



रामागुण्डम फर्टिलाइजर्स एण्ड केमिकल्स लिमिटेड

Ramagundam Fertilizers & Chemicals Limited

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

Site Office: Fertilizer City,
Ramagundam-505210,
Dist- Peddapalli, Telangana

E-TENDER

BIDS ARE INVITED
FOR

"Annual rate contract for Operation & Maintenance of 2x240KLD MBR (Membrane Bio-Reactor) based Sewage Treatment Plant (STP) at RFCL Township Ramagundam-2024"

Tender No: RFCL /SITE-Tender/Misc./TS-STP/ O&M/2024/31

e-Tender Event ID: 56766

JULY-2024

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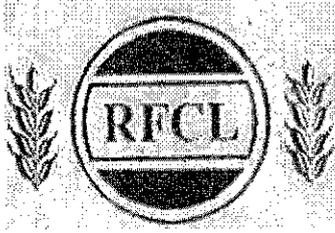
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TOTAL SHEETS OF TENDER		75

NOTE: The bidders shall satisfy themselves before submitting that no page or document listed above is missing from the tender Issued to him / them.

A. R. Shetty



Ramagundam Fertilizers and Chemicals Ltd.

रामागुण्डम फर्टिलाइजर्स एण्ड केमिकल्स लिमिटेड

(A Joint Venture Company of NFL, EIL & FCIL)

Site office: Fertilizers Plant Ramagundam – 505210, Distt: Peddapally, Telengana
Telephone: +91 8728 257488 E mail: rfcl.ramagundam@rfcl.co.in

CIN No. U24100DL2015PLC276753

Tender No.: RFCL /SITE-Tender/Misc./TS-STP/ O&M/2024/31

Date: 02.07.2024

INSTRUCTIONS TO TENDERERS FOR E-TENDERING

1. Mode of Tendering:

Ramagundam Fertilizers and Chemicals Ltd. (A Joint-Venture of NFL, EIL, FCIL, HTAS, GAIL & Govt. of Telangana) has decided to award “Annual rate contract for Operation & Maintenance of 2x240KLD MBR (Membrane Bio-Reactor) based Sewage Treatment Plant (STP) at RFCL Township Ramagundam-2024” through e-tendering. The NIT will be posted on website <https://rfcl.abcprocure.com> 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. e-Procurement Technologies Ltd, Ahmedabad 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

Mr. D. Satyanarayana, AGM (TS) RFCL, Fertilizers City, Ramagundam – 505210 Mob No. 9990974500 E mail: d.satyanarayana@rfcl.co.in	Mr. B. Syam-Kumar, Manager (TS) RFCL, Fertilizers City, Ramagundam – 505210 Mob No. 7702654687 E mail: syam.bandari@rfcl.co.in
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b) M/s. e-Procurement Technologies Limited

1	Approval of Profile & DSC Verification	Help Desk	+91 - 63532 17080, +91-90990 90830	info@abcprocure.com dsc@abcprocure.com
2	e-Tender Submission	Help Desk	+91 9904406300 , +91 9510812960 , +91 9265562821 , +91 6354919566	support@abcprocure.com
3	e-Auction related Queries	Help Desk	+91 - 98799 96111, +91-99044 07997, +91-95108 13415	
4	Office Hours: Monday to Friday - 10:00AM to 07:30PM (IST) 1st, 3rd and 5th Saturday - 10:00AM to 06:00PM (IST) 2nd and 4th Saturday - Holiday			

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

- I. Bidders are strongly advised to refer Minimum System Requirement document uploaded on <https://rfcl.abcprocure.com> under download section prior registration and Participating in e-Tenders invited by RFCL.
- II. For Quick Bidder Manual, you can refer this link <https://youtu.be/-E5fiZVYnfg> for Tender Submission **OR** download "Bidder Manual" from <https://rfcl.abcprocure.com> website **OR** Contact us.

(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 III DSC)
- Vendors need to procure DSC 24 hrs prior to Registration on <https://rfcl.abcprocure.com> .
- 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. **e-Procurement Technologies Ltd.**
- Respective DSC Drivers needs to be installed.
- DSC needs to be physically inserted into the system.
- DSC should appear in the Browser.
- Vendor should map the DSC with their Log-ID immediately after registration, Email Verification.

(c) Pre-Requisites for Login Credentials:

For registration on the e-tender site <https://rfcl.abcprocure.com> , one can be guided by the "Instructions to Vendors" available under the download section of the homepage of the website. As the first step, bidder shall have to click the "Register" link and fill in the requisite information in the "Bidder Registration Form". Kindly remember your email id (which will also act as the login ID) and the password entered therein. Once you complete this process correctly, you shall get a system generated mail. Thereafter, login in to the portal using your credentials. When you log in for the first time, system will ask you to add your Digital Signature Certificate. Digital Signature Certificate Class 3 Signing + Encryption is mandatory to attach at the time of Registration and to log-in. Bidders should ensure that DSC is in the name of registered firm and person only. If attached DSC does not match with the registered profile then DSC will not be verified and profile will not be approved. Once you have added the Digital Signature Certificate, please inform the vendor administrator info@abcprocure.com , dsc@abcprocure.com , Contact no.: +91 - 63532 17080, +91-90990 90830 for approval. Once approved, bidders can login in to the system as and when required.

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. As a pre-requisite for participation in the tender, vendors are required to obtain a valid Digital Certificate of Class III (having both signing and encryption certificates) as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCIA), Controller of Certifying Authorities (CCA). The cost of obtaining the digital certificate shall be borne by the vendor.
5. Corrigendum/amendment, if any, shall be notified on the site <https://rfcl.abcprocure.com>. In case any corrigendum/amendment is issued after the submission of the bid, then such vendors who have submitted their bids, shall be intimated about the corrigendum/amendment by a system-generated email. It shall be assumed that the information contained therein has been taken into account by the vendor. They have the choice of making changes in their bid before the due date and time.



6. Vendors are required to complete the entire process online on or before the due date/time of closing of the tender
7. Directions for submitting online offers, electronically, against e-procurement tenders directly through internet:
 - (i) Vendors are advised to log on to the website (<https://rfcl.abecprocure.com>) and arrange to register themselves at the earliest
 - (ii) The system time (IST) that will be displayed on e-Procurement web page shall be the time considered for determining the expiry of due date and time of the tender and no other time shall be taken into cognizance.
 - (iii) Vendors are advised in their own interest to ensure that their bids are submitted in eProcurement system well before the closing date and time of bid.
 - (iv) If the vendor intends to change/revise the bid already submitted, they shall have to withdraw their bid already submitted, change / revise the bid and submit once again (if this feature "Bid Withdraw" is enabled in e-tender event). However, if the vendor is not able to complete the submission of the changed/revise bid within due date & time, the system would consider it as no bid has been received from the vendor against the tender and consequently the vendor will be out of contention. The process of change / revise may do so any number of times till the due date and time of submission deadline. However, no bid can be modified after the deadline for submission of bids.
 - (v) Once the entire process of submission of online bid is complete, they will get an automail from the system stating you have successfully submitted your bid in the following tender with tender details.
 - (vi) Bids / Offers shall not be permitted in e-procurement system after the due date / time of tender. Hence, no bid can be submitted after the due date and time of submission has elapsed.
 - (vii) No manual bids/offers along with electronic bids/offers shall be permitted except those specifically indicated.
8. No responsibility will be taken by RFCL and/or the e-procurement service provider for any delay due to connectivity and availability of website. They shall not have any liability to vendors for any interruption or delay in access to the site irrespective of the cause. It is advisable that vendors who are not well conversant with e-tendering procedures, start filling up the tenders much before the due date / time so that there is sufficient time available with him/her to acquaint with all the steps and seek help if they so require. Even for those who are conversant with this type of e-tendering, it is suggested to complete all the activities ahead of time. It should be noted that the individual bid becomes viewable only after the opening of the bid on/after the due date and time. Please be reassured that your bid will be viewable only to you and nobody else till the due date/ time of the tender opening. The non-availability of viewing before due date and time is true for e-tendering service provider as well as RFCL officials.
9. RFCL and/or the e-procurement service provider shall not be responsible for any direct or indirect loss or damages and or consequential damages, arising out of the bidding process including but not limited to systems problems, inability to use the system, loss of electronic information etc. In case of any clarification pertaining to e-procurement process, the vendor may contact the following agencies / personnel:
10. 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.
11. For submitting price bid through e-Auction, the successful Pre-Qualified Vendors will have to use a Class III Digital Signature Certificate issued by any India CA approved by CCA of India as per IT Act 2000.
12. It is mandatory for the vendors to use the Digital Signature Certificate in all their bidding Process. 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.

13. **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-

<i>Sr. No.</i>	<i>Tender Stage</i>	<i>Date & Time</i>
1.	Start Tender Document Download	02.07.2024 at 17:00 hrs.
2.	Pre-Bid Meeting	09.07.2024 at 10:00 hrs.
3.	End Tender Document Download	17.07.2024 at 15:00 hrs.
4.	Due/ last date of submission Bids	17.07.2024 at 15:30 hrs.
5.	Techno-commercial Bids Opening	17.07.2024 at 15:45 hrs.
6.	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.

14. The activity defined for vendors are Download of Tender document, Bids Preparation, Uploading of bids. During the Download sequence, the vendors who have been invited will be able to download the main tender document and the supporting documents.

15. **Tender Opening:**

The tenders will be opened electronically by us from our RFCL Site Office in the presence of authorized representatives of Vendors who wish to attend the bid opening. The submission of bids may however be done by vendors from their office or from place of their choice. However, bids can't be submitted after the bid submission due date & time as per the schedule.

16. RFCL takes no responsibility for delay, loss or non-receipt of EMD sent by post/courier.

17. RFCL reserves the right to reject or accept any tender without giving any reason. The bids not accompanied with the requisite Earnest Money may not be opened.

18. **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 & submitted their bids online.

19. **Name & Address of Contact person:**

Mr. D. Satyanarayana,
Assistant General Manager (TS),
Ramagundam Fertilizers and Chemicals Ltd,
Fertilizers City – 505210.
Ramagundam (Mandal), Peddapalli (District),
Telangana state, India.

20. **GST Nos.**

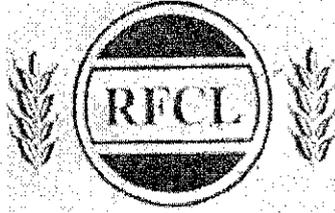
Unit	GST NO.
Ramagundam, Telangana	36AAHCR2335P1ZY

21. 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). The rates should be quoted both in figures and in words.
22. Your GST Registration No. and Permanent Account No., allotted by the concerned Department should be mentioned in the quotation positively.
23. 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.

Thanking You
For & On Behalf of Ramagundam Fertilizers and Chemicals Limited



D. Satyanarayana
Assistant General Manager (TS)
DURGAM SATYANARAYANA
Asst. General Manager (Technical Services)
Ramagundam Fertilizers and Chemicals Limited
Ramagundam-505210, Dist. Peddapalli (T.S)



Ramagundam Fertilizers and Chemicals Ltd.

रामागुण्डम फर्टिलाइजर्स एण्ड केमिकल्स लिमिटेड

(A Joint Venture Company of NFL, EIL & FCIL)

Site office: Fertilizers Plant Ramagundam – 505210, Distt: Peddapally, Telengana

Telephone: +91 8728 257488 E mail: rfcl.ramagundam@rfcl.co.in

CIN No. U24100DL2015PLC276753

Tender No: RFCL /SITE-Tender/Misc./TS-STP/ O&M/2024/31

Date: 02.07.2024

NOTICE INVITING TENDER

To,

Sub: Annual rate contract for Operation & Maintenance of 2x240KLD MBR (Membrane Bio-Reactor) based Sewage Treatment Plant (STP) at RFCL Township Ramagundam-2024.

Dear Sirs,

Sealed Bids are invited for the work as detailed below:

1. **Name of Work** "Annual rate contract for Operation & Maintenance of 2x240KLD MBR (Membrane Bio-Reactor) based Sewage Treatment Plant (STP) at RFCL Township Ramagundam-2024."
2. **Earnest Money Deposit and Tender Cost** Tender Cost/Tender fee: Rs. 1000/- (Incl. GST)
Tender fee is non-refundable
Earnest Money: ₹1,00,000 (Rupees One Lakh Only)
as per payment modes as stipulated as per clause no. 09 of Annexure-VII. Bids received without Tender Fee & EMD shall be outrightly rejected.
Note: This is a Service contract, hence, Bidders registered under National Small-Scale Industries/MSME are exempted from submission of E.M.D & Tender Fee.
3. **Period of completion** **12(Twelve)** months from the start date mentioned in LOA and extendable as per provisions mentioned in GTCC.
4. **Validity of the Tender** **120 days** from the Date of Opening of Tender.
5. **Date/Time of Pre Bid Meeting & Site Visit** **09.07.2024, 10.00 AM** at office of AGM (TS), RFCL, Ramagundam
6. All request for interpretation, clarification & queries in connection with tender shall be addressed in writing to Issuing Authority i. e. AGM. (TS), RFCL Site, Ramagundam at least 3 (Three) days prior to the closing date of the tender.
7. The rate should be quoted in the Units given in the Schedule of Rates.
8. Ramagundam Fertilizers & Chemicals Ltd., Ramagundam reserves the right to reject any or all Bids without assigning any reasons whatsoever and it also does not bind itself to accept the Lowest Tender.

9. **Procedure for Submission of Tender:**

The Tender shall be submitted in Three Parts as under:

9.1 Step No. 1/ Envelope No. 1: -

Will be '**Tender Fee & EMD**' and shall contain Tender Fee & EMD or MSME as per Clause No. 2 of the above.

9.2 Step No. 2/ Envelope No. 2: -

- Will be '**Techno Commercial bid (unpriced)**' shall contain NIT duly signed, documents & all other declarations required as per Tender.
- Documents as stated in **Annexure-II** for meeting the eligibility & evaluation criteria.
- Duly Filled Performa's of Techno Commercial Bid.
- Unpriced SOR Performa mentioning "quoted" in all pages with signature and stamp.

9.3 Step No. 3/ Envelope No. 3:-

Will be '**Price Bid/Schedule of Rates**' and shall contain the item wise rates only as per Schedule of Rates Performa.

All the procedure of filling the tender will be as on E Tender basis only.

9.4 RFCL's Site bank details:

Tender fee/EMD can be deposited in RFCL's account through RTGS/NEFT & details of the transaction with UTR No. to be submitted along with technical bid for verification.

RFCL's site 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 | : | FERTILIZER CITY, RAMAGUNDAM (61777) |
| d) Account Number | : | 36727029257 |
| e) IFSC No. | : | SBIN0061777 |

Alternatively, the bidder can submit the Tender Fee/EMD in the form of Crossed Demand Draft favouring Ramagundam Fertilizers and Chemicals Ltd. and issued by any scheduled/nationalized bank payable at Ramagundam. EMD can also be submitted in the form of Bank Guarantee Format of EMD-BG as per Annexure-XVII. The charges, if any, for online payment or for DD or for BG for submission of Tender fee/EMD will be borne by bidder. In case of submission of Tender Fee by DD & EMD by DD or in the form of BG, it should be ensured by the tenderer that the scan copy of the DD /BG is uploaded with E-Tender portal & original DD or Original BG should be received by RFCL within **3 working days** from opening day of techno-commercial bids for verification of the details of DD/BG given online by the tenderer.

10. **Opening of Tender:**

The Tender shall be opened as under E tender process:

Step No. 1: The envelope containing Tender Fee & EMD or MSME/NSIC will be opened first, on the scheduled date of opening of tender, Party those who failed to submit/upload the details of Tender Fee & EMD or MSME/NSIC will be rejected for further tender opening.

Step No. 2: "**Techno Commercial Bid (Unpriced)**" shall then be opened of only those parties who have submitted the EMD & Tender cost/ MSME/NSIC.

Step No. 3: '**Price Bid/Schedule of Rates**' shall be opened after meeting the eligibility criteria of **Techno-Commercial Bid(unpriced)** and whose bids determined to be technically and commercially responsive. The date of opening of Price Bid/SOR will be intimated to technically selected tenderers separately.

11. No condition or deviation should be mentioned by Bidder in Price Bid. Offers where the party has mentioned any condition or deviation in Price Bid shall be out rightly rejected
12. This letter shall form part of the contract document and shall be signed and returned along with the tender documents.
13. Every communication by tenderers shall be made in the English Language. All other information such as documents and drawings supplied by the Bidder will also be in English Language as will be any further information supplied by RFCL.
14. Bids containing erasures and alterations of the tender documents are liable to be rejected unless these are authenticated by the persons signing the tender documents.
15. "Bidders may ensure that tender documents/offer have been signed by appropriate/authorized representative for the Company. Withdrawal of offer/non-acceptance of orders placed based on offers submitted by bidder's on their letter head will not be allowed on the grounds that offer was not signed by authorized person." in such case EMD shall be forfeited
16. One person will be allowed to represent only one company during discussion/negotiation 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 negotiation.
17. All pages shall be initialled at the lower right-hand corner and signed wherever required in the tender papers by the tenderers or by a person holding power of attorney authorizing him to sign on behalf of the tenderer before submission of tender. No eraser or overwriting is permissible

Thanking you,

Yours faithfully,

for M/s. Ramagundam Fertilizers & Chemicals Ltd.


(D. Satyanarayana) **DURGAM SATYANARAYANA**
Asst. General Manager (Technical Services)
Assistant General Manager (TS)
Ramagundam Fertilizers and Chemicals Limited
E mail: d.satyanarayana@rfcl.co.in
Mob No. 9990974500
Encl. Tender Documents (Annexure-I to XVII)

RAMAGUNDAM FERTILIZERS AND CHEMICALS LIMITED

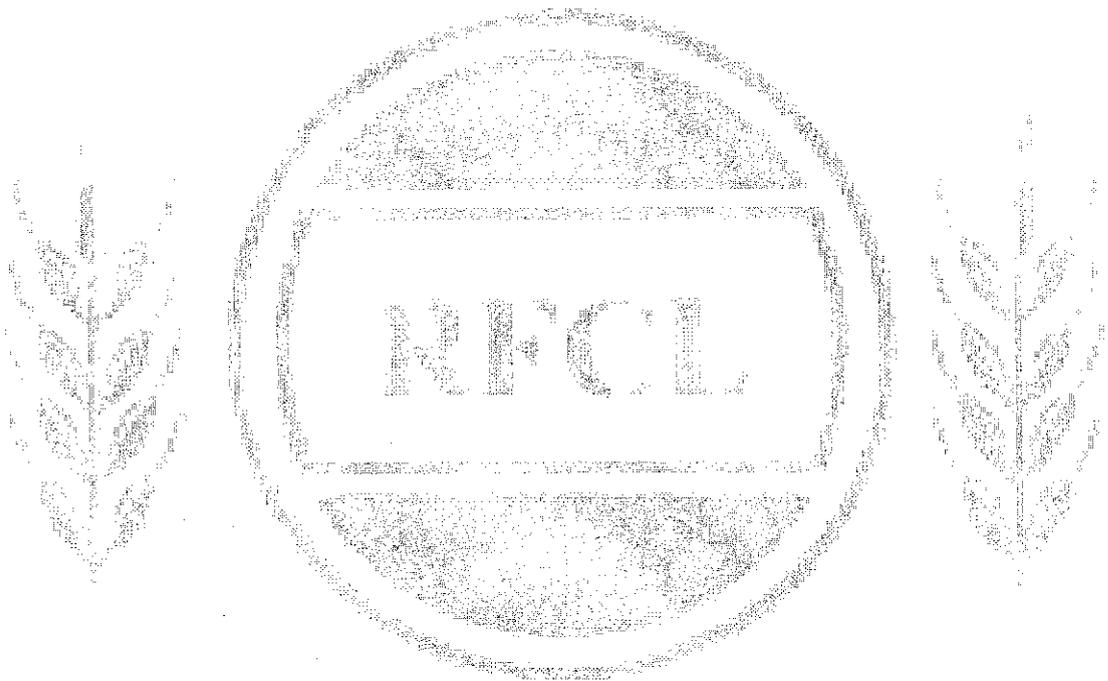
DEFINITIONS OF TERMS

In the contract documents herein defined where the context so admits, the following words and expression will have the meanings assigned to them respectively:

1. "The RFCL" means the RAMAGUNDAM FERTILIZERS AND CHEMICALS LIMITED, incorporated in India, having its registered office at **Scope Complex, Core No. III 7, Institutional Area, Lodhi Road New Delhi – 110003**
2. The "ENGINEER-IN-CHARGE" shall mean the person designated as such by RFCL and shall include those who are expressly authorized by him to act for and on his behalf for operation of this contract.
3. The "WORK" shall mean the works to be executed in accordance with the contract or part thereof as the case may be and shall include all extra, additional, altered or substituted works as required for purpose of the contract.
4. "CONSTRUCTION/MAINTENANCE EQUIPMENT" means all appliances and equipment of whatsoever nature for the use in or for the execution, completion operation or maintenance of the work unless intended to form part of permanent work.
5. "SITE" means the areas in which the work is to be performed by the Contractor and shall include a part or portion of the site on which the permanent work is proposed to be constructed.
6. The "TENDER DOCUMENTS" shall consist of Short Tender Notice, General Instructions to the Tender, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, Time Schedule Tender Form, Performa or Agreement Form Schedule of Rates, and Addendum/Addenda to Tender Documents.
7. "THE CONTRACTOR" means any person or persons or firm or company whose Tender has been accepted by RFCL with the concurrence of the RFCL, and the legal personal representatives, successors and permitted assigns of such person, persons firm or company.
8. The "CONTRACT" shall mean the Agreement between RFCL and the Contractor for the execution of the works including therein all contract documents.
9. The "SPECIFICATIONS" shall mean the various Technical specifications attached and referred to in the Tender documents. It shall also include the latest addition of relevant Indian Standard Specifications published before entering into contract.
10. "The DRAWINGS" shall include Maps, Plans and Tracings OR Prints thereof with any modifications approved, in writing by the Engineer-in-charge and such other drawings as may, from time to time, be furnished or approved in writing by the Engineer-in-charge.
11. The "CONTRACT DOCUMENTS" shall consist of Agreement, Tender documents & Specifications as defined in Clause 6, 8 & 9 above, Acceptance of Tender and further amendments.
12. The "ALTERATION ORDER" means an order given in writing by the Engineer-in-charge to affect additions to or deletion from and alterations in the works.
13. The "COMPLETION CERTIFICATE" shall mean the Certificate to be issued by the Engineer-in-charge when the works have been completed to his satisfaction.
14. The "FINAL CERTIFICATE" in relation to a work means the Certificate issued by the RFCL after the period of defect liability is over.

A. Phogat

15. The "PERIOD OF DEFECT LIABILITY" in relation to work means the specified period from the date of issue of Completion Certificate upto the date of issue of Final Certificate during which the Contractor stand responsible for rectifying all defects that may appear in the works.
16. 'ZERO DATE' shall mean the date of issue of LETTER OF ACCEPTANCE (LOA) or issue of WORK ORDER, whichever is earlier.
17. "GTCC" means General Terms & Conditions of Contract.
18. "Working Day" means a day other than a Sunday or a public holiday on which RFCL is open for business.
19. "Week" means a period of any consecutive seven days.



A. Bhoopathy

ELIGIBILITY CRITERIA

Sl. No.	Conditions	Documents required (To be submitted along with Technical bid)
1.	<p>Bidder should be Contractor/agency having executed at least 1(one) similar work of Operation and/or Maintenance of MBR (Membrane Bio-Reactor) based Sewage Treatment Plants (STP) for <i>Central Govt. Departments/State Govt. Departments/Public &/or Private Sector Factories/Projects/Operational-Establishments/Office-Complexes/Hotels/Hospitals/Warehouses/Townships/Residential-Apartments etc.in any one year, during the last 7 years.</i></p> <p>“Similar” means Operation and/or Maintenance of MBR based Sewage Treatment Plants (STP).</p> <p>Note: “The last 7 years shall be counted from last date of the preceding month in which tender has been Issued.”</p>	<p>i) Bidder must submit the copy of valid industrial License issued by Statutory authority for being a manufacturer along with ISO certificate/ GST Registration certificate / Udyog Aadhaar / certificate issued by statutory authority/NSIC certificate or equivalent certificate.</p> <p>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. The Authorization certificate should be issued for specific tender/enquiry.</p> <p>iii) Authorization letter from the company on behalf of the person signing the document be provided with technical bid.</p> <p>iv) For Proprietorship firm - Name of the proprietor to be mentioned. Affidavit of proprietorship in original duly notarized (Latest)</p> <p>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.</p> <p>vi) For Transport unions/Co-operative societies/Registered societies- Copy of Registration certificate /Copy of Resolution of members/Authority letter to participate in the tender.</p>
2.	<p>Bidder should have successfully completed similar work(s) as defined above during immediate last 7 years as mentioned below:</p> <p>One work having not less than ₹45.30 lakhs/- (excl. GST)</p> <p>or</p> <p>Two works each having value not less than ₹28.31 lakhs/- (excl. GST)</p> <p>or</p> <p>Three works each having value of not less than ₹22.65 lakhs/- (excl. GST)</p>	<p>Copy of Work Completion Certificate along with copy of Work Order from the organization where the work is executed is to be enclosed mentioning the completed value of each single work executed and performance certificate issued by the client.</p>
3.	<p>The Average Annual turnover of the bidder in last three financial years shall not be less than ₹16,98,521/-</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 30th september, 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 30th September, it is compulsory to submit the 	<p>Bidder shall submit financial standing through Audited* Balance Sheet/ Profit & Loss Account for the last three financial years. (FY 22-23, 21-22, & 20-21)</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 any interest in the bidder's company).</p>

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	<p>financial details of the immediate three preceding financial years only.</p> <ul style="list-style-type: none"> 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. 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. 	
4.	<p>The net worth of the bidders should be positive for the Financial year 2022-23 ending March'2023.</p> <p>*Networth = Paid up share capital+ Reserves Out of Profit (Including Security Premium) – Accumulated losses – Deferred Expenditure – Mis. Expenditure not written off</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 any interest in the bidder's company).</p>
5.	<p>Bidder should have minimum working capital of ₹5,66,174/- as per Audited Financial result of Financial Year 2022-23</p> <p>“Working capital should be current assets minus current liabilities.</p>	<p>Copy of audited balance sheet for the Financial year 2022-23 ending 31st March'2023 should be submitted.</p> <p>Or,</p> <p>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 ₹5,66,174/- 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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DECLARATION-FORM-I

Date:

To,

Assistant General Manager (TS)
 Ramagundam Fertilizers & Chemical Ltd.
 Fertilizers City, Ramagundam (TS)
 District: Peddapalli (Telangana)
 Pin Code- 505210

Dear Sir,

I/We hereby submit tender for "Annual rate contract for Operation & Maintenance of 2x240KLD MBR (Membrane Bio-Reactor) based Sewage Treatment Plant (STP) at RFCL Township Ramagundam-2024." work at Ramagundam fertilizers & Chemicals Limited, Fertilizer City, Ramagundam, Telangana, as per tender separately signed and accepted by me/us, and rates quoted by me/us in attached schedule of rates (Annexure-XIII) in accordance with Notice Inviting Tender, terms and conditions of Tender, other documents and papers as detailed in the tender document.

I/We hereby agree to abide by and fulfill all terms and conditions referred to in the Tender Document/Work Order/LOA etc. and in default thereof, to forfeit and pay to the RFCL or its successors or its authorized nominees such sums of money as are stipulated in Terms and Conditions contained in the Tender Document.

I/We confirm having deposited the **Earnest Money of ₹1,00,000/- (Rs. One Lakh Only)** vide Demand Draft No. _____ dated _____ in favor of Ramagundam Fertilizers and Chemicals Limited payable at Ramagundam or through BG no. _____ dated _____ or through bank transfer to RFCL Account bearing UTR no. _____.

Or I/We confirm having certified bidders registered under **National Small-Scale Industries/MSME** (Copy of certificate has been enclosed), certificate No. _____ dated _____ and valid up to _____.

It is certified that Price Bid/Schedule of Rates is unconditional and quoted for all the items of 'Schedule of Rates/Price bid' in Figures and Words both and no item is blank/unquoted.

If, I/we fail to start execution of the said contract in the time, specified in the tender documents or fail to deposit the amount of security deposit specified in the Tender Document, I/We agree that Ramagundam fertilizers & Chemicals Limited, shall be at liberty to cancel the notice of acceptance of tender if I/We fail to remit Security Deposit amount as aforesaid or to execute an agreement or to start work as stipulated in the tender document/perform the contract faithfully.

Dated the _____ day of _____ 2024

Signature of Tenderer with Seal Name

&Address: _____

E-Mail Address: _____

Mobile/Telephone No. _____

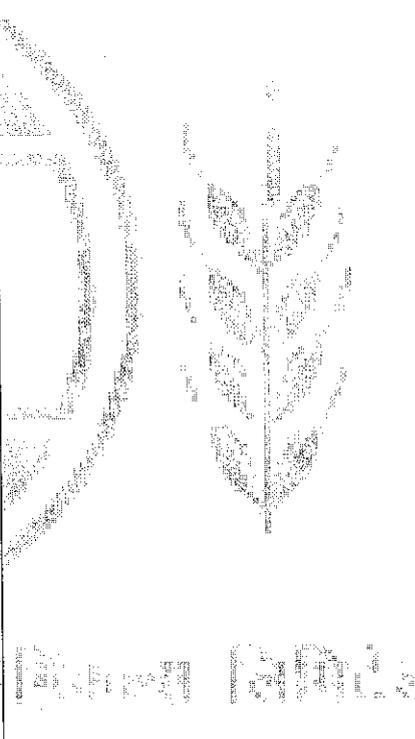
A. Ghawate

DECLARATION FORM-II

The following declaration to be signed by Contractor and to be submitted along with required documents which would be duly self-certified:

Sr.No	Description			
1.	Name of Applicant/Firm/Company			
2.	Complete Address along with Contact Person name, mobile number and Email Id			
3.	Company Profile			
i)	Public Limited/Private Limited Company/ Undivided Hindu Family/Individual/ Partnership Firm/Co-operative Society/LLP/Others (Please mention)			
	(Please attach duly attested partnership deed(latest) by Notary public/Self attested firm registration copy /Incorporation certificate, Articles of association and memorandum of association and power of attorney who is signing documents on behalf of applicant/firm/company).			
4.	Year of Establishment & Registration No along with documentary proof if any			
5.	If a Bidder has relations whether by blood or otherwise with any of employees (including employees on deputation) of RFCL, the Bidder must disclose the relation at the time of submission of Tender, failing which, RFCL shall reserves the right to reject the Tender or rescind the Contract.	YES / NO (If Yes, give the following details)		
		Name & Designation of the Employee	Place of Posting	Relation with the Employee
6.	P.F. Registration No. of the Contractor to be intimated along with Documentary proof thereof.			
7.	PAN No. of the Contractor to be intimated along with Documentary Proof thereof.			
8.	Whether bidders are registered or unregistered as per GST Laws. If registered the following details shall be provided-			
9.	GST Registration No. with Documentary Proof.			
10	Service Accounting Code No.			
11	Rate of GST applicable on the quoted rates	IGST ___%	CGST ___%	SGST ___%

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12	We have assessed & ascertained the rate of GST applicable on quoted services. It is clearly understood that RFCL will not have any liability towards payment of GST over & above the GST rate quoted for any reason whatsoever except for statutory variation against documentary evidence.	Agreed
13	ESI Registration No. of the Contract or to be intimated along with Documentary proof thereof.	
14	If the bidder is registered as Micro/Small/Medium Enterprises as per MSMED Act, 2006, the same may be confirmed by the bidder and submit a photocopy (Self certified) of the registration certificate in support thereof. Otherwise, it will be construed that the bidder is not registered as per MSMED Act, 2006. Registration month & Year should be prior to bid submission due date.	
15	<p>Labour License No. of the bidder to be intimated along with Documentary proof thereof. If the bidder does not have labour license, then the bidder shall submit undertaking on their letter head regarding Labour License, as per the following format.</p> <p>The bidder shall submit undertaking regarding Labour License, as per the following format</p> <p>"In case this job is awarded to us i.e. M/s _____, we shall obtain Labour License from the appropriate Licensing Authorities i.e. Central / State Government, as applicable from time to time, under the Contract Labour (R & A) Act, 1970 & the rules enacted there under and submit a copy of the same to RFCL, Ramagundam before start of execution of contract work in RFCL, Ramagundam"</p> <p>If we fail to submit labour license before start of execution of work, we agree for forfeiture of SD and termination of Contract by RFCL"</p>	

Dated the _____ day of _____ 2024

(Signature of Bidder with Seal)

Name: _____

Address: _____

Place: _____

A. Baccaly

E-Banking Mandate Form

PRINT ON LETTER HEAD OF THE CUSTOMER/VENDOR.

Ref No _____

Date: -----

E-BANKING MANDATE FORM

SL NO	PARTICULARS	DETAILS TO BE FILLED HERE
1	Vendor/Customer Name	M/s _____
2	Vendor/Customer Code	Optional
3	Vendor/Customer Address	
4	Vendor/Customer e-mail Id	
5	Particulars of Bank Account	
	i) Name of the Bank	
	ii) Name of the Branch	
	iii) Branch Code	
	iv) Address	
	v) Telephone No.	
	vi) Type of Account	
	vii) Account No	
	viii) RTGS/IFSC number of the Bank	
	ix) 9 Digit MICR Code	

I/We hereby authorize Ramagundam Fertilizers and Chemicals Limited (RFCL) to release any amount due to me/us in the bank account as mentioned above. I/we hereby declare that the particulars given above are correct and complete. If the transactions are delayed or lost because of incomplete or incorrect information, we would not held RFCL responsible for that.

SEAL & SIGNATURE of the Vendor/Customer

We certify that M/s _____ has an account no. _____ with us and we confirm that the details given above are correct as per our record.

Bank Stamp:

Date:

Signature of authorized officer of the Bank

A. Blacore

I. SCOPE OF WORK & ASSOCIATED TERMS AND CONDITIONS

Scope of work includes but not limited to the following: -

1. Deployment of qualified & experienced **Operators & Reliever (s) with all requisite tools & tackles**, in three shifts for running of Township STP plant for 24 hrs in all days of the week.

Note:- Qualification for operators & Reliever: Minimum ITI (Fitter, Electrical, Mechanical) with 2 years Exp in process industry such as STP, ETP etc. in operation department etc.

2. **Reliever(s)** will be made available to provide weekly off and leave to the operators as and when required.
3. Deployment of **Supervisor** in General Shift for monitoring the day-to-day maintenance activities in STP.

Note:- The contractor will have to keep one experienced site supervisor with having minimum 2 year of experience (in case of Diploma/Degree) or minimum 5 years' experience (in case ITI) in process industry. The Supervisor so deployed may be empowered with proper power of attorney / Authority letter to act on behalf of the Contractor's firm for all works and bill related matters taking instructions from Engineer-In-Charge. The said supervisor must be able to communicate in either Hindi or English in addition to Telugu. In case of his absence from duties under normal circumstances for more than 3 working days in a month, penalty shall be levied @ ₹1000 per working day from due payments of the Contractor, till resumption of duties by the Supervisor. In case of absence due to medical reasons, Contractor shall inform the same to Engineer-In-Charge and shall endeavour to deploy replacement Supervisor temporarily, within 10 days. Upon failure to deploy replacement within 10 days, penalty shall be levied @ ₹1500 per working day from due payments of the Contractor, till re-deployment of the Supervisor. In case, no Engineer/Supervisor is present at site for more than 10 continuous working days, same shall be treated as non-performance at the Contractor's end. The quoted rates shall be deemed to include the above provisions.

4. Deployment of Manpower shall be with complete statutory compliances like Minimum Wages, PF, ESI, Leave, Bonus & Holiday payments.
5. Supply of PPE to operator as required.
6. Detailed Plant Health report shall be submitted once in a month. **The plant health report shall be submitted in a format which shall be approved by RFCL Engineer-In-Charge.**
7. Assurance for consistent Quality and Quantity of the treated water.
8. Preparation and submission of daily, weekly and monthly reports consisting all the details pertaining to plant operation, consumables etc.
9. Water sample collection and analysis Reports of STP – inlet & outlet samples once in a month, in total –2 nos samples/Month. The parameters as tabulated below shall be indicated in the report along with applicable limits prescribed by CPCB: -

A. Shrivastava

TEST RESULTS

S. No	Parameters	Units	Test Method
1.	pH at 25°C	--	IS:3025 part 11 1983, RA-2022
2.	Color	CU	IS: 3025 Part 4 1983, RA-2022
3.	Odor	--	IS: 3025 Part 5 1983
4.	Turbidity	NTU	IS: 3025 Part 10 1984, RA-2017
5.	Total Hardness as CaCO ₃	mg/L	IS: 3025 Part 21 2009, RA-2019
6.	Calcium as Ca	mg/L	IS: 3025 Part 40 1991, RA-2019
7.	Total Dissolved Solids (at 180°C)	mg/L	IS: 3025 Part 16 1984, RA-2017
8.	Total Suspended Solids (at 105°C)	mg/L	IS: 3025 Part 17 1984, RA-2022
9.	Chemical Oxygen Demand (COD)	mg/L	IS 3025 Part 58 2006, RA-2017
10.	Biological Oxygen Demand (3 days at 27°C)	mg/L	IS 3025 Part 44 1993, RA-2019
11.	Sulphates as SO ₄	mg/L	APHA 23 rd Edn:2017 - 4500 SO ₄ E
12.	Residual Free Chlorine	mg/L	IS: 3025 Part 26 1986, RA-2021
13.	Ammonical Nitrogen	mg/L	IS: 3025 Part 34 1988, RA-2019
14.	Total Alkalinity as CaCO ₃	mg/L	IS: 3025 Part 23 1986, RA-2019
15.	Oil & Grease	mg/L	IS 3025 Part 39 1991, RA-2021

MICROBIOLOGICAL ANALYSIS

S. No	Parameters	Units	Test Method
1.	Coli form Bacteria	MPN/100mL	APHA 23 rd ED 2017 9221 B
2.	E.Coli Bacteria	MPN/100mL	APHA 23 rd ED 2017 9221 B

In addition to above, following parameters are to be analysed: -

- 1) Dissolved Phosphates
- 2) MLSS

The samples shall be tested in NABL accredited laboratories only and monthly reports shall be submitted to the Engineer-In-Charge by first week of the succeeding month for review and records. The outlet water parameters achieved in the report, shall be considered as indicator of plant health.

10. The following shall be the broad scope for Operation & Maintenance of the STP: -

- A) **Manning of Township STP & intermediate pumping station at a distance of nearly 2km from Township STP**, as per the supplier's norms & good industry practice in three shifts by deploying experienced manpower along with supervisor with desired PPEs. The deployment of manpower shall be with all statutory compliances with respect to Minimum Wages, PF, ESI, Leave, Bonus, Holiday Payments etc.
- B) Pumps operation as per O&M manual Annexure-XVII.
- C) Bar screen cleaning.
- D) Supply & safe keeping of consumables & inventory/stock management as per requirement in consultation with the Engineer-In-Charge, for smooth operation of STP.
- E) Dosing of chemicals/consumables etc. as per requirement and instruction of Engineer-In-Charge
- F) Cleaning of suction and delivery line of pumps as required.
- G) Cleaning of foot valve of pumps as and when required.
- H) Maintenance cleaning of all pumps and motors as and when required.
- I) Log sheets/Log Book will be maintained as per requirement/instruction of Engineer-In-Charge
- J) Greasing of motor/pump bearings.
- K) Gear Oil replacement and servicing.
- L) Air filters cleaning of blowers.
- M) Foot valve, Suction and delivery line cleaning, Diaphragm cleaning for dosing pumps.
- N) Water sample collection from collection tank, treated water tank followed by submission of lab test reports after testing at NABL accredited labs (1 sample each from Inlet & Outlet every month). Parameters to be tested as per Sr. No. 8 above.
- O) Submission of Plant Health Status Report on Monthly basis.

A. Shrivastava

- P) Chemical cleaning of MBR Module as per requirement & instruction of Engineer-In-Charge (Minimum Frequency- Twice per Annum)
- Q) Sludge disposal as per requirement and instruction of RFCL Engineer-In-Charge to dump yard designated by RFCL (within 3 km range) including deployment of tractor-trolley with required manpower for loading/unloading etc.
- R) Cleaning of all process tanks & sumps/pits etc. and clearing chocking, if any.
- S) Supply of bearings and consumables as and when required.
- T) General Area Housekeeping of the STP Premises.
11. All required Chemicals / consumables like Naoci, HCL, Urea, Dap, MLSS development chemicals, LBC, Gear oil, grease, poly, alum, V Belts, bearings, & pipes etc., will be supplied as per rates quoted at Price Schedule-II, Annexure-XIII. The payment shall be made on actual quantum of material used based on-site consumption measurement or trend. **Hence, any and all consumables shall be strictly supplied upon approval/prior intimation to the Engineer-In-Charge.**
 12. RFCL Plant is categorized as a hazardous factory and issuance of Safety work permits is mandatory for doing any job inside the plant process area. The contractor shall ensure that, until safety work permit is issued by RFCL (wherever applicable), work will not be carried out.
 13. The Contractor shall arrange necessary documents of their manpower and ensure compliance of formalities for making Gate passes to work in RFCL's premises as per RFCL Plant Gate Security norms, which include **mandatory ESI registration, medical fitness check-up & Police Verification of workmen** to be deployed. The workmen, Operator, supervisors, Engineers are allowed to come in the working area only with proper gate passes. RFCL will issue necessary gate passes to such persons for whom the request will have to be made by the contractor. RFCL will not be responsible for late entry of the persons through the gate due to the absence of gate passes. The quoted rates shall be deemed to be inclusive of all these considerations.
 14. All consumable, non-consumable materials to be brought inside STP shall be entered with proper gate passes.
 15. Ensuring availability of calibrated measuring instruments/tools as and when required for measurement & inspection purpose like Measuring tapes, Auto-Level etc. shall be in the scope of Contractor.
 16. The contractor shall provide pertinent PPEs (Personal Protective Equipment) like Safety Helmets, Safety Shoes, Safety Goggles, Face Shields, Dust Masks, Hand Gloves, Gum boots, Earmuffs etc. based on nature/location of works being carried out by workmen deployed by him. The contractor shall ensure strict compliance of Safety norms laid down by RFCL or as intimated from time to time, during the currency of the Contract. However, all workmen shall be mandatorily provided with **minimum 1 No. Safety Helmet (Yellow Colour), 1 Pair of Safety Shoes & 1 Pair of Industrial Safety Hand Gloves**, which they shall wear invariably while working inside the Plant. The helmet shall bear the initials/logo of the Contractor's firm and Blood Group of the person wearing the same. **The quoted rates shall be deemed to be inclusive of these provisions. In case, Contractor fails to comply with above Safety norms, flat penalty @ ₹ 500 per incident of violation shall be levied from due payments of the Contractor.**
 17. The watch and ward of all consumables, Contractor's as well as Free Issue Materials, if any shall be in the scope of the Contractor, at no extra cost to RFCL.
 18. To & fro Local Travelling as may be required, Lodging and Boarding of their staff and workers from work site to their place of stay, shall be in the scope of the Contractor. Accommodation to company official in RFCL Premises may be provided, on chargeable basis, subject to availability.
 19. The contractor shall make suitable arrangement and quote their rate accordingly so that the labour will be given weekly off, holiday and other statutory benefits like annual leave & retrenchment benefits. The quoted rates shall be deemed to be inclusive of all these considerations.
 20. The contractor shall maintain records and comply to all applicable statutory provisions with respect to wage payment, PF, ESI labour license etc. (if required) and any other documents as may be required as per relevant statues.

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21. No minor, sick, old or medically unfit labour will be deployed for the work.
22. The contractor shall abide by all statutory rules and regulations of local authority, State and Central Govt. as the case may be with regard to statutory benefits and non-statutory benefits prevailing at RFCL-Ramagundam as applicable, at his own cost.
23. The contractor shall have to comply with the provision of payment of wages Act, 1936 minimum wages Act, 1948, contract labour (regulation and abolition) Act, 1970 with latest modification thereof or any other related law and rules made time to time. No extra claim shall be entertained by RFCL on this account.
24. RFCL has right to terminate the contract at any time during the contract period in case performance is not found satisfactory and work not carried as per instruction of Engineer-In-Charge.
25. The price shall be firm and no variation/escalation in price shall be allowed on any account till execution of the complete work.
26. The Quoted rates/prices shall include all the cost of materials, labours, taxes duties/levies except GST and other minor incidental expenses to complete the work as per the SOR Item.

II. RFCL'S SCOPE:

- 1) Temporary LT power supply Single/3 phase, 50 Hz, 240 Volt/ 415 Volt with TPN at a single point, free of cost subject to availability.
- 2) To provide necessary work permits and isolations as and where required.
- 3) RFCL shall provide Water Supply at Single point near working areas subject to availability. However, Flexible Pipe Hose of required length & Connectors, Clamps etc. shall have to be arranged by the Contractor at his own cost.
- 4) Crane with lifting tools & tackles shall be provided Free of Cost, upon request subject to availability for lifting & shifting any plant equipment for maintenance, on Free Issue basis.
- 5) Any Civil/Mechanical/Electrical/Instrument works/modification in the system.
- 6) Any equipment repair/replacement.
- 7) All Electrical control panel and PLC Spares, OEM Visits & necessary repairs & replacement.
- 8) Control panel/ cabling servicing and replacing.
- 9) Rotary equipment's spares, OEM visits & necessary repairs/replacement.
- 10) Liaising and coordination with statutory body like local PCB etc.
- 11) Calibration of instruments.
- 12) Any sundry modifications/repairs/replacements not covered under Contractors' scope shall be under RFCL Scope.

III. TIME SCHEDULE:

1. Mobilization with Men and Equipment shall be done within 04(Four) days of start date of work mentioned in LOA.

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SPECIAL TERMS & CONDITIONS OF CONTRACT

1. RFCL does not guarantee any quantum of consumables to be consumed.
2. The agency will work in such a manner, which will not disturb the office environment. Certain jobs shall be carried out at the convenience of RFCL, which can only be executed after office hours and/or on holidays. To carry out these works, agency shall deploy workers at such convenient timings only. Nothing extra shall be payable on account of odd hours of working and/or waiting time for availability of site for work.
3. Contractor shall not employ in connection with the work, any person who has not completed Eighteen (18) years of age.
4. If there are varying or conflicting provisions made in any one document forming part of the contract, the decision of Engineer in charge shall be final and binding on the contractor.
5. The Contractor shall submit the Computerized Running Account Bills as per the RFCL approved format.
6. **PENALTY CLAUSE FOR INADEQUATE MANNING FOR OPERATION OF STP: -**

The Contractor shall ensure 24x7 continuous manning through Operators (in 3 Shifts) & Supervisor (in General Shift) for smooth operation of STP. In the event of any shortfall in manpower deployment is observed, RFCL at its sole discretion may temporarily replenish such shortfall by deploying its own manpower, at the cost of contractor and deduct applicable administrative charges as per contractual provisions.

7. **SPECIFICATIONS & QUANTUM FOR CONSUMABLES**
The technical specification & quantity of chemicals/consumables to be supplied shall be got approved by RFCL Engineer-In-Charge, in the beginning of each month. If required by Engineer-In-Charge, samples of the consumables may have to be presented for approval, at no extra cost to RFCL.
8. In Clause no. 1.2.0 of GTCC partly modified as service air shall not be provided by RFCL.
9. **GTCC Clause no. 1.8.0 (a), 1.8.0(b) and 1.8.0(c) is replaced with following:**

Tenderers must submit Earnest Money Deposit of Rs. 1,00,000/- (Rupees One lakh Only) & Tender fee of Rs.1000/- (Rupees One thousand). The tenderers will have the option to submit the Tender Fee and EMD either in the form of a Crossed Demand Draft favouring Ramagundam Fertilizers and Chemicals Ltd. and issued by any scheduled/nationalized bank payable at Ramagundam or through online payment modes like RTGS/NEFT etc or can submit the EMD in the form of Bank Guarantee Format of EMD-BG as per Annexure-XVII. The charges, if any, for online payment or for DD or for BG will be borne by bidder. In case of submission of Tender Fee by DD & EMD by DD or in the form of BG, it should be ensured by the tenderer that the scan copy of the DD /BG is uploaded with E –Tender portal & original DD or Original BG should be received by RFCL within **3 working days** from opening day of techno-commercial bids for verification of the details of DD/BG given online by the tenderer.

The details of the transaction with UTR No to be submitted along with technical bid for verification.

RFCL's Bank details for RTGS/NEFT are as follows:

Beneficiary Name : Ramagundam Fertilizers and Chemicals Limited
Bank name : State Bank of India
Branch Name : RFCL BRANCH (61777)

A. Shrivastava

Bank A/c no. : 36727029257
IFSC Code : SBIN0061777

Earnest Money Deposit will not bear any interest.

Bids received without earnest money deposit & Tender fee shall be summarily rejected. However, bidders registered under National Small-Scale Industries/MSME are exempted from submission of E.M.D & Tender Fee.

Note: Tenderer may submit copy of such DD/RTGS/NEFT/BG details immediately to d.satyanarayana@rfcl.co.in and syam.bandari@rfcl.co.in .

10. **GTCC Clause 1.9.0(vi) stands modified as below: -**

Bidder's bid should be workable. In case after Price Bid evaluation & analysis it is found that, bids have been submitted with non-workable rates i.e. abnormally low or high rates, such offers may be rejected.

11. **GTCC clause no. 1.22.0 (a) is modified as:**

The period of completion of work is 12 months from the start date mentioned in Letter of Award to the contractor. Contractor shall Mobilize at site within 4 (Four) days of notification for actual date of start of contract. However, if the necessity arises Contractor may have to mobilize at site within 2 days of instruction given by RFCL in writing.

12. **Replace GTCC clause no 1.28.0 (Period of liability (Defect Liability Period) with the following clauses**

The subject work involving Operation & Maintenance Service with duration of 12 Months, period of Defect Liability Period shall be 1 Month from the date of certified completion.

13. **GTCC Clause no. 1.34.0 & 1.30.0 (c), stand deleted.**

14. **GTCC clause no. 1.39.0 stands deleted and is replaced by the below clause:**

Except where otherwise provided in the contract all matters, questions, disputes or differences (Dispute's) whatsoever, which shall at any time arise between/among the parties hereto, touching the construction, meaning, operation or effect of the contract, or out of 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 shall be resolved / settled amicably through negotiation by the parties. For the same, one party shall issue dispute notice in this regard, to the other party. If the said dispute/s could not be settled amicably within 45 days from the date of receipt of dispute notice by other party, then, party/ies may refer the said dispute/s for adjudication through Arbitration, as prescribed hereinafter.

On failure of amicable resolution/settlement as above. The dispute/s shall be referred / adjudicated through Arbitration under / in accordance with "Arbitration Centre (Domestic and International), High Court of Judicature at Hyderabad for the state of Telangana and the State of Andhra Pradesh Rules,2015" as amended or modified or re-enacted from time to time. Where the said rules are silent or in conflicts with Indian Laws, same shall be governed by Arbitration & Conciliation Act 1996; as amended or modified or re-enacted, from time to time.

The number of Arbitrator shall be three (3) in case of matter involving total amount of claims (without considering claim of interest) more than Rs. 3 Crore, otherwise number or Arbitrator shall be one (1) i.e. (Sole) Arbitrator. The language of Arbitration shall be English.

A. Shrivastava

The Governing Law Shall be Laws of India and dispute/s shall be adjudicated as per Indian Laws.

For the convenience of parties, the venue of Arbitration shall be as per above rules i.e., Arbitration Centre, Hyderabad, However, the Seat of the Arbitration Shall be, Ramagundam, Peddapalli District, State of Telangana. The courts at Ramagundam Peddapalli District, State of Telangana shall, have exclusive Jurisdiction.

It is also agreed by and between the parties that in case a reference is made to the Sole Arbitrator / Arbitral Tribunal for the purpose of resolving the dispute/s 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 SBI MCLR Rate applicable to RFCL on the date of award of contract.

15. RFCL may ask any documents if seems necessary like income tax returns, Form 26AS etc. while evaluating tender.
16. Replace GTCC Clause no. 1.27.0(a), 1.27.0(b), 1.27.0(c) with following clauses
 - a. The Security Deposit together with EMD/Initial Security Deposit shall be 5% of the Contract value.
 - b. In case of work awarded, Initial Security Deposit (ISD) shall be 2.5% of the Contract Value which is required to be deposited within 10 days of the issue of the letter of acceptance by the successful tenderer. EMD can be adjusted against Initial Security Deposit. The balance amount of Security Deposit (S.D.) @ 2.5% of the bill value shall be deducted from each Running Bill of the Contractor so as to make the total recovery of Security Deposit @ 5% of the Contract / Work Order Value.
 - c. Alternatively, Successful bidder can furnish Performance Bank Guarantee (PBG)/ Bank Guarantee (BG), in lieu of ISD & SD, from any Nationalized / Scheduled Bank except Rural and Co-operative bank equivalent to the 5% of the contract value valid up to the expiry of Defect Liability period + three months claim period within 10 days of the issue of the letter of acceptance (As per proforma attached at Annexure IX).
17. The term "10% security deposit" mentioned in clause no. 1.30.0(a) of GTCC is replaced with "5% Security Deposit".

A. Khosla

General Terms and Conditions of Contract

1.1.0 The execution of the work may entail working in all the site and weather condition and no extra rate will be considered on this account. The Contractor may have to carry out the jobs to work round the clock as per our requirement to be decided by Engineer in-charge and the Contractor should take this aspect into consideration for formulating his rates and quotation. No extra claim/overtime will be paid on this account.

1.2.0 Electricity, Water and Service Air will be provided free of cost at one point as per requirement of the job subject to availability.

All lifting tools & tackles are to be got tested, wherever applicable, under the Competent Person engaged by State Government from time to time and the certificates duly verified by Competent Authority are to be submitted to the Department before taking up the job.

1.3.0 **Accommodation and Land for Contractor's Godown/Workshop:**

1.3.1 Suitable accommodation will be provided for the Contractor or his authorized representative on chargeable basis, if available.

1.3.2 RFCL may allocate land for putting temporary Godown/ workshop for making storage, work site by the Contractor, free of cost.

1.3.2.1 The CONTRACTOR shall at his own cost construct temporary structures as required by them for their office, fabrication shop and construction stores only in the area allocated to them on the project site by the RFCL or his authorised representative and provide suitable water supply and sanitary arrangement and get the same approved by the ENGINEER-IN-CHARGE. No unauthorised buildings, constructions or structures should be put up by the CONTRACTOR anywhere on the project site

1.3.2.2 On completion of the works undertaken by the CONTRACTOR, he shall remove all temporary works erected by him and have the SITE cleaned as directed by ENGINEER-IN-CHARGE.

1.3.2.3 If the CONTRACTOR shall fail to comply with these requirements, the ENGINEER-IN-CHARGE may at the expenses of the CONTRACTOR remove such surplus, and rubbish materials and dispose of the same as he deems fit and get the site cleared as aforesaid; and CONTRACTOR shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such surplus materials disposed of as aforesaid.

1.3.2.4 RFCL reserves the right to ask the CONTRACTOR any time during the pendency of the CONTRACT to vacate the land by giving 7 days' notice on security reasons or on national interest or otherwise.

1.3.2.5 No person except for authorised watchman shall be allowed to stay in the plant area/CONTRACTOR's area after completion of the day's job without prior written permission from ENGINEER-IN-CHARGE.

1.3.2.6 **Land for Residential Accommodation:** No Land shall be made available for residential accommodation for staff and labour of CONTRACTOR

A. Shrivastava

1.4.0 The Contractor shall have to make his own arrangements for all Tools & Tackles, Skilled and Unskilled labours etc. required for the job. The work is subject to inspection at all time by the Engineers-in-charge and the Contractor shall have to carry out the work to the entire satisfaction of the Engineer-in-charge.

1.5.0 **Sub-Contracting:** Sub-Contracting of the job will not be allowed without prior written permission of the owner (RFCL).

1.6.0 Statutory deduction on account of Income Tax and GST TDS on works contract shall be made at the rates applicable at the time of release of payment to the bidder.

1.7.0 The rates quoted will be firm for the currency of the contract period and will not be subjected to escalation irrespective of any increase what so ever. The rates quoted for materials, if any, are F.O.R. RFCL Site, Ramagundam and are inclusive of all taxes. No taxes will be paid extra(excluding GST). However, the escalation pertaining to labour deployment component will be allowed as per clause 1.30.0

1.8.0 Earnest Money Deposit:

- a) The Tenderer should make a deposit of Earnest Money and Tender Fees as prescribed in NIT/Tender by an A/C Payees Demand Draft (Separate for both) drawn on any Scheduled Bank except Rural or Co-Operative Bank in favour of "**Ramagundam Fertilizers and Chemicals Limited,**" payable at Ramagundam. The Earnest Money and Tender Fees shall not be accepted in any other form except specified.
- b) The Earnest Money and Tender Fees should accompany the Tender in separate Envelope without which tender may not be opened and it may be considered as rejected at the sole discretion of RFCL. However, Bidders firm registered, Prior to bid submission due date, with NSIC/MSE (Micro & small) vendors are exempted from submission of Tender fee and EMD subject to submission of documentary evidence that the bidder is a Micro or Small Enterprises registered with District Industries Centers or Khadi and Village Industries or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises or Udyog Aadhaar Memorandum.
- c) In case tenderers are required to collect tenders from RFCL Office, the tender sets may be given upon the submission of the tender fee in prescribed mode/form as above. In case parties download the tenders from the website, tendered are required to submit the respective tender fee along with EMD.
- d) Earnest Money Deposit will be refunded to all unsuccessful bidders after award of Contract/Placement of Order against the tender to Successful bidder. Earnest Money Deposit will be refunded to all Technically unsuitable bidders within 30 days after expiry of tender validity period or placement of order against tender whichever is earlier. No Interest shall be payable by RFCL for amount deposited as Earnest Money.
- e) Earnest Money is liable to be forfeited if tenderer:
 - i. Withdraws or modifies offer in full or part during the validity period
 - ii. Failure of the bidder to honor their offer.
 - iii. Does not accept Purchase / Work Order if placed by RFCL

A. Associate

- iv. Does not Confirm of acceptance of order within the stipulated time after placement of order.
- v. Inability to perform satisfactorily after receipt of order in case of successful bidder.
- vi. If documents submitted along with the bid are found false, fabricated etc.

1.9.0 The following tenders will be liable to summary rejection:

- i. Tenders submitted by Tenderer who resort to canvassing.
- ii. Tenders, which do not fulfill any of the conditions, laid down in the Tender Documents or are incomplete, in any respect.
- iii. Tenders, which contain uncalled for remarks or any alternative additional conditions.
- iv. The company reserve the right to accept the lowest or any other Tender in part or in full or award parallel contracts or reject all OR any of the Tender without assigning any reasons thereof.
- v. Tenders received late / delayed.
- vi. Bidder's bid should be workable and price bids quoting "Nil" consideration or "Negative" or "Zero or its derivatives as contractor's service charge/ profit margin will be rejected summarily.
- vii. Bids having less than current minimum wages as specified by Govt of India/Telangana State Govt. whichever is higher and not fulfilling the related statutory requirements as per applicable labour laws/other laws from time to time.
- viii. Tenders not accompanying the Earnest Money and Tender fee of prescribed value and prescribed mode/form.
- ix. Ring tendering/Cartel formation

1.10.0 If the Tenderer has relations whether by blood or otherwise with any of the employees (including employees on deputation) of the RFCL, the tenderer must disclose the relation in the Form of Declaration attached, at the time of submission of tender failing which RFCL shall reserve the right to reject the tender or rescind the Contract.

1.11.0 The Contractor shall at all times indemnify RFCL against any claim which may be made under the ESI Act 1948, regulation/ scheme or any statutory modifications thereof or otherwise for or in respect of any damage or compensation payable in consequence of any accident or injury sustained by any workman or other person whether in the employment of the Contractor or not.

1.12.0 In every case in which by virtue of provision of ESI Act 1948 or any other Law for the time being in force, RFCL is obliged to pay compensation to a Workmen employed by the Contractor for the execution of the work, RFCL will recover the amount of the compensation so paid from the Contractor's bill, Security Deposit, Bank Guarantees.

- a) The Contractor will be solely responsible for any liability for his workers in respect of any accident, injury etc. arising out of and in the course of Contractor's employment. For this purpose, he shall obtain ESI Registration Number from Appropriate Authorities and deposit both Employer's as well as employees share of ESI contribution each month with ESI Authorities and also make necessary compliance of the provisions of the ESI Act, its regulations and scheme. The Contractor shall be responsible for recovery of employees share of ESI contribution from the concerned Contract Labour and RFCL will not bear any

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liability whatsoever on this account. Further, the Contractor also indemnifies RFCL against any damages/interest that may be imposed by ESI Authorities on account of non-payment/delayed payments towards ESI.

- b) The Contractor shall ensure that contribution on account of ESI is deposited by due date of month and he will be required to furnish photocopy of ESI challan every month by 21st of the month following the month to which it relates. For this purpose, every month the Contractor shall submit to RFCL a copy of wages sheet as a proof of wages paid to the staff, treasury challan regarding depositing of ESI amount etc. for perusal of officer in charge and will also submit quarterly/periodically statements of ESI etc. as required under various labour laws in respect of staff engaged in execution of jobs. He will also submit half yearly return of ESI.

c) Insurance Cover for Workmen:

All workers whose salary is more than Rs 21,000/- per month need not to be covered by ESI. However, contractor to take insurance policy to cover the risk towards temporary disablement and permanent disablement for the workmen.

The contractor shall obtain adequate Insurance Policy in respect of his workmen to be engaged for the work compulsorily towards compensations as admissible under the Workmen's Compensation Act 1923, and Rules framed there under upon death/disablement of a worker. Photocopy of this Insurance policy is required to be submitted by the Contractor to RFCL immediately after the issue of LOA but before the start of the work. Payment against the work done will not be released to the Contractor until and unless photocopy of the Insurance policy is submitted to the RFCL.

CONTRACTOR shall at his cost and expense take out insurance policy from a suitable insurance company acceptable to owner and maintain for the entire period until ACCEPTANCE OF WORKS or until such time thereafter as the CONTRACTOR may consider appropriate the following insurances.

- i. **Workmen's Compensation Insurance (WCI):** This insurance shall conform to and satisfy all the requirements of the applicable laws and regulations of the country, state territory or province having jurisdiction over the CONTRACTOR 's employees engaged in the WORKS.
- ii. **Employer's Liability Insurance (ELI):** The insurance shall cover the liability of the CONTRACTOR as employer, for compensation beyond the coverage of the Workmen's Compensation Insurance for bodily injury to or loss of life the CONTRACTOR's employees while engaged in the WORKS.
- iii. **Third Party Liability Insurance (TPL):** This insurance shall cover legal liability for bodily injury to loss of life of and/or damage to and loss of properties of the third person party arising out of the performance by the CONTRACTOR of the works.
- iv. **Automobile Liability Insurance (ALI):** This insurance shall cover all the CONTRACTOR's liabilities in connection with use by the CONTRACTOR for the WORKS of any mobile equipment and automobile and when used which are owned, non-owned hired and otherwise placed under the CONTRACTOR's administration and control, or bodily injury to loss of life of and/or property damage of any person or party.
- v. **Other Insurance:** Other insurance which shall be necessary or which the CONTRACTOR deems necessary for proper performance of the WORKS

A. Bhattacharya

Inclusion of such insurance requirements in such contracts as aforementioned however, shall not release the CONTRACTOR from any of his responsibilities and liabilities under the CONTRACT.

- 1.13.0 Wages shall be paid by the Contractor to the workman directly into their bank accounts through Electronic Fund Transfer without the intervention of any Jamadars or The kedars and contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by Jamadars from the wages of workman.
- 1.14.0 The Contractor may employ such employees/ labours as he may think fit and the employees so employed shall be employees of Contractor for all purposes whatsoever and shall not be deemed to be in the employment of RFCL for any purpose whatsoever. The Contractor shall abide by all rules, laws and regulations that may be in force from time to time regarding the employment or conditions of service of the employees. If under any circumstances whatsoever, RFCL is held responsible in any manner whatsoever for the default or omission on the part of the Contractor in abiding by the aforesaid rules, regulations and laws or held liable or responsible to the employees of the Contractor in respect of any matter whatsoever and called upon to make payments on that account, RFCL shall be reimbursed by the Contractor for the same as also any other expenses costs and charges incurred by RFCL in any proceeding or litigation arising out of any claim, demand or act on the part of the employees of the Contractor, RFCL shall be entitled to claim, demand or compensation from the Contractor in that event. RFCL shall also be entitled to recover the aforesaid amount from the Contractor from any amounts that may become due and payable to Contractor.
- 1.15.0 In case of any difference of any of the terms and conditions either in the meaning or understanding or contradictory terms or conditions at different places/portions in this document, the stricter terms favoring RFCL will apply. Interested tenderer after studying the tender documents carefully, may obtain necessary clarifications, if any in writing before tendering, submitting of tender implies that the Tenderer has obtained all the clarifications required. No claim on ground for want of knowledge in any respect will be entertained. No claim for extra charge consequent upon any misunderstanding or otherwise will be allowed.
- 1.16.0 The Contractor shall be liable to RFCL for any omission or commission on his part or on the part of his employees thereby causing any loss, damage or inconvenience to RFCL.
- 1.17.0 The Contractor shall make his own arrangement for removal of old as well as unused material, including packing materials and empty cases free of cost from work site to the place indicated by the Engineer-in-charge after completion of work and nothing extra will be paid.
- 1.18.0 The decision of Engineer-in-charge in regard to all matters relating to the Tender and for determine the category of work with reference to material of an item not mentioned in scope of work shall be final.
- 1.19.0 If the Contractor gives an undertaking (along with Technical bid) citing that the PF Code will be obtained before start of work and failure to do so, then RFCL shall have the right to terminate the Contract without any compensation or payment.

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1.20.0 Quantum of Job:

The estimated quantity and value of work has been given on the basis of technical assessment and indicates the approximate quantities. The Contractor shall have to execute any or all the jobs depending upon the requirement of the RFCL. However, RFCL will not give any guarantee for minimum billing or minimum quantum of work to be executed against the contract. The rates shall remain firm for the increased or decreased quantities. Payment shall be made on the basis of actual quantities executed.

1.21.0 Rights of Owner (RFCL): If the Contractor is unable to execute the work and any loss is incurred by the Contractor in this respect, it will be to the Contractor's account. The Company may also terminate the contract after giving 15 (Fifteen) days' notice, if in its opinion, the work under the contract is not being done to its satisfaction.

A unilateral stoppage of work by the Contractor shall be considered a breach of the CONTRACT and the OWNER reserves its right to take necessary and suitable action as it may deem fit, to adequately protect his/its interest at the risk and cost of the contractor. Any aforesaid action shall be without prejudice to any other action rights and remedies etc. that may also be available

In the above events, RFCL shall have right to get the job done by any other agency/ own resources at the risk and cost of the Contractor till the expiry of period of the contract and recover the cost plus 25% to the Contractor.

1.22.0 Validity and Extension of Contract:

a. **Validity of Contract:** The contract shall remain valid for a period as specified in NIT reckoned from the date of its award. The job can, therefore, be got done any time during the tenure of the contract. In such case, normally, a notice of 7 days would be given for starting the job but the Contractor should be able to mobilize within 24 hours, if the necessity so arises.

b. **Extension of Contract:** The extension of contract can be given on the same rates, terms & conditions for a period of three months as per mutual consent. Further extension may be given only in exceptional circumstances based on justification and merit of the case.

1.23.0 FORCE MAJEURE:

The terms and conditions agreed upon under the contract shall be subject to Force Majeure. Neither the Contractor nor RFCL shall be considered in default in the performance of their obligation contained therein, if such performance is prevented or delayed or restricted or interfered with by reason of War, Hostilities, Revolutions, Civil Commotion, Strike, Epidemics, Accidents, Fires Flood, Earthquake, regulation or ordinance or requirement of any Government or any sub-division thereof, or authority or representative of any such Govt. and/or due to technical snag/reasons or any other Act whatsoever, whether similar or dissimilar to those enumerated beyond the reasonable control of the parties/bidders hereto or because of any act of GOD. The party so affected, upon giving prompt notice to the other party shall be excused from such performance to the extent of such prevention, delay, restriction or interference for the period it persists provided that the party so affected shall

A. Sharma

use its best efforts to avoid or remove such causes of non-performance if possible and shall continue performance hereunder with the utmost diligence whenever such causes are removed. Should one or both parties be prevented from fulfilling their contractual obligations by a state of Force Majeure lasting continuously for a period of one week, the two parties to the contract shall meet and decide about the future course of action for implementation of the contract.

1.24.0 Deleted.

1.25.0 RFCL shall have power to make any alteration in, omission from, addition to, or substitutions for original Specifications and instructions which may be considered necessary, during the progress of work and Contractor shall have to carry out the work in accordance with any instruction which may be given to him in writing duly signed by Engineer-in-charge. Such alteration, omission, additions, substitutions, shall not invalidate the contract and any altered, additional or substituted work which the Contractor may be directed to do in the manner above specified as a part of the work, shall be carried out by the Contractor on the same condition in all respects on which he has agreed to do the main work.

1.26.0 If the rate for the additional altered or substituted work are specified in the contract for the work, the Contractor is bound to carry out the additional, altered or substituted work at the same rate as per specifications in the rate contract for that work.

a) In the event the extra or substituted items of the work does not fall in category as above, the cost will be calculated on the basis of actual labour and consumable materials utilized for the job. The quoted rates will be inclusive of overhead and profit. The quantum of labour and consumable material used will be assessed by the Engineer-in-charge, whose decision in this respect will be final and binding upon the Contractor. The Contractor will be required to obtain prior approval of RFCL for rates payable to him for such extra items.

b) In case, the Contractor fails to do the extra and/or substituted work. RFCL will have the option to get the work done through another agency at the Contractors' risk and cost as per clause no. 1.21.0 of General Terms and Conditions.

1.27.0 Security Deposit:

- a. The Security Deposit together with EMD/Initial Security Deposit shall be 10% of the contract value.
- b. In case of work awarded, Initial Security Deposit (ISD) shall be 2.5 % of the Contract Value which is required to be deposited within 10 days of the issue of the letter of acceptance by the successful tenderer. EMD can be adjusted against Initial Security Deposit. The balance amount of Security Deposit (S.D.) @ 7.5% of the bill value shall be deducted from each Running Bill of the Contractor so as to make the total recovery of Security Deposit @ 10% of the Contract / Work Order Value.
- c. Alternatively, Successful bidder can furnish Performance Bank Guarantee (PBG)/ Bank Guarantee (BG), in lieu of ISD &SD, from any Nationalized / Scheduled Bank except Rural and Co-operative bank equivalent to the 10% of the contract value valid up to

A. Elkarakey

the expiry of Defect Liability period + three months claim period within 10 days of the issue of the letter of acceptance (As per proforma attached at **Annexure IX**).

- d. In case work is split between two or more parties, SD shall be submitted based on the value of split order.
- e. No interest shall be paid on security deposit. EMD shall be considered as part of SD.
- f. RFCL is entitled without being bound to do so, to adjust the whole or any portion of the security deposit towards the recovery of any amount due to RFCL from the successful tenderer/Contractor.
- g. Security deposit or such portion thereof that has not been adjusted towards recovery of amount due from the successful tenderer/Contractor shall be returned to contractor after obtaining 'No objection certification' from executive department after expiry of 'Defect Liability Period' on demand within 30 days.
- h. If the Contractor submits security deposit in the form of Bank Guarantee (BG) as above, EMD shall be refunded along with first RA Bill payment.
- i. Security deposit shall be forfeited in case the vendor fails to execute the order.

1.28.0 Period of liability (Defect Liability Period) :

The Contractor shall guarantee for the work done for a period of 3 months from the date of issue of Completion Certificate. Any damage or defect may arise or lie undiscovered at the time of completion certificate, in the workmanship shall be rectified or replaced by the Contractor to the satisfaction of RFCL. In default, the Engineer-in-charge may cause the same to be made good by other Contractor and deduct expenses (of which the certificate of Engineer-in-charge shall be final) from any sums that may be there or at any time thereafter become due to the Contractor from his Security Deposit.

1.29.0 PROCEDURE FOR MEASUREMENT/BILLING OF WORKS IN PROGRESS:

a. Measurement and Billing:

All measurement shall be in Metric System. All the works shall be measured jointly by Representatives of Engineer In charge and Contractor. Contractor shall prepare measurements on prescribed proforma and get it verified from Sectional Heads and Area In charges of the Executive Department at RFCL before raising the bill.

The Contractor will submit a bill in approved proforma in triplicate to the Engineer In-Charge of the work giving abstract and detailed measurements for the various items executed during a month before expiry of the 1st week of the succeeding month along with the copy of the following documents and all other documents to comply with the statutory requirement.

- i. Self-attested copy of the challan and ECR with respect to PF deposit relating to previous month.
- ii. Self-attested copy of ESI challan relating to previous month and its payment receipt.
- iii. Self-attested copy of the wage sheet
- iv. Self-attested copy of the proof for transfer of salary to the workers bank account through online transfer (EFT only).
- v. Self-attested copy of GST Deposit relating to previous month.

A. Shrivastava

vi. Any other document if required as per NIT.

b. Running Account Payments:

All running account payments shall be considered as advance payment against the final bill payment and not as payments for work actually done.

c. Completion Certificate/Final Bill:

The Engineer In-charge shall normally issue to the Contractor the completion certificate within one month after receiving an application thereof from the Contractor after verifying from the completion documents and satisfying himself that the work has been completed in all respects in accordance with the instructions, specifications of contract documents. The Contractor after obtaining the completion certificate is eligible to present the final bill for the work executed by him. The final bill shall be prepared in the prescribed proforma with reference to the total work covered by the contract. Such bill to be drawn up applying the applicable rates specified in the schedule of rates to the relative measured quantities. The final bill shall also include all additional claims of the Contractor and considered as conclusive.

The final bill, complete in all respects, shall be submitted by the Contractor within 30 days of the completion of work. No further claim shall be allowed by RFCL after Final bill.

The following documents shall be submitted to comply with statutory requirements apart from the documents to be submitted with the RA bills:

- i. Undertaking against the compliance of the labour laws in the prescribed format
- ii. No claim certificate in the format approved by RFCL
- iii. Copy of the Form 19 (or) Form 13 of employees send to PF office if required.
- iv. Material reconciliation statement for all materials issued by RFCL to the contractor whether on free-issue basis or chargeable basis if any.
- v. No dues certification for facilities provided by RFCL to the contractor.
- vi. Certificate of clearing of temporary establishments of the contractor at site.
- vii. Indemnity certificate towards all Labour payments and statutory payments, indemnifying RFCL/Consultant in this regard.

In case final bill is not submitted within 30 days, as specified above, the Engineer-in-Charge shall be at liberty to carry out their own measurement/recording of work done and may make payment or recover balances based on such measurement/recording which shall be binding on the contractor.

d. Final Certificate:

Within 15 days of Contractors application made after the expiry of the period of defect liability provided in clause 1.28.0 here of satisfaction of all liabilities of the Contractor in respect there of the Engineer In-charge that the Contractor has performed the obligations in respect of the defect liability period and until issue of such final certificate, the contractor shall be deemed not to have performed such liabilities, notwithstanding issue of completion certificate or payment of the final bill by RFCL.

A. Ghazal

1.30.0 Terms of Payment:

- a. Payment of monthly running account bill complete in all respect shall be made after making necessary recoveries as per contract within 30 days of receipt of bill. Payment of final bill shall be released within 60 days after receipt of bill completed in all respect. Payment of 10 % security deposit/deducted shall be released after completion of defect liability period on demand within 30 days.
- b. All payments shall be made to Contractor through Electronic Funds Transfer (NEFT/RTGS Process) as per information furnished by the Contractor in prescribed e-banking mandate form. Any change in the particulars shall be immediately informed to RFCL.

c. Escalation in Rates:

- i. The escalation/de-escalation in wages, if any, will be reimbursed for the component for the statutory part of the payment like, minimum wages (Basic+VDA), PF, ESI, Bonus, Leave Payment etc., however no escalation/de-escalation will be paid on the contract profit margin.
- ii. Escalation/de-escalation is applicable only in the case of Complete/Pure Man power supply contracts. For all other contracts, prices/rates quoted shall remain firm and fixed till the completion of work/Final certificate as per tender and shall not be subject to escalation. However, if any Contract labour component identifiable in the Contract, RFCL may pay the differential Minimum wages only to the extent of labour component if claimed by the Contractor, in case Minimum Wages are increased subject to submission of supporting documentary evidence.
- iii. The escalation/de-escalation in wages, if any will be reimbursed as per following:
Formula= Billed amount *Wt. avg. factor*(% of labour component)

Note: Billed amount is an amount excluding GST and Contractors Profit Margin

For example- Calculation of increase in Minimum Wages Impact as given below:

S.No.	Category	Old Rate (Rs./day)	New rate (Rs./day)	Difference (Rs./day)	Proportion factor (Rs.)	Manpower deployed (No's)	Wt. avg difference (Rs./day)
1	A	B	C	D=C-B	E=D/B	F	G=E*F
2	Skilled	*522	*527	5	0.0096	5	0.0479
3	Semi-skilled	*433	*437	4	0.0092	2	0.0185
4	Un-skilled	*370	*373	3	0.0081	11	0.0892
5				Total	0.0269	18	0.1556
							Wt.avg factor (G5/F5)
							0.0086

* The above figures mentioned at B & C are indicative and actual figures may change depending upon the minimum wage notifications from GOI/Telangana State Govt. whichever is higher (Minimum of wages of either Telangana state govt. or GOI whichever is higher shall be considered at the time of Price bid opening or as referred in the NIT and the same shall be continued till the currency of the Contract)

A. Bhattacharya

d. Tax Liability:

- i. The rates to be quoted by the bidder should be inclusive of all duties, taxes, levies, entry tax etc. but excluding GST. The GST will be reimbursed to the contractor against Tax invoice subject to submission of documentary evidence.
- ii. No variation on account of taxes and duties, statutory or otherwise, shall be payable by RFCL to Contractor/Vendor except for GST. However, any statutory variation for GST shall be payable up to date of completion against documentary evidence except for period for which is completion is delayed due to delay by Contractor. Any reduction/deletion in Taxes / duties / cess / levies / fees shall be passed on to RFCL
- iii. Addition of new taxes imposed by the State Governments/Central Government after submission of tender documents and during contractual period shall be to RFCL's account.
- iv. Statutory deductions on account of any law for time being in force shall be made at the rates applicable at the time of release of payment to the bidder.

e. Raising of Invoice/Bill:

Contractor shall issue the tax invoice in accordance with GST Law within stipulated time i.e. 30 days of rendering the service.

If Contractor is a registered taxable person, a tax invoice is issued based on the rules regarding details required in a tax invoice, following are the mandatory fields in an invoice.

- i. Invoice number and date
- ii. Customer name
- iii. Shipping and billing address
- iv. Customer and tax payer GSTIN
- v. Place of supply
- vi. HSN code/ Accounting code of services
- vii. Taxable value and discounts
- viii. Rate and amount of Taxes i.e. CGST/SGST/IGST
- ix. Item details i.e. description, unit price, quantity

In the event that the Contractor fails to provide the invoice in the form and manner prescribed under GST act, RFCL shall not be liable to make any payment against such invoices.

f. Debit notes and credit notes:

All revisions, rectifications, modification, settlement of taxable value or tax charged may have to be carried out through debit notes and credit notes as early as possible. Further, Credit note shall be issued not later than September month following the end of the financial year in which supply was made or date of filing of the relevant annual return, whichever is earlier. If Contractor fails to issue debit/ credit note as the case may be RFCL may withhold the payment till rectification of such differences.

A. Shrivastava

g. Uploading of Taxable Invoices:

Uploading of taxable invoice and credit/ debit notes shall be done by the Contractor strictly within the period prescribed in GST act. In the event that the input tax credit of GST charged by Contractor is denied by the tax authorities to RFCL for the reason whatsoever, then RFCL shall be entitled to recover such amount from the Contractor by way of adjustment from the next invoice / security deposit. RFCL shall also be entitled to recover interest and penalty, in case it is imposed by the tax authorities on RFCL.

h. Income Tax Permanent Account Number (I-Tax PAN): The Tenderer shall mention the Permanent Account Number allotted by the Income Tax Authorities in his Tender.

1.31.0 Preservation of Free Issue Material:

All materials issued to the Contractor by RFCL shall be preserved against deterioration and storage while under Contractor's custody. Any damage / losses suffered on account of non-compliance with the requirement stipulated herein shall be considered as losses suffered due to willful negligence on the part of the Contractor and he shall be liable to compensate RFCL for the losses suffered at penal rates to be determined by the Engineer In-Charge with reference to the rates charged for the purpose of recovery and shall be final and binding on the Contractor.

1.32.0 Scrap Allowance (For Free Issue Material only):

Contractor will plan the work in such a way that the wastage to be minimum Following scrap allowance will be allowed. Beyond the allowance, the wastage will be chargeable to the contractor on RFCL rate +25% + All Taxes will be charged extra.:

S No	PARTICULARS	SALVAGEABLE
A	STRUCTURE	2.5 %
B	PIPE	3.0 %

1.33.0 Issue of material from RFCL:

Any issue of materials from RFCL stores not covered in RFCL obligation will be issued and charged on RFCL issue rate +25% + All Taxes will be charged extra. The issue of such material will be sole discretion of RFCL.

1.34.0 Issue of Gas Cylinder:

Contractor has to make his arrangement for Oxygen and Acetylene Gas. However, the Oxygen and Acetylene gas can be issued on chargeable basis in exigencies subject to the availability constituting following components.

- a) Invoice price of gas.
- b) Rent for each Cylinder per day.
- c) Department charges.
- d) Cost of collection and return of empty Cylinder.

1.35.0 Material Transportation:

The Contractor shall make his own arrangement for Transportation of the material from stores to site of work and to the place of erection etc. at his own cost for making temporary

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stores/work sites, RFCL may indicate an area at its own discretion for putting up of a temporary hut/shed.

1.36.0 Price Reduction Schedule:

It shall be obligation on the Contractor to adhere strictly to the time schedule as stipulated in Letter of Acceptance/Work order. In the event of work is not completed according to the time schedule, then, unless such failure is due to Force Majeure as defined in Clause 1.23.0 here above or due to RFCL's defaults, then the total contract price shall be reduced by 1 % (One Percent) of the total value of work for every day of delay or part thereof, subject to a ceiling of 10 % of the total value of work, by way of reduction in price for delay and not as penalty. The invoice raised shall take into account the above price reduction, if applicable and payment shall be released for reduced value only. If the Contractor does not raise invoice for reduced value, then the Contractor shall issue a credit note equivalent to the price reduction amount." The decision of Engineer-in-Charge with regard to applicability of Price Reduction Schedule shall be final and binding on the Contractor.

1.37.0 Engineer-In-Charge:

The Engineer-In-Charge shall have general supervision and direction of the work. He has authority to stop the work whenever such a stoppage may be necessary to ensure the proper execution of the contract. He shall also have authority to reject all work, direct the application of forces to any portion of the work as, in his judgment, is required and order force increased or diminished and to decide disputes which arise in the execution of the work. The Officer-In-Charge reserves the right to suspend the work or the part thereof at any time and no claim whatsoever on this account will be entertained. In case of any dispute the Contractor may appeal to the Officer-In-Charge whose decision shall be final and binding.

1.38.0 Jurisdiction:

For any disputes regarding this contract, the exclusive Jurisdiction shall lie in courts situated at Peddapalli (Telangana state) generally where the contract is being executed, and jurisdiction of all other courts is explicitly excluded. This Contract shall be interpreted and governed as per the laws of India/Telangana state.

1.39.0 Conciliation & Arbitration:

Except where otherwise provided 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 of the matters relating to the contractor 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 Parties to the contract be referred to the Designated Unit Head / E.D /CFO/CEO, Ramagundam Fertilizers and Chemicals Limited or his / her nominee for appointment of Arbitrator.

The Arbitration & Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under shall govern the Arbitration proceedings.

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/PLR/ Base Rate as

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applicable to RFCL on the date of award of contract. The arbitration shall be conducted in English. The award shall be final and binding upon the parties.

1.40.0 Contractor to Remove Unsuitable Employees:

The Contractor shall, on instruction of the Engineer-In-Charge, immediately remove from the work any person employed thereon who misbehaves or causes any nuisance or otherwise in the opinion of the Engineer-In-Charge is not a fit person to be retained on the work and such person shall not be again employed or allowed on the works without the prior written permission of the Engineer -In-Charge.

1.41.0 Safety Regulations:

The Contractor shall observe and abide by all fire and Safety regulations of the RFCL. Before starting maintenance work, the Contractor shall consult RFCL's Safety Officer or the Engineer-in-charge. If the Safety Engineer is not available, he will do familiarize him with such regulations, copies of which will be furnished to him by RFCL, when requested. He shall be responsible for and must make good to the satisfaction of the RFCL any loss or damage due to fire to any portion of the work to be done under this agreement or to any of the RFCL's existing property. All the accidents to Contractor's staff will be reported to the Safety Officer promptly. This will, however, not relieve the Contractor of any other statutory obligations.

The Contractor shall not undertake any hot job without safety work permit. He has to maintain First Aid Box in his office. Also, necessary safety equipment like Helmets, Hand Gloves, Face Shield, Safety Belt etc. are to be provided to his workmen by the contractor. However, special Safety equipment required as per the job requirement will be provided by RFCL free of cost.

For any default / accident / loss due to negligence of Contractor/ workers, the liability of Contractor shall be "Absolute liability".

However, Personal Protective Equipment's shall be provided to the Contractor's workmen by RFCL, on chargeable and permanent (non- returnable) basis. The cost of the item plus 25 % overhead charges shall be recovered from the Contractor.

1.42.0 Contractor to Execute Agreement:

The Contractor's responsibility under this Contract will commence from the date of issue of the LOA / DLOA. The Tender Documents, Other Documents exchanged between the Tenderer and RFCL, the Letter of Acceptance, DLOA and Work Order shall constitute the Contract. The successful Tenderer shall have to execute an Agreement with Ramagundam Fertilizers and Chemicals Limited, on a non-judicial stamp paper as notified by Telangana state (Presently Rs.200.00) purchased from Ramagundam/State of Telangana, within 10 (Ten) days of date of issue of LOA/DLOA OR Start of Work whichever is earlier. The cost of stamp paper shall be borne by the Contractor.

The agreement shall remain valid for the initial period of WO and all extensions. No separate agreement for extension period shall be required.

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The Agreement to be executed shall be in the Proforma which is specified by RFCL in NIT(Annexure-XI).

1.43.0 Bidder to Acquaint Himself Fully:

The Bidder may visit the site and shall acquaint himself fully and thoroughly with the conditions and limitations including scope, requirements and official/statutory regulations, under which, conforming to which and subject to which, services/work are to be performed by him. Failure to comply with the aforesaid requirements will not relieve the BIDDER of his obligations in the event of his tender being accepted nor any claim whatsoever will be entertained on the plea of ignorance or overlooking.

The Bidder shall give an undertaking that the terms and conditions of NIT and other aforesaid conditions are acceptable to him without reservations and no deviations to NIT have been taken while making the offer.

Unless otherwise specifically stated in his bid, it will be assumed that all terms and conditions of NIT are accepted by the bidder without any reservations whatsoever.

1.44.0 Payment for Preparation of Bid Document:

The Bidder shall not be entitled to claim any cost, charges, expenses, losses incidental to the preparation and submission of this tender in any case.

1.45.0 Termination of Contract and its Consequences:

1.45.1 Termination of Contract

Notwithstanding anything elsewhere herein provided and in addition to any other right or remedy of RFCL under the Contract or otherwise including right of RFCL for compensation for delay, the Engineer-in-charge/officer-in-charge may, without prejudice to his right against Contractor in respect of any delay, bad workmanship or otherwise or to any claims for damage in respect of any breaches of the Contract and without prejudice to any rights or remedies under any of the provisions of this Contract or otherwise and whether the date for completion has or has not elapsed by intimation in writing, absolutely, determine the Contract:

Default or failure by Contractor of any of his obligations under the Contract including but not limited to the following, the Contract is liable to be terminated if the Contractor

- a. Becomes bankrupt or insolvent or goes into liquidation or is ordered to be wound up or has a receiver appointed on its assets or execution or distress is levied upon all or substantially all of its assets or any insolvency proceedings have been initiated under Insolvency Bankruptcy Code, 2016, Or
- b. Abandons the work, Or Persistently disregards the instructions of the RFCL/ Engineer in Charge in contravention of any provision of the CONTRACT, Or
- c. persistently fails to adhere to the agreed program of work

Or

- d. Sublets the work in whole or in part thereof without RFCL's consent in writing assigns, transfers or sublets or attempts to do so., Or

- e. Performance is not satisfactory or work is abnormally delayed, Or
- f. Defaults in the performance of any material undertaking under this CONTRACT and fails to correct such default to the reasonable satisfaction of RFCL within fifteen days after written notice of such default is provided to the Contractor.
- g. Failure to pay minimum wages to the employees/workmen of the Contractor and related statutory payments to the concerned authorities for consecutive period of Three months, or
- h. In the event of theft/untoward incident happened due to act of Contractor and/or its employees, or
- i. Ring tender/Cartel formation/Non-bonafide method, or
- j. RFCL may terminate the Contract due to any reason including reasons due to force majeure, regulations or ordinance of any Government or any other reasons beyond the reasonable control of the RFCL.
- k. Failure to submit the PF code before start of Work and labour license, if applicable, along with first RA bill.

Such termination will be by 15 (fifteen) days' notice in writing and no claim/compensation shall be payable by the RFCL as a result of such termination (except clause 1.45.1 (k)), excepting the fees and costs for the meaningful services rendered by the Contractor and acceptable to RFCL, up to the date of termination. In case of termination of this contract on its expiry or otherwise, the staff deployed by the Contractor will have no claim for any employment in the regular / or any other capacity in RFCL.

1.45.2 Consequences of Termination:

If the contract is terminated by RFCL for the reason detailed under clause above or for any other reason whatsoever:

- a. RFCL reserves the right to get the work completed at the risk and cost of the Contractor and to recover from the Contractor any amount (plus 25%) by which the cost of completing the work by any other agency exceeds the value of the contract, without prejudice to any other remedies/rights/claims etc. that may be available with RFCL.
- b. Security Deposit/Performance Bank Guarantee Bond submitted by the Contractor shall stand forfeited.
- c. The Contractor shall have no right to claim any compensation for any loss sustained by him by reason of his having entered into any commitment or made any advances on account of or with a view to the execution of the works, or on account of expected profits.
- d. All the dues payable to the Contractor for the work executed by him before and up to termination shall only be released after making adjustments for the expenses, charges, damages and expected losses etc. incurred by RFCL as a consequence of the termination of the contract.

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1.46.0 Deleted

1.47.0 TIME EXTENSION:

If the Contractor requires any extension of time for completing the Work under the CONTRACT, he must apply to RFCL within seven days from the date of the occurrence of the event on account of which he desires such extensions and RFCL may, if he thinks such request reasonable, grant such extension of time as he may think necessary.

1.48.0 **Continued Performance:** The Contractor shall not stop work in case of any dispute pending before arbitrator/court/Tribunal in relation to the contract or otherwise unless further progress of works has been rendered impossible due to non-fulfillment of any reciprocal promise. Unilateral stoppage of work by the Contractor shall be considered a breach of CONTRACT and the RFCL shall be within its rights to take suitable and necessary action as it may deem fit to adequately protect its own interests.

1.49.0 The Contractor shall comply with the provisions of Factories Act, 1948 & Contract Labour (Regulation & Abolition) Act 1970 and rules framed there under & amended from time to time.

1.50.0 The Contractor shall abide by all the Acts / Labour Laws related to PF, Wages, Holidays, Leaves, Bonus and Overtime etc. The Contractor is required to comply with all statutory provisions, from time to time, during the tenure of the contract.

1.51.0 The Contractor shall ensure that the payment of the minimum wages to the labourers through EFT, specified by the government (State Government or Central Govt. whichever is higher) from time to time, has been made in accordance with the Minimum Wages Act. If at any time, it is noticed or it comes to the knowledge that the payment, to the laborer's employed by the Contractor, is not made in accordance with the Minimum Wages Act, RFCL shall reserve the right to take remedial action to regulate the payments.

In case contractor fails to provide the requisite documents pertaining to statutory payments of contract workers along with the bill, an amount equivalent to 40% of the billed amount pertaining to labour wages may be withheld to take care of fulfillment of statutory requirements such as PF, ESI, Bonus, leave payment etc. by the contractor. Further, the Contractor has to make the payment to his workmen on or before 7th day of the following month directly into their bank accounts. In case Contractor fail to do so, RFCL being the Principal Employer will disburse the payment to Contractor's workmen employed for this work and deduct the amount so paid from his bill. For this, RFCL will recover additional 25% of the total wage bill of the labour, as departmental/ administrative charges.

1.52.0 **Loss to Owner (RFCL) during execution of Contract:** It is understood by the Contractor that in the event of any losses/damages caused to the owner (RFCL) due to the reasons whatsoever within his control and the same losses/damages are approved, the Contractor has to make good all the consequential damages/losses to the Owner without any protest and demur. The damages/losses shall be apart from other claims/damages to which the Owner is entitled under the contract or in the course of Law. Except with the written consent from RFCL, the Contractor shall not disclose the contract or any provision of the contract to any third party

A. Shrivastava

1.53.0 The Contractor shall ensure that all formalities, permissions, licenses required be complied under the existing laws of India and amendments thereof time to time for and in connection with this contract including engagement / employment of laborers are duly complied with along with maintenance of all records and registers as required under laws. The Contractor shall indemnify and keep indemnified RFCL from and against all actions, claims, demands and liabilities whatsoever under and in respect of the breach of any provisions pertaining to labor laws and/or against any claim, action or demand by any workman/ employee deployed by the Contractor or any third parties, in relation to work under this Contract.

1.54.0 Deleted

1.55.0 INDEMNIFICATION

The contractor shall have to furnish Indemnity Bond (as per format enclosed as Annexure-X) for value of Rs.....towards the material being sent for repair (This Clause shall be applicable for repair of materials).

1.56.0 "If a Bidder 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 Bidder from participation in the present/future Bids up to period of 2 years".

1.57.0 Time Limit for Any Claim:

In case the Contractor fails to claim compensation, from RFCL on account of any claim under the contract, in writing to the Engineer In-Charge, within a period of one month of cause of action of such a claim arise, the Contractor shall be deemed to have waived of his right to claim the same.

1.58.0 Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears the provisions of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.

1.59.0 Priority of documents:

Except if and the extent otherwise provided by the Contract, the provisions of the General Conditions of Contract and Special Conditions shall prevail over those of any other documents forming part of the CONTRACT. Several documents forming the CONTRACT are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the ENGINEER-IN-CHARGE who shall thereupon issue to the Contractor instructions thereon and in such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:

- a. The Contract Agreement and its Appendices
- b. The Letter of Acceptance/Work Order;
- c. Special Terms and Conditions of Contract (STCC);
- d. General Terms and Conditions of Contract (GTCC);
- e. Instruction to Bidder or letter Inviting bid

A. Sharada

f. Any other document forming part of the Contract.

1.60.0 Contractor engaging 20 or more workers must obtain valid Labour License for employing no., of persons as Contract Labour and it should mention the location and the maximum no. of contract labours to be employed/ engaged before actual execution of work and copy be forwarded to HR Dept., before actual execution of work. The contractor shall not undertake or execute any work through contract labour except under and in accordance with the license issued on that behalf by the Licensing Officer. The license may be renewed as per the requirement.

1.61.0 PROHIBITION OF CHILD LABOUR:

Engagement of child labour/adolescent is prohibited and any one violating this clause will be black listed and whenever there are violation of the provisions, the Company will resort to legal action as deemed fit. Person below the age of 18 should not be employed

1.62.0 Corporate Governance Certificate about Compliance of all Labour Laws: Under Companies Act, 2013 (Clause 49), it is mandatory requirement of the Principal Employer to certify that the Contractors are complying with all Labour Laws pertaining to the Payment of Minimum Wage including temporary Contract workers, Contribution deposited Regularly towards ESI & PF, Payment of Statutory Bonus so as to state that the Contractors of the Company are strictly adhering to the rules and regulations and are not violating any applicable Labour Laws. Hence, each Contractor/Agency to give monthly Undertaking with supportive documents stating that they are complying all Laws applicable for all the Contract workers including temporary workers engaged at RFCL site (Proforma attached as Annexure "XII"). and which should be counter verify by the Execution Dept. and after certification month wise, it is forwarded to HR Department

1.63.0 Weekly Off/Holiday:

All the Contract Employees must mandatorily be given a weekly day off (full day). All Contract Employee to get at least a three National Holidays (26th January, 15th August and 2nd October) as paid Holidays and also RFCL's Paid Holidays.

Pay during leave and holidays: Every employee shall be paid at a rate equivalent to the daily average of his wages for the days on which he actually worked during the preceding month exclusive of any earning in respect of overtime.

A. Bora

SECURITY DEPOSIT-CUM-PERFORMANCE BANK GUARANTEE FORMAT
(To be prepared on Stamp paper of Rs.500 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 AND CHEMICALS LIMITED a Company registered in India under Companies Act, 2013 and having its registered office at Scope Complex, 7 Institutional Area, Lodhi Road New Delhi - 110003 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 AND CHEMICALS LIMITED (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-cum-Performance Bank Guarantee for Rs. _____

CONTRACTOR accordingly agrees to furnish the Security cum performance Bank Guarantees hereinafter contained towards fulfillment of all of its obligations under the contract.

NOW THIS DEED WITNESSES AS FOLLOWS:

The decision of the Owner as to whether the terms and conditions of this Security Deposit-cum-Performance Bank Guarantee have been observed or not shall be final and binding on the BANK. In any case, however the Bank's responsibility under this Security Deposit-cum-Performance Bank Guarantee is limited to Rs. _____.

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 fulfill 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.
2. This Security Deposit-cum-Performance Bank Guarantee 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 expiry of _____ months from the issuance of Commissioning /erection / completion certificate according to terms of contract the Security Deposit-cum-Performance Bank Guarantee shall become null and void.

A. Shrivastava

3. This Security Deposit-cum-Performance Bank Guarantee 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 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 Security Deposit-cum-Performance Bank Guarantee will remain in force initially upto _____ 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 Security Deposit-cum-Performance Bank Guarantee 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.
8. The last date of claim under this Security Deposit-cum-Performance Bank Guarantee shall be _____ (date of expiry + 3 months).

Dated _____ this _____ day of _____ 2024

(Indicate the Name of the Bank with stamp)

A. Khosla

Proforma for Indemnity Bond

(To be prepared on Stamp paper of Rs.500)

This DEED OF INDEMNITY made between M/s.....having its registered office atand place of business at..... (hereinafter called 'The Contractor'), which expression shall include its successor and assigns of the one part and M/s RAMAGUNDAM FERTILIZERS AND CHEMICALS LIMITED , a company incorporated under the Indian Companies Act, 2013 and having its registered Office at Scope Complex, 7 Institutional Area, Lodhi Road New Delhi - 110003 (herein under called 'the Owner') which expression shall include its successors and assigns of the other part WHEREAS the Owner has placed a Work Order No.on the Contractor forand whereas one of the conditions of the said Contract, is that the Owner will supply to the contractor free issue Material for..... As specified in the said Contract for the purpose of

.....and WHEREAS the Owner has agreed to send the said Free issue Material in the terms of the said Contract upon the terms that the Contractor should enter into covenants hereinafter contained.

NOW THIS DEED WITNESSETH AS FOLLOWS

1. In pursuance of the said agreement and in consideration of the promises the Contractor hereby permits and acknowledges that the Contractor holds and shall always hold the said Free Issue Materials (which will from time to time be sent by the Owner to the Contractor) under the said contract, in trust for to the order of and on account of the Owner.
2. The Contractor hereby assume full responsibilities for the said Free Issue Materials shall keep the said Free Issue Materials free of charge to the Owner in the safe place and in good condition.
3. The Contractor hereby agrees to indemnify and keep the Owner indemnified at all times hereafter against all claims, demands, proceedings, losses, damages, costs charges and expenses which may be or brought against the owner of which the Owner may suffer or incur by reason of any loss or damage to the Contractor or its employees caused by the default or negligence of the Contractor or its employees or agent and/or by reasons of breach by the Contractor or its covenants obtained in clause 1 and/or clause 2 hereof.
4. The Contractor agrees that the FIM shall be used only for purpose intended by the Owner.
5. NOTWITHSTANDING anything stated herein above, Contractor's liabilities under this Guarantee is restricted to Rs..... (Rs..... only) and it will remain in force till.....unless an action to enforce claim under the guarantee is filed against Contractor before the aforesaid date all Owner's rights under the said guarantee shall be forfeited and Contractor shall be relieved and discharged from all the liabilities thereunder.

Dated:

A. Sharma

FORM OF CONTRACT**(To be prepared on Non-Judicial Stamp paper of Rs.200)**

THIS CONTRACT made at RAMAGUNDAM (Telangana) on the ----- day of ----- BETWEEN RAMAGUNDAM FERTILIZERS AND CHEMICALS LIMITED, registered in India under the Indian Companies Act 2013, having its registered office at Scope Complex, 7 Institutional Area, Lodhi Road New Delhi - 110003 (hereinafter referred to as the "Owner" which expression shall include its successors and assigns) of the ONE PART

AND

----- carrying on business in sole proprietor/partnership/company etc. under the name and style of -----, having its office at ----- (hereinafter referred to as the "Contractor" which expression shall include his/their executors, representatives and permitted assigns/ successors) of the OTHER PART.

WHEREAS the owner is desirous of executing certain works more specifically mentioned and described in the Work Order No. -----Dated ----- for and WHEREAS the contractor has agreed to execute the work as specified in the Tender Documents/ Work Order referred to above.

NOW, THEREFORE, THIS CONTRACT WITNESSETH AS FOLLOWS:**ARTICLE-I****1.1 CONTRACT DOCUMENTS:**

The following documents shall constitute the contract documents, namely:

- a) This agreement of contract;
- b) NIT/Tender documents;
- c) Acceptance of Tender;
- d) Letter of Acceptance dated -----;
- e) Work Order dated -----; and
- f) Further amendments, if any.

A copy of each tender document is annexed hereto and the said copies have been collectively marked Annexure-A.

ARTICLE-2**2.1 WORK TO BE PERFORMED**

In consideration of the payments to be made to the contractor as hereinafter provided, he shall, with due care, promptness, accuracy execute the work in accordance with the Notice Inviting Tenders, Special Terms & conditions of Contract, Work Order and Letter of Intent.

ARTICLE-3**3.1 COMPLETION PERIOD**

The contract work shall be duly completed in all respect and handed over to within stipulated time schedule from the date of issue of Letter of Intent. The time mentioned herein shall be the essence of the contract.

A. Shrivastava

ARTICLE-4

4.1 JURISDICTION

Notwithstanding any other Court or Courts having jurisdiction to decide the question(s) forming subject matter of a suit, any and all actions and proceedings arising out of or relating to the contract (including any arbitration in terms thereof) shall lie only in the court of a competent civil jurisdiction in this behalf at Peddapalli District of Telangana (where this contract has been signed on behalf of the owner) and only the said Court(s) shall have jurisdiction to entertain and try such action(s) and/or proceeding(s) to the exclusion of all other courts.

ARTICLE-5

5.1 ENTIRE CONTRACT

The contract documents mentioned in Article-1 hereof embody the entire contract between the parties. The parties declare that in entering into this contract they do not rely upon any previous representation whether expressed or implied and whether written or oral, or any inducement, understanding or agreement and all prior negotiations, representations, contract and/or agreements and understanding are hereby cancelled.

ARTICLE-6

6.1 NOTICE

Subject to any provisions in the contract documents to the contrary, any notice or order or communications sought to be served by the contractor on the owner with reference to the contract shall be deemed to have been sufficiently served upon the owner (notwithstanding any enabling provisions under any law to the contrary) only if delivered by hand or by Registered acknowledgement due post to the engineer-in-charge as defined in the general conditions of contract.

Without prejudice to any other mode of service provided for in the contract documents or otherwise available to the owner any notice, order or other communications sought to be served by the owner on the contractor with reference to the contract, shall be deemed to have been sufficiently served if delivered by hand or through registered acknowledgement due to the principal office of the contractor at his/their address mentioned on page No.1.

ARTICLE-7

7.1 WAIVER

No failure or delay by the owner in enforcing any right or remedy in terms of the contract or any obligations or liability of the contractor in terms thereof shall be deemed to be a waiver of such right, remedy, obligation or liability as the case may be, by the owner and notwithstanding such failure or delay, the owner shall be entitled at any time to enforce such right, remedy, obligations or liability, as the case may be.

ARTICLE-8

8.1 NON-ASSIGNABILITY

The contract and benefits and obligations thereof shall be strictly personal to the contractor and shall not on any account be assignable or transferable by the contractor.

A. Bhogate

ARTICLE-9

9.1 ARBITRATION

Except where otherwise provided in the contract all matters, questions, disputes or differences (Dispute's) whatsoever, which shall at any time arise between/among the parties hereto, touching the construction, meaning, operation or effect of the contract, or out of 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 shall be resolved / settled amicably through negotiation by the parties. For the same, one party shall issue dispute notice in this regard, to the other party. If the said dispute/s could not be settled amicably within 45 days from the date of receipt of dispute notice by other party, then, party/ies may refer the said dispute/s for adjudication through Arbitration, as prescribed hereinafter.

On failure of amicable resolution/settlement as above. The dispute/s shall be referred / adjudicated through Arbitration under / in accordance with "Arbitration Centre (Domestic and International), High Court of Judicature at Hyderabad for the state of Telangana and the State of Andhra Pradesh Rules,2015" as amended or modified or re-enacted from time to time. Where the said rules are silent or in conflicts with Indian Laws, same shall be governed by Arbitration & Conciliation Act 1996; as amended or modified or re-enacted, from time to time

The number of Arbitrator shall be three (3) in case of matter involving total amount of claims (without considering claim of interest) more than Rs. 3 Crore, otherwise number of Arbitrator shall be one (1) i.e. (Sole) Arbitrator.

The language of Arbitration shall be English.

The Governing Law Shall be Laws of India and dispute/s shall be adjudicated as per Indian Laws.

For the convenience of parties, the venue of Arbitration shall be as per above rules i.e., Arbitration Centre, Hyderabad, However, the Seat of the Arbitration Shall be, Ramagundam, Peddapalli District, State of Telangana. The courts at Ramagundam Peddapalli District, State of Telangana shall, have exclusive Jurisdiction.

It is also agreed by and between the parties that in case a reference is made to the Sole Arbitrator / Arbitral Tribunal for the purpose of resolving the dispute/s 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 SBI MCLR Rate applicable to RFCL on the date of award of contract.

IN WITNESS WHEREOF the parties hereto executed this contract on ---the day of -----, 2024 and shall come into force w.e.f. -----.

SIGNED AND DELIVERED FOR AND ON BEHALF OF

Ramagundam Fertilizers and Chemicals Limited
(With Rubber stamp)

Witness

1.

2.

Contractor

(With Rubber stamp)

Witness

1.

2.

A. Sreeraj

(Undertaking for Statutory obligations to be given in the letter head along with every Running Bill)

Certificate of Compliance

Of

Statutory Provisions of Labour Laws

Certified that provisions of contract Labour (Regulations and Abolition Act-1970) and other relevant Laws as mentioned below have been complied with towards the contract for

awarded to M/s. _____ having work order No _____ dated _____ for which RA Bill No _____ has already been submitted for Rs. _____ against which payment has been made through Electronic Fund Transfer to the bank accounts of the employees and is as per Minimum wages act, bonus and other laws and no complaint has been lodged till date by any contract employee of the above contractor, who has paid wages and applicable statutory payments on account of EPF, ESI, Bonus, Leave Payment for the month of _____.

Maintained proper registers, records, documents and books and filed proper returns, forms and statement and furnished necessary particulars to the relevant authorities. EPF and ESI Contributions for the above referred month have been deposited with concerned authorities on or before due dates in respect of the manpower deployed as mentioned in Sl. No _____ to _____ of wage payment register.

1. Minimum Wages Act 1970, Factories Act-1948 & 2013, Workman Compensation Act-1923,
2. Employee's Provident Fund & Miscellaneous Provision Act 1952
3. The Payment of Bonus Act - 1965
4. Any other Labour Law formed by State/ Central Government from time to time and relevant to the above contract.

WE have gone through the terms and conditions stipulate in the tender document and confirm to abide by the same and not done or committed any act or entered into any transaction in violation of any statutory provisions.

No other charges would be payable by RFCL.

(Signature & Seal of Authorized signatory of the Agency/Contractor with seal)

Signature & Seal of
Authorized Signatory
of the Executing Department)

Verified by
Authorized Signatory
(Signature & Seal of
HR Department, RFCL)

A. K. Khatke

PRICE SCHEDULE-I (Routine O&M)

S.No	Description & Scope	Unit	Qty/ No. of Operations	Lump Sum Rate	Amount
			(A)	(B)	(AxB)
1	Operation and Maintenance (O&M) of 2x240 KLD capacity MBR (Membrane Bio Reactor) based Sewage Treatment Plant at RFCL Township, Ramagundam in round the clock shifts to treat the sewage from Township. The scope covers deputing qualified and experienced operators for 24 Hours shift operation of the plant, along with required relievers. The operators are required to monitor proper functioning of all the equipment and the system in total for effective performance of the plant for better results. The scope for O&M has been broadly defined in Annexure-VI.	Monthly	12		
	Note:- One Operation means operating and maintenance of 2 x240 KLD STP for a period of ONE month, as per Scope.				

Total for Price Schedule-I per Annum (in ₹) excluding GST

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PRICE SCHEDULE-II(Consumables)

Sr. No.	Details of Consumables	Unit	Qty	Unit Rate	Amount	
			(A)	(B)	(AxB)	
1	Naocl	Litres	2400			
2	Lime	Kg	120			
3	Poly Alum	Litres	240			
4	Citric Acid	Kg	180			
5	LBC	Litres	120			
6	MLSS development chemicals	Kg	120			
7	Urea	Kg	180			
8	DAP	Kg	180			
9	Cow Dung	Bags	60			
10	Air blower V - Belts	Nos	48			
11	Grease	Kg	30			
12	Gear oil 140 grade	Litres	120			
13	Gear oil 150 grade	Litres	24			
14	Air delivery Hoses (flexible pipe)-1-inch dia Length of pipe-app 3meter	Piece	240			
15	Supply of Bearings for Motors, Pumps, Blowers & agitator etc as per instructions of EIC. Bearing shall be supplied in set of DE and NDE (both). Installation of bearing and maintenance of motors, pumps. Blowers & agitator etc. shall be in the scope of RFCL. Make of bearing:- FAG/SKF/NTN Note:-The bearing shall be guaranteed for 6 month from the date of handing over to EIC.					
	Details of bearing	Bearing code	Unit	Qty (Set of DE & NDE (nos))	Unit Rate(Rate of DE +NDE Bearing)	Amount
				(A)	(B)	(AxB)
15.1	Tag No-3F3-310-B-410-C Equipment name-MBR BLOWER-1	DE-6206-2Z/C3 NDE-6205-2Z/3C	Set	1		
15.2	Tag No-10F4-310-B-410-A Equipment name-MBR BLOWER-2	DE-6206-2Z/C3 NDE-6205-2Z/3C	Set	1		

A. Gowaly

15.3	Tag No-3F3-310-B-410-B Equipment name-MBR BLOWER STANDBY	De-6206-2Z/C3 NDE-6205-2Z/3C	Set	1		
15.4	Tag No-9F1-310-B407-B Equipment name-PAT BLOWER-1	DE-6310-2Z/C3 NDE-6209-2Z/C3	Set	1		
15.5	Tag No-3F1-310-B407-A Equipment name-PAT BLOWER-2	DE-6310-2Z/C3 NDE-6309-2Z/C3	Set	1		
15.6	Tag No-3F2-310-8-403-A Equipment name-CT & SHT BLOWER-1	DE-6208-2Z/C3 NDE-6208-2Z/C3	Set	1		
15.7	Tag No-11F1-310-B-403-B Equipment name-CT & SHT BLOWER-2	DE-6208-2Z/C3 NDE-6208-2Z/C3	Set	1		
15.8	Tag No-10F2-310-P-417-A Equipment name-TREATED WATER PUMP-1	DE-6308-2Z NDE-6208-2Z	Set	1		
15.9	Tag No-9F2-310-P-417-C Equipment name-TREATED WATER PUMP-2	DE-6308-2Z NDE-6208-2Z	Set	1		
15.10	Tag No-4F2-310-P-417-B Equipment name-TREATED WATER PUMP STANDBY	DE-6308-2Z NDE-6208-2Z	Set	1		
15.11	9F6-310-P-403-C Equipment name-RAW SEWAGE PUMP-1	DE-6205-2Z NDE-6205-2Z	Set	1		
15.12	Tag No-4F6-310-P-403-A Equipment name-RAW SEWAGE PUMP-2	DE-6205-2Z NDE-6205-2Z	Set	1		
15.13	Tag No-5F1-310-P-403-B Equipment name-RAW SEWAGE PUMP STANDBY	DE-6205-2Z NDE-6205-2Z	Set	1		
15.14	Tag No-4F3-310-P-410-C Equipment name-RAS PUMP-1	DE-6307-2Z NDE-6305-2Z	Set	1		
15.15	Tag No-9F3-310-P410-A Equipment name-RAS PUMP-2	DE-6307-2Z NDE-6305-2Z	Set	1		
15.16	Tag No-4F4-310-P-410-B Equipment name-RAS PUMP STANDBY	DE-6307-2Z NDE-6305-2Z	Set	1		
15.17	Tag No-9F4-310-AC-420 Equipment name-AIR COMPRESSOR	DE-6206-2Z NDE-6205-2Z	Set	1		
15.18	Tag No-2F1-310-P-408-A Equipment name-MBR-1 PERMIT PUMP-1	DE-6306-2Z NDE-6205-2Z	Set	1		
15.19	Tag No-3F1-310-P-408-B Equipment name-MBR-1 PERMIT PUMP-2	DE-6306-2Z NDE-6205-2Z	Set	1		
15.20	Tag No-4F1-310-P-409-B Equipment name-MBR-2 PERMIT PUMP-1	DE-6306-2Z NDE-6205-2Z	Set	1		
15.21	Tag No-5F1-310-P-409-B Equipment name-MBR-2 PERMIT PUMP-2	DE-6306-2Z NDE-6205-2Z	Set	1		
15.22	Tag No-310-F5-403-A Equipment name-FINE SCREEN CLEANING PUMP	DE-6203-2Z/C3 NDE-6202-2Z/C3	Set	1		
15.23	Tag No-310-AG-407-A Equipment name-ALUM AGITATOR MOTOR	DE-6204-2Z NDE-6204-2Z	Set	1		
15.24	Tag No-310-AG-418/1 Equipment name-POLY AGITATOR MOTOR	DE-6204-2Z NDE-6204-2Z	Set	1		
15.25	Tag No-310-AG-407-B Equipment name-ALUM AGITATOR MOTOR	DE-6204-2Z NDE-6204-2Z	Set	1		
15.26	Tag No-310-AG-405-A Equipment name-ANOXIC AGITATOR MOTOR	DE-6204-2Z NDE-6204-2Z	Set	1		
15.27	Tag No-310-AG-406-A Equipment name-ANOXIC AGITATOR MOTOR	DE-6204-2Z NDE-6204-2Z	Set	1		
15.28	Tag No-310-P-412-A Equipment name-NAOCL DOSING MOTOR	DE-6202-Z NDE-6202-Z	Set	1		
15.29	Tag No-310-P-413-A Equipment name-CITRIC DOSING MOTOR	DE-6202-Z NDE-6202-Z	Set	1		
15.30	Tag No-310-P-418-A Equipment name-SCREW PUMP-MOTOR	DE-6205-2Z/C3 NDE-6204-2Z/C3	Set	1		
15.31	Tag No-310-P-418-A Equipment name-SCREW PUMP-MOTOR	DE-6205-2Z/C3 NDE-6204-2Z/C3	Set	1		
15.32	Tag No-31-FP-419 Equipment name-FILTER PRESS	DE-6205-2Z/C3 NDE-6204-2Z/C3	Set	1		
Total for Price Schedule-II for 12 Months (in ₹)						

A. Shrivastava

Net Total per Annum for O&M including consumables for 12 Months	
(Price Schedule I + Price Schedule II)	
Add GST @ 18%	
Grand Total Value of Contract(in Figures) incl. GST	

Note to bidders

1	The Rates quoted should be inclusive of all Taxes except GST, other Statutory Levies to be payable unless specified to the contrary in the bid all present taxes and statutory levies shall be borne and paid for by the bidder. Payment of the taxes and other statutory levies shall be the responsibility of the bidder and shall not be payable by RFCL.
2	Bid shall be evaluation of price bids shall be on overall total basis (Price Schedule-I + Price Schedule-II)
3	Quantities of consumables mentioned in the Price Schedule-II are tentative and indicated for the purpose of evaluation of bids. However, actual quantities may vary. RFCL does not guarantee the quantum of work. Payment will be made on actual basis. The rates for consumables shall remain firm throughout the currency of the contract. RFCL reserves the right to procure consumables in any quantity up to the completion of contract.
	Signature & Stamp of Bidder:
	Name of Bidder:
	Date & Place:

A. Eloraty

Undertaking on Bidder's letterhead: -

With reference to NIT No. RFCL /SITE-Tender/Misc./TS-STP/ O&M/2024/31 dated 02.07.2024 of Ramagundam Fertilizers And Chemicals Limited, Ramagundam for, at RFCL Ramagundam site I/We _____ S/o.Shri. _____

R/o _____
Authorized Representative of (the Institution) _____

do solemnly affirm and declare as under: -

- i) That our Institution/sister concern etc. has not been blacklisted or put on holiday by any Institutional Agency/Government Department/Public Sector Undertaking.
- ii) That no other Institution/Sister Concerns/Associates belonging to the same group are participating/submitting the Tender for the job.
- iii) That the information furnished by me/us in respect of above Tender is true and correct and nothing has been concealed. In case any of information is found to be false and incorrect at any stage, RFCL shall be fully competent to take the necessary action as deemed fit.

SEAL & SIGNATURE of the Bidder

Verification:

Verified that the contents of the above paras of my affidavit are true and correct to the best of my knowledge and belief and nothing has been concealed therein. Verified at
..... on thisday of2024.

SEAL & SIGNATURE of the Bidder

A. Bhargava

Check List of documents to be submitted by Bidder
[Please write Yes/No/NA in Column III]

Sl. No	Name of Documents	Yes/No or N/A
1	Cost of Tender documents: (Rs. 1000/-) DD No. _____ Amount _____ Date _____ or UTR no. _____ Amount _____ Date _____	
	EMD (Rs 100000/-) DD No. _____ Amount _____ Date _____ or UTR no. _____ Amount _____ Date _____ or BG No. _____ Amount _____ Date _____	
2	Whether all the pages of tender document are stamped and signed & properly tagged with all documents?	
3	Whether Declaration form-I is filled up?	
4	Whether declaration form-II (bidders' details) filled up?	
5	Whether e-banking mandate form is filled up?	
6	Whether self-attested copy of registration of the firm (for partnership firm or Pvt. Ltd./ Pub. Ltd. company) is enclosed?	
7	Enclose latest notarized affidavit towards sole proprietorship of firm/ Self Attested Partnership deed or Incorporation certificate of Company/Article of Association /Memorandum of Association as applicable)	
8	Self-attested copy of PAN Card	
9	Self-attested copy of GST Certificate	
10	Self-attested copy of EPF Certificate	
11	Self-attested copy of ESI certificate.	
12	Power of Attorney in original, in case tender document is signed by person other than tenderer or tendering company.	
13	Undertaking on Party's letter head about Blacklisted/Non-Blacklisted company. The certificate should be exactly in the same format as given in Annexure-XIV of the tender document	
14	Total Turnover of the business in F. Y-2020-21, 2021-22 & 2022-23 (Attach copy of Audited Profit & Loss Account and B/S for the Financial Years 2020-21, 2021-22 & 2022-23).	

A. Bhargava

15	Give details of the major similar contracts handled by the tendering Company/Firm/Agency during last seven years (ending last day of month previous to the one in which applications are invited)		
S no	Details of client	Amount of Work completed	Contract period (From and to)
A			
B			
C			
D			
(If the space provided is insufficient, a separate sheet may be enclosed.)			
16	Document showing completion of one similar works of value not less than Rs. 45.29 Lacs/Annum (excluding taxes) related to provision of similar services in a single contract during the last seven years (ending last day of month previous to the one in which applications are invited) (enclose copies) OR		
17	Documents showing completion of Two similar completed works costing each not less than Rs.28.31 Lacs/Annum (excluding taxes) OR		
18	Documents showing completion of Three similar completed works costing each not less than Rs.22.65 Lacs/Annum (excluding taxes)		
19	Average Annual turnover of the bidder in last three Financial Years shall not be less than Rs.16,98,521/-		
20	Net Worth of the bidders should be positive for the FY 2022-23.		
21	Minimum Working Capital of ₹ 5,66,174/- for FY 2022-23.		
22	All annexures have been signed as per tender document.		

A. Elavathy

Bid Evaluation Criteria:

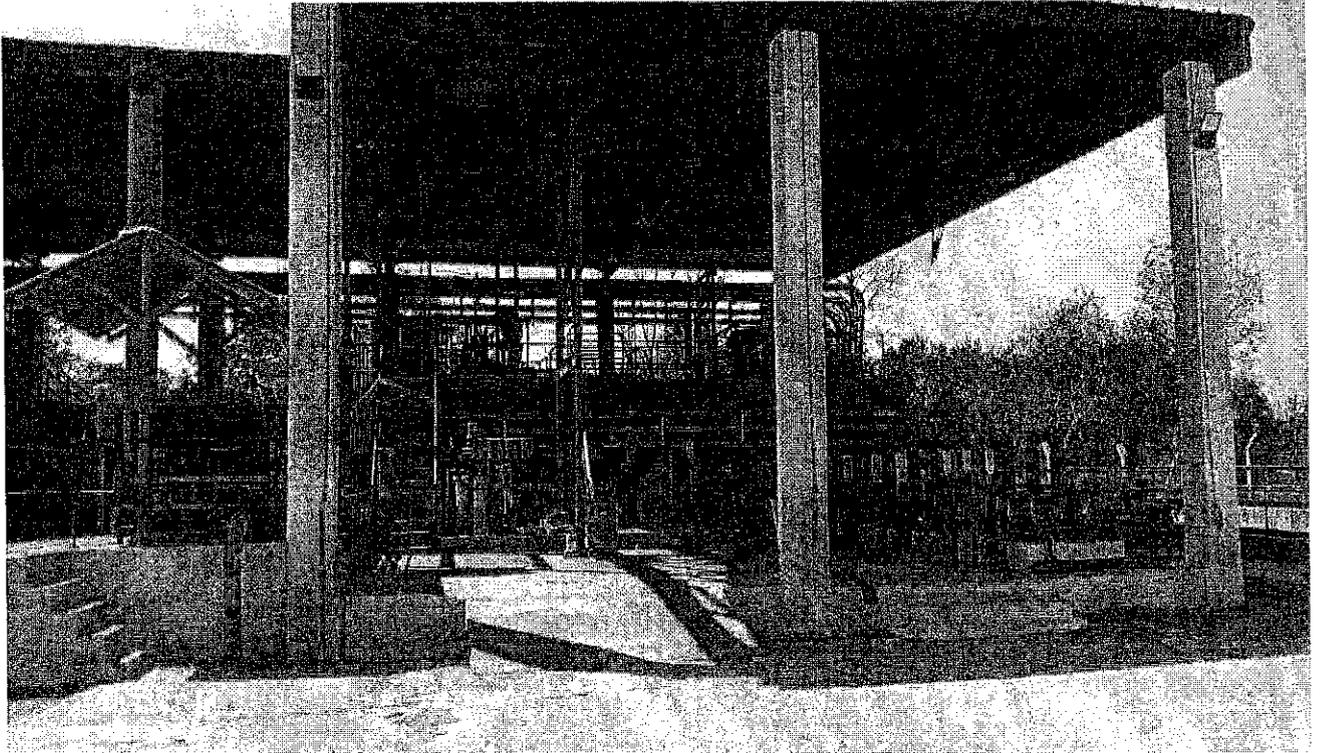
1. Price bid/Schedule of Rate (SOR) of those bidders, who accepts and confirms to all the terms and conditions of NIT without any deviation, will be opened after due notice to eligible bidders.
2. If there is any discrepancy between the words and figures, the amount in words shall prevail.
3. Bidder is required to quote item wise rate and amount. The rates to be quoted by the party should be inclusive of all duties, taxes, levies, entry tax etc. but excluding GST. The GST will be extra and as applicable.
4. Incase Overall rate(**Price Schedule-I + Price Schedule-II**) quoted by two or more bidders happens to be same , such bidders will be called to offer discount in sealed envelope, based on maximum discount offered, L-1 bidder will be decided for placement of work order.
5. Evaluation of price bids shall be on overall total basis (**Price Schedule-I + Price Schedule-II**) and work shall be awarded to Overall Lowest L-1 bid.
6. It may be noted that, for evaluation purposes, if the tenderer does not quote rate for any item, the same shall be taken based on the highest rate quoted by any of the other tenderer. However, if such bidder happens to be lowest evaluated bidder, price of unquoted items shall be taken as Nil and considered as included in the bid price.
7. RFCL may ask form 16A/26AS in support of work completion certificate for work orders submitted in response to BQC.
8. RFCL reserves the right to accept or reject any tender including the lowest one, in part or full, without assigning any reason whatsoever.
9. Splitting of Contract is not applicable.

A. Elavar

OPERATION & MAINTENANCE

MANUAL FOR

2 X 240 KLD MBR SEWAGE TREATMENT PLANT



PROJECT: RFCL TYPE – C TOWN SHIP

RAMAGUNDAM, KARIMNAGAR,

TELANGANA.

A. B. S. Rao

Effluent Flow rates:

The rate of Effluent generation is estimated to be 480 cubic meters per day.

Inlet Characteristics:

S.No	Parameters	Influent Quality
1	PH	6.5 - 8.5
2	BOD (mg/l)	100 - 350
3	COD (mg/l)	200 - 550
4	Suspended Solids(mg/l)	200 - 300
5	Ammonical Nitrogen (mg/l)	20 - 30
6	Total Phosphorus	10 Max
7	Oil & Grease (mg/l)	50 Max

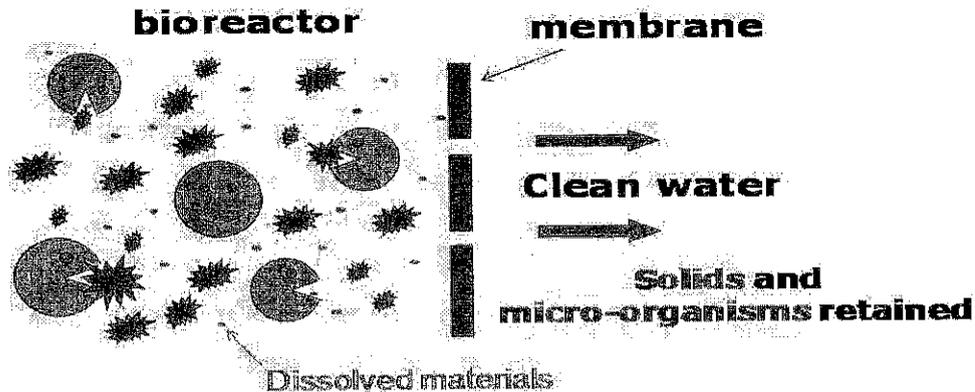
Treated Characteristics:

S.No	Parameters	Influent Quality
1	PH	6.5 - 8.5
2	BOD (mg/l)	<10
3	COD (mg/l)	<50
4	Suspended Solids(mg/l)	<5
5	Ammonical Nitrogen (mg/l)	<5
6	Total Phosphorus	<1
7	Oil & Grease (mg/l)	Below Detectable Limit
8	Fecal Coliform	< 1000

A. Bhattacharya

OVERVIEW:

Membrane bioreactor is the combination of a membrane process like micro filtration or ultra filtration with a biological waste water treatment process, the activated sludge process. It is now widely used for municipal and industrial waste water treatment.



Simple schematic describing the MBR process

When used with domestic wastewater, MBR processes can produce effluent of high quality enough to be discharged to coastal, surface or brackish waterways or to be reclaimed for urban irrigation. Other advantages of MBRs over conventional processes include small footprint, easy retrofit and upgrade of old wastewater treatment plants.

It is possible to operate MBR processes at higher mixed liquor suspended solids (MLSS) concentrations compared to conventional settlement separation systems, thus reducing the reactor volume to achieve the same loading rate.

Two MBR configurations exist: internal/submerged, where the membranes are immersed in and integral to the biological reactor; and external/side stream, where membranes are a separate unit process requiring an intermediate pumping step.

A submerged membrane should be outer-skinned. In general, permeate is extracted by suction or, less commonly, by pressurizing the bioreactor. In the external circuit, the membrane can be either outer- or inner-skinned, and the permeate is extracted by circulating the mixed liquor at high pressure along the membrane surface. In the latter case, the concentrated mixed liquor at the feed side is recycled back to the aeration tank.

A. Blacal

Technical Specifications of Equipment's:

SL.No	Equipment Names	Specifications
1	Coarse Bar Screen	
	Size	: 1000 mm X 1000 mm
	Spacing	: 10 mm
	MOC	: SS316
	Make	: REPL
	Quantity	: 1 No
	Fine Bar Screen	
	Size	: 1000 mm X 1000 mm
	Spacing	: 8 mm
	Quantity	: 1 No
2	Drum Type Fine Screen	
	Capacity	: 30 m3/hr
	Spacing	: 2 - 3 mm
	Quantity	: 2 Nos
3	Fine Screen Cleaning Pump	
	Capacity	: 3 m3/hr
	Head	: 15 mtrs
	Motor Rating	: 0.46 KW
	Make	: Grundfos
	Quantity	: 1 No
4	Stirrer Mechanism With Motor for Anoxic Tank	
	Capacity	: 1 HP
	MOC	: SS304
	Quantity	: 2 Nos
5	Raw Sewage Transfer Pumps	
	Capacity	: 12.5 m3/hr
	Head	: 15 mtrs
	Motor Rating	: 2.2 KW
	Make	: Kirloskar
	Quantity	: 3 Nos
6	GE MBR System	
	Type	: Membrane Casattes
	Make	: SUEZ
	Quantity	: 1 Set
	Alum Dosing With Agitator	
	Capacity	: 0 - 10 LPH
	Model	: V - 13

A. Bhargava

7	Make	:	Asia LMI
	Dosing Tank	:	500 Ltrs
	Quantity	:	1 No
8	Filtration Permeate Pumps With VFD		
	Capacity	:	12 - 19 m3/hr
	Head	:	15 mtrs
	Motor Rating	:	2.2 KW
	Model	:	SP2HM
	Quantity	:	4 Nos
9	Air Blowers for MBR Tank		
	Capacity	:	120 m3/hr
	Pressure	:	0.5 kg/cm2
	Motor Rating	:	5 HP
	Model	:	M 44
	Quantity	:	3 Nos
10	Air Blowers for PAT 1 & PAT 2		
	Capacity	:	520 m3/hr
	Pressure	:	0.5 Kg/cm2
	Motor Rating	:	25 HP
	Model	:	
	Quantity	:	2 Nos
11	Air Blowers for CT & SHT		
	Capacity	:	200 m3/hr
	Pressure	:	0.5 kg/cm2
	Motor Rating	:	10 HP
	Make	:	Everest /ABB
	Quantity	:	2 Nos
12	Coarse Bubble Diffusers		
	Size	:	90 mm Dia X 800 mm Long
	Model	:	PVC
	Quantity	:	20 Nos
13	Fine Bubble Diffusers		
	Size	:	90 mm Dia X 1000 mm Long
	Model	:	EPDM
	Quantity	:	66 Nos
14	NaOCL Dosing Pump with Tank		
	Capacity	:	0 - 10 LPH
	Model	:	V -13
	Make	:	Asia LMI
	Dosing Tank Capacity	:	500 Ltrs
	Quantity	:	2 Nos

A. Shrivastava

15	Cytric Acid Dosing Pump		
	Capacity	:	0 - 10 LPH
	Tank Capacity	:	500 Ltrs
	Pump Model	:	M - 13
	Tank Moc	:	HDPE
	Quantity	:	2 Nos
16	Sludge Extraction/Recirculation Pump		
	Capacity	:	40 m3/hr
	Head	:	12 m
	Motor Rating	:	3.7 KW
	Model	:	SP3LM
	Make	:	Kirloskar
	Quantity	:	3 Nos
17	Instrumentations		
	Quantity	:	1 Lot
18	Interconnecting Piping & Valves		
	Model	:	CPVC
	Make	:	Finolex
	Quantity	:	1 Lot
19	Back Pulse Water Tank With Level Switch		
	Capacity	:	100 Ltrs
	Make	:	REPL
	Quantity	:	1 No
20	Polymer Dosing Pump		
	Capacity	:	0 - 10 LPH
	Tank Capacity	:	500 Ltrs
	Stirrer Capacity	:	1 HP
	Pump Model	:	V - 13
	Tank MOC	:	HDPE
	Stirrer MOC	:	SS304
	Pump Make	:	Asia LMI
	Tank Make	:	Sintex
	Stirrer Make	:	REPL
	Quantity	:	2 Nos
21	Screw Pump		
	Capacity	:	2 m3/hr
	Pressure	:	4.5 - 5.5 Kg/cm2
	Make	:	Alfa Helical
	Model	:	BAD 206
	Quantity	:	2 Nos
22	Filter Press		
	Size	:	610 mm X 610 mm
	Plates	:	18
	Make	:	Royal Precision
	Quantity	:	1 No
	UV System		
	Capacity	:	25 m3/hr

A. Ghosh

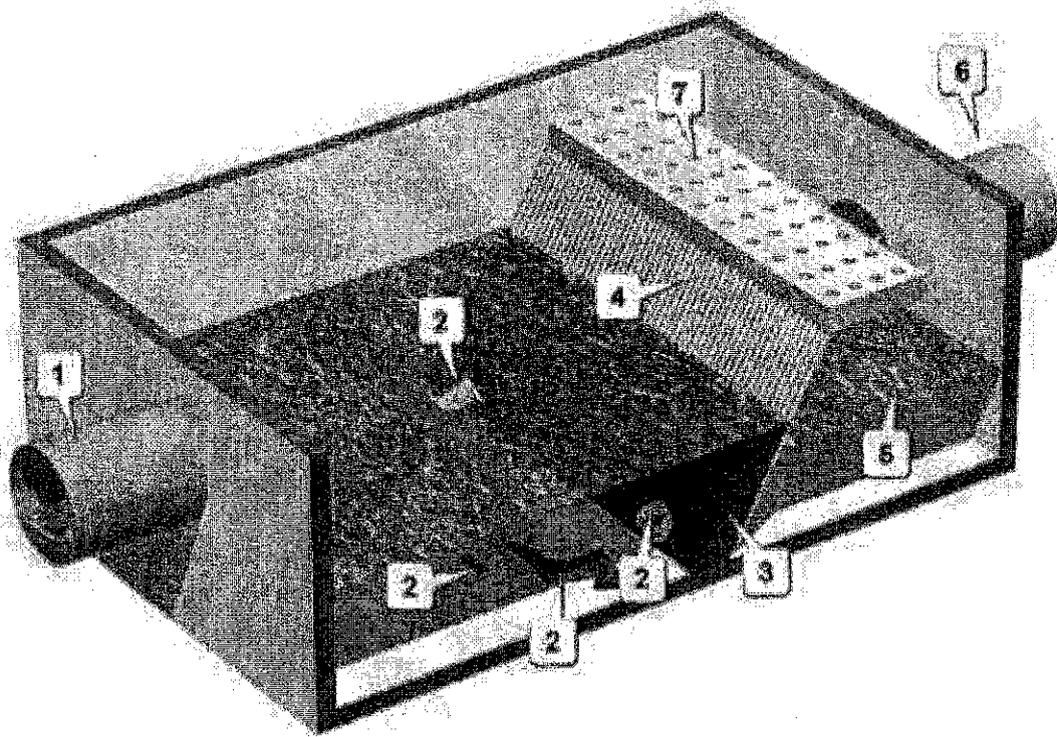
23	Head	:	45 m
	Model	:	KPDS 40/20A
	Make	:	Kirloskar
	Quantity	:	3 Nos
24	Treated Water Transfer Pumps		
	Capacity		25 m ³ /hr
	Head		45 m
	Model		KPDS - 40/20A
	Make		Kirloskar
	Quantity		3 Nos

BAR SCREEN CHAMBER:

The bar screen chamber is used to separate plastics and other non-decomposable matter from incoming waste water to prevent clogging of pipelines and pumps thereby causing break-downs.

The bar screen chamber consists of two screens i.e., a coarse screen followed by a fine screen which are inverted at an inclined angle.

The bar screen chamber is to be at a suitable overflow height to the equalization tank.



Inlet pipe for the STP.

Debris (plastic bags, paper cups, condoms, sanitary napkins, paper dishes, etc.) gets trapped here. Muck (sediment in sewage) accumulates and blocks the grill (if not cleaned regularly)

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Grill Must be cleaned regularly to avoid a build-up of debris (2) and muck (3).

Screened sewage. If the screen (4) is maintained well, this would be free of any large articles. Outlet pipe (goes to the Equalization Tank)

Platform with weep holes. The STP operator stands here to rake the debris (2). He also uses the platform as a drip-tray for the collected debris

EQUALIZATION/COLLECTION TANK:

Flow equalization is the process of mitigating changes in flow rate through a portion of a system by providing storage to hold water when it is arriving too rapidly, and to supply additional water when it is arriving less rapidly than desired. In treating wastewater, the rate at which the waste arrives at the treatment process might vary dramatically during the day, so it is convenient to equalize the flow before feeding it to the various treatment steps. In either case, the engineering issue is deciding how large an equalization basin is required to allow a steady, the treatment processes to operate with a steady, average flow.

The sewage from the bar screen chamber and oil, grease and grit trap comes to the equalization tank. The equalization tank is the first collection tank in an STP. Its main function is to act as a buffer: To collect the incoming raw sewage that comes at widely fluctuating rates, and pass it on to the rest of the STP at a steady (average) flow rate. During the peak hours, sewage comes at a high rate. The equalization tank stores this sewage, and lets it out during the non-peak time when there is no/little incoming sewage.

This is mandatory for two reasons:

It keeps the raw sewage aerated, thereby avoiding septicity and suppressing odor generation.

It keeps solids in suspension and prevents settling of solids in the tank, thereby reducing frequency of manual cleaning of the tank.

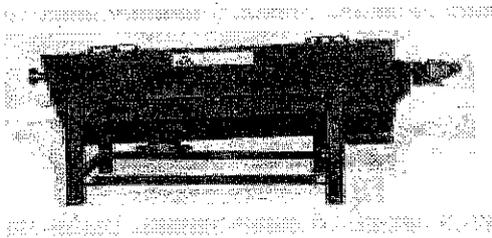
The tank may be of any shape, provided it permits placement of air diffusers for full floor coverage and uniform mixing over the entire floor area. The diffusers should be retrievable: Individual diffusers (or sets of diffusers) may be lifted out and cleaned for routine maintenance. This will reduce frequency of shut down of the Equalization tank for manual cleaning purposes.

If membrane diffusers are used, they will fail frequently, due to the repeated cycles of expansion and contraction caused by fluctuating water levels in the equalization tank. Therefore, only coarse bubblediffusers must be used in the equalization tank.

DRUM TYPE FINE SCREEN:

The smallest type of screening in wastewater treatment is micro screening. These screens are typically low-speed drum screens. The drums are lined with filtering fabrics with openings of 10 to 35µm. Wastewater enters the drum, and the retained solid waste is collected and disposed of

A. Shorab



ANOXIC TANK:

Anoxic zones in wastewater are useful for nitrogen removal. Some wastewater has a high nitrate and nitrite content, and the treatment process must break down those compounds to avoid causing nutrient pollution when the plant discharges its effluent back into the environment.

In anoxic zones, when bacteria break down the nitrogen products, the separation of the molecules releases oxygen, which the bacteria need to thrive. Because the biodegradation of nitrogen products naturally releases oxygen, the bacteria in anoxic tanks like denitrification basins do not require supplemental oxygen from diffusers or surface aerators.

PRE - AERATION TANK:

From the Collection Tank the waste water is pumped to aeration tank where oxygen is mixed with water by means of floating aerator system.

To understand the system, the following terms must be understood:

(I) **BACTERIA:** Bacteria are single celled prokaryotic organisms. Their usual mode of reproduction is by binary fission. Generally a bacterial cell contains 80% water and 20% dry material, out of which 90% is organic & 10% is inorganic.

(II) **BIO CHEMICAL OXYGEN DEMAND: (BOD)** It is the demand of dissolved oxygen by bacteria and other microbes in the bio-chemical oxidation of Organic matter.

(III) **MIXED LIQUOR SUSPENDED SOLIDS: (MLSS)** The suspended solids concentration in the Aeration tank is referred as Mixed Liquor SS. It is an index of the mass of active micro organisms in the Aeration tank. As illustrated before MLSS in aeration tank indicates the presence of both active and dead bacterial cells. The level of MLSS that has to be maintained depends upon the desirability of treated water quality. MLSS level of 3500 - 5000 mg /lit would be optimum in an Extended type aeration tank.

(IV) **RETURN ACTIVATED SLUDGE (RAS):** The purpose of the return of activated sludge to Anoxic tank from Sludge Sump is to maintain a sufficient concentration of activated sludge in the tank so that required degree of treatment can be obtained in the limited time interval.

(V) **FOOD TO MICROBES RATIO (F/M):** It is the ratio between amounts of Organic material available to microbial population. In other words it is the ratio between BOD in Kg's and MLSS in Kg's. A proper F/M can be achieved by increasing or decreasing the rate of Return Activated Sludge (RAS) from Secondary Clarifier. Optimum F/M for an Extended Aeration type ASP is 0.1 - 0.15.

(VI) **NUTRIENTS:** To continue reproduction & stabilization of organic matter, an organism must

A. Ghosh

have (a) a source of energy (b) carbon for the synthesis of new cellular material (c) Inorganic elements such as nitrogen, phosphorus, sulphur, potassium, calcium and magnesium. For deriving energy bacteria use light and other chemical reaction as a source. Carbon is derived from organic matter and atmospheric CO₂.

MBR TANK:

In the MBR process, membranes act as a solid-liquid separation device, keeping the biomass within the bioreactor before discharging the treated effluent to the nature. Basically, they take the place of clarifiers used in the conventional activated sludge (CAS) process.

Both micro- (MF) and ultrafiltration (UF) membranes can be used in MBR applications. Typically, UF membranes are the preferred choice because of their superior separation characteristics (thus, being able to remove some colloids and viruses as well) and lower fouling tendency (because of the smaller pore size, they have a lower risk of pore clogging).

There are three types of membrane geometries used for MBRs:

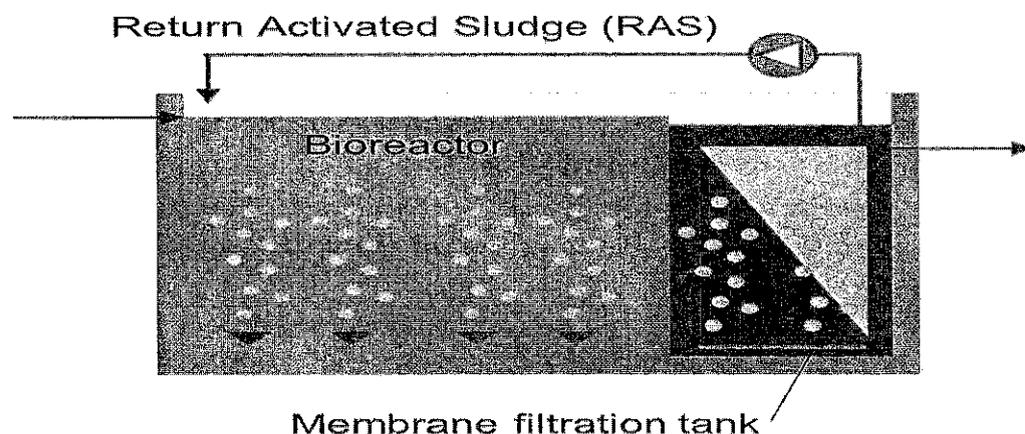
1. Hollow fibre (HF);
2. Flat sheet (FS);
3. Tubular (or multi-tubular, MT).

Other configurations, such as spiral-wound (SW), are not suitable to MBR applications because of their sensitivity to suspended solids contents.

The crucial function of membranes is to separate solids from a liquid. In activated sludge facilities, this is traditionally accomplished using secondary clarifiers.

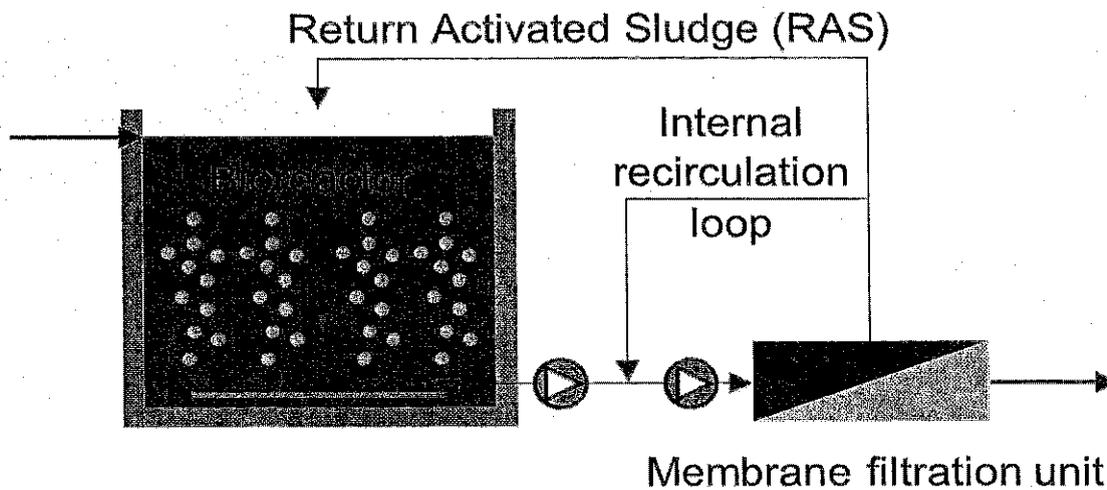
Two process configurations are possible:

- Submerged MBR, in case vacuum-driven membranes are used (like PCI HF-Zmbr2 Series);



- Side stream (or external) MBR, in case pressure-driven membranes are used (like PCI A-Series).

A. Sharaf



Smaller Footprint:

Large clarifiers no longer are needed. A smaller often rectangular shaped chamber, fitted with the membrane cassettes replaces the secondary clarifier whose size is governed by hydraulic and solids loading. On top, because of the higher biomass concentrations that can be sustained within the bioreactors, the same total mass of solids is stored in a smaller tank, resulting in up to 50% smaller footprint.

High-Quality Effluent:

In comparison to the activated sludge (CAS) process, the effluent is free of suspended solids and reduced bacteria and viral content. Therefore, minimum disinfection is required.

Therefore, the MBR process easily allows the treated effluent to be discharged to sensitive receiving bodies or to be reclaimed for applications such as urban irrigation, utilities or toilet flushing.

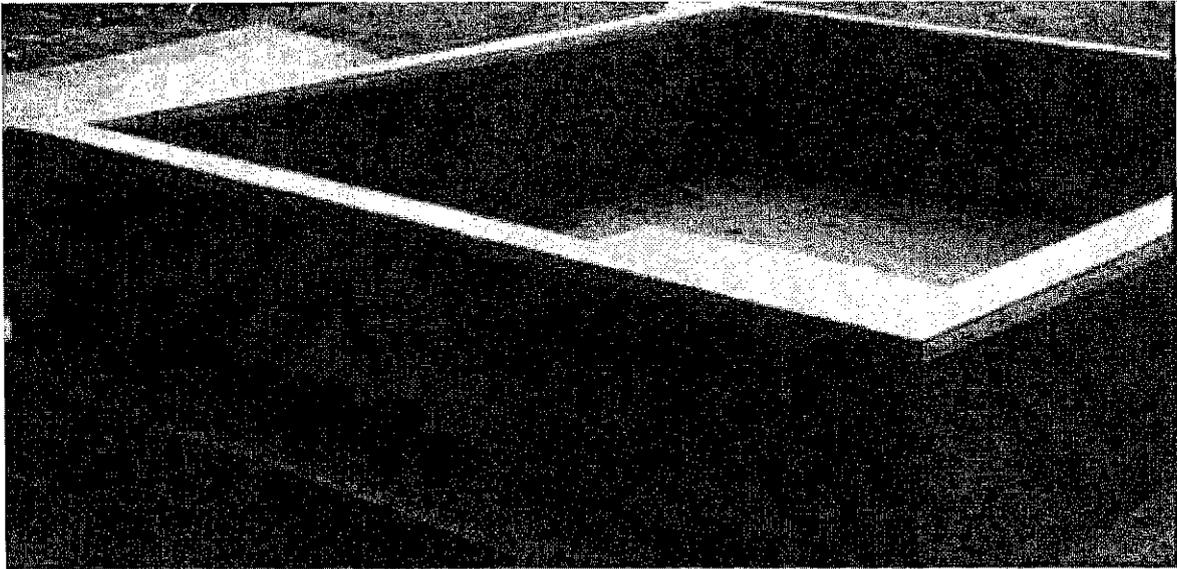
Higher Automation Capabilities:

The operation of the MBR system can be fully automated, minimising operators intervention that are typically required for conventional treatment plants. This means that the MBR process can be easily implemented also in decentralized sites.

TREATED WATER TANK:

Required storage capacity may be met by use of elevated or ground storage. Elevated storage, feeds the water distribution system by gravity flow. Storage which must be pumped into the system is generally inground storage tanks. STP treated water storage, which is usually part of a water treatment plant, is not included in computing storage unless sufficient firm pumping capacity is provided to assure that the storage can be utilized under for grading and flushing purpose, and then only to the extent of storage in excess of the 24-hour requirements of the treatment plant. STP treated water storage is used to supply peak water demand rates in excess of the production rate, and to provide a reservoir for plant use, filterbackwash supply, and water supply to the system for short periods when plant production is stopped because of failure or replacement of some component or unit of treatment.

A. Glove



SLUDGE HOLDING TANK:

Sludge holding tanks provide storage of biosolids and can serve as a location for thickening before further processing or disposal. Mixing in sludge holding tanks provides uniform sludge concentration, prevents sludge stratification, and ensures a homogeneous feed to dewatering equipment.

Pumps

Pumps must be monitored regularly, correctly and accurately according to a specific plan which is made by specially trained personnel. The following six parameters should be regularly monitored to understand how a pump is performing:

1. Suction pressure (P_s)
2. Discharge pressure (P_d)
3. Flow (Q)
4. Pump speed (N)
5. Pump efficiency (η)
6. Power.

The advantages regular monitoring of the pumps are

1. No dismantling of the pump is necessary.
2. Offers cost savings and energy savings by increasing the pump availability and reliability coefficients for pumps.
3. The time to maintain the pump set maybe predicted and planned more accurately and in a qualified manner in line with predictive and planned maintenance strategies.
4. If a flow meter is installed to measure process liquid flow, then the pump monitor is able to verify the accuracy of the meter readings by calculating 'Q' from the empirical formula for power 'P'.

A. Shariq

In addition, it is very important to monitor some other conditions for centrifugal pump during normal operation such as:-

1. Vibration monitoring.
2. Oil level and schedule oil Analysis

Routine inspections

Perform the following tasks whenever you check the pump during routine inspections:

- Check the level and condition of the oil through the sight glass on the bearing frame.
- Check for unusual noise, vibration, and bearing temperatures.
- Check the pump and piping for leaks.
- Analyze the vibration.
- Inspect the discharge pressure.
- Inspect the temperature.
- Check the seal chamber and stuffing box for leaks.
- Ensure that there are no leaks from the mechanical seal.
- Adjust or replace the packing in the stuffing box if you notice excessive leaking.

Three-month inspections

Perform the following tasks every three months:

- Check that the foundation and the hold-down bolts are tight.
- Check the mechanical seal if the pump has been left idle, and replace as required.
- Change the oil every three months (2000 operating hours) at minimum.
- Change the oil more often if there are adverse atmospheric or other conditions that might contaminate or break down the oil.
- Check the shaft alignment, and realign as required.

Annual inspections

Perform the following inspections one time each year:

- Check the pump capacity.
- Check the pump pressure.
- Check the pump power.

If the pump performance does not satisfy your process requirements, and the process requirements have not changed, then do the following:

1. Disassemble the pump
2. Inspect it.
3. Replace worn parts.

Routine maintenance (Can be made during pump operation)

Perform the following tasks whenever you perform routine maintenance:

- Clean bearing bracket from any oil if found.
- Check oil drain plug.
- Lubricate the bearings.
- Inspect suction and discharge flanges for any leak.
- Inspect pump casing for any unusual damage signs.
- Inspect the seal.
- If the pump is offline check the coupling and its shims for any damage.
- Make sure that the coupling guard is well tightened to pump base plate.
- Check that motor alignment bolts are all in place.

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• TROUBLE SHOOTING

PUMPS Defects and their Possible Causes

Defect	Possible Causes
No Discharge	1. Pump not properly primed.
	2. Leakage in Foot valve, Suction Pipe or Gland.
	3. Hump in suction line.
	4. Wrong direction of rotation.
	5. Blockage in strainer, Pipes or in pump.
	6. Low drive speed (Low voltage).
	7. Head too high for the pump.
	8. Suction lift too high.
Loss of delivery or Insufficient Discharge	1. Leakage in suction pipe and glands.
	2. Foot valve uncovered or inadequately submerged.
	3. Suction lift high.
Excess Power	1. Too high speed.
	2. Pump strained by pipes.
	3. Head too low.
Noise & Vibration	1. Too high delivery.
	2. Too high suction lift.
	3. Blocked suction line or impeller.
	4. Air entrained in the water.
	5. Worn or defective Bearing.

Air Blowers:

Blowers are mostly used in the secondary phase of treatment to create air bubbles which serve two main processes: aeration and agitation.

The primary function of aeration is to provide usable oxygen for the aforementioned biological processes. This allows a much higher concentration of microorganisms (the agent that removes the waste from the water) to be maintained than what would naturally occur.

Blower operating checks

- *Daily checks –*
With the blower running, check: Outlet temperatures.
 - Discharge pressure (when functioning under pressure).
 - Suction pressure (when functioning in vacuum conditions).
 - Absorbed power.
- *Check after first 50 hours*
With the blower shut down, check: The oil level.
 - Oil leaks.
 - Auxiliary circuit leaks.
 - Belt tension.

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- Check every 500 hours
With the blower shut down, check: The oil level.
- Oil viscosity and condition.
- Belt wear.
- Flexible coupling inserts.
- Auxiliary circuits.

BLOWERS MAINTENANCE

SYMPTOM	SYMPTOM PROBLEMS CAUSE	REMEDY
No Air flow	Speed too low.	Check speed and verify as per recommendations.
	Wrong direction of rotation.	Check for correct direction of rotation.
	Obstruction in piping.	Check suction and discharge line for any obstruction.
Low capacity	Speed too low.	Check speed, belt drive slippage.
	Excessive pressure.	Check the line pressure.
	Discharge line leaks.	Check up for open flow path.
Excessive power consumption of blower	Speed too high.	Correct the speed.
	Differential pressure across the suction and discharge openings too high	Check line pressure with rated pressure. Check & clean filter and silencer Check for any obstruction in the suction and discharge line.
	Impellers rubbing.	Check the impellers for any hot spots/rubbing marks. If observed, reset impeller timing. This operation requires skill and patience. If in doubt, contact "EVEREST".
Overheating of bearings and gears / blower	Inadequate lubrication.	Check for oil level and replace dirty oil.
	Differential pressure across the suction and discharge openings too high	Check line pressure with rated pressure. Check & clean filter and silencer. Check for any obstruction in the suction .. and discharge line.
	Coupling misalignment	Check alignment and realign.
	Belt slippage/Over tightened belts.	Adjust belt tension.
	Too much oil in gear case	Correct oil level.
	Worn impeller, clearances too high	Replace impellers.
	Internal contact.	Reset clearances.
Vibration	Drive misalignment.	Check alignment.
	Impeller rubbing (Distant knocking sound would be observed).	Check for hot points. Recheck blower alignment and mounting, Recheck impeller

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		timing.
	Worn bearings/gears.	Check and replace the bearings/gears.
	Loose pulley/coupling.	Check if pulley/coupling is loose on shaft. Check key.
Blower jams after running for a short period	Insufficient axial clearances	Correct clearances.
	Differential pressures across suction & discharge high, resulting in over heating & subsequent jamming, due to thermal expansion	Correct differential pressures.
Blower makes heavy knocking sound on running	Unit out of time.	Retime impellers.
	Distortion due to improper mounting or pipe strains.	Check mounting alignment and relieve pipe strains.
	Differential pressure across the suction and discharge openings too high.	Check gauge readings across the suction and discharge ends
	Worn bearings/gears	Check and replace the bearings/gears.
Oil leaking out of oil fill hole	Excessive oil level.	Correct oil level.
	Oil seal leakage	Check and replace gear end oil seals.
Traces of oil in blower casing	Oil seal leakage.	Check and replace oil seals.

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MAINTENANCE SCHEDULE

SI No	Name of the Part	Maintenance to be carried out	TIME	Remarks
1	Bearings	Checking of Temperature with thermometer	Weekly	Hot ball or roller bearings point to too much oil or grease. Hot sleeve bearings need more oil or heavier lubricant. If does not correct, disassemble and inspect the bearing alignment of pump and driver.
2	Glands	Changing of Gland packing	Weekly	
3	Bearings	Lubrication (greasing)	Two months	Check for saponification resulting in whitish color. Washout with kerosene.
4	Gauges	Checking of pressure and vacuum gauges.	Three months	Not Applicable
5	Valves	Changing of gland packing in delivery sluice valve, suction valves, bye pass valve. Reflux valve.	Six months	
6	Exhaust pump and its auxiliaries.	Checking of gland packing & its auxiliaries etc.	Six months	Not Applicable
7	Impeller.	Checking of impeller blades. Sleeves efficiency rings, bearings necking impeller nut etc.	One Year	

Timers

TIMERS	
Filtration	8 Mins
Backwash	40 sec
CEB	
Initial Back pulse	25 sec
Rest Time	20 sec
Back pulse & Dosing	30 sec
Soaking	30 sec
No of Cycle	6 – 8
Backwash	30 sec
Rest Time	30 sec
Filtration	60 sec

A. Goyal

