO & CO ₂ – METHANATOR O/L	0.31	0.71	0.1 ppm	0.1 ppm	73.3	25.68	-	

FOR S.NO 2-6 – CALIBRATION GAS MIXTURE IN NEW 10 LTR W/C CARBON STEEL CYLINDER WITH SS VALVE

Filling Pressure -130.00 kg/cm²
Content -1,300.00 ltrs
Preparation Tolerance +/-10%
Certificate Accuracy +/-2%
Stability -12 Months
Cylinder Basis - Outright

FOR S.NO-7-CALIBRATION GAS MIXTURE IN NEW 10 LTR W/C CARBON STEEL CYLINDER WITH SS VALVE

Filling Pressure -43.00 kg/cm²
Content -430.00 ltrs
Preparation Tolerance +/-10%
Certificate Accuracy +/-2%
Stability -12 Months
Cylinder Basis - Outright

FOR S.NO -8- CALIBRATION GAS MIXTURE IN NEW 10 LTR W/C ALUMINIUM CYLINDER WITH SS VALVE

Filling Pressure -45.00 kg/cm²
Content -450.00 ltrs
Preparation Tolerance +/-30%
Certificate Accuracy +/-3%
Stability -12 Months
Cylinder Basis - Outright

FOR S.NO 9 – CALIBRATION GAS MIXTURE IN NEW 10 LTR W/C CARBON STEEL CYLINDER WITH SS VALVE

Filling Pressure -130.00 kg/cm²
Content -1,300.00 ltrs
Preparation Tolerance +/-10%
Certificate Accuracy +/-2%
Stability -12 Months
Cylinder Basis - Outright

FOR S.NO- 10 – CALIBRATION GAS MIXTURE IN NEW 10 LTR W/C ALUMINIUM CYLINDER WITH SS VALVE

Filling Pressure -130.00 kg/cm²
Content -1,300.00 ltrs
Preparation Tolerance +/-30%
Certificate Accuracy +/-3%
Stability -12 Months
Cylinder Basis - Outright

11. TRACE SULPHUR COMPOUNDS IN NATURAL GAS				
Parameters/Components	Units	min	max	
H ₂ S – Hydrogensulphide	ppm	0.01	10	TOTAL SULPHUR MAX 20 PPM
COS – carbonylsulphide	ppm	0.01	10	
CH ₃ SH – Methylmercaptan	ppm	0.01	10	
C ₂ H ₅ SH – Ethylmercaptan	ppm	0.01	10	
CH ₃ SCH ₃ – Dimethylmercaptan	ppm	0.01	10	
C ₃ H ₈ S – 1-Propanthiol	ppm	0.01	10	

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Butylmercaptan	ppm	0.01	10	
Thiophene	ppm	0.01	10	
CH ₄ – Methane	ppm	Balance	Balance	
DRY TOTAL	%	100	100	

FOR S.NO- 11 – CALIBRATION GAS MIXTURE IN NEW 10 LTR W/C ALUMINIUM CYLINDER WITH SS VALVE

Filling Pressure -130.00 kg/cm²
Content -1,300.00 ltrs
Preparation Tolerance -+/- 30%
Certificate Accuracy -+/-5 %
Stability -12 Months
Cylinder Basis - Outright

12. TRACE LEVEL ORGANIC COMPOUNDS IN GAS SAMPLES		
Parameters/Components	Units	
DIMETHYLETHER	ppm (m/m)	50
METHYLFORMATE	ppm (m/m)	50
ACETONE	ppm (m/m)	50
METHYLETHYLKETONE	ppm (m/m)	50
METHANOL	ppm (m/m)	50
HIGHALCOHOLS	ppm (m/m)	50
AIR	ppm (m/m)	100
WATER	ppm (m/m)	800
Ammonia	ppm (m/m)	50

FOR S.NO- 12 – CALIBRATION GAS MIXTURE IN NEW 10 LTR W/C ALUMINIUM CYLINDER WITH SS VALVE

Filling Pressure -130.00 kg/cm²
Content -1,300.00 ltrs
Preparation Tolerance -+/- 10%
Certificate Accuracy -+/-3 %
Stability -12 Months
Cylinder Basis -Outright



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Annexure-IV

Check list for Bidder's Confirmation

S.NO	ITEM DESCRIPTION	QTY	UOM	BIDDERS CONFIRMATION/ COMENTS
GAS CHROMATOGRAPHS AS PER ANNEXURE-III				
1	GC for analysis of Natural Gas & Product H ₂ , Flue gas (Ar & O ₂) as per Specification table placed at annexure 3 with suitable detectors, columns and other standard accessories Make: Model: Detector details: Column Details:	1	No.	BIDDERS CONFIRMATION
2	Process gas & Syngas (along with NH ₃)) as per Specification table placed at annexure 3 with suitable detectors, columns and other standard accessories Make: Model: Detector details: Column Details:	1	No.	BIDDERS CONFIRMATION
3	Trace CO & CO ₂ and Process gas, product CO ₂) as per Specification table placed at annexure 3 with suitable detectors, columns and other standard accessories Make: Model: Detector details: Column Details:	1	No.	BIDDERS CONFIRMATION
4	Sulphur compounds in Natural gas (with SCD)) as per Specification table placed at annexure 3 with suitable detectors, columns and other standard accessories Make:	1	No.	BIDDERS CONFIRMATION



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	Model: Detector details: Column Details:			
5	For trace amounts of dimethyl ether, methanol, water, methyl formate, acetone, methylethylketone, higher alcohols and air in gases containing Hydrocarbons) as per Specification table placed at annexure 3 with suitable detectors, columns and other standard accessories Make: Model: Detector details: Column Details:	1	No.	BIDDERS CONFIRMATION
6	Gas distribution panel for He Gas distribution panel for N2 Gas distribution panel for H2..... Gas distribution panel for zero air.....	5	No.	BIDDERS CONFIRMATION
7	Gas purifier panel for He..... Gas purifier panel for N2..... Gas purifier panel for H2..... Gas purifier panel for zero air.....	5	No.	BIDDERS CONFIRMATION
8	SS tubing with colour coded sleeves (1/4 inch diameter) for each gas from gas cylinder to GC	5	No.	BIDDERS CONFIRMATION
9	Single stage/two stage regulators with gauge Make : Model :	5	No.	BIDDERS CONFIRMATION
10	Manual Changeover arrangement for gas cylinders	5	No.	BIDDERS CONFIRMATION



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11	2-Microns filters for sample line Make : Model :	5	No.	BIDDERS CONFIRMATION
12	One complete set of columns as spare for each GC Details :..... 	1	SET	BIDDERS CONFIRMATION
13	Software as mentioned in Technical Specifications Details:	5	No.	BIDDERS CONFIRMATION
14	Desk top computer for GC: Should be compatible with Software and GCs. ➤ Intel core i5/above, 3ghz or better ➤ Windows 10 or above ➤ 4.0 gb ram memory ➤ 500 gb hard disk storage/higher storage capacity ➤ DVD-RW ROM ➤ 17" LCD monitor or better ➤ 101 keys keyboard ➤ Mouse & mousepad ➤ MS office – 2016 or above.....	5	No.	BIDDERS CONFIRMATION



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15	Network compatible One laser jet printer with auto duplex print. Make : Model :	1	No.	BIDDERS CONFIRMATION
16	Operational Manuals/Valve Diagrams for each GC	1	SET	BIDDERS CONFIRMATION
17	Documentation : IQ / OQ	5	SET	BIDDERS CONFIRMATION
18	Installation and Training to lab staff at RFCL			BIDDERS CONFIRMATION
19	Standard OEM Warranty for 1 year for each GC Number of free service visits within warranty period:			BIDDERS CONFIRMATION
CALIBRATION GAS MIXTURE CYLINDERS 10 LIT CAPACITY AS PER ANNEXURE-III ALONG WITH COA				
20	Natural gas composition and sulphur compounds Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
21	Primary reformer outlet Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months	1	No.	BIDDERS CONFIRMATION



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	Cylinder Basis /Type			
22	Secondary reformer outlet Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
23	High temperature shift converter outlet Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
24	Low temperature shift converter outlet Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
25	CO2 Absorber outlet Composition: Certificate of Analysis (COA)	1	No.	BIDDERS CONFIRMATION



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	Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type			
26	Ammonia Converter outlet Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
27	Product CO2 Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
28	Flue gas Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... %	1	No.	BIDDERS CONFIRMATION



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	Stability Months Cylinder Basis /Type			
29	Trace CO & CO2 Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
30	Trace Sulphur component in NG Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
31	Trace Organic Impurities in gas Composition: Certificate of Analysis (COA) Filling Pressurekg/cm2 Contentltrs Preparation Tolerance +/-% Certificate Accuracy -+/-..... % Stability Months Cylinder Basis /Type	1	No.	BIDDERS CONFIRMATION
32	Technical data sheet / brochure / catalogue for the quoted model GCs			BIDDERS CONFIRMATION



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ANNEXURE-V

PROFORMA FOR QUOTATION

("Supply, Installation & Training of 5 Number of Gas chromatographs")

Tenderers shall quote in the following proforma, and all columns should be filled. Incomplete bid(s) and those not on this proforma are liable to be rejected.

Tenderers to quote only single rate on FOR Ramagundam (Telangana) destination basis or any other place in India. Tenderers to keep their offer valid for making delivery at Ramagundam Unit of RFCL

PRICE SCHEDULE FOR SUPPLY, INSTALLATION & TRAINING OF GAS CHROMATOGRAPHS AS PER ANNEXURE- I, III & IV:

S.No.	Brief Description of item for Supply, Errection, Installation, Commissioning, Demo as applicable	Qty. & UOM (NO)	HSN Code	Unit Rate without GST- For Door Delivery basis*	Rate of GST (%)	GST in Rs	RATE OF ITEM WITH GST	TOTAL Amount (with GST – FOR Door delivery basis)
		(A)		(B)		(C)	(D)=A+B	(E)=(A)x(D)
1.	Gas Chromatographs required for the Analysis of: a) Natural Gas & Product H2, Flue Gas (Ar & O2) b) Process Gas & Syngas (along with NH3) c) Trace CO & CO2 and Process gas, product CO2 d) Sulphur Compounds in Natural gas (with SCD) e) For Trace amounts of dimethyl ether, Methanol, water, methyl formate, acetone, methylethylketone, higher alcohols and air in gases containing Hydrocarbons	5						

A. Rates to be quoted should be based on the **FOR, Ramagundam site basis.**

B. Price should be all Inclusive charges for packing, Freight, Insurance, Installation, and Training & Documentation of mentioned items.

C. Quoted prices shall include supply of Testing set / Equipment up to RFCL Chemical Laboratory, its initial power up and commissioning / acceptance testing, special tools & tackles and accessories for full functioning of supplied item(s).

D. Quoted prices shall also include training to be imparted to RFCL Lab Staff at RFCL site for Six (6) man-days.

I/We have read all the terms and conditions of the Notice Inviting Tender and the Annexures hereto and agree to accept and abide by the same in to. The above quotation has been prepared after taking into account all the terms and conditions of Notice Inviting Tender.

Signature of the Tenderer_____

Name of Signatory_____



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'SEAL'

Designation of Signatory_____

Name and Address of the Firm _____

Date _____

Place_____



रामगुंडम फर्टिलाइजर्स एंड केमिकल् लिमिटेड

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Email: siva@rfcl.co.in, sprakash@rfcl.co.in

Annexure-VI

BID SECURITY (EMD) FORMAT

DRAFT OF BANK GUARANTEE FOR BID SECURITY DEPOSIT/EMD

IN CONSIDERATION OF Ramagundam Fertilizers and Chemical Limited (RFCL), HAVING ITS REGISTERED OFFICE AT 3rd & 4th FLOOR, MOHTA BUILDING, BHIKAJI CAMA PLACE, NEW DELHI-110066 (HEREINAFTER CALLED RFCL WHICH EXPRESSION SHALL UNLESS REPUGNANT TO THE SUBJECT OR CONTEXT INCLUDES ITS SUCCESSORS AND ASSIGNS) HAVING AGREED TO EXEMPT _____ (HEREINAFTER CALLED THE, THE SAID TENDERER(S)' WHICH EXPRESSION SHALL UNLESS REPUGNANT TO THE SUBJECT OR CONTEXT INCLUDES HIS SUCCESSORS AND ASSIGNS) FROM THE DEMAND UNDER THE TERMS AND CONDITIONS OF TENDER NO _____ FOR _____ HEREINAFTER CALLED "THE SAID TENDERER" OF SUCH BID SECURITY DEPOSIT FOR THE DUE FULFILMENT BY THE SAID TENDERER(S) OF THE TERMS AND CONDITIONS CONTAINED IN THE SAID TENDER _____ FOR _____ ON PRODUCTION OF BANK GUARANTEE FOR RS. _____ (RUPEES _____ ONLY).

1. WE _____ BANK HEREINAFTER REFERRED TO AS 'THE BANK' DO HEREBY UNDERTAKE TO PAY TO RFCL AN AMOUNT NOT EXCEEDING RS. _____ (RUPEES _____ ONLY) AGAINST ANY LOSS OR DAMAGE CAUSED TO OR SUFFERED BY 'RFCL' REASON OF ANY BREACH BY THE SAID TENDERER(S) OF ANY OF THE TERMS AND CONDITIONS CONTAINED IN THE SAID TENDER (THE DECISION OF THE COMPANY AS TO ANY SUCH BREACH HAVING BEEN COMMITTED AND LOSS SUFFERED SHALL BE BINDING ON US).

2. WE _____ BANK DO HEREBY UNDERTAKE TO PAY THE AMOUNTS DUE AND PAYABLE UNDER THIS GUARANTEE WITHOUT ANY DEMUR MERELY OR A DEMAND FROM 'RFCL' STATING THAT THE AMOUNT CLAIMED IS DUE BY WAY OF LOSS OR DAMAGE CAUSED TO OR WOULD CAUSE TO OR SUFFERED BY 'RFCL' BY REASON OF ANY BREACH BY THE SAID TENDERER(S) OF ANY OF THE TERMS OR CONDITIONS CONTAINED IN THE SAID TENDER OR BY REASON OF THE SAID TENDERER'S FAILURE TO KEEP THE TENDER OPEN. ANY SUCH DEMAND MADE ON THE BANK SHALL BE CONCLUSIVE AS REGARDS THE AMOUNT DUE AND PAYABLE BY THE BANK UNDER THIS GUARANTEE. HOWEVER, OUR LIABILITY UNDER THIS GUARANTEE SHALL BE RESTRICTED TO AN AMOUNT NOT EXCEEDING _____ (RS. _____ ONLY).

3. WE _____ BANK FURTHER AGREE THAT THE TEE HEREIN CONTAINED SHALL REMAIN IN FULL FORCE AND EFFECT DURING THE PERIOD THAT WOULD BE TAKEN FOR THE FINALISATION OF THE SAID TENDER AND THAT IT SHALL CONTINUE TO BE ENFORCEABLE TILL THE SAID TENDER IS FINALLY DECIDED AND ORDER PLACED ON THE SUCCESSFUL TENDERER AND/ OR TILL ALL THE DUES OF RFCL UNDER/OR BY VIRTUE OF THE SAID TENDER HAVE BEEN FULLY PAID AND ITS CLAIMS SATISFIED OR DISCHARGED OR TILL A DULY AUTHORISED OFFICER OF RFCL CERTIFIED THAT THE TERMS AND CONDITIONS OF THE SAID TENDER HAVE BEEN FULLY AND PROPERLY CARRIED OUT BY THE SAID TENDERER(S) AND ACCORDINGLY DISCHARGES THE GUARANTEE. UNLESS A DEMAND OR CLAIM UNDER THIS GUARANTEE IS MADE ON US IN WRITING ON OR BEFORE THE _____ TO INCLUDE 3 MONTHS CLAIM OVER AND ABOVE THE PERIOD MENTIONED IN THE PARAGRAPH FOR THE VALIDITY OF THE BANK GUARANTEE IN THE TENDER WE SHALL BE DISCHARGED FROM ALL LIABILITY UNDER THIS GUARANTEE THEREAFTER.

4. WE _____ BANK, LASTLY UNDERTAKE NOT TO REVOKE THIS GUARANTEE DURING ITS CURRENCY EXCEPT WITH THE PREVIOUS CONSENT OF 'RFCL' IN WRITING. DATED _____ DAY OF _____ 20

CORPORATE SEAL

FOR BANK



3rd & 4th Floor, Mohta Building, 4, Bhikaji Cama Place, New Delhi - 110 066
Phone: +91-11-26701441/1442

Ramagundam Fertilizers & Chemicals Limited

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ANNEXURE - VII

BANK GUARANTEE FOR SECURITY DEPOSIT FORMAT (To be prepared on Stamp paper issued in the name of Bank)

This BANK GUARANTEE No. _____ made this day _____ of _____ between _____ a bank incorporated and having its registered office at _____ (hereinafter called BANK) which expression shall unless repugnant to the context or contrary to the meaning thereof include its successors and assigns on the one part and RAMAGUNDAM FERTILIZERS & CHEMICALS LTD, a Company registered in India under Companies Act, 2013 and having its registered office at 3rd & 4th Floor, Mohta Building, Bhikaji Cama Place, New Delhi - 110 066, India to the context or contrary to the meaning thereof include its successors and assigns on the other part.

WHEREAS in pursuance to the agreement dated _____ (hereinafter called CONTRACT) entered into between RAMAGUNDAM FERTILIZERS & CHEMICALS LTD (hereinafter called OWNER and _____ a Company incorporated in _____ (hereinafter called CONTRACTOR) which expression shall unless repugnant to the context or contrary to the meaning thereof include its successors and assigns, for supply of _____ as envisaged in the Contract, Contractor has to submit a SECURITY DEPOSIT for Rs. _____.

CONTRACTOR accordingly agrees to furnish the Bank Guarantee for Security Deposit as hereinafter contained towards fulfillment of all of its obligations under the contract.

NOW THIS DEED WITNESSES AS FOLLOWS:

1. In pursuance of the Contract, the Bank hereby guarantees as a direct responsibility to OWNER that the BANK is holding the amount of Rs. _____ at Owner's disposal and hereby promises and shall be bound to pay to OWNER, forthwith at Owner's written notice stating that the contractor has failed to fulfil its obligations under the contract for reasons for which contractor is liable and without any protest or demur and without recourse to contractor and without asking for any reasons as to whether the amount if lawfully asked for by Owner or not, the entire amount or the portion thereof as mentioned by Owner in the notice. The decision of the Owner as to whether the terms and conditions of this BANK GUARANTEE FOR SECURITY DEPOSIT have been observed or not shall be final and binding on the BANK. In any case, however the Bank's responsibility under this BANK GUARANTEE FOR SECURITY DEPOSIT is limited to Rs. _____.

2. This BANK GUARANTEE FOR SECURITY DEPOSIT shall be valid for an initial period of _____ months from the date of this Bank Guarantee No. _____ dated _____ given by the Bank to Owner become effective. Upon issuance of Commissioning / Erection / Completion certificate according to terms of contract on expiry of _____ months after the issuance of the above mentioned certificate of commissioning / erection / completion certificate, the BANK GUARANTEE FOR SECURITY DEPOSIT shall become null and void.

3. This BANK GUARANTEE FOR SECURITY DEPOSIT shall be in addition to and shall not affect or be affected by any other security now or hereafter held by Owner on account of money hereby intended to secure and Owner at its discretion and without any further consent from the Bank, and without affecting its rights against the Bank, may compound with, give time or



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other indulgence to or make any other arrangement with Contractor and nothing done or omitted to be done by Owner in pursuance of any authority or permission contained in this guarantee, shall effect discharge of the liability of the Bank.

4. UNLESS PREVIOUSLY CANCELLED BY THE OWNER, this Bank Guarantee for Security Deposit will remain in force initially up to _____ months from the effective date of Bank Guarantee No. _____ dated _____ given by the Bank to the Owner and subject to provisions of paragraph 2 above will stand automatically cancelled on the expiry of the said period. Unless demand or claim under this Bank Guarantee is made on Bank in writing within three months from the date of expiry of this Bank Guarantee, all the rights of Owner against the Bank shall be forfeited and Bank shall be relieved and discharged from all the liabilities hereunder.

5. Any notice by way of request, demand or otherwise hereunder may be sent by post to the Bank, addressed as aforesaid, and if sent by post, it shall be deemed to have been given at the time when it would be delivered in due course of post, and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate, signed by an officer of the owners, to the effect that the envelope was so posted, shall be conclusive.

6. The BANK GUARANTEE FOR SECURITY DEPOSIT is to be returned to the Bank after its expiry in terms of Paragraph 4 above.

7. The Bank declares that it has the power to issue this guarantee and the undersigned have full power to do so.

Dated _____ this _____ day of _____.

(Indicate the name of the Bank with stamp)

INTEGRITY PACT

Integrity Pact (IP) is a tool developed by Transparency International (TI) to help governments, business and civil society, which are prepared to fight corruption in the field of public contracting and procurement.

Ramagundam Fertilizers and Chemicals Limited (RFCL), as one of its endeavours to maintain and foster most ethical and corruption free business environment, have decided to adopt the Integrity Pact, to ensure that all activities and transactions between the Company (RFCL) and its Counterparties (Bidders, Contractors, Vendors, Suppliers, Service Providers/Consultants etc.) are handled in a fair and transparent manner, completely free of corruption.

Integrity act is aimed at reducing corrupt practices during procurement and contracts through an agreement between the Principal (RFCL) and Counterparties. The agreement seeks commitment from the persons/officials of both the parties not to demand or accept any bribe or gift. Only those Vendors/bidders who enter into such an integrity pact with the buyer qualify to participate in the bidding process.

Integrity Pact is implemented through Independent External Monitor(s) who ensure that concerned parties comply with their respective obligations under the Integrity Pact. Two Independent External Monitor (IEMs) nominated in consultation with Central Vigilance Commission (CVC) shall monitor the activities. Any NIT/RFQ/Tender related complaint, for NIT/RFQ/Tenders covered under Integrity Pact having value of Rs. 1 (One) crore and above, may be addressed to the Independent External Monitor (IEMs) as per details given below:

Mr. Rakesh Chopra
32, Western Avenue,
Sainik Farms
Khanpur
New Delhi-110062
Email Id: chopra.rakesh@gmail.com

Mr. Chandra Prakash
T-3/404, Takshila Heights
Sector-37 C
Near Basai Chowk
Gurugram-122001 (Haryana)
Email Id: chandraprakash@gargs.com