#### 1

## **RAJKOT MUNICIPAL CORPORATION**

Central Workshop, Opp. Sitaram Weigh Bridge, Bhavnagar Road, Rajkot-360003



#### e-TENDER No. RMC/FIRE & EMERGENCY/01/2023-24

### e-TENDER TECHNICAL BID FOR

To Design, Manufacture, Supply and Delivery of Foam tender on suitable chassis as per Technical specification.

## **MILESTONE DATES**

| Tender available on web site   | 26/05/2023 To 15/06/2023 up to 18.00 Hours                                       |
|--|--|
| Last Date & Time for a Query (submitted by E- mail )                 | 04//06/2023 up to 18.00 Hours<br>Send Query on Mail id:-<br>jlshingal@rmc.gov.in |
| Last Date & Time for downloading the Tender Document                 | 15/06/2023 Upto 18.00 Hours IST  |
| Last date & Time for Online submission of tender                     | 15/06/2023 Upto 18.00 Hours IST  |
| Physical submission of Qualification documents, EMD, Tender Fee etc. | Upto 19/06/2023 during office hours.<br>(Through Reg. AD or Speed Post only)     |
| Online Opening of Technical Bid                                      | 20/06/2023 at 12.00 Hours IST onwards (If Possible)                              |
| Online Opening of Price Bid of the Evaluated Tender                  | 23/06/2023 at 12.00 Hours IST onwards (If Possible)                              |

2023-24

Deputy Commissioner (East Zone)
RAJKOT MUNICIPAL CORPORATION
RAJKOT - (Gujarat)

# INDEX

| Chapter | Content                                 | Page<br>No. |  |  |  |
|---------|---|-------------|--|--|--|
| 1       | Tender Notice                           | 03          |  |  |  |
| 2       | E.M.D. Schedule                         | 05          |  |  |  |
| 3       | Tender Schedule                         | 06          |  |  |  |
| 4       | General Terms & Conditions For Contract | 07          |  |  |  |
| 5       | Special Conditions of Contract          | 13          |  |  |  |
| 6       | Technical Specifications And Terms      | 14          |  |  |  |
| 7       | Qualify Data Sheets                     | 23          |  |  |  |
| 8       | Technical Data Sheet                    | 25          |  |  |  |
| 9       | Details of Tenderer Data Sheet          | 26          |  |  |  |

# RAJKOT MUNICIPAL CORPORATION CHAPTER - 1 Tender Notice

Online e-tenders with two bid system are invited for "To Design, Manufacture, Supply and Delivery of Foam tender on suitable chassis as per Technical specification." from reputed qualified manufacturers only who have qualifications –

#### Eligibility criteria:

- 1. Registration with SSI or Director of Industries.
- 2. Bidder must have valid GST registration.
- 3. Average annual turnover of last seven years should not be less than Rs.45 Lacs
- 4. Minimum solvency required Rs.12 lacs of Scheduled or Nationalized Bank of Current Financial year.
- 5. Experience as a manufacturer of this kind of Fire Water Tender /Water/foam Browser(HCV Chassis mounted only) of with CE certified / UL Listed / BIS marked pump, minimum value of 45.0 Lacs in any one work of last seven years in single contract for Govt. or Semi Govt. Organization.

or

Experience as a manufacturer of this kind of Water Tender /Water Browser(HCV Chassis mounted only) with CE certified / UL Listed / BIS marked pump, minimum value of 36 Lacs in last seven years (02 Nos. of work Min. required) for Govt. or Semi Govt. Organization

- 6. Performance certificates along with its PO/WO from competitive authorities.
- 7. Working Capital must not be less than Rs.23 Lacs.

#### Note:

Enhancement factor at 10 % per year for last seven years will be applicable to arrive finalize the magnitude of work done in last seven years.

- 8. The Bidder must have to submit affidavit over Non judicial stamp paper of Rs.300 for
  - A) I/We here by Declare that I/We am/are not partner(s) Black Listed /Terminated/Debarred or Concerned with Firm Black listed in any States, CPWD/MES/Railways or any Government ,Semi Government, Autonomous body or Private Body. Also no Complaint is lodged against the Firm Company
  - B) We, The Partners /Owners of this firm, Hereby give an undertaking that we are jointly and severally responsible to meet all the liabilities ever and above the business of this firm and make good the above financial loss sustained by the Rajkot Municipal Corporation as a result of our abandoning the Works entrusted to us.
  - C) Documents submitted by us are correct and genuine in every manner.

| e-Tender   | Item                          | Qnty. | Est. cost   | EMD at     | Tender              |
|------------|-------------------------------|-------|-------------|------------|---------------------|
| No         |                               | in    | in Rs.      | in Rs.     | Fee in Rs.          |
|            |                               | Nos.  |             |            | (Non<br>refundable) |
| RMC/FIRE   | To Design, Manufacture,       | 1     | 90,00,000/- | 2,70,000/- | 3000/-              |
| &          | Supply and Delivery of Foam   | Nos.  |             |            |                     |
| EMERGENC   | tender on suitable chassis as |       |             |            |                     |
| Y/02/2023- | per Technical specification   |       |             |            |                     |
| 24         |                               |       |             |            |                     |

An Earnest Money Deposit of Rs 2,70,000/- and Tender fee of Rs.3000/- (Non-refundable) in form of Demand Draft in favour of **"Rajkot Municipal Corporation"**, RAJKOT, of any Nationalized or Schedule Bank located at RAJKOT shall accompany along with the qualification's documents on As per Mile stone date during office hours at Office of the Deputy Executive Engineer (Auto), Rajkot Municipal Corporation, Central Workshop Branch, Opp. Sitaram Weigh Bridge, Bhavnagar Road, Rajkot-360003.

The Technical Bid should be downloaded on a white plain A4 size paper and it should be submitted with all technical details with quoted models and leaflet, duly filled and every page should be signed and sealed and should be submitted along with the sign and stamp of qualification documents.

Tender will be submitted online through e-tendering up to 18.00 hours IST on date **XX-XX-XXXX** and e-tendered Technical Bid will be opened on Date **XX-XX-XXXX** at 12.00 Hours IST on web site http://www.nprocure.com

Municipal Commissioner, Rajkot Municipal Corporation, Rajkot, reserves the right to accept or reject any or all tender(s) without assigning any reason thereof.

Dy. Commissioner RAJKOT MUNICIPAL CORPORATION

#### <u>CHAPTER - 2</u> <u>EMD SCHEDULE</u>

Earnest Money Deposit :- Rs. 2,70,000/-

An Earnest Money Deposit of Rs. 2,70,000/- and Tender fee of Rs. 3000/- (Non-refundable) in form of Demand Draft in favour of "Rajkot municipal Corporation", Rajkot, of any Nationalized or Schedule Bank located at RAJKOT shall accompany along with the qualification's documents on XX-XX-XXXX to XX-XXXXX during office hours.

Tender Fee :- 3000/- (Non-refundable)

# 

## <u>CHAPTER - 3</u> <u>TENDER SCHEDULE</u>

| e-Tender                               | ender Item                  |      | Est. cost   | EMD at     | Tender Fee          |
|--|-----------------------------|------|-------------|------------|---------------------|
| No                                     |                             |      | in Rs.      | in Rs.     | in Rs.              |
|  |                             | Nos. |             |            | (Non<br>refundable) |
| RMC/FIRE &<br>EMERGENCY<br>/01/2023-24 | Supply and Delivery of Foam |      | 90,00,000/- | 2,70,000/- | 3000/-              |

Dy Commissioner RAJKOT MUNICIPAL CORPORATION

## CHAPTER - 4 :: General Terms And Conditions For Contract ::

#### 1. 1. Definitions

Unless repugnant to the subject or context thereof, the following expressions herein used shall carry the meaning hereunder respectively assigned to each, namely:

- a. **Approved / Approval** means approved in writing.
- b. **Contract** means the contract entered between RMC and Supplier and as derived from tender documents, agreed variations to the tender documents, supplier"s Price Bid and the Purchase Order.
- c. **Contract Document(s)** means individually and collectively the documents constituting the contract.
- d. **Contract Price** means the price payable to the Supplier as specified in the Contract, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract
- e. Day means calendar day
- f. **Indenter / Employer / Owner / Purchaser** means Rajkot Municipal Corporation / RMC and includes its legal successor.
- g. **Inspectors** means Inspectors nominated, appointed, approved or deputed by RMC for inspection of the goods / stores / material(s)
- h. **IS** means Indian Standards, prescribed by the Bureau of Indian Standards(BIS)
- i. **UL** means Underwriter Laboratories, UL provides safety-related certification, validation, testing, inspection, auditing, advising and training services to a wide range of clients, including manufacturers, retailers, policymakers, regulators, service companies, and consumers.
- j. **CE** means European Conformity, The CE marking is the manufacturer's declaration that the product meets the requirements of the applicable EC Directives.
- k. **Goods / Stores / Material(s)** means any and all raw materials, manufactured articles, equipment, spares and other goods and supplies whatsoever and includes wherever applicable drawings, data, specifications and intellectual property rights and all services (including but not limited to design, fabrication, inspection, delivery and testing) required to be supplied, done, performed, prepared or undertaken to meet the requirements of the Contract.
- Project Management Consultants means the representative or agency appointed by RMC for managing, coordinating the supply of goods / stores / expediting and / or material(s).
- k. **Purchase Order** means RMC"s acceptance of the Supplier's offer / bid and includes any formal or detailed Purchase Order issued by RMC pursuant to the acceptance of the tender.
- Delivery Period means the date(s) for delivery of the goods / stores / material(s) as stipulated in the Contract and failing such stipulation, shall mean the date(s) for such delivery(ies) as agreed between the Supplier and RMC
- m. **Tender Documents** with reference to the Purchase Order means the instruction & information, general rules and direction for bidders, general terms and conditions of purchase, specification, drawings, the schedules of quantities and tender prices, the formal agreement, special conditions of purchase and all addenda (including corrigendum if any) and attachments related to the above
- n. **Services** means services ancillary to the supply of the material(s), such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract

- Supplier means the particular person, firm or Company or Group of firms or Companies or his designated representative to whom the Purchase Order is placed for supplying the goods / stores / material(s) and services under this Contract and includes his legal successors.
- p. **Contract Value** means total value of the goods / stores / material(s) & services to be supplied as specified in the Purchase Order.
- 2. Prices should be written clearly in Figure and in Words proper space in "Price Schedule" of e-tender Price Bid of the e-Tender (online only).
- 3. Quoted price should be inclusive of all taxes and duties like GST, royalties, octroi, costs, fees, To & Fro, Transportation charges, Transits Insurance, One year full comprehensive insurance, Entry Taxes, other applicable levies, TPI charges RTO passing charges and F.O.R. at RAJKOT MUNICIPAL CORPORATION, RAJKOT-360 003.
- 4. An Earnest Money Deposit of Rs.2,70,000/- and Tender fee of Rs.3000/- (Non-refundable) in form of Demand Draft in favour of "RAJKOT MUNICIPAL CORPORATION", RAJKOT, of any Nationalized or Schedule Bank located at RAJKOT shall accompany along with the qualification's documents on **XX-XX-XXXX** to **XX-XX-XXXX** during office hours. Without E.M.D. and tender fee in form of Demand Draft, e-tender will be rejected.
- 5. The award of contract will normally be made within 120 days after the date of opening e-Tender Price Bid.
- e-Tender will be submitted online through e-tendering upto 18.00 hours IST on date XX-XXXXX and e-tendered Technical Bid will be opened on Date:XX-XXXXX at 12.00 Hours IST on web site http://www.rmc.nprocure.com
- 7. e-Tenderer should have to offer the firm prices in e-tender Price Bid for the prescribed item as per given in Technical Specification. Offer for the other item will not be considered and tender will be rejected.
- 8. e-Tenderer shall have to submit the hard copy or Xerox copy of -
  - 1. Registration with SSI or Director of Industries.
  - 2. Bidder must have valid GST registration.
  - 3. Average annual turnover of last seven years should not be less than Rs.45 Lacs
  - 4. Minimum solvency required Rs.12 lacs of Scheduled or Nationalized Bank of Current Financial year.
  - 5. Experience as a manufacturer of this kind of Fire Water Tanker/Water Tender /foam Browser(HCV Chassis mounted only) of with CE certified / UL Listed / BIS marked pump, minimum value of 45.0 Lacs in any one work of last seven years in single contract for Govt. or Semi Govt. Organization.

or

Experience as a manufacturer of this kind of Fire Water Tanker/Water Tender /Water or foam Browser(HCV Chassis mounted only) with CE certified / UL Listed / BIS marked pump, minimum value of 36 Lacs in last seven years (02 Nos. of work Min. required) for Govt. or Semi Govt. Organization

- 6. Performance certificates along with its PO/WO from competitive authorities.
- 7. Working Capital must not be less than Rs.23 Lacs.
- 8. OEM authorization certificate of chassis, pumps, Pto, water/foam monitor.
- 9. The Bidder must have to submit affidavit over Non judicial stamp paper of Rs.300 for
  - D) I/We here by Declare that I/We am/are not partner(s) Black Listed /Terminated/Debarred or Concerned with Firm Black listed in any States, CPWD/MES/Railways or any Government ,Semi Government, Autonomous body or Private Body. Also no Complaint is lodged against the Firm Company
  - E) We, The Partners /Owners of this firm, Hereby give an undertaking that we are jointly and severally responsible to meet all the liabilities ever and above the business of this firm and make good the above financial loss sustained by the

Rajkot Municipal Corporation as a result of our abandoning the Works entrusted to us.

- F) Documents submitted by us are correct and genuine in every manner.
- 9. Successful e-tenderer shall have to pay the Security Deposit @ 5% of Contract Value in form of Fixed Deposit Receipt or Bank Guarantee of any Scheduled Bank or Nationalized Bank located in Rajkot, for a period of 20 (Twenty) months in the name of "Municipal Commissioner, Rajkot Municipal Corporation," Rajkot, and shall have to enter into an agreement on a stamp paper as per rules security deposit amount must be submitted, and if the contractor fails to submit the agreement deed in the stipulated time limit, the E.M.D. for this contract will be forfeited and the contractor will be black listed for this work of RMC. This will be returned only after successful completion of warranty period.
- 10. e-Tenderer shall have to complete contract within 150 days after getting work order, otherwise penalty will be charged as per norms of Rajkot Municipal Corporation

#### **Terms of Payment**

The payment shall be made to the Supplier as under:

(i) 100% of the invoice amount will be paid within 60 days of the delivery of the goods at the destination in good condition (after due testing and acceptance by RMC or third party inspection agency assigned by RMC) and submission of the necessary documents. The payment of the bill shall be made after deducting RMC/Government dues, if any Payment shall be made in Indian Rupees

The payment of the bills shall be withheld in the following circumstances:

- (a) The goods / stores / material(s) are found sub-standard or in non-acceptable condition
- (b) Breach of condition of any contract by the Supplier
- (c) Previous RMC/Government dues of Supplier
- 1. Insurance shall be the responsibility of e-Tenderer. e-Tenderer shall provide coverage for all items against transits risk, Accident to acquisition, Transport delivery upto destination and accident in trial and testing.
- 2. Inspection will be carried out by Third Party Inspecting Agency.

The inspection parameters shall cover the following: Purchaser may, at its discretion carry out stage inspection at the following critical stages at supplier's works -

- a) Final inspection including all accessories including load test, stability, operation and dimensional check.
- b) Apart from inspection, which may be carried out by purchaser's representative or authorized inspecting agency, supplier shall furnish Test Certificates for all bought out components and also details of their own in-house inspection carried out.
- c) All costs towards inspection shall be borne by supplier also arrangements for arranging the tests shall be provided by supplier, within scope of technical parameters of e-tender.
- d) It shall be the supplier's responsibility to raise inspection call in writing to purchaser at least 10 days prior to each stage as above. Bidder shall be provided an opportunity to rectify defects but without any extension in the delivery period.
- 3. Any modification or any changes in work or technical specifications done by RMC's Engineer-In-Charge or Third Party Inspecting Agency and e-tenderer have to follow these changes without any dispute and argument. (No extra cost will be given for the modifications or changes).
- 15. e-Tenderer have to furnish all Drawings and Authorised Certificates of dealership and Xerox copies of bills of materials those are required and demanded by Engineer-in-charge of RAJKOT MUNICIPAL CORPORATION or Third Party Inspecting Agency.
- 16. e-Tenderer should have to fill up price of whole equipment with clearly in e-Price Bid of e-tender.

#### 17. Taxes:

Applicable Rate of GST should be mentioned. Successful bidder has to submit Invoice for payment and The Invoice should compliance with GST ACT -2017. If the firm is exempted from the payment of GST the certificate for the same should be attached. All the transit losses and breakage shall be suppliers risk and cost. Rajkot Municipal Corporations GST No. is 24AAALR0138G1ZD.

#### 18. Unit of rate:

The unit of rate shall be on number basis.

#### 19. Tender offer validity period

The Tender offer for the work shall be valid for a period not less than One Hundred and Twenty (120) days from the date of opening of the Price Bid. The same may be extended by the Bidder for a further period of One Hundred and Twenty (120) days, if required by RMC. The bidder shall not be allowed to withdraw or modify the offer on his own during this period. If any bidder withdraws or make any modification or additions in the terms and conditions and tender validity period of his tender offer is not acceptable to the RMC, then the RMC shall without prejudice to any right or remedy, be at liberty to forfeit in full, the said EMD absolutely.

In exceptional circumstances, RMC may solicit the Bidder's consent for an extension of the period of validity of the Tender offer by a period not exceeding another One Hundred Twenty (120) days.

The request and response shall be made in writing or by tele-fax and email. If a Bidder accepts to extend the period of validity, the validity of EMD shall also be extended accordingly. In case of refusal by Bidder for extension of validity period his EMD shall be returned. Any Bidder granting the request of extension of offer validity period will not be permitted to modify his / their Bid.

#### 20. Inspection:

If required Preliminary inspection will be carried out by authorized representative of RAJKOT MUNICIPAL CORPORATION or Third Party Inspecting Agency.

Pump testing/Inspection shall be carried out by authorized representatives of RAJKOT MUNICIPAL CORPORATION and TPI at pump manufacturers premises.

Inspection of the complete fire water tanker shall be carried out by two authorized representatives of Rajkot Municipal Corporation and Third Party inspection agency nominated by RMC and the charges(TPI Fees approx 0.45% of Contract Value) for the same( Whatever is charged by TPI Agency )and travel, accommodation, food, etc of tpi and representatives of RMC during Inspection has to borne by tenderer.

#### 21. Price Prefence:

No price preference will be given to SSI units or Khadi Gramudhyog Units.

#### 22. Jurisdiction:

In the event of any dispute or difference arising out of this e-tender / contract, the jurisdiction of the Court shall be RAJKOT (Gujarat) only. While executing the agreement, the supplier shall be governed at all times by all laws, regulations etc., in force in Gujarat State.

#### 23. Dispute:

In the event of any problem, dispute or difference arising out of or under this contract, the decision of the Municipal Commissioner, RAJKOT MUNICIPAL CORPORATION, RAJKOT, will be final and binding to the parties to this contract.

#### 24. Statutory Variations:

The price of the Water Tenders quoted by the e-tenderer will be on the basis of current taxes and levies. If there will be any increase / decrease in the statutory tax / levies Govt. on the finished products that will be to the account of consignee i.e. **RAJKOT MUNICIPAL CORPORATION**, and same will be paid by **RAJKOT MUNICIPAL CORPORATION** on receipt of necessary documentary evidence from the supplier.

#### 25. Non-Blacklisting Bond:

The manufacturer has to furnish the undertaking on the non-judicial stamp paper of Rs.300/- duly Notarized regarding his firm is not black listed in anywhere in India at the time of e-tendering. This undertaking should be submitted during the physical submission of Qualification documents.

**26.** Conditional offer will not be accepted and same will be treated as non-responsive.

#### 27. Liquidated Damages:

In the event of the failure of the supplier to offer the machines for inspection under the supply order in the stipulated time limit and also in case of the said material not reaching at the destination in the time limit as stipulated in clause 10 above. RAJKOT MUNICIPAL CORPORATION will charge liquidated damages at the rate not of 0.1% of the total order value per day subject to maximum of 10% of the total order value shall be charged. The Rajkot municipal corporation also reserves right to cancel the order in such case. The part shall supplied on as and when requirement basic within the specified period mentioned failing which a penalty up to maximum 10% of the order value will be charged and deducted from the pending bills/deposits of the tenderer.

#### 28. e-TENDER AGREEMENT:

The e-tenderer shall be required to enter into an agreement for due performance of the contract. The stamp duty on all documents to be executed in connection with this contract to be entered into shall be borne by supplier. The security deposit (SD) in form of FDR / Bank Guarantee shall be deposited for required value. The contract agreement will have to be executed on a stamp paper of appropriate value as per value orders in force for the time being.

(i) EMD of the first lowest firm/company will be forfeited if they fail to enter into agreement within prescribed time limit for entering into agreement.

#### 29. Gurantee:

The supplier at the time of entering into contract shall give a guarantee against technical and manufacturing defects in materials supplied and free replacement of defective materials at his own cost up to a period of 12 months from the date of receipt of material.

#### 30. Extension for delay:-

If the supply is delayed by (1) Force Majeure, (2) Serious losser damage by fire, (3) Strike, Bandh, Curfew, Rally, Heavy rains, Flood, Cyclone, Earthquake or Natural Calamities occurs, (4) Electricity staggering, (5) Any other case, which is beyond the control of contractor. Municipal Commissioner will decide period of delay extension.

#### 31. Acceptance of Tender

The tender is liable for rejection due to any of the reasons mentioned below:

- a. Non-Submission of tender within stipulated time.
- b. Tender is unsigned OR not initialed on each page or with unauthenticated corrections.
- c. Submission of tender documents in unsealed envelop.
- d. Tender not submitted in separate envelopes as per conditions and the envelopes are not superscripted with details of the tender enquiry and part enclosed.
- e. Non-payment of Earnest Money Deposit.
- f. Non-submission of required documents as shown in Tender Notice.
- g. Conditional and / or vague offers
- h. Unsatisfactory past performance of the bidder.
- i. Rates have been shown elsewhere than ONLINE Price Bid
- j. Items with major changes / deviations in the specifications / standard / grade / packing /quality are offered in **Technical Bid**.
- k. Offering a cheaper accessory not approved / recommended by the manufacturer.
- 1. Offering an accessory as optional even though it is required to operate the instrument.

- m. Submission of misleading / contradictory / false statement or information and fabricated / invalid documents.
- n. Tenders not filled up properly
- o. Non-submission of Charter Accountant Certificates.

#### 32. Future Requirement:-

As of now we have requirement of afore said quantity, but if we have further requirement of this equipment/machine in next 06 month, agency has to supply the same at the approved rate, if there are any changes in taxation same will be paid extra to agency, agency has to provide necessary supporting documents for the same.

### 33. Clarification of bidding document:

A prospective bidder requiring any clarification of the bidding documents may notify the RMC in writing at <a href="mailto:jlshingala@rmc.gov.in">jlshingala@rmc.gov.in</a> As per Milestone date. Any Query or Demands after that date will not be considered.

Municipal Commissioner, RAJKOT MUNICIPAL CORPORATION, RAJKOT, reserves the right to accept or reject any or all the e-tender(s) without assigning any reasons thereof.

34. e-Technical Bid will be opened online on Date As per Milestone date And after evaluation of e-Technical Bid, e-Price Bid will be opened only of those e-tenderers who will be qualified in e-Technical Bid evaluation. Date of opening of e-Price bid will be As per milestone date, only of those e-tenderers who will be qualified in e-technical bid evaluation.

### 35. **Training:**

Post-delivery, supplier shall have to train personnel nominated by purchaser for on free of cost basis. Training held at manufacturing site or at Rajkot Municipal corporation site,

Dy. Commissioner RAJKOT MUNICIPAL CORPORATION

## CHAPTER - 5 SPECIAL CONDITIONS OF CONTRACT

- 1. It will be the responsibility of the tenderer to order, payment and collect the chassis from the regional sales office of the manufacturer or their authorized dealer and transport the same to their workshop. Any charges applicable for the same shall be included in the quoted price of tender.
- 2. It will be the responsibility of the tenderer to deliver the vehicle after the completion of the fabrication of the equipment to RMC, RAJKOT.
- 3. The prices for the equipment shall be inclusive of all taxes & duties mainly, GST, Entry tax, Transit insurance, Transportation charges, One year full comprehensive Insurance, R.T.O. registration charges, TPI charges, incidental and other expenses, extra fitment, etc,. However any change in statutory levies after award of work may be accepted for which tenderer has to submit all required documentary proof.
- 4. After satisfactory inspection & testing of Foam Tender, done by RMC's Engineers or third party inspection agency at your works, successful tenderer should be responsible for supply & delivery of of Foam Tender from works to Rajkot Municipal Corporation, Rajkot, Gujarat at his risk and expenses like e.g. temporary R.T.O. passing, transportation, drivers, diesel, Road insurance for R.T.O. Registration etc.
- 5. R.T.O. registration of vehicle will be done by tenderer. Successful bidder must provide body builder certificate, Form No.-22, 22-A and all other necessary documents required for R.T.O. registration at Rajkot. All the procedure for the registration with the RTO, RAJKOT should be done by tenderer, whenever & wherever sign & seal required of Municipal Corporation of Rajkot will be done by authorized person of R.M.C.

Dy. Commissioner RAJKOT MUNICIPAL CORPORATION

#### <u>CHAPTER</u> - 6 <u>TECHNICAL SPECIFICATIONS AND TERMS</u>

Name of work:- To Design, Manufacture, Supply and Delivery of Foam tender on

suitable chassis as per Technical specification

Tender No:- RMC/FIRE & EMERGENCY/01/2023-24

#### 1. CHASSIS

The Foam Tender shall be fabricated on a suitable 28 ton GVW – BS-VI or latest as amended up to date of registration emission norm brand new CABIN CHASSIS with Min. 210 HP Engine having Max Torque 825 Nm @ 1200-1600 rpm of reputed manufacturer. Drag hook or eye of adequate strength and design shall be provided at the rear & front of chassis by the vendor. The chassis shall be as per the latest CMVR prevailing norms. The bidder should offer a complete package including the cost of the chassis.

The Bidder must have to submit OEM authorization certificate & vehicle details

#### 2. GENERAL

The FOAM TENDER including all its accessories & equipment's is required for the Department. It shall be designed & manufactured in strict compliance with the specifications given below, as well as other relevant indian/International standards where applicable & as per sound engineering practices. The FOAM TENDER shall be designed to effectively & efficiently carry 10,000 Liters of Water & 2000 Liters of Foam, a Godiva/ Rosenbauer/ Firefly/ Sides/ Oshkosh or equivalent (CE certified/UL listed) pump with a discharge capacity of 3000 LPM @ 10 Kg/ cm2 driven through heavy duty Power Take Off (PTO) units, a Water Monitor of approximately 1000 GPM (US), equipment, etc. All The equipment's & accessories shall be fixed on the appliance in a compact, neat & ergonomic manner & shall be easily & readily accessible for immediate use during emergencies. Due care shall be taken to ensure that all aggregates are designed for ease & comfort of the operator.

#### **DESIGN & CONSTRUCTION**

The FOAM TENDER shall be designed to be as compact as possible with ease of accessibility to all the service parts. The pump & other equipment controls shall be so arranged that user can operate them easily & conveniently. Lever type valves shall be preferred unless impractical in any way. The FOAM TENDER shall be supplied complete with all the equipment's & accessories mentioned in these specifications. The material for construction shall be used with a view to combine lightness with strength & durability. No form of wood, (timber of ply) shall be used anywhere in the body construction. All parts which form water ways, come in contact with water or are made from materials that are prone to corrosion, shall be treated with a good quality anti-corrosion system/ treatment/ paint (epoxy coats)/ zinc coating etc.

#### 3. PUMPING SYSTEM

The pump fitted on the FOAM TENDER shall be a Godiva/ Rosenbauer/ Firefly/ Sides/ Oshkosh or equivalent (CE certified/UL listed), centrifugal pump, capable of delivering, not less than 3000 LPM @ 10 Kg/ cm2 & 300 LPM @ 40 Kg/cm2. The quoted Fire Pump shall be CE certified to EN 1028-1 and 2, its subsequent amendments (2008 or above) with EN 1050 and ISO 14121. The pump shall be of Godiva/Rosenbauer or equivalent (CE certified/UL listed), with CF8/GM. Fabricator shall provide five (05) years warranty and after sale service letter from OEM along with tender documents. Fabricator shall not make any modification (manifold etc.) in pump and shall provide pump having 4 deliveries from OEM. Fabricator shall provide the warranty and after sale service letter from OEM along with tender documents. The warranty shall come in to effect from the date of supply of FOAM TENDER. The OEM priming system shall be

twin piston reciprocating type or Water-ring type primer, which shall be capable of lifting water from 7 Mtrs, depths within 30 seconds when tested. The primer shall be capable of working even if left dry over extended periods. The pump shall be of rigid construction & shall be modularly designed for ease of maintenance. It shall be capable of delivering its full performance with all strainers (external & internal). The details of the pump such as its make & model, supported with catalogs/brochure/drawings etc. shall be attached with the offer. The discharge of the pump shall be routed to the outlets for hand lines and monitor fitted on the top. The other construction details shall be as per the following specifications.

#### 3.1 Pump Suction inlet

The suction inlet of the pump shall be capable of being connected either directly to hydrant discharge Outlets through headers or to the water tank of the vehicle. It shall be of a suitable size to give the rated output of the pump, but not less than 140 mm. The inlet shall be of male round-threaded type & shall be provided in such a way that it is convenient to take water from outside sources like open wells with metal type removable strainer. The connection from the water tank to the pump shall be suitably sized (min 150mm) to allow full pumping at the rated output. A ball/butterfly valve of good quality shall be fitted between the suction inlet of the pump & the water tank. Stainless Steel strainer shall be fitted inside the tank on the pipe outlet to pump.

### 3.2 **Pump Discharge Outlet**

There shall be 4 outlets of standard size (63mm) with screw down type delivery valves, having female instantaneous coupling. The pump shall have multi volute design for require pressure. Fabricate or shall not make any modification (manifold etc.) in pump and shall provide pump having 4 deliveries from OEM.

A ball/butterfly valve of good quality shall be fitted at the starting point of the water flow to the monitor.

A second valve shall be provided at a suitable place near the base of the monitor. This is to ensure that in case of a leakage at any time in the first valve, the second valve fitted near the monitor base shall hold the pressure.

#### 3.3 **Pump Mounting**

The pump shall be rear mounted to ensure maximum hydraulic efficiency when working from open water sources. It shall be mounted in such a way that vibrations from the drive line are not transmitted to the control panel. The pump shall have at least four mounting points to ensure that the complete load of the system is evenly distributed. The mounting shall be done on heavy "C" channels/plates only. The mounting shall be secured to the chassis members by bolting. Welding of the mounting shall be strictly avoided. The rotating drive flange shall be provided with a cover/guard so that injury is minimized during operation or maintenance of the pump. The quard shall be bolted and easily removable.

#### 3.4 Pump Material of Construction

The Pump body/casing, impeller, delivery outlets, etc. shall be made of CF-8/GM. The wearing ring & other parts that may be subject—to frequent wear shall be of renewable type. The impeller shaft shall be of SS confirming to IS:6603 & shall be carried in anti-friction bearings as per the pump manufacturer's standard design. The impeller neck—rings & impeller rings shall be renewable type. The bearing housing shall be of Cast Iron for better heat dissipation. An easily accessible drain valve made of SS 304 shall be provided at the bottom of the casing to enable easy draining of the complete system.

#### 3.5 **Pump Shaft Sealing**

The shaft sealing shall be of self-adjusting type. The sealing system shall be as per pump manufacturer's standard design. The mechanical seal assembly shall withstand dry running of pump up to 2 minutes without any damages.

#### 3.6 **Pump Control Panel**

The Pump control panel shall be supplied and designed keeping in ease of operation as well as maintenance. The control panel shall be ergonomically designed with the following;

Pump to Delivery Outlets Pump to monitor pump to Tank Filling Foam Tank to pump to Cooling line Tank to Pump Suction Outside source to Pump suction Water Level Indicator Throttle control for engine Foam Level Indicator Pressure Gauge Compound Gauge.

#### 3.7 **Pump Priming System**

To ensure that the priming system is compatible with the pump, only an OEM (pump manufacturer) supplied priming system shall be incorporated with the pumping system. The OEM priming system shall be twin piston reciprocating type or Water-ring type primer, which shall be capable of lifting water from 7 mtrs, depths within 30 seconds when tested. In case the primer is twin piston reciprocating type or water-ring type, means shall be provided to automatically limit the engine RPM to the manufacturers recommended speed. The primer shall get automatically disengaged once the pump is registered the pressure. The system shall be maintenance free to the extent possible & shall be constructed of suitable materials to prevent corrosion due to salty/brackish water.

#### 4. POWER TAKE OFF

The PTO for the pump shall be of VAS/ Prabhat Engineering& Co./ Firehawk/ webstar/ Kozmasksan. of suitable ratio for the rated output of the pump & the torque of the vehicle. The lever/switch for engaging the P.T.O. shall be provided in Driver's cabin. Inspection/maintenance hatch of removable type shall be provided at suitable places for gaining access to gear box/PTO. Necessary modifications, to the standard drive system as available on the chassis, shall be done by the vendor so as to adopt the PTO Units in the system. Necessary supports for PTO Units, propeller shafts coupling, universal joints etc. for power input to and output from PTO Units shall have to be provided by vendor. The drive assembly components (shafts, coupling etc.) shall be dynamically balanced and the vibration at any of the rotary parts shall be minimized.

The Bidder must have to submit OEM authorization certificate & PTO details

### 5. **COOLING SYSTEM**

In addition to the radiator cooling, an indirect cooling system of the open circuit type shall be provided if required to keep the engine from overheating during extended use in tropical climates & when the ambient temperature is over 40 C. The cooling system shall be so designed that the full power output of the engine can be maintained during continuous stationary running without overheating. The operating temperature of the engine cooling water shall be thermostatically controlled. The oil in the sump shall be prevented from overheating & the pump characteristic shall be chosen in a manner so that the engine does not run at its maximum speed for the required output. The cooling water outlet pipe from P.T.O. & additional cooling tank/heat exchanger shall be connected through a suitable diameter pipe. The end of the pipe shall terminate in a threaded Connector.

#### 6. HIGH PRESSURE HYDRAULIC OPEARTED HOSE REEL:

Single high-pressure hose reels at appropriate location of the vehicle to facilitate operation of the high- pressure section of the Fire Pump shall be provided. The high-pressure hose reel shall hold 60 meter of hose in one length, terminating in a high

pressure Jet /Fog gun. Plumbing between the pump and hose reel shall have clean and unobstructed waterway of not less than 18 to 20 mm throughout without any restriction. Hose reel will be operated through hydraulically (selfwinding). NOT Electrically OR Manually.

The hose should be mounted on a hose reel Drum with high torque hydraulic motor driven winding & unwinding suitable arrangement located on the rear or side of the locker. The hose reel drum should be sufficiently strong to take up the winding and unwinding of the high pressure hose at the full pressure

#### 7. WATER TANK

The Water tank shall be of min. 10000 Ltrs. Capacity & shall be suitably mounted on the chassis in such a way that the weight distribution is optimized. In addition a 2% expansion space shall be made in the tank over & above the water capacity. The tank shall be fabricated out of MS plates of min. 6 mm thick for the bottom & 5 mm for the sides. The top & baffle plates shall be of 3 mm. The tank shall be of welded construction & shall be die-pressed on all sides to prevent distortion & to ensure torsional rigidity. Due care shall be taken to ensure that butt-weld joints are minimized. All tank joints shall be DP tested for soundness of welding

#### 7.1 BAFFELLS

The tank shall be suitably baffled longitudinally and transversally to prevent surge when the vehicle is cornering or braking. The baffle plates shall be of minimum 3 mm MS plate thickness bolted type. The fasteners used shall be SS material only so that they do not freeze due to rusting. The must shall be tack welded to the baffle plates. The baffles shall be so designed that they do not buckle under any circumstances during braking cornering or accelerating. The baffles shall be arranged in a manner to facilitate easy cleaning of the tanks.

#### 8.2 Tank Mounting

A tank shall be provided at each mounting support i.e. 100x50x6 mm MS channel. A mounting support shall be bolted properly with sandwich pad i.e. 10 mm & 12 mm thick M.S. plate. Upper & Lower respectively in middle of that Rubber a packing 25 mm thick shall be provided. Tank bottom should vertically supported by 10 mm thick gusset plate. Tanker mountings should be fabricated as per our instructions. The bottom of the tank shall be sloped towards rear. Suitable hooks/lifting eyes shall be provided on top of the tank to enable it to be lifted off the vehicle for maintenance/repairs. The bottom of the hooks shall be suitably reinforced with pads to avoid stress on the tank top plate. Sides of tank shall be die-pressed to give additional strength & stiffness so that it does not distort due to chassis flexion.

#### 8.3 Connection for filing

The tank shall have a filling orifice of 250 mm and an inspection & maintenance manhole of 450 mm at the top. The cover for this port shall be of hinged or threaded type as per the manufacturer's standard design & shall be clearly marked with the words (either etched or raised) "WATER". This port shall be used for filling the water tank from overhead storage tanks. Apart from the above, two more filling connections shall be provided on the sides of the tank terminating in filling connection of 63mm male instantaneous couplings made of GM or SS material incorporated with a strainer. The header & the line shall be suitable designed to ensure that the inflow of the water into the tank is sufficient to maintain the output of the pump while the tank is being replenished from other vehicles or from hydrant lines. These connections shall be fitted with a valve to prevent water leaking through the filling pipe & shall be provided as close to the pump as possible. Valve may be of NRV/Ball/butterfly type. One connection shall also be provided for filling tank from pump itself. Connection shall be taken from pump manifold & shall be controlled by a shut-off valve.

### 8.4 Draining Cleaning & Repairs

A 50mm diameter drain line with a ball/butterfly valve shall also be provided to drain the tank for maintenance/cleaning/repairs etc. A cleaning hole of 250mm shall be provided at the bottom of the tank & shall be taken down to a point below the chassis without reducing the effective ground clearance. The connection shall ensure that the water is discharged as far away from the wheels of the vehicle as possible, to reduce the chances of tyre slippage. Suitable lifting lugs shall be provided on the shell of the tank to enable it to be lifted off vehicle for repairs/replacement as necessary.

#### 8.5 Overflow

One overflow pipe of suitable diameter shall be fitted to the tank. The diameter of the overflow pipe shall be determined as per the filling connections provided. However it shall not be less than 65 mm diameter in any case. In case the inlets provided at the sides are more, the overflow pipe diameter shall be suitable changed to accept the additional flow. The overflow pipe shall be taken up to 2 inches higher than the top of the vehicle from the inside of the tank & shall be cut at an angle of approx..45 degrees.

#### 8.6 Water Level Indicator

Water level indicator made of thick acrylic tube shall be provided for water tank & foam tank and calibrated as empty  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , and full. A three way drain cock shall be fitted at low end of the tube. The acrylic tube shall be supported by protective bracket od aluminum sheet of 1 mm thickness.

#### 9 FOAM TANK

Tank shall be of 2000 Liters, fabricated from 4 mm SS 316L plates only & diepressed on all sides to ensure torsional rigidity. Complete welding shall be done using Argan or Gas Tungsten Arc Welding (GTAW) process with ER 304 electrodes. It shall be suitably baffled & the baffle plates shall be bolted. Fasteners used shall be of SS only. Bottom of tank shall be sloped towards the rear. It shall have a filling orifice of 150 mm & an inspection manhole of 450 mm. One additional filling connection of 50 mm shall be provided on the sides of the tank with a ball valve for replenishing/filling the tank from an outside source. The tank shall be fitted with sludge trap with a cleaning hole of 250 mm dia & a 50 mm drain pipe with a valve & plug incorporated in it for maintenance, a system for ensuring that sludge does not enter into the pipeline (so that the foam system does not get clogged), shall be provided. Tank shall be hydraulically tested at 0.5 bar for leakage. All joints shall be flanged type & have 'O' ring sealing only. All weld joints shall be radio graphically tested & test films & reports shall be submitted at the time of stage inspections.

#### 9.1 Foam Proportioner

An around the pump Foam Proportioning system (RTP) with a selector valve to induce 3% to 6% of foam compound shall be provided. The Proportioner shall be installed in such a way that it shall not be liable to mechanical or other failures. The selector valve shall have three settings. Each upward setting shall result into an equal increase in the foam compound flow rate. The linkages of this purpose shall be as simple as possible to avoid distortion due to chassis flexion. It shall be reliable & shall not require frequent calibration checks. The Proportioner RTP type shall be duly calibrated & supplied by the pump manufacturer only.

#### 10 PIPING & VALVES

Complete pipeline circuit on the vehicle including water lines & fittings shall be of SS 316 materials only, including all water lines. All valves (AUDCO/L&T) up to 2"

size shall be lever operated SS 316 ball valves & all valves above 2" size shall be normal ball/butterfly valves but made of SS316. Seats of the valves shall be easily replaceable, readily available & at least 2 sets of spare seals shall be provided for each size of valves. All the lines shall be tested hydraulically for at least 3 times the working pressure or

1.5 times the working pressure of the pump. A flow chart and schematic diagram shall be made and submitted with the technical bid failing which the bid shall be summarily rejected.

#### 11. FOAM/WATER MONITOR

Foam Monitor having discharge capacity of 2500 LPM @ 7 to 8 bar shall be mounted on the top of the fire tender in such a manner that it can be operated (manually) by a crew member. The monitor shall be capable of traversing through 360" in horizontal plane, elevating from horizontal to 75" and depressing from horizontal to not less than 15" and fully rotation in both directions. Monitor shall be AAG/SBJ/ELKHART make as per UL. The monitor shall be UL listed capable of discharging water to an effective distance of not less than 75 meters & projecting the foam discharge to an effective distance of not less than 45 meters in still air conditions when operated at rated pressure. Monitor shall be provided with Jet/Spray type Nozzle. The MOC of the Monitor shall be Cast Stainless Steel (CF8)/GM. Fabricated Stainless Steel Monitors shall not be allowed.

## The Bidder must have to submit OEM authorization certificate & Monitor details

#### 12. BODY WORK

The Foam Tender shall be supplied with original Slipper Cabin (OEM) with seating arrangement and doors for Driver and Officer. The glasses on crew cabin windows and doors shall be fixed in aluminum sections. The cabin doors shall be hinged type opening out wards & hung forward with catch latches. The cab and lockers shall be of composite construction with sufficient rigidity and reinforcement and shall be kept as light as possible. Pressed sections of 40 mm x 40 mm x 2 mm thick corrosion free square tubes of sufficient strength shall be used for the cabin construction as far as possible.

The rear equipment lockers superstructure (after the OEM cabin) shall be fabricated in corrosion free MS section or square hollow pipe constructed with welding work and paneled with aluminum plate by means of glue without any welding work.. Roof panels shall be made of aluminum padded plates. The roof shall be strong enough for being walked on and must be sufficiently supported. The intermediate walls and shelves shall be constructed from aluminum sheets paneled to the Corrosion The outer and inner paneling of the superstructure shall be done from 1.6 mm aluminum sheets. The complete top of the rear superstructure would be covered with 2 mm aluminum chequered plates/suitable anti-skid material. The sheets of the outer paneling shall be bonded/glued to the skeleton framework. The area over the tank shall be suitably treated for slippage by chequered plates or anti-skid material. The doors of the cabin shall be fitted with toughened glasses & windows type regulators. The driver shall be provided with good quality large size rear view mirrors on both sides of the cab & convex round mirrors for overall rear view of the vehicle from top to bottom & left to right. The cabin shall be as per the latest national/international standards & ergonomically designed so that the crew members are comfortable in transit as well as are able to use the vehicle in an efficient & comfortable manner.

#### a. Lockers

Suitable lockers shall be provided for storage of equipment's & accessories wherever required. Size and number of locker shall be decided at the time of stage inspections. The lockers shall be constructed in a modular way so that in case if the configuration needs to be changed, it can be achieved without major

modifications. All equipment stored in lockers shall be strapped/clamped in neat & convenient manner so that it has an identified place. All lockers shall be suitably labeled so that each item shall have identification when it is required to be accessed. For all water fittings like branch pipes etc. quick release type couplings (GM/SS) shall be provided, which shall enable the operator to locate the desired equipment instantly & save valuable time. Inner paneling of locker shall be 1 to 1.5 mm SS sheet.

#### **b.** Roller Shutters

For the easy operation of the Fire tender roller-shutters covering the equipment lockers shall be installed on both sides of the appliance. These shutters shall be rolled inwards underneath the roof giving unobstructed access to the equipment lockers & the equipment/accessories fitted in the vehicle. Roller shutters shall be made of hollow rectangular shaped aluminum links which shall be inter connected with the help of plastic/rubber profiles, sealing the roller shutter watertight when closed. They would be durable, maintenance free, weather & corrosion resistant & capable of opening in every position of the vehicle even in rough terrain & on slopes. A spring mechanism shall be fitted so that the shutters are not held up at any point of opening. It would be easy to operate & shall ensure that the shutters can be easily pulled down. The sections of the shutter shall be powder coated to a smooth finish & aesthetic look. Guide rails shall support the shutters over the entire length on both sides & make them corrosion free. The rain protection slat shall be equipped with LED Lighting (to be provided by Roller Shutter OEM only) which will ensure that the area near the locker is enlightened. The shutters shall have a sturdy locking mechanism which shall prevent accidental opening during movement of the vehicle. A master switch for isolating locker lighting circuit shall also be fitted in the driver's cabin.

#### 13. Ladder with Beam Gantry

The vehicle shall be installed with a Suitable gantry on the vehicle roof and shall be suitable for fixing a 10 Meters trussed Double extension. Ladder Beam gantry should be operated though hydraulically NOT electrically or manually.

## HOSE REEL AND BEAM GANTRY SHOULD BE OPERATED WITH SINGLE HYDRAULIC PUMP.

The Bidder must have to submit details drawing & technical data of beam Gantry.

#### a. Hydraulic Panel

Hydraulic panel should be provide inside of the locker. The gantry and hydraulic self-winding hose reel should be operated via rear control pane.

#### 14. ELECTRICAL EQUIPMENT

Adequate lighting arrangement (approved make only) shall be made in all compartments. All equipment lockers shall have internal lighting arrangement automatically switched on and off by opening/closing of doors/shutters. All the wiring shall be properly fixed in position & shall be protected against heat, oil & physical injury. To the extent possible all wiring shall pass through conduits. All wires used in the vehicle shall be stranded copper alloy conductors of a gauge rated to carry at least 125 percent of the maximum current for which the circuit is protected & shall be uniquely identified by color coding or permanent marking. Voltage drops in all wiring from the power source to the using device shall not exceed 10 percent. The use of star washers for circuit ground connections shall not be permitted.

All the electrical circuits shall have their own separate fuses, suitably marked & grouped in a common fuse box, located in an easily accessible position. Provision shall be made for minimum 4 spare fuses in the box which shall be provided in driver's cabin. All the controls for electrical system shall be provided near the

driver's seat. The battery shall be placed in a totally enclosed box. Radio suppression of the electrical system, which is sufficient to ensure positive operation of radio equipment without interference, shall be provided. Arrangement shall be made on dashboard opposite to fire officer's seat to fix a mobile wireless set. Power supply shall be provided from vehicle battery. Mechanism shall be provided to charge the vehicle battery from external power source.

#### 15. FITTINGS & ACCESSORIES

Following accessories shall be provided on the appliance

- 1. Tow Spot lights in front
- 2. Tow Fog lamps
- 3. Four Blinker type traffic indicators
- 4. One Removable type search light with 30 Mtrs. Cable & tripod stand.
- 5. LED Light bar with Blue and Red lighting shall be provided on top of the fire vehicle.
- 6. PA System & Hooter shall be provided.
- 7. Blue & Red strobe lights shall be provided on both sides of the vehicle (These shell be of the high intensity type with regular and intermittent flash pattern. Orange/Amber LED Flashing Warning Light shall be provided at the rear side of the vehicle.

#### 16. Accessories to be supply with Foam tender

| Sr.No | Description  | Quantity |
|-------|--|----------|
| 1.    | Aluminum Extension Ladder Trussed type 10.5 m  | 1 no.    |
| 2.    | PVC Suction Hose with Light GM round Threaded Couplings to suit the Pump Inlet – 2.5 mtr.              | 2 nos.   |
| 3.    | Delivery Hose IS: 636 (Type B) rubberized, ISI Marked, 63 mm x 15 meters with GM couplings ISI Marked. | 12nos.   |
| 4.    | Suction Strainer for item 2  | 1 nos.   |
| 5.    | Basket Strainer for item 2   | 1 nos.   |
| 6.    | Dividing Breaching controlled type (GM)  | 2 nos.   |
| 7.    | Collected breaching (GM)   | 2 nos.   |
| 8.    | Pair of Suction Wrench universal type  | 1 nos.   |
| 9.    | Long line (poly propylene) 50 mm circumference, 30 m long  | 2 nos.   |
| 10.   | Short line (poly propylene) 50 mm circumference, 15 m long   | 2 nos.   |
| 11.   | Hose Bandages Rubberized   | 12 nos.  |
| 12.   | Hose Clamps  | 6 nos.   |
| 13.   | FB 5X with pickup tube foam making branch  | 2nos.    |
| 14    | FB 10X Foam Making Branch  | 1nos     |
| 15    | High Expansion Foam Generator  | 1nos.    |
| 16    | Short Branch   | 3nos     |
| 17    | Hand Control Branch  | 2nos     |

#### 17. PAINTING AND MARKING:

The basic structure material should be zinc plated and thereafter it should be prepared by grinding the welded surfaces, priming the finished material with a zinc rich primer and then finally coated with a two pack epoxy based paint. Once the panelling is completed, all the outside surfaces should be painted with a good quality paint system. This should be poly-urethane (PU) based paint with a life of minimum 10 years. The

whole of the chassis and the body shall be coated from under with 2 coats of anticorrosive paint.

#### 18.ACCEPTANCE TESTS:

The following acceptance test will be given to the complete satisfaction of the owner. All the testing parameters should be carried out at the manufacturer's premises and the details of the testing infrastructure shall be provided. The Bidder will offer proof of having these facilities at his workshop failing which the tender is liable for rejection.

#### **GRADIENT:**

The vehicle will be tested on a test ramp which has an angle of 1 Mtrs in every 4 Mtrs of distance travelled. This test will be done as per the Indian standards.

#### **LONG RUNNING TEST:**

The rating of pump would be min. 4 hrs. The pump will be tested for a continuous period of four hours and the water will not be replenished in the radiator during this test. The engine will not show signs of overheating during this test. Deep lift test of 7 metres within 30 seconds.

#### **ARTICULATION TEST:**

The vehicles will be tested for articulation and will not show any signs of stress during this test. Also the clearances in the wheel wells will be checked for tolerances.

#### **SHOWER TEST:**

After completion of the fabrication, the vehicle will be subjected to shower test as per the norms laid down under BIS. The appliance will not show any signs of leakages during this test.

#### **GUARANTEE/WARRANTY PERIOD:**

The vehicles shall be guaranteed for a period of minimum 1 year for all manufacturing defects. During this period if any defects are found in the vehicle the same will be repaired or replaced free of charge.

#### CHAPTER - 7 DATA SHEET

To Design, Manufacture, Supply and Delivery of Foam Tender on suitable chassis as per Technical specification

## IT IS MANDATORY TO FILL ALL THE DATA SHEETS BY E-TENDERER :: 1. QUALIFICATION DATA SHEET ::

| Sr<br>No | Details   | Action  | Reply<br>(Yes/No) |
|----------|---|---|-------------------|
| 1        | Experience as a manufacturer of this kind of Fire Water Tanker/Water Tender /Water Browser(HCV Chassis mounted only) of with CE certified / UL Listed / BIS marked pump, minimum value of 45 Lacs in anyone work of last seven years in single contract for got. Or semi Government.  Or  Experience as a manufacturer of this kind of Fire | Attached copy of work order and completion certificate in hard copy.      |                   |
|          | Water Tanker/Water Tender /Water Browser(HCV Chassis mounted only) with CE certified / UL Listed / BIS marked pump, minimum value of 36 Lacs in last seven years (02 Nos. of work Min. required) for Govt. or Semi Govt. Organization   |   |                   |
| 2        | Average annual turnover of last seven years should be less than Rs.45 lacs  | C.A. and hard copy submitted.   |                   |
| 4        | The Bidder must have to submit affidavit over Non judicial stamp paper of Rs. 300 for A) He should not be black listed anywhere in India. B) Document submitted by him are correct and genuine in every manner.   | Attached<br>Declaration on<br>stamp paper of<br>Rs.300/-duly<br>Notarized |                   |
| 5        | Minimum solvency required Rs.12.00 lacs of any Scheduled or Nationalized Bank of Current Financial year.  | Attached certificates in hard copy.                                       |                   |
| 6        | The manufacturer shall have a full fledged workshop with all equipments, machineries and manpower.  | Attached certificates/Da ta in hard copy.                                 |                   |
| 7        | Working capital not less than 23Lacs  | Attached CA certificates/Da ta in hard copy.                              |                   |
| 8        | OEM authorization certificate of chassis, pumps, pto, water/foam monitor which asked in technical specification.  | Attached<br>authorization<br>certificates in<br>hard copy                 |                   |
| 9        | Duly sign and stamp downloaded price bid, Technical bid and amendment if uploaded.  | Attached copy   |                   |

An Earnest Money Deposit of Rs.2,70,000/- and Tender fee of Rs.3000/- (Non-refundable in form of Demand Draft in favour of "Rajkot Municipal Corporation", RAJKOT, of any Nationalized or Schedule Bank located at RAJKOT shall accompany along with the duly sign and stamp qualification's documents and duly sign and stamp of bid as per Milestone date during office hours at Office of The Deputy Executive Engineer (Auto), Rajkot Municipal Corporation, Opp. Sitaram Weigh Bridge, Bhavnagar Road, Rajkot-360003.

## : 2. TECHNICAL DATA SHEET ::

The following technical details shall be furnished in the e-Technical Bid:

To Design, Manufacture, Supply and Delivery of Fire Water Tanker on suitable chassis as per Technical specification

## **:: 3. DETAILS OF TENDERER DATA SHEET ::**

| 1 | а | Name of Tenderer  |
|---|---|---|
|   | b | Address of the office(s) and Factory  |
|   | С | Date of incorporation and/or  |
| 2 |   | commencement of business  Brief description of the                                    |
|   |   | Tenderer's main lines of business   |
| 3 |   | Details of individual(s) who will   |
|   |   | serve as the point of contact / communication for <b>RMC</b> with                     |
|   |   | the tenderer  |
|   | а | Name  |
|   | b | Designation   |
|   | С | Company / firm  |
|   | d | Address   |
|   | е | Telephone number  |
|   | f | e-mail address  |
|   | g | Fax number  |
|   | h | Mobile number   |
| 4 |   | Name, Designation, Address and Phone Numbers of authorized signatory of the tenderer. |
|   | а | Name  |
|   | b | Designation   |
|   | С | Company / firm  |
|   | d | Address   |
|   | е | Telephone number  |
|   | f | e-mail address  |
|   | g | Fax number  |
|   | h | Mobile number   |

## **:: 4. DETAILS OF TECHNICAL STAFF DATA SHEET ::**

| Sr.<br>No. | No. of personnel with designation | Technical Qualification | Experience |
|------------|-----------------------------------|-------------------------|------------|
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   |                         |            |
|            |                                   | 1                       |            |

## **:: 5. DETAILS OF PLANT & MACHINERY DATA SHEET ::**

| Sr.<br>No. | Name of equipment | No. of<br>units | Kind of make | Capacity | Age & condition | Present address of<br>manufacturing<br>unit |
|------------|-------------------|-----------------|--------------|----------|-----------------|---|
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   |                 |              |          |                 |   |
|            |                   | ĺ               |              |          |                 |   |