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THIRUVANANTHAPURAM - 695 011, KERALA, INDIA
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CORRIGENDUM -2 dtd. 19.08.2020

TENDER NO. SCT/H/IND/P4/2020-21/2

Particulars	Dates given as per tender dtd. 31.03.2020	To be read as
Last date and time of online submission of Technical bid & Price bid	17.07.2020 upto 5.00 pm	**09.10.2020 upto 5.00 pm**
Last date and time of submission of **Original EMD along with hardcopy of Technical bid as specified in Annexure-II** . **(price bid has to be submitted online only).**	22.07.2020 upto 1.00 pm	**14.10.2020 upto 1.00 pm**
Date of tender Opening	22.07.2020 at 03.00 PM	**14.10.2020 at 03.00 PM**

LIQUID MEDICAL OXYGEN PLANT

Sl.No.	Description	Amended as
(I) 6	Bidder shall execute all required civil, electrical, plumbing, lighting, fire safety, exhaust systems and other works as maybe required for complete installation and trouble-free functioning as a part of the turnkey work.	Bidder shall execute all required civil, Electrical, fire safety, etc and other works as maybe required for complete installation and trouble-free functioning as a part of the turnkey work.
(I) 7	Bidder should provide automatic changeover between Liquid Medical Oxygen system and oxygen manifold system.	Bidder should provide manual changeover between Liquid Medical Oxygen system and oxygen manifold system.
(I) 8c	Should not contain less than 99.6% V/ V of oxygen.	Should not contain less than 99.5% V/ V of oxygen.
(I)9	Quantity per year: 2,25,000 CUBIC METER with +/- 20% variation.	Quantity per year: 1,25,000 CUBIC METER with +/- 30% variation.
(I) 10	Consumption per day: Varying from 500 to 750 cubic meters as per number of patients and their condition.	Consumption per day: Varying from 300 to 450 cubic meters as per number of patients and their condition.
(I) 16	Specifications: - The supply shall confirm to specified codes (latest edition). Medical Oxygen IP-2014.	Specifications: - The supply shall confirm to specified codes (latest edition). Medical Oxygen IP-2018 or

		latest.
(I) 17	The firm quoting for tender should primary manufacturer of Liquid Medical Oxygen (LMO) through Air Liquefaction process.	The firm quoting for tender should be primary manufacturer, authorized dealer or distributor of Liquid Medical Oxygen (LMO) manufactured through Air Liquefaction process.
(I) 18	Firm quoting for LMO should have a valid drug license & should be following testing process as per Indian Pharmacopoeia IP – 2014.	Firm quoting for LMO should have a valid drug license & should be following testing process as per Indian Pharmacopoeia IP – 2018 or latest.
(I) 24	Tanks should be installed as per AS – 2896 and HTM -02 – 01 requirements. Tanks should be installed free of charge and supplier shall obtain necessary license from chief controller of explosive (Competent Authority).	Tanks should be installed as per PESO standards and requirements. Tanks should be installed free of charge and supplier shall obtain necessary license from chief controller of explosive (Competent Authority).
(I) 27		The successful bidder must provide the required drawings of LMO system as directed by SCTIMST and get it approved by the concerned department before commencement of the work.
(I)28	Minimum 40% of stock level to be maintained in the installed capacity to avoid emergency situation & for the same supplier should install suitable monitoring & alarming devices.	Minimum 30% of stock level to be maintained in the installed capacity to avoid emergency situation & for the same supplier should install suitable monitoring & alarming devices.
(I) 29	Supplier should be supplying to minimum 15 Hospitals in Kerala & valid documents from any one of them to be produced.	Supplier should be supplying to minimum 5 Hospitals in Kerala & valid documents from any one of them to be produced.
(I) 31	There should be provision of monitoring daily consumption.	There should be provision of telemetry system for monitoring daily consumption and it must be accessible for SCTIMST also.
(I) 32	The contract will be valid for Five years; however the contract will be renewed on the yearly basis based on the satisfactory performance.	The contract will be valid for Five years; however the contract will be renewed on the yearly basis based on the satisfactory performance. In case the hospital is non functional due to any reason during the contract period, the same duration will be extended in the contract period.
(I) 35	(A) Minimum safety features for LMO installation required Alarm System as per AS – 2896 (Aus) Or HTM – 02– 01 (NZ) (a) Alarm VIE (Vacuum Insulated Evaporator). (b) Low content or Low level of storage indication (Audio – Visual). (c) Low Pressure Alarm (Audio – Visual). (B) Low Pressure Alarm in downstream of Pipeline system (Audio – Visual). (C) Pressure Regulating: Dual parallel regulation system for uninterrupted supply in case of regulator has to change for repair. One regulator is set at 4.2 bar and other at 3.8 bar as per international practice.	(A) Minimum safety features for LMO installation required gauge System as per AS – 2896 (Aus) Or HTM – 02– 01 (NZ),PESO, (B) Low content or Low level of storage indication/gauge. (C) Low Pressure gauge in downstream of Pipeline system. (D) Pressure Regulating: Dual parallel regulation system for uninterrupted supply in case of regulator has to change for repair. One regulator is set at 4.2 bar and other at 3.8 bar as per international practice.

	(D) Three ways Gauge Valve for isolation of Line Pressure & with Manual Maneuvering. (E) Telemetry System: For continuous monitoring of liquid level in the storage vessel from a central location anywhere in India.	(E) Three ways Gauge Valve for isolation of Line Pressure & with Manual Maneuvering. (F) Telemetry System: For continuous monitoring of liquid level in the storage vessel from a central location anywhere in India.
(I) 36	Number of Cylinder Provided as Backup Arrangement should be 500(Bulk D Type Cylinder). 120 filled cylinders out of these, 500 numbers should be available at SCTIMST manifold room.	The company shall arrange adequate number of back up cylinder supply/ VITT vehicle in case the company fails to supply the liquid oxygen/during the event of shut down of plant for maintenance works .
(I) 37	The successful Tenderer will be required to undertake to provide at his cost technical training for personnel involved in the use and handling of the equipment on site at the institute immediately after its installation. The company shall be required to train the institute personnel onsite for a minimum period of 1 month.	The successful Tenderer will be required to undertake to provide at his cost technical training for personnel involved in the use and handling of the equipment on site at the institute immediately after its installation. The company shall be required to provide adequate training to the institute personnel periodically/ as and when as required by Institute.
(I) 40	Bidder shall be responsible for supply, installation, testing and commissioning of Liquid Medical Oxygen tanks, complete as per HTM 02-01/NFPA 99C/DIN/EN standards.	Bidder shall be responsible for supply, installation, testing and Commissioning of Liquid Medical Oxygen tanks, complete as per PESO, HTM 02-01/NFPA 99C/DIN/EN relevant standards.
(II)2	The Three VIE vessel system should be interconnected with automatic change over.	The VIE vessel system should be interconnected with manual change over.
(II)5	Essential inter connection to the manifolds through automatic change over control should be provided.	Essential inter connection to the manifolds through manual change over control should be provided.
(VII)4	The site would be protected by fence around, well lit by sodium vapour lamps and demarcated with proper signage.	The site would be protected by fence around and demarcated with proper signage.
(VII)6	Automatic change over should be provided between the primary and secondary LMO tanks. In case of failure in liquid oxygen supply, it should automatically switch over to an emergency oxygen manifold having 2 x 19 cylinders.	Manual change over should be provided between the primary and secondary LMO tanks. In case of failure in liquid oxygen supply, it should switch over to an emergency oxygen manifold having 2 x 19 cylinders.
(IX)7	Suitable By Pass arrangements should be provided for each vessel.	Deleted
(X) 2	The fence, lighting, signage, approach gate etc are to be designed and installed by the vendor.	The fence, signage, approach gate etc are to be designed and installed by the vendor. Agency may note that there are underground utilities running across the proposed site and therefore excavation works should be avoided at the premises. Any damage to the utilities during the course of installation works has to be rectified by the vendor.
(XII)	VAPORISER COIL	(XI) VAPORISER COIL

(XII) VAPORISER COIL (6)	Flow rate : 1200 cubic meter/ hour	Flow rate : 1200 LPM
(XII) SAFETY	The vendor should ensure that all international safety norms and standards applicable as implemented and certified by the CCE. Following are the mandatory provisions for vessel: 1. Vessel low liquid level alarm. 2. Vessel low pressure alarm. 3. Pipeline low pressure alarm. 4. Twin regulator. 5. Twin safety valve. 6. Non return valve and 3 way diverter (bypass) valve. 7. Automatic changeover to manifolds with control panel. 8. Alarm on indicating manifold in use in case the vessel is not in use. 9. Alarm on low pressure back-up manifold cylinders.	The vendor should ensure that all international safety norms and standards applicable as implemented and certified by the CCE. Following are the mandatory provisions for vessel: 1. Vessel low liquid level gauge. 2. Vessel low pressure gauge. 3. Pipeline low pressure gauge. 4. Twin regulator. 5. Twin safety valve. 6. Non return valve and 3 way diverter (bypass) valve. 7. Manual changeover to manifolds with control panel.
(XVI)2	The validity of the tender will be for the period of five years from the date of Agreement. However the rate quoted should be fixed for minimum one year and bidder shall quote the revision rates after each year onwards till completion of five year. Total amount for 5 years with annual escalation rate will be considered for financial evaluation.	The validity of the tender will be for the period of five years from the date of Agreement. However the rate quoted should be fixed for minimum one year and bidder shall quote the revision rates after each year onwards till completion of five year. Total amount for 5 years with annual escalation rate in percentage will be considered for financial evaluation. In case of termination of contract, the installation site should be cleared of all the equipment supplied under the contract within a period of 7 days. Otherwise, SCTIMST shall be at liberty to dispose of the material without any further intimation to the vendor. No further representations shall be entertained in this regard in such an eventuality.

Sd/-

DIRECT OR