VISAKHAPATNAM PORT TRUST MECHANICAL & ELECTRICAL ENGINEERING DEPARTMENT M M DIVISION

No. MMD/Gr.II/R-036/20-21/SLT Date: 13-08-2021.

To

Dear sir/ Sirs,

Sub: Tender for Fabrication and Supply of 02 Nos 1KL Liquid Oxygen Storage Tank for the use of GJH- Reg.

Please find herewith a tender set, which will enable you to participate in our tender. Please read the instructions carefully and fill in the tender set correctly to avoid rejection due to various reasons like non-submission of requisite document, non-furnishing of any confirmations, incompleteness, lack of clarity etc.,

INSTRUCTIONS TO THE TENDERS

1. The Tender has to be submitted in **TWO BID SYSTEM** failing which the tender will be liable for rejection. All technical matters, testimonials, credentials, commercial conditions including the costs like Packing, forwarding, freight, insurance, inspection, taxes & duties etc., has to be mentioned and enclosed in a Sealed Envelop duly <u>super-scribing the Envelop as COVER – I</u> i.e., <u>Technical Bid</u>. Price has to be mentioned separately both in figures and words and enclosed in a separate sealed envelop duly <u>superscribing the Envelop as COVER – II</u> i.e., <u>Price Bid</u>. Both the envelops i.e., COVER –1 & COVER II has to be <u>enclosed in an another Sealed Envelope</u> duly addressing the Dy. Chief Materials Manager & Materials Manager I/c, Visakhapatnam Port Trust and superscribing the envelop with the Tender Number and Due date failing which the Purchase will not accept any responsibility whatsoever.

2 The Tender will be received in the Office of the MATERIALS MANAGER, VISAKHAPATNAM PORT TRUST, Visakhapatnam, upto 12.00 Noon on **23-08-2021** and will be opened by the Tender Committee in the presence of those Tenderers who may be present at 3.05 P.M. on the same date. If the tender opening date becomes a holiday for any reason the tender will be opened on the next working day.

- 3. Tenders should be submitted in the prescribed Forms only in a sealed cover superscribing on the Top corner of the Envelope with the words "TENDER FOR Fabrication and Supply of 02 Nos 1KL Liquid Oxygen Storage Tank for the use of GJH. DUE ON 23.08.2021 and addressed to 'THE Dy. CME & MATERIALS MANAGER I/c, VISAKHAPATNAM PORT TRUST, VISAKHAPATNAM'. Tenderers may in their own interest send their Sealed Tenders by Registered post to the aforesaid address so as to reach this office not later than 12.00 Noon on 23.082021.
- 4. Tenders sent by hand delivery should be deposited in the sealed Tender Box at the aforesaid office during working hours on all working days and upto 13.00 hours on Saturday.
- 5. Late tenders will be summarily rejected. The Purchaser will not accept any reason for delay in submission of tender.
- 6. The tender /bid should be exclusive of Taxes & Duties. The tenders/Bids submitted inclusive of Taxes & Duties are likely to be rejected. Port Trust is not a Registered Dealer for purpose Sales Tax and Excise Duty. The Purchaser will not issue any kind of concessional Sale Tax Form.
- 7. All the tenderers those who participated in the tender ie., Those to whom tender sets are sent by post should submit **Rs.590/-** in the form of RTGS/NEFT/Bank transfer only. to the following Bank account towards cost of tender documents failing which their offer will be rejected summarily

Bank name: State Bank of India

Bank Branch: Visakhapatnam Port Branch

Account No. 30387186900 IFSC code: SBIN0001740

However those bidders who registered with NSIC /SSI DGS&D/MSME/DIC are exempted from payment of tender cost subject to submission of a valid copy of NSIC / SSI /MSME/DIC Registration certificate.

Kindly acknowledge receipt and send your Tender in the prescribed FORMS duly going through the same carefully before filling it.

Encl: 1. Tender Form for Dy.Chief Mechanical Engineer & MM i/c

2. Tender schedule M.M. DIVISION

Visakhapatnam Port Trust

GENERAL TERMS & CONDITIONS

- 1. All the conditions appearing in Tenderer's letter head or else where stands cancelled and the Conditions as mentioned in this tender will alone be valid and supersede any or all the conditions appearing in any of the papers submitted by the tenderer.
- 2. Commercial conditions, if any exists in the PRICE bid, will be treated as cancelled.
- 3. Submission of a sample or quotation of a brand or make will not absolve the Tenderer from the responsibilities arising out of rejection of supplies which when examined/tested, prove not to be upto specification or not meeting the purpose of buying the item.
- 4. All the materials to be supplied against the tender should be brand new and manufactured out of virgin raw materials and with proper workmanship and latest technology.
- 5. Full payment will be made within 30 days of receipt and acceptance of the stores.

6. INSPECTION:

- 6.1 Inspection will be done by the user department on receipt of the materials at our Stores/Site. Inspection by user department will not absolve the responsibility of the to supply quality Materials and to supply materials as per the specification of the order.
- 6.2 Irrespective of the inspection made and approval given by any other agency, the materials will be inspected by the Purchaser on its receipt at Stores/Site. It shall be lawful for the Purchaser to reject the goods which are found to be not as per the specification or found other-wise not suitable for use notwithstanding any other inspection that may have been done previously including inspection Report/Approval of any Third party inspection Agency.
- 7. The rejected goods will lie at our Stores/Site on as is where basis at the cost, risk & responsibility of the tenderer right from the moment of rejection of the goods. The Purchaser will not accept any responsibility for the rejected materials under any circumstances. The rejected goods will be replaced by the within one week or within the period as would be decided by the Purchaser, of receipt of notice from the Purchaser. If any payment is made, the rejected goods will not be returned to them unless replacement is given by the Tenderer and the same is accepted by the Purchaser. Otherwise the Seller may depute his Authorised Representative with proper Letter of Authority to take back the rejected materials from our Stores/site.
- 8. **DRAWING:** Drawings, if any, attached with the tender should be verified by the Tenderer before submission of tender. The Purchaser will not entertain any indulgence or any claim or price increase etc. which is resulted due to not verifying the drawing carefully at the time of submission of tender. If the tenderer's drawing needs to be approved by the purchaser, the same must be submitted in quadruplicate along with the tender and purchaser will not consider any request for extension of delivery period etc. if the tenderer fails to do so.

- **9. GUARANTEE**: Other than consumable or similar nature items, all the items supplied Against this tender shall have guarantee for satisfactory performance for a period of 12 months from the date of commencement of use or 18 months from the date of supply, whichever is earlier. Consumables will have guarantee for its performance / function as per the general experience ensuring the desired level of satisfaction.
- 10. If the Tenderer fails to deliver the goods or part thereof within the specified delivery period or as per the extended delivery period or at any time repudiates the contract before expiry of such period, the Purchaser may without prejudice to his other rights:
- (A) Recover penalty from the contractor/seller @ 0.5% per week or part thereof subject to a maximum 10% of the value of the stores not supplied /delayed.

OR

- (B) Cancel the order for the outstanding quantity at the RISK, COST & RESPONSIBILITY of the contractor and buy the materials from alternative sources, and the defaulting contractor shall have to pay to the Purchaser the differential cost plus 18% towards departmental charges. The Tenderer shall have no right to claim compensation in such cases.
- 11. Any increase in TAXES and DUTIES after expiry of the contractual delivery period or during the extended delivery period is not admissible.
- 12. All conditions/instructions in Drawings, specifications, tender Schedule etc. will be treated as a part and parcel of this tender and acceptance of this tender will mean acceptance of the whole tender in tote. All the conditions mentioned herein will be considered as an integral part of the contract/Purchase order which will be concluded/placed based on this tender,
- 13. This tender will be valid for a period of 3 (three) months from the date of opening of tender and the Tenderer cannot amend, alter or revoke his tender in any way during this period and if he does so, the Earnest Money Deposit paid by him shall be forfeited without notice.
- 14. The quantities indicated in the schedule are tentative and Purchaser will have the right to modify the quantities specified therein before placing order without giving any intimation to the Tenderer.
- 15. The Purchaser will have the right to increase the quantity of the order upto 100% within a period of 6 (six) months from the date of supply of the last consignment against the order based on the rates and terms & conditions of the order. Any increase / decrease in Taxes & Duties during the contractual delivery period for the supply of such additional quantity will be to the account of the Purchaser.
- 16. The Purchaser will reserve the right to accept or reject any or all the tenders without assigning any reason and the Purchaser doesn't binds itself to accept the lowest tender. The Purchaser will also reserve the right to divide the tender amongst the bidders without assigning any reason.

17. The Purchaser reserves the right to place order on a higher Bidder instead of the lowest Bidder in consideration of early delivery period quoted by the higher Bidder. The supplier on whom order is so placed in consideration of earlier delivery period, shall adhere to the delivery period indicated by him in his offer. In case of default, the Supplier will be liable to pay to the Port Trust the difference between the contract value and that of the lowest tender on the basis of FOR-destination, including all costs like Freight, Insurance, Excise Duty, Sales tax, Local taxes, and other incidental charges. Accordingly the

payment will be restructured.

18. If any order is placed on a higher Bidder instead of the lowest Bidder in consideration of early delivery period quoted by the higher bidder, the tender will be liable to pay to port trust the difference between the contract value and that of the lowest acceptable tender on the basis of FOR-Destination including all costs like freight, insurance, excise duty sales tax, local taxes, and other incidental charges

in case of failure to complete supplies as per the delivery date specified in the order.

19 If the successful tenderer fails to execute the order against this tender or fails to execute any other previous order(s), the Purchaser shall have the right to recover the loss or damage from any money including Security Deposits, Earnest Money Deposit or from any payment due to the Tenderer from the Purchaser against any order(s) / Tenders.

20. The Successful tenderer to pay 3% value of the contract as Security Deposit either in the form of RTGS/NEFT/Bank transfer only. to the following Bank account.

Bank name: State Bank of India

Bank Branch: Visakhapatnam Port Branch

Account No. 30387186900 IFSC code: SBIN0001740

or in the Form of Bank Guarantee as per Purchaser's prescribed format. The Bank Guarantee should from any scheduled Bank of India.

Exemption from payment of Security Deposit will not be granted to any firm even if they are registered with DGS&D/NSIC/SSI unless such exemption is granted in the DGS&D/NSIC certificate.

21 All the tenderers those who participated in the tender ie., Those to whom tender sets are sent by post should submit Rs.590/- either in the form of RTGS/NEFT/Bank transfer only. to the following Bank account towards cost of tender documents failing which their offer will be rejected summarily

Bank name: State Bank of India

Bank Branch: Visakhapatnam Port Branch

Account No. 30387186900 IFSC code: SBIN0001740

However those bidders who registered with NSIC /SSI DGS&D/MSME/DIC are exempted from payment of tender cost subject to submission of a valid copy of NSIC / SSI /MSME/DIC Registration certificate.

22. The court at VISAKHAPATNAM will alone have jurisdiction to decide any dispute arising out of or in respect of contract.

All the particulars as mentioned in the tender are noted and accepted without any reservation/addition/alteration.

SIGNATURE OF THE TENDERER

Encl: One Tender Schedule FULL ADDRESS:

Special Terms & Conditions

1,. All the tenderers those who participated in the tender ie., Those to whom tender sets are sent by post should submit **Rs.590/-** either in the form of RTGS/NEFT/Bank transfer only. to the following Bank account towards cost of tender documents failing which their offer will be rejected summarily

Bank name: State Bank of India

Bank Branch: Visakhapatnam Port Branch

Account No. 30387186900 IFSC code: SBIN0001740

However those bidders who registered with NSIC /SSI DGS&D/MSME/DIC are exempted from payment of tender cost subject to submission of a valid copy of NSIC / SSI /MSME/DIC Registration certificate.

- 2. EMD exempted. However the bidders have to submit the Bid Security declaration in the VPT prescribed format along with your offer.
- 3. Manufacturers/ Authorised dealers / Traders / Fabricators to participate in the Tender. The Firms who are participating in the status of Authorised dealer should submit a valid copy of dealership certificate for the make and brand offered, failing which the offer is liable for rejection. The date of issue and date of validity of the A/D certificate shall be indicated in the A/D certificate.
- 4. The delivery of material is within 4 weeks. However the firms may indicate their earliest delivery period for supply of the material.
- 5. The rates must be quoted based on door delivery basis including unloading of material AT VPT Golden Jubilee Hospital and duly indicating taxes and other chargers duties separately. Please claim full GST, SGST, IGST, UTGST as legally applicable.
- 6. All the specifications, terms and conditions enclosed in the annexure will be the part and parcel of the NIT conditions.
- 7. Please indicate the applicable GST and HSN codes for the quoted material.
- 8. Payment will be made within 30 days from the date of receipt and acceptance of material along with guarantee certificate, etc., through ECS mode. No other payment terms will be acceptable.
- 9. All the tender papers have to be returned invariably by the tenderer along with the quotation without fail duly signing on all the pages, in token of acceptance to all the tender terms in toto.
- 10. Any kind of Price Variation clause or force-majeure clause shall not be considered.
- 11. The material should be guaranteed for a minimum period of 18 months from the date of dispatch or 12 months from the date of use which is earlier. A certificate to this effect to be submitted along with material supply. The Guarantee shall include the Cost of any spare needed with labour. The Manufacturers Test Certificate also to be submitted by the successful tenderer along with supply.

12. The Successful tenderer to pay 3% value of the contract as Security Deposit either in the form of RTGS/NEFT/Bank transfer only to the following Bank account.

Bank name: State Bank of India

Bank Branch: Visakhapatnam Port Branch

Account No. 30387186900 IFSC code: SBIN0001740

or in the Form of Bank Guarantee as per Purchaser's prescribed format. The Bank Guarantee should from any scheduled Bank of India. Exemption from payment of Security Deposit will not be granted to any firm even if they are registered with DGS&D/NSIC/SSI/DCI.

- 13. If any adverse report about performance is received from any source against the bidder, such bids will be liable for rejection.
- 14. All the tenderers must be Registered with Commercial Tax Department and furnish their .G.S.T Registration number & PAN Number in their quotation, failing which payments if any will not be released for the supplies made.
- 15. The tenderer has to submit recent copies of purchase orders/ proof of experience for supply of Liquid Oxygen Storage Tanks to PSU's/Ports/Govt dept. or any other reputed firms.
- 16. The bidders shall give an undertaking that they have not made any payment or illegal gratification to any person/authority connected with the bid process so as to influence the bid process and have not committed any offence under the PC Act in connection with the bid.
- 17. The bidders shall disclose any payments made or proposed to be made to any intermediaries (agents etc.) in connection with the bid.
- 17. The bidder shall authenticate the bid with his digital signature certificate for submitting the bid electronically on e-procurement platform and the bids not authenticated by digital signature certificate of the bidder will not be accepted on the e-procurement platform."
- 18.The successful bidder found defaulting in submission of hard copies of uploaded certificates / documents, with in the stipulated time i.e before finalization of the tender or if any variation is noticed between the uploaded documents and the hard copies submitted by the successful bidder, the successful bidder will be suspended from participating in tenders on e-Procurement platform for a period of three years.
- 19. The bidders shall give an undertaking that their firm does not have any relationship (direct or indirect) either personal or commercial with any existing trustees of VPT.
- 20. The offers of the firms will be / rejected , If any of the following are noticed.
 - a) Furnished false / fabricated particulars in the forms, statements and / annexures submitted in proof of the qualification requirements.
 - b) Not turned up for entering into agreement, when called upon.
 - c) Record of poor quality material supply / pending replacements not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc.

21. Clarification on the Technical Bid.

a. The tender opening authority may call upon any Tenderer / Bidder for clarification on the statements,

documentary proof relating to the technical bid etc. The request for clarification and response

thereto shall be in writing and the clarification called for from the tenderers / Bidders shall be

furnished within the stipulated time.

b. The Tenderer/Bidder if so desirous shall agree in writing to furnish the clarification called for within

the stipulated time and, for disqualification and rejection of his tender in the event of failure to do

so.

21. Price Bid Opening:

a. Only the Price Bids of qualified Tenderers whose technical Bids are found satisfying the eligibility

criteria shall be opened on the date and time fixed as per details sent via e-mail.

b. Tenders shall be scrutinised in accordance with the conditions stipulated in the Tender document. In

case of any discrepancy of non-adherence to the Conditions, the decision taken by the Tender

Accepting Authority on tenders shall be final and the same shall be binding both on tender accepting

and the tenderer / Bidder. No correspondence will be entertained in this regard.

c. Non submission of tender cost, noncompliance of the tender conditions may result in outright rejection

of offer/bids.

All the particulars mentioned in the tender are noted and accepted without any reservation / additional/

alteration.

SIGNATURE OF THE TENDERER

Encl: One Tender Schedule

FULL ADDRESS:

Station:

TO BE FILLED IN SIGNED & RETURNED BY THE TENDERER

То

The Chief Mechanical Engineer, Materials Management Division, Old DLB Building 4th Floor, Visakhapatnam Port Trust, Visakhapatnam 530 035.

Sir,

Tenderer's reference:

Date:

To be submitted by 12 p.m. on: 23.08.2021 And to be opened at 3.00 p.m. on the same date.

Sub: Tender No. GR2/R- 036/2021-22/SLT For Supply of 02 No. of 1KL Liquid Oxygen Storage Tank for the use of GJH

I / We engage to supply to V.P.T, with the articles as specified in the tender schedule attached here with upon the terms and conditions as specified in your tender.

- 1. The rate (s) as mentioned in the tender schedule is / are based on door delivery at VPT Store / F.O.R Visakhapatnam by Road / Rail.
- 2. The rates of taxes and duties will be as under:GST: Payable extra as applicable at the time of delivery.
 Present Rate @ _____%.
- 3. This offer will remain valid up to 90 days from the date of opening of the tender.

 The acceptance of this tender by the VPT shall constitute a binding contract between me / us and t purchaser.
- Encl: 1. Tender conditions duly signed and accepted.
 - 2. Tender schedule duly signed and accepted.

Name & complete address of Tenderer M/s.



Specifications for procurement of Liquid Oxygen Tank (Cryogenic Technology)

- 1. Type of vessel: Double Walled Vertical cylindrical vessel supported on legs.
- 2. The of insulation: Inner vessel insulated with perlite powder and vacuum and sealed with vacuum level better than 100 microns.
- 3. Vacuum maintenance system: Adsorbent and getters as adequate.
- 4. The manufacturer/supplying firm shall have PESO/ CCOE License.
- 5. Inspection: (PESO/ CCOE approved Inspection agency (TPIA) for stage wise inspection of vessel.

6. Inner Vessel

- 6.1 Design & Manufacturing Code: EN 13458 2 2002 Annexure C & SMPV (U) Rules 2016.
- 6.2 Material of construction ASTM-A 240 Gr 304.
- 6.3 Maximum allowable working pressure: 22Bar g (i.e. Safety Valve Set Pressure)
- 6.4 Design pressure (corrected for vacuum): 23Bar g
- 6.5 Stretching test Pressure: 34.5 Bar g (Hydraulic)
- 6.6 Design temperature: (-) 196 °C to (+) 40°C
- 6.7 Dimensions (in mm): 860 ID x 1350 Length (TL To TL) with 2: 1 Tori spherical Heads.
- 6.8 Radiography: 100% for all S.S butt welds for inner vessel.
- 6.9 Internal cleaning: Vessel internal surfaces and its components to come in contact of Cryogenic liquid gas shall be cleaned for oxygen service as per std. procedure.

7. Outer Vessel (Vacuum Casing)

- 7.1 Design & manufacturing code: EN 13458 2-2002 & SMPV (U) Rules 2016
- 7.2 Material of construction: Carbon steel IS 2062 Gr. E-250A
- 7.3 Operating pressure: Vacuum
- 7.4 Design pressure (External): 30 PSIG Critical collapsing pressure.
- 7.5 Operating temperature: (+) 45 °C
- 7.6 Design temperature: (+) 55 °C
- 7.7 Dimensions (in mm):
 - (i) Vessel: 1250 OD x 2725±50 mm Overall Length With leg Supports with Tori spherical heads.
 - (ii) Skid Frame: 1550 X 1400 X 3000 Height approx.
- 7.8 Outer surface: The outer vessel external surfaces shall be mechanically cleaned to SSPC 10 finish.
 - (a) Polyurethane Primer: Two coats
 - (b) Polyurethane Intermediate: Two coats Total 8 mills DFT
 - (c) Final paint (Polyurethane): Two coats
- 8. Weight of Storage Tank
- 8.1 Empty weight: 775 Kgs. approx.
- 9. Details of Cryogenic Process Valves, Accessories And Safety Fittings:
- 9.1 Inlet Valves 20 NB One each long stem cryogenic globe valve. (Bestobell UK/ Heroes/Mack)- Imported.

- 9.2 Liquid Outlet Valve 20 NB One each long stem cryogenic globe valve. (Bestobell UK, Herose/Mack))- Imported.
- 9.3 Pressure Build-up Valve: 15 NB.
- 9.4 Safety Fittings:
 - (i) 02 Nos. Safety Valves (inner vessel) and accessories provided as per sizing calculations. With diverter valve, set at i.e.1.5 Kg/cm2g
 - (ii) Weight loaded safety disc for jacket.
 - (iii) TRV's at pipe lines for stagnant flow.
 - (iv) 2 Nos. rupture discs set at 18 Kg/cm2g
- 9.5 Safety Relief Valve: Make, Model :Bestobell/ Mack/Herose/Fainger Lesser or equivalent Approvals : PESO/ CCOE approved inspection authority & Manufacturer.
- 9.6 Different pressure: 01 no. Differential pressure type liquid level indicator of 6" dial calibrated in mm WC, Make Samson/Hirlekar/General Instrument / WIKA
- 9.7 High & Low Level Isolation Valves: Long stem needle valves 2 Nos. each for DP gauge and pressure gauge.
- 9.8 Pressure Gauge: One No. 6" dial. (Fiebi / Gluc/ Waree/General Instrument / H.Guru.)
- 9.9 Pressure gauge Isolation valve: One No. Needle valve
- 9.10 Full Try cock/over Flow: One no. long stem globe valve (Bestobell UK/ Herose/Mack)
- 9.11 Flow Divertor Valve: One No. for safety valves and bursting disc. MOC SS-304 (CF-8)/ Bronze. Make Baldota / Mack / VAAS

Note:

- The body material for all cryogenic globe valves will be SS-304 (A-351 Gr. CF-8) or equivalent / Bronze material.
- II. Safety Relief Valves to be SS-304 (A-351 Gr. CF-8)/ Bronze material.

10. PRESSURE BUILD UP COIL

- 10.1 Design Code: ASME Section VIII Div.1 Edition 2010.
- 10.2 Type: Ambient Air Heated & Vertical.
- 10.3 Service: Liquid Oxygen
- 10.4 Quantity: 1 Nos.
- 10.5 Surface area per unit: 1 m² Approx.
- 10.6 Duty cycle of each bank: 8 Hours continuous before De-Icing
- 10.7 Maximum operating pressure: 25 Kg/Crn²g
- 10.8 Design pressure: 27 Kg/Cm²g
- 10.9 Hydraulic test pressure: 32.5 Kg /Cm²g
- 10.10 Outlet temperature: 10° C below ambient.
- 10.11 Design temperature: (-) 196°C To (+) 65°C
- 10.12 Fin tube outside diameter: 25 mm.
- 10.13 Inner pipe dia / wall thickness: 19 mm / 3 mm
- 10.14 Empty weight: 12 Kg Approx
- 10.15 Fin: SB 221 6063 T6
- 10.16 Bends & headers: SB 221 6063 T6
- 10.17 End connection: Flanged to ANSI B 16.5
- 10.18 Bolts & supports: SS 304 / Aluminum

11. DOCUMANTATION FOR CRYOGENIC LIQUID TANK

- 11.1 Product quality certificate.
- 11.2 Manufacture's data report.
- 11.3 History sheet of equipment for stage wise inspection with dimensional report.
- 11.4 Formed head inspection report.
- 11.5 Material test report of pressure parts & inner vessel.
- 11.6 Material heat chart of all pressure parts & inner vessel (Mill Test Certificate)
- 11.7 Mechanical & Bend property report for weld test plate of the product.
- 11.8 Test certificates of pipes, pipe fittings & valves.
- 11.9 Welding RT examination report.
- 11.10 Welding UT examination report wher ever require as per code.
- 11.11 Liquid penetration test report for inner & outer vessel
- 11.12 Vacuum Retention report.
- 11.13 Painting test report for outer vessel.
- 11.14 Inner vessel cleaning inspection.
- 11.15 Test & Inspection certificate of safety valves, rupture discs, pressure gauge & level gauge from PESO/ CCOE approved agency wherever applicable.
- 11.16 Inspection control certificate of the tank from PESO/ CCOE recognized third party inspection Agency
- 11.17 Safety valve test certificate from manufacturer.
- 11.18 Name plate photo copy.
- 11.19 Operational & Maintenance manual for tank with parts detail.
- 11.20 Drawing approval letter along with four sets of fabrication drawing.

12. SITE APPROVAL AND FILLING LICENSING FROM CHIEF CONTROLLER OF EXPLOSIVES (PESO/ CCOE), NAGPUR:

The scope of work shall be limited to the following:

- Preparation of layout drawing as per PESO/ CCOE rules and obtaining approval from PESO/ CCOE Nagpur.
- To prepare documentation for application PESO/ CCOE license.
- Inspection & Safety Certification from PESO/ CCOE approved competent authority.
- To submit application and other documents to PESO/ CCOE Nagpur and to obtain copy of letter for PESO/ CCOE license.
- Endorsement of license through PESO/ CCOE local authority from PESO/ CCOE Nagpur will be arranged by Client.
- · The license fee is in the scope of contractor.

13. DOCUMENTATION:

- The following documents shall be submitted at the time of dispatch:
 - Control Certificate of manufacturing the Cryogenic Liquid Storage tank from Inspection agency.
 - · Copy of PESO/ CCOE (Chief Controller of Explosive) approved of fabrication drawing for

Cryogenic Oxygen Tank.

- Inspection dossier of Cryogenic Liquid Storage tank comprising of material test certificates and all stage Inspection reports.
- Safety valves manufacturing certificates from PESO/ CCOE approved 3rd party inspection
 agency.
- Test Certificates of all items: Cylinder Filling Pump, Electrical Motor, Isolation Valves, Pressure Gauge etc.
- · Operational and Maintenance Manual.
- 14. Design and Drawings are in the scope of Supplier/Contractor
- 15. Performance guarantee: 12 months from date of commissioning or 18 months from the date of supplywhichever is earlier. Any defect intimatedshall be attended and rectified afterreceipt of such communication within Guarantee period. The guarantee shallinclude the cost of any spare needed withlabour.

16. Delivery peliod

4 weeks