Amendment -I

Subject: Supply, Installation, Testing & Commissioning of Medical Gas Manifold System for All India Institute of Medical Sciences (AIIMS), Raebareli

IFB No : HSCC/SES/MGMS/AIIMS/Raebareli/2020 Date :15.01.2020

This has reference to above IFB.

The following Amendment may be noted which shall be treated as part of the tender document and to be submitted duly signed & stamp along with tender.

Sr. No.	Bidders' Queries	Reply
1.		
2.	Volume-I,Page no. 3, Period of Completion: 4 Months	Tender terms & conditions prevail.
	We request the period of completion should be 6 months after approval of drawings. You would appreciate that quantum of this Project is large and arranging quantity of material takes time and resources. This is not mere supply of equipments items like Control Panels & Manifold for O2, N2O & CO2, Medical Air Plant, Medical Vacuum Plant, AGSS Plant, Area & Master Alarm, All types Outlets, AVSU, Line Isolation valves, High Pressure Tubes etc are imported items for which procurement only starts after approval of final drawing which is a time consuming process.	
	We hereby request to kindly increase the completion schedule to 6 months.	
3.	Volume-I, Pre-Qualification Criteria; Page no. 5 & 6, Clause no. 2.2 (ii) Experience of having successfully completed	Tender terms & conditions prevail.
	similar work during last 7 years ending last day of month previous to the one in which tenders are invited should be either of the following :	
	Three similar* completed works costing not less than the amount equal to 40% of the estimated cost.	
	or Two similar* completed works costing not less	

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	than the amount equal to 50% of the estimated cost.	
	or One similar* completed work costing not less than the amount equal to 80% of the estimated cost.	
	*Similar nature of works means successful completion of supply, Installation, testing and commissioning of Medical Gas Manifold System in India.	
	We request the clause of the tender should be further clarified as following :	
	"In case, the qualifying experience certificate is from Private sector/ Charitable Hospital, the vendor should submit the TDS certificate as a proof of having executed the said work."	
	We are enclosing herewith the snippets for your kind reference & duly marked at Page no. 1 to 5 from Government Agencies NBCC (India) Ltd. and Project Implementation Unit, Gujarat about the TDS Certificate, which is clearly defined. We are also enclosing herewith M/s HSCC clarification papers taking the cognigenze of this and had issued Amendment M/s HSCC MOT Shimla Tender.	
	The TDS certificate should be of same value as supporting document which will prove the authenticity of Private work completed. There should not be any room that any bidder plays with the private works, therefore the TDS Certificate should be made mandatory for the justification of the order value against the experience of similar nature of work.	
	We request this clause should be suitably amended so that NO Bidder could take undue advantage of NSIC Certification and all the bidders should be treated on single platform.	
4.	Common Performance of the Company	Tender terms & conditions prevail.
	We request, to kindly ensure that the bidder who has executed the similar nature of work in Government Hospital through Government	

	Agencies such as M/2 HSCC (India) I to M/2	
	Agencies such as M/s HSCC (India) Ltd., M/s HLL Lifecare Ltd, UPRNN, NBCC etc., the	
	performance of the company should be satisfactory.	
5.	Volume-3, SCC, Page no. 12, 12.3 Bid Security,	Tender terms & conditions prevail.
	Document Fee and EMD are exempted for NSIC registered Firm.	prevan.
	As you are aware, to promote Micro Small & Medium Enterprise, Government of India had given the facility of NSIC Certification to the manufacturing firm. This may please be noted that this clause is only applicable for manufacturing of goods in India and not for procurement of Imported goods. If we go through the tender Specifications, there are imported items such OT Light, Pendant etc	
	We request this clause should be suitably amended so that NO Bidder could take undue advantage of NSIC Certification and all the bidders should be treated on single platform. This had been done in earlier HSCC Sangrur, Shimla & Raebareli Tenders.	
6.	Volume-III, Page no. 18 GCC Clause no. 21.0 Terms of Payment	Tender terms & conditions prevail.
	For purposes of estimating the contract value of works executed for certificate of payment, the following norms shall be followed:	
	1) 70% of the BOQ contract rates on delivery of equipments at site after inspection and passing on pro-data basis.	
	2) 20% of BOQ contract rates on satisfactory take over certificate by client after erection and installation, testing and commissioning of equipments on pro-data basis.	
	3) 10 % of BOQ contract rates after successful completion of trial run of 30 days from the date of handover to the client on pro-data basis.	
	We request, the payment terms should be amended as:	
	1) 75% of the BOQ contract rates on delivery of	

7.	equipments at site after inspection and passing on pro-data basis. 2) 20% of BOQ contract rates on satisfactory take over certificate by M/s HSCC after Installation. 3) 5% of BOQ contract rates after successful completion of trial run of 30 days from the date of handover to the client on pro-data basis. Please appreciate, as soon as the work order is received , the contractor has to initiate necessary actions for successful execution of the work order. Among the very important, Contractor need to place order to the respective suppliers along with 100% payment because supplier will not wait till the completion of the project. Here it is worthwhile to say that contractor do not get 75% payment as 5% amount gets hold for Security from Running Bill; 1% towards Labour Cess; 10% towards Performance Bank Guarantee, 12% towards GST & in case of delay in supply liquidated damages. After going through all this in the netshell a contractor gets approximately 50% amount at the initial stage. It is just a eye wash that 70% payment will be released on pro-rata basis. Initial payment is the lifeline to the contractors, which gives relief up to some extent. Volume-II, Page 18, GCC Clause 21.0 Insurance of Works and Contractor's Equipment & elsewhere in the tender The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 20.1 to 20.4, insure: We request, the insurance of works and contractor's equipment should be upto Final Acceptance Certificate (FAC) only. Please appreciate once all the BOQ Items are received, installed commissioned & tested before you/end	Tender terms & conditions prevail.
	Clause 20.1 to 20.4, insure: We request, the insurance of works and contractor's equipment should be upto Final Acceptance Certificate (FAC) only. Please	

	Acceptance Certificate only and not beyond it.	
8.	Common	Tender terms & conditions
		prevail.
	USFDA/European CE Certified with 4 digit	
	notified body number or American ETL/UL Listed.	
	Listed.	
	We understand these certification means Imported,	
	the place from where the goods are mined,	
	cultivated, grown, manufactured, produced or	
	processed and Outside India.	
	Accordingly the certification of the product applies	
	i.e. if it is UL Listed certification same shall be	
	applicable to American Manufacturer only and	
	European CE Certification same shall be	
	applicable to European Manufacturer only. We request this criteria should be strictly applied and	
	maintained.	
	It is further requested that the European CE	
	Certified/UL listed Criteria for NFPA-99	
	STANDARD OF ANY OTHER STANDARD	
	SHOULD BE "CERTIFICATION, WHEREVER APPLICABLE FOR ALL THE ITEMS of	
	MEDICAL GAS".	
9.	Page no. 2	The Manifold should be
		hydraulically tested > 3000
	1.2 Oxygen Manifold Supply System (without	psig".
	Cylinder) The Manifold should be hydraulically tested at	
	3500 psig.	
	1 0	
	Please note as per NFPA standard, Manifolds are	
	designed with a maximum inlet pressure of 3000	
	psig instead 3500 psig. You are requested to kindly amend the same and mention "The Manifold	
	should be hydraulically tested at 3000 psig". The	
	working pressure is 2000 LPM, we are giving 1.1/2	
	time more pressure.	
10.	Page no. 3	The Manifold should be
	1.3 Emergency Manifold Supply System (without	hydraulically tested > 3000 psig".
	Cylinder)	P. 5
	The Manifold should be hydraulically tested at	
	3500 psig.	
	Please note as per NFPA standard, Manifolds are	
	designed with a maximum inlet pressure of 3000	
	psig instead 3500 psig. You are requested to kindly	

amend the same and mention "The Manifold should be hydraulically tested at 3000 psig". The working pressure is 2000 LPM, we are giving 1.1/2 time more pressure.	
time more pressure.	
•	
Page no. 9	The Manifold should be hydraulically tested > 3000
2.2 Nitrous Oxide Manifold (without Cylinder)The Manifold should be hydraulically tested at3500 psig.	psig".
Please note as per NFPA standard, Manifolds are designed with a maximum inlet pressure of 3000 psig instead 3500 psig. You are requested to kindly amend the same and mention "The Manifold should be hydraulically tested at 3000 psig".	
Page no. 10	The Manifold should be
2.3 Emergency Nitrous Oxide Supply System (without Cylinder)The Manifold should be hydraulically tested at 3500 psig.	hydraulically tested > 3000 psig".
Please note as per NFPA standard, Manifolds are designed with a maximum inlet pressure of 3000 psig instead 3500 psig. You are requested to kindly amend the same and mention "The Manifold should be hydraulically tested at 3000 psig".	
Page no. 10	Variation of +/- 5% is
3. Medical and Surgical Air System (Package Unit- Imported)	accepted
- Variation of + 10% is missing	
Please appreciate throughout the worldwide , the Models and the Capacity (LPM) of Air System are Pre-Defined by Manufacturers. Air System is not manufactured as per the requirement. Based on the Pre-Defined Air System, the Models are selected as per the requirement. Like in M/s HSCC (India) Ltd. Tender no. HSCC/SES/ MGMS/ 2018 (IIT Kharagpur) Amendment no. IV dated 02.02.2018; Tender no. HSCC/SES/MGMS/PGI/ SANGRUR/ 2019 Dated 09.01.2019 (PGI Sangrur); Tender no. HSCC/SES/MGMS /SSB/Shimla/2019 Dated : 31.01.2019; Tender no. HSCC/SES/MGMS /AIIMS/Raebareli/2019 Dated : 29.03.2019 variation of +/- 10% is given & like wise and M/s HI L Tenders such as SIX AIIMS for MGPS etc. +	
	 3500 psig. Please note as per NFPA standard, Manifolds are designed with a maximum inlet pressure of 3000 psig instead 3500 psig. You are requested to kindly amend the same and mention "The Manifold should be hydraulically tested at 3000 psig". Page no. 10 2.3 Emergency Nitrous Oxide Supply System (without Cylinder) The Manifold should be hydraulically tested at 3500 psig. Please note as per NFPA standard, Manifolds are designed with a maximum inlet pressure of 3000 psig instead 3500 psig. You are requested to kindly amend the same and mention "The Manifold should be hydraulically tested at 3000 psig instead 3500 psig. You are requested to kindly amend the same and mention "The Manifold should be hydraulically tested at 3000 psig". Page no. 10 3. Medical and Surgical Air System (Package Unit - Imported) Variation of + 10% is missing Please appreciate throughout the worldwide , the Models and the Capacity (LPM) of Air System are Pre-Defined by Manufacturers. Air System is not manufactured as per the requirement. Based on the Pre-Defined Air System, the Models are selected as per the requirement. Like in M/s HSCC (India) Ltd. Tender no. HSCC/SES/MGMS/2018 (IIT Kharagpur) Amendment no. IV dated 02.02.2018; Tender no. HSCC/SES/MGMS/PGI/ SANGRUR/2019 Dated 09.01.2019 (PGI Sangrur); Tender no. HSCC/SES/MGMS/PGI/ SANGRUR/2019 Dated 09.01.2019 (Dated : 29.03.2019

	variation is mentioned for ease in procurement.	
	We therefore request, the Air Compressor plant capacity should be defined with variation of +/-10% and same should be as per Standard.	
14.	Page no. 11	Purity testing should be American Pharmacopeia/
	Stage 3: Bacteria filter for removing particles down to 0.01 micron.Purity should be tested as per the American Pharmacopeia / European Pharmacopeia standard	European Pharmacopeia/Third Party such as TUV/SGS/Lloyd etc,
	We request the testing should be American Pharmacopeia/European Pharmacopeia/Third Party such as TUV etc, which will be more appropriate.	
15.	 Page no. 12 3. Medical & Surgical Air System (Package Unit - Imported) 3.2 Vertifical Air Receiver Capacity shall be atleast 50% (+ 5%) 	The Air Receiver shall be at least 50% (+ 5%) of primary plant capacity or Should be as per standards as mentioned in the tendered specifications.
	The Medical & Surgical Vertical Air Receiver as per Tender Specifications is atleast 50% (+ 5%). Please recall Tender no. HSCC/SES/MGMS /SSB/Shimla/2019, wherein as per Amendment-II dated 08.03.2019, it is mentioned "Should be as per corresponding standards quoted by the bidder'- The capacity shall be as per NFPA 99/HTM 02 01/ISO- 7396-1/EN/ DIN standards". The same is done AIIMS Jai Prakash Narayan Apex Trauma Center Medical Gas Pipeline tender, AIIMS Nagpur, Kalyani, Guntur.	
	We therefore request the Vertical Air Receiver Capacity should be as per standard.	
16.	Page no. 13	Variation of +/- 5% is accepted.
	4. VACUUM SYSTEMS (Package unit – imported)	
	- Variation of + 10% is missing	
	Please appreciate throughout the worldwide, the Models and the Capacity (LPM) of Vacuum System are Pre-Defined by Manufacturers. Vacuum System is not manufactured as per the requirement. Based on the Pre-Defined Vacuum System, the Models are selected as per the	

	requirement. Like in M/s HSCC (India) Ltd. Tender no. HSCC/SES/MGMS/2018 Amendment no. IV dated 02.02.2018 (IIT Kharagpur); Tender no. HSCC/SES/MGMS /SSB/Shimla/2019 Dated : 31.01.2019; Tender no. HSCC/SES/MGMS /AIIMS/Raebareli/ 2019 Dated : 29.03.2019 variation of +/- 10% is given and M/s HLL such as SIX AIIMS Tender no. HLL/PCD/ PMSSY/AIIMS-III/14-RT-01/15-16 dated 31.12.2015 for MGPS etc, +/- 10% variation is given. This +/- 10% variation is mentioned for ease in procurement.	
	We therefore request, the Vacuum plant capacity should be defined with variation of $+$ 10% and same should be as per Standard.	
17.	Page no. 13 4. VACUUM SYSTEMS (Package unit – imported) 4.4 Bacterial Filters	Should be as per standard as mentioned in the tender document.
	Bacteria Filters does not come in NFPA-99 Standard. The Bacteria Filter is in built in the vacuum system. Bacteria Filters comes in HTM Standard. We therefore request to kindly take a note of it and issue necessary amendment.	
18.	Page no. 13 4. Vacuum System 4.2 Vertifical Receiver Capacity shall be atleast 50% (+ 5%)	Tender terms & conditions prevail.
	The Vacuum Receiver as per Tender Specifications is atleast 100% (+ 5%) of primary plant capacity. Please recall Tender no. HSCC/SES/MGMS /SSB/Shimla/2019, wherein as per Amendment-II dated 08.03.2019, it is mentioned "Should be as per corresponding standards quoted by the bidder'- The capacity shall be as per NFPA 99/HTM 02 01/ISO- 7396-1/EN/ DIN standards". The same is done AIIMS Jai Prakash Narayan Apex Trauma Center Medical Gas Pipeline tender.	
19.	We therefore request the Vertical Air Receiver Capacity should be as per standard. Page no. 15, 16	Tender terms & conditions
	8. DISTRIBUTION PIPING8.1 Piping specifications	prevail.

	We request the Medical Grade Copper Pipe should be Kite Mark. Here, Lloyd is 3rd party Inspection Agency whereas Kite Mark product and service quality certification mark which is owned and operated by the British Standards (BSI Group). It is a voluntary mark of manufacturers and service industries use to demonstrate safety and reliability. The product has been proven to meet the agreed high standard. We therefore request Copper Pipe should be kite marked.	
20.	Page no. 17	Should be as per standard as
	11. AREA VALVE SERVICE UNIT : The Area Valve Service Unit should incorporate a ball valve with NIST/else connectors either side mounted in a lockable box with emergency access.	mentioned in the tendered specifications.
	The NIST Connection as mention is as per HTM	
	Standard. We work on the Principals of NFPA-99	
	Standard, where no NIST connection is applicable.	
	We therefore request NIST Connection should be deleted.	
21.	Page no. 18	Should be as per standard as
	12.1 Master Alarm System The emissions from alarms should conform with EMC standard	mentioned in the tendered specifications
	We work on the principals of NFPA-99 standard where EMC Standard is not applicable. This standard may be applicable to HTM Standard. Therefore we request you to please delete.	
22.	Page no. 19 & 20	All Bed Head Panels shall
		be horizontal.
	16. Horizontal/ Vertical Bed Head Panel	
	Kindly clarify the no. of Horizontal and no. of Vertical Bed Head Panel required as there is	
	costing involved in it.	
23.	Page no. 18, 19	The Alarm should be Touch typed/ LCD type with Display
	12. Alarm System12.2 Medical Gas Area Alarm	size of minimum 10".
	We request the Alarm System should be Touch Type Alarm Technology – Please refer to the Tender no. HITES/PCD/AIIMS-IV/14/MGPS/18- 19 dated 14.02.2019 for New AIIMS Gorakhpur	

	and Bhatinda under PMSSY Phase-IV & V and	
	Tender no. HITES/PCD/ PMSSY-	
	IV/02/MGPS/18-19 dated 14.02.2019 for 7	
	Medical Colleges /Institutions getting upgraded	
	under PMSSY Phase-IV; where in it is clearly	
	defined DIGITAL.	
24.	Page no. 24	Tender terms & conditions
		prevail.
	Bidder shall execute all required civil, electrical,	1
	plumbing, lighting, fire safety, exhaust systems,	
	false ceiling trap door/ cutout and repair(if any)	
	and other works as may be required for complete	
	installation and trouble-free functioning as a part	
	of the 'Civil Modification'.	
	It is requested to Please elaborate all required civil,	
	electrical, plumbing, lighting, fire safety, exhaust	
	systems, false ceiling trap door/ cutout and repair	
	(if any) and other works as maybe required for	
	complete installation. Please specify the areas	
	where these work has to be executed. Please	
	mention quantity of all additional work required to	
	be carried out by MGPS Vendor in tender BOQ	
25		The Medical Cas Directine
25.	Page no. 25	The Medical Gas Pipe Line
		System must follow Single
	12. The Medical Gas Pipe Line System must	Standard any one only from:
	follow Single Standard any one only from:	NFPA 99c/HTM02-01/ ISO
	NFPA 99c/HTM02-01/ ISO 7396-1/DIN/EN.	7396-1/DIN/EN except
		accessories.
	As mentioned the products should of one standard	
	-	
	only; kindly note rest of the medical gas items are	
	Engineering Products. Items such as Ward Vaccum	
	Unit, Theatre Vaccum Unit, Flowmeter with	
	Humidifier bottle are Accessories and are not part	
	of Medical Gas Pipeline System. The Standard	
	applies from Pipe Distribution to Gas Outlets	
	Worldwide and all the Companies, adopts this	
	methodology.	
26.	Page no. 26	Tender terms & conditions
		prevail.
	15. The following systems/items must be from the	
	same principal company/Manufacturer:	
	a. Control Panels & Manifold for O2, N2O & CO2	
	b. Medical Air plant	
	-	
	c. Medical Vacuum Plant	
	d. AGSS Plant	
	e. Area & Master Alarm	
	f. All types Outlets	
	g. AVSU	
	0	

	h. Line Isolation valves	
	i. High Pressure tubes	
	As per clause 15, 09 items should be from same	
	manufacturer. It is requested that these items	
	should be as per same standard.	
	should be as per same standard.	
	This is totally resulting in restricting the	
	This is totally resulting in restricting the	
	competition so it should be deleted . The tenders	
	from AIIMS [Copy enclosed of recently evaluated	
	& AIIMS MGMS Jai Prakash Narayan, Delhi at	
	Page 6], Ministry of Health and Family Welfare,	
	M/s HSCC (India) Ltd. one of the biggest	
	procurement agency, such a Clause of same	
	principal is never there. We are also referring M/s	
	NBCC, UPRNN, PWD Haryana, Municipal	
	Corporation of Greater Mumbai etc. this clause is	
	-	
	never there in any Tenders. You can mention that	
	Air Compressor, Vacuum System Components	
	such as Plant, Control Panel, Tank, Filter from	
	Single Source, otherwise it will lead to restrictions	
	for bidders, so please, it is requested that it should	
	be deleted.	
	Secondly, please appreciate worldwide, NO Single	
	Manufacturer, Manufactures Complete Medical	
	Gas Items. One Manufacturer Specialize in Certain	
	Medical Gas Items and Second Manufacturer	
	Specialize in other Medical Gas Items; by	
	Combining together, a bidder supply the Complete	
	Medical Gas Items as per Standard. The same	
	applies in other Medical Equipments.	
27.	For your kind information, as soon as we will send	Tender terms & conditions
	the MAF, to our foreign principal, he will straight	prevail.
	away refuse to provide the same as they do no	
	manufacture all the items. Out of the 10 items,	
	some of these are sourced items from other	
	manufacturers. The sourced items will not have	
	European CE/UL Certified in the name of same	
	manufacturer. You are well aware that that these	
	things contradicts each other and are wrong. Please	
	5	
	appreciate, No foreign principal will share any	
	other kind of documentation to correlates the	
	things. No other manufacture will issue certificate	
	which contradicts with the Certification of these 10	
	items. Even if any bidder submit MAF from	
	Foreign Principal for the desired 10 items, at the	
	time of evaluation of the tender, will fails to	
	provide the European CE/UL/ETL certification,	
	because those certification belongs to other	
	occause mose contineation belongs to other	

	principal not principal manufacturer and will get straight away rejected or will be asked to provide the documents as per tender terms, which the bidder will not be able to provide. Keeping in view all these constraints M/s HITES in PMSSY-Phase- III Tender for Hospitals Getting Upgraded changed the Criteria through Clarification. Same is enclosed herewith at Page no. 7 ; AIIMS JPNATC deleted this criteria through corrigendum. Same is enclosed herewith at Page no. 6.	
28.	We also like to draw your kind attention that added Para "Certain items should be from the same manufacturer" will have cost implications. As you have mentioned in Paragraph of "Same principal company/Manufacturer"; you are very well aware that no one is manufacturer for all the 09 items. The principal company will procure equipments from original manufacturer thereby the Principal will add his margin and the bidder will add his margin. In this way the cost of item will escalate.	Tender terms & conditions prevail.
29.	Sir, we have tried and explain the above from our years of experience. This clause is Added to restrict other bidders, in other words monopolistic. The criteria should be liberal enough so that equal opportunity for all bidders should be there, which results in more participation and ultimately better pricing to the Ex-Chequer. Also, we have never come across or nowhere in the CVC Guidelines or Govt. of India Procurement Policy, it is mentioned that all items should be from same principal. We have executed/ completed Super Speciality Safdarjung Medical Gas Pipeline Project and are presently executing PMSSY MGPS Projects in various hospitals in India, but never came across such clause. In one way Govt. of India is asking for Competitive pricing & equal opportunity to all and in other way restricting the bidder to submit competitive price.	Tender terms & conditions prevail.
	Therefore we strongly suggest that the Medical Gas Pipeline System must follow Single Standard; same is Understandable and acceptable. We therefore request you to kindly DELETE the para "Following systems/items must be from the same principal company/manufacturer".	
30.		
31.	Vol 4 - Technical Specifications, Page 2, Para 1.2 Oxygen Manifold Supply System (without	Tender terms & conditions prevail.

	Calin dam).	
	Cylinders): Oxygen Manifold should consist of 2 row/s of respective numbers of class D-type bulk oxygen cylinders.	
	The Standard configuration of Manifolds available with most of the leading manufacturers are of Single (1) Row. Therefore we request you to amend the sentence as; Oxygen Manifold should consist of 2/1 row/s of respective numbers of class D-type bulk oxygen cylinders.	
	In addition to this, and for enhancing safety of the manifold system, we suggest that you should demand that the manifold system should not contain any Halogenated Polymer materials and necessary certificates to be provided.	Manifold system should not contain any Halogenated Polymer materials and necessary certificates to be provided.
32.	Vol 4 - Technical Specifications, Page 2, Para 1.2 Oxygen Manifold Supply System (without	Should be as per standards as mentioned in the tendered specification.
	Cylinders): Header bar/s assembly shall be provided with a high pressure shut off valve.	specification.
	It may be noted that HTM or ISO Standards doesnot permit the use of Shut Off Valves on the Headers.	
	Moreover, if any Shut Off Valve are provided on Manifold Header, then the same will not be compliant / satisfying the requirement of HTM / ISO Standards.	
	Hence, we request you to delete the sentence: Header bar/s assembly shall be provided with a high pressure shut off valve.	
33.	Vol 4 - Technical Specifications, Page 2, Para 1.2	The Manifold should be hydraulically tested > 3000
	Oxygen Manifold Supply System (without Cylinders): The manifold should be hydraulically tested to 3500 psig or as per standard.	psig".
	In India, the general practise is that the medical gas manifolds are tested at a minimum pressure of 3500 psig. This is inherent and can be verified in many of the earlier tenders floated by HSCC as well.	

		1
	Accepting of any manifold which are tested below 3500 psig is actually diluting the safety standards and requirement, and thereby increasing the risk of untoward incidents happening. We therefore request you to maintain the requirement of manifold hydraulically tested to minimum 3500 psig, and delete the wordings or as per standard.	
34.	 Vol 4 - Technical Specifications, Page 3, Para 1.3 Emergency Oxygen Manifold (without Cylinders): The manifold should be hydraulically tested to 3500 psig or as per standard to be followed. In India, the general practise is that the medical gas manifolds are tested at a minimum pressure of 3500 psig. This is inherent and can be verified in many of the earlier tenders floated by HSCC as well. Accepting of any manifold which are tested below 3500 psig is actually diluting the safety standards and requirement, and thereby increasing the risk of untoward incidents happening. We therefore request you to maintain the requirement of manifold hydraulically tested to minimum 3500 psig, and delete the wordings or as per standard. 	The Manifold should be hydraulically tested > 3000 psig".
35.	Vol 4 - Technical Specifications, Page 3, Para 1.3 Emergency Oxygen Manifold (without Cylinders): Please confirm if any Pr Regulating arrangement is required to be offered along with the Emergency Oxygen Manifold? If YES, what is the flow capacity & other technical requirement?	Tender terms & conditions prevail.
36.	Vol 4 - Technical Specifications, Page 10, Para 2.2 Nitrous Oxide Manifold (Without Cylinders) Header bar/s assembly shall be provided with a high pressure shut off valve. It may be noted that HTM or ISO Standards does not permit the use of Shut Off Valves on the Headers. Moreover, if any Shut Off Valve are provided on Manifold Header, then the same will not be compliant / satisfying the requirement of HTM / ISO Standards.	Should be as per standards as mentioned in the tendered specification.

	Hence, we request you to delete the sentence: Header bar/s assembly shall be provided with a high pressure shut off valve.	
37.		The Manifold should be hydraulically tested > 3000 psig".
	In India, the general practise is that the medical gas manifolds are tested at a minimum pressure of 3500 psig. This is inherent and can be verified in many of the earlier tenders floated by HSCC as well.	
	Accepting of any manifold which are tested below 3500 psig is actually diluting the safety standards and requirement, and thereby increasing the risk of untoward incidents happening. We therefore request you to maintain the	
	requirement of manifold hydraulically tested to minimum 3500 psig, and delete the wordings or as per standard.	
38.	Vol 4 - Technical Specifications, Page 10, Para 2.2 Emergency N2O Manifold (Without Cylinders) Each header bar assembly shall be provided with a	Should be as per standards as mentioned in the tendered specification.
	high pressure shut off valve. It may be noted that HTM or ISO Standards doesnot permit the use of Shut Off Valves on the Headers. Moreover, if any Shut Off Valve are provided on Manifold Header, then the same will not be compliant / satisfying the requirement of HTM / ISO Standards. Hence, we request you to delete the sentence: Header bar/s assembly shall be provided with a high pressure shut off valve.	
39.	Vol 4 - Technical Specifications, Page 11, Para 3.1 MEDICAL AND SURGICAL AIR SYSTEM : The medical air plant shall fully comply with the requirements of the HTM 02-01/ NFPA 99C/EN/DIN/ISO 7396-1. It should be BIS/US FDA/European CE certified with 4 digit notified body number or American ETL/ UL listed(In-case of NFPA 99c the control panel of plant must be UL Listed and Undertaking from manufacturer for this tender reference must be submitted for using the same control panel in the	Tender terms & conditions prevail.

	system offered)	
	system onered)	
	It is observed that fair comparison is not happening	
	between HTM / ISO Products Versus NFPA	
	Products. Needless to say the HTM & ISO	
	products have better quality & redundancy factors	
	incorporated, which is much safer for the patients	
	and end users.	
	On the one hand for HTM & ISO Plants, while you	
	are seeking for the very stringent 4 digit notified	
	body number CE Certification with	
	MDD/93/42/EEC for the entire packaged plant,	
	and on the other hand for NFPA based plants you	
	are just asking for the UL/ETL listing only for the	
	Control Panel.	
	By the common voice expressed by various NFPA	
	suppliers, it is being accepted by HSCC that UL	
	Listing is generally issued only for Electrical Parts	
	/ components. In that case, we fail to understand	
	how the NFPA bidders are able to supply UL	
	Listing certificates for Gas Terminal units etc,	
	where in there is no visible electrical component /	
	part involved. Kindly clarify and look into this	
	grave matter.	
	Another major issue is that, some of the NFPA	
	Vendors are just importing only the Electrical	
	Control Panel from their principal Suppliers, and	
	procuring and assembling rest of the plant locally	
	which comprises major and critical items like Air	
	Compressors / Vacuum Pumps, Receivers,	
	Breathing & Filteration Units, Bacteria	
	Filterations, various Valves, Pressure Switches &	
	Piping etc. We request you to kindly look into this	
	grave matter and incorporate checks and measures	
	to ensure that fully packaged skid plants from the	
	Principal Manufacturer are only supplied by the	
	bidders. You may probably ask the bidders to	
	provide Country of Origin documents, Shipping	
	details etc. Also, we would strictly recommend that	
	you should arrange for thorough checking /	
	inspection of recently supplied plants of the	
	previous project tenders, to ensure compliance.	
40.	Vol 4 - Technical Specifications, Page 11, Para 3.1	Tender terms & conditions
		prevail.
	MEDICAL AND SURGICAL AIR SYSTEM :	
	Air Compressor Modules:	
	It should be Oil-Less Screw Compressors /Scroll	
	Compressors to produce the plant output as	
	mentioned in BOQ as primary and same as	
	standby.	

	HTM & ISO Standards permit use of Oil injected	
	Air Screw Compressors for Medical & Surgical Air.	
	It may be noted that Lubricated Screw	
	Compressors are very economical in terms of	
	initial investment and also maintenance and	
	lifetime cost compared to oilless scroll / screw. This type of Air Compressors are installed all over	
	the world in major hospitals.	
	Also, it is to be noted that a Scroll technology is	
	not a very good choice for 10 Bar plant	
	requirement.	
	Hence, we request you to include oil injected	
4.1	screw compressors in the specifications.	
41.	Vol 4 - Technical Specifications, Page 11, Para 3.1	Tender terms & conditions
	Pressure Reducing Station:	prevail.
	Padlocks available to allow locking of the valves in	
	both open and closed positions and must have easy	
	to read pressure gauges or as per guideline of	
	standard to be followed.	
	We fail to understand why padlocks are required to	
	be provided in the Pressure reducing Station?	
	Please note that this appears to be a particular	
	make specific. Hence, we request you to delete the requirement of	
	padlocks for the valves.	
42.	Vol 4 - Technical Specifications, Page 12, Para 3.2	Tender terms & conditions
		prevail.
	Vertical Air Receiver:	
	Total air receiver capacity shall be at least 50% (\pm 5%) of the minimum plant consists mentioned in the	
	5%) of the primary plant capacity mentioned in the BOQ) in 1 minute in terms of free air delivered at	
	normal working pressure or as per standard.	
	or	
	Our submission is that, for fair evaluation and	
	comparison of bidders of various standards and for	
	parity purposes, the minimum capacity of the Air	
	Reciever should be specified, which should be complied by bidders for all standards.	
	If an open ended statement like as per standard is	
	mentioned, then this would be a huge disdvantage	
	for HTM / ISO eqpt suppliers.	
	Contrarily, it may be noted that, NFPA doesnot	
	have any guideline on sizing the capacity of Air	
	Receivers. It has been left to the discretion of manufacturers.	
	It has been observed that Medical Air Systems of	
	it has been boser ved that Medical All Systems of	

	NFPA Standards are usually supplied with a small capacity Air Receivers. Hence, to avoid this ambiguity, we suggest that minimum capacity of Air Receiver is clearly specified in the amended tender specs, and which should be followed by all bidders.	
43.	Vol 4 - Technical Specifications, Page 12, Para 3.4 System Controls: The cabinet shall have status display to include system pressure, dew point pump operation, accumulated time, maintenance interval, fault conditions, and silence button, lighted Hand-Off- Automatic selector switches	System controls be offerred as per the requirement of the standard.
	It appears that the specification is of a particular make and standard. We request you to delete the words silence button, lighted Hand-Off-Automatic selector switches. Further, it is suggested that this be amended as : System controls be offerred as per the requirement of the standard.	
44.	Vol 4 - Technical Specifications, Page 13, Para 4.2 Vacuum Receiver: Vacuum reservoir shall have total volume of at least 100 % of Primary plant output(± 5%) (Capacity as mentioned in the BOQ) or as per standard in one minute in terms of free air aspired at normal working pressure.	Tender terms & conditions prevail.
	Our submission is that, for fair evaluation and comparison of bidders of various standards and for parity purposes, the minimum capacity of the Vacuum Reciever should be specified, which should be complied by bidders for all standards. If an open ended statement like as per standard is mentioned, then this would be a huge disdvantage for HTM / ISO eqpt suppliers. Contrarily, it may be noted that, NFPA doesnot have any guideline on sizing the capacity of Vacuum Receivers. It has been left to the discretion of manufacturers. It has been observed that Medical Vacuum Systems of NFPA Standards are usually supplied with a small capacity Vacuum Receivers. Hence, to avoid this ambiguity, we suggest that minimum capacity of Vacuum Receiver is clearly specified in the amended tender specs, and which should be followed by all bidders.	

45.	Vol 4 - Technical Specifications, Page 14, Para 4.3	System controls be offerred
	System Controls: The cabinet shall have status display to include system pressure, dew point pump operation, accumulated time, maintenance interval, fault conditions, and silence button, lighted Hand-Off- Automatic selector switches	as per the requirement of the standard.
	It appears that the specification is of a particular make and standard.	
	We request you to delete the words silence button, lighted Hand-Off-Automatic selector switches. Further, it is suggested that this be amended as : System controls be offerred as per the requirement of the standard.	
46.	Vol 4 - Technical Specifications, Page 14, Para 4.4 Bacterial Filters:	Tender terms & conditions prevail.
	The dryer should be particulate filter dryer with ability to remove particles as small as 1 micron.	
	The wordings dryer appears to be a typo error. Please clarify and issue necessary amendments.	
47.	Vol 4 - Technical Specifications, Page 14, Para 5	Tender terms & conditions prevail.
	Ward Vacuum Units: Digital Suction Regulator: Suction regulator should be supplied with a safety jar, including and antibacterial filter and an anti-overflow safety device.	
	The standard practise is Analog Suction Regulators. Even in your recent tenders for 3 AIIMS (Nagpur Kalyani & Guntur) you have asked for Digital / Analogue Suction Regulators. Hence we request you to amend the sentences as Digital / Analogue Suction Regulator.	
48.	Vol 4 - Technical Specifications, Page 15, Para 7	Tender terms & conditions prevail.
	Theatre Vacuum unit for OT: Digital Suction Regulator: Suction regulator should be supplied with a safety jar, including an anti-bacterial filter and an anti-overflow safety device	Pro tun.
	The standard practise is Analog Suction Regulators. Even in your recent tenders for 3 AIIMS (Nagpur Kalyani & Guntur) you have asked for Digital / Analogue Suction Regulators.	

	Hence we request you to amend the sentences as	
	Digital / Analogue Suction Regulator.	
49.	Vol 4 - Technical Specifications, Page 15, Para 8	Tender terms & conditions prevail.
	AGSS (Anesthetic Gas Scavenging System) Plant:	providin
	The package should consist of two dry rotary	
	vane/Claw type vacuum pumps (Dry/Oiless) or as	
	per guideline of standard to be followed,	
	As per HTM & ISO Standards, the Blower type	
	Pumps are normally used in the AGSS System.	
50	Please confirm if this is acceptable.	
50.	Vol 4 - Technical Specifications, Page 15, Para 8	Tender terms & conditions prevail.
	AGSS (Anesthetic Gas Scavenging System) Plant:	
	Connecting hose suitable to fit with anaesthesia workstation should be provided.	
	Please provide the Qtys of Connecting Hoses	
	required for the Anaesthesia Workstations and	
	their Technical Specs.	
	Ideally, the connecting hoses are supplied by the	
	respective Anaesthesia Workstation Suppliers, and	
	therefore can be deleted from the tender specs.	
51.	Vol 4 - Technical Specifications, Page 17, Para 11	Tender terms & conditions prevail.
	AREA VALVE SERVICE UNIT:	
	The Area Valve Service Unit should incorporate a	
	ball valve with NIST/else connectors either side	
	mounted in a lockable box with emergency access	
	or as per guideline of standard to be followed.	
	Please confirm if the AVSU is required to be	
	supplied along with ball Valves? If yes, specify the	
	valve sizes configuration required in each of the	
	AVSU models 2 gas - 6 gas services.	
52.	Vol 4 - Technical Specifications, Page 17, Para 11	Tender terms & conditions prevail.
	AREA VALVE SERVICE UNIT:	*
	The Area Valve Service Unit should incorporate a	
	ball valve with NIST/else connectors either side	
	mounted in a lockable box with emergency access.	
	Our submission is that, for fair evaluation and	
	comparison of bidders of various standards and for	
	parity purposes, and also for the Safety and backup	
	arrangement and continuity of gas supplies of the	
	MGPS, the NIST is a very critical requirement for	
	AVSU, which should be complied by bidders for	
	all standards.	

	If an open ended statement like with NIST / else	
	connectors is mentioned, then this would be a huge	
	disdvantage for HTM / ISO eqpt suppliers. Just	
	providing connectors would be not sufficient and	
	shall risky as there would high chances of	
	interconnections due to interchangeability issues.	
	The NIST should be madatory to prevent	
	accidents.	
	Contrarily, it may be noted that, NFPA doesnot	
	categorically mention about the requirement of	
	NIST. However, the Isolation Valves as per NFPA	
	Mandates to have provisions for inlet ports on the	
	pipe extensions, wherein the NIST connectors can	
	be fixed.	
	Hence, to avoid this ambiguity, we suggest that	
	NIST Connectors are mandatory is clearly	
	specified in the amended tender specs, and which	
	should be followed by all bidders.	
53.	Vol 4 - Technical Specifications, Page 17, Para 11	Powder coated
		Aluminium/Steel
	AREA VALVE SERVICE UNIT:	i Hummuni, Steel
	The box shall be made from extruded aluminium to	
	prevent corrosion or as per standard.	
	It may be noted that the AVSU Day manufactured	
	It may be noted that the AVSU Box manufactured	
	by all major suppliers is made of Steel and powder	
	coated etc to prevent corrossion.	
	Hence, we request you to kindly delete the	
	wordings extruded aluminium from the tender	
	specs and instead add Steel powder coated.	
54.	Vol 4 - Technical Specifications, Page 18, Para	Tender terms & conditions
	12.1	prevail.
	Master Alarm :	
	The master alarms should be capable to monitor	
	minimum 40 Point.	
	Bidder shall be responsible for all cabling from	
	local alarm panels to master alarm panel.	
	1 ····································	
	Please confirm if all the Area Alarms are required	
	to be connected with the Master Alarm Panel by	
	providing cabling? If Yes, then the Size of Master	
	Alarm Panel is not sufficient, as it has provision to	
	connect only 30-40 points.	
	• •	
~ ~	Whereas, the total number of AVSU is 53 Nos.	
55.	Vol 4 - Technical Specifications, Page 19, Para	Tender terms & conditions
	12.2	prevail.
	Medical Gas Area Alarm:	
	The medical gas central alarms should be capable	

	of monitoring up to 5 medical gas services (As specified in BOQ)	
	It appears the central mentioned in the tender specs is a typo error. Please clarify.	
	Also, the 5 medical gas services mentioned in the specs is not correct, as the BOQ mentions upto 6	
	medical gas services. Please clarify.	
56.	Vol 4 - Technical Specifications, Page 22, Para 13b	Tender terms & conditions prevail.
	Manufacturer Authorization:	
	This is a limiting clause and appears to be favoring few companies only and which may restrict competition to a few bidders only. You are requested to delete the requirement of Manufacturers Authorisation Certificates. By getting committed to a particular manufacturer while quoting, the bidders lose their ability to negotiate better prices and terms at the time of supply and also quite often are restricted to the products of the particular manufacturer despite better products becoming available from other manufacturers while the tender is still under consideration of the tenderer. This requirement is	
	inviting cartelisation because local / indian representatives of particular foreign manufacturers have got their specification incorporated in the major tender and the leading bidder will have their supporting bidders. Moreover, it may be noted that the requirement of Manufacturers Authorisation Certificate is against the CCI Act 2012.	
57.	Vol 4 - Technical Specifications, Page 24,	Tender terms & conditions prevail.
	Responsibility of bidder:	
	5. Rota meters for measurement of consumption of Oxygen and Compressed air	
	To enable fair evaluation and parity among all bidders, Please provide Technical Specs for the Rotameters. Also, request you to include this in the line item of the BOQ, as this is a major item.	
58.	Vol 4 - Technical Specifications, Page 27, Para 15	Tender terms & conditions prevail.
	The following systems/items must be from the same principal company/Manufacturer: a. Control Panels & Manifold for O2, N2O & CO2	

[]		
	b. Medical air plant	
	c. Medical Vacuum Plant	
	d. AGSS Plant	
	e. Area & Master Alarm	
	f. All types Outlets	
	g. AVSU	
	h. Line Isolation valves	
	i. High Pressure tubes	
	We request you to kindly delete the sentence The	
	following systems/items must be from the same	
	principal company/Manufacturer:, and allow the	
	bidders to select the best possible supplier option,	
	as long as all the MGPS Products being offered are	
	from the same single MGPS Standard and Quality	
	assurance is ensured by providing CE / UL	
	certificates.	
	It may be kindly noted that there are only a few	
	and limited suppliers worldwide who manufacture	
	(or outsource) all the MGPS products.	
	On the other hand, there are certain manufacturers	
	who are having exceptionally good experience and	
	reputation in their respective domain like	
	supplying MGPS Plant Source Equipments	
	(Medical Air Plant, Vacuum & AGSS Plants), and	
	there are other's who can offer exceptionally good	
	quality MGPS Distribution System Equipment and	
	similarly for Architectural Systems (Bed Head	
	panels etc), SOT Products (Oxygen Flowmeter,	
	Ward Vacuum Units, Theatre Vacuum Units etc).	
	Linde shall take the single point responsibility for	
	all the equipment supplied by the respective OEM	
	Suppliers, and shall be fully responsible for the	
	complete installation and during warranty and	
	CMC Periods.	
59.	Vol 4 - Technical Specifications, Page 27, Para 15	Tender terms & conditions
57.	, or a reenhear specifications, I age 27, I and 15	prevail.
	The following systems liters must be from the	provan.
	The following systems/items must be from the	
	same principal company/Manufacturer:	
	We request you to bindly provide detailed	
	We request you to kindly provide detailed	
	definition of the words Principal Company &	
	Manuafacturer.	
	Is there any difference in these, if yes kindly	
	provide the definition.	
60.	Vol 4 - Technical Specifications, Page 26, Para 23	Tender terms & conditions
		prevail.
	Inter connection to Manifolds with LMO tank with	-
	necessary automatic switchover panels between	
	LMO & Manifold will be up to responsibility of	
	Listo a manifola min de ap to responsionity of	

	hidder unto 100m distance	
	bidder upto 100m distance.	
	We requset you to provide drawings of the site to	
	identify the location of proposed LMO system and	
	the location of Manifold Room, to enable ascertain	
	the distance, routing and cost estimation.	
61.	Vol 3 - SCC, Page 35,	After provisional taking
011	, or <i>b</i> = <i>b</i> = 0, <i>r</i> u <u>b</u> = <i>b</i> = 0,	over, the contractor shall
	After provisional taking over, the contractor shall	provide 5 years warranty
	provide operation and maintenance services for the	and 5 years CMC
	complete MEDICAL GAS MANIFOLD SYSTEM	
	EQUIPMENT till the successful completion of	
	Defect Liability Period.	
	Derect Encounty Ferrod.	
	Please clarify the meaning of Operation. Will the	
	bidder have to provide manpower at site? If Yes,	
	how many in each shift etc?	
	The BOQ file does not have relevant areas to	
	provide the Operation Cost. Please amend the	
	BOQ file, if this scope of work is required to be	
	provided.	
62.	Vol 3 - SCC, Page 49,	Tender terms & conditions
		prevail.
	MANUFACTURER'S AUTHORIZATION	
	FORM:	
	Dear Sir,	
	Tender No	
	We who are established and reputed manufacturer	
	of (name & description of goods	
	offered) having factories at (address of factory) do	
	hereby authorize M/s (Name & address of agent)	
	which has been our dealer/distributor since, to	
	submit a bid, and sign	
	the contract with you for the goods manufactured	
	by us against the above tender.	
	No company or firm or individual other than M/s	
	are authorized to bid and conclude the contract for	
	goods manufactured by us against this	
	specific tender.	
	We hereby extend our full guarantee and defect	
	liability period as per the clause of	
	Condition of Contract and Additional Specific	
	Conditions of Contract of above tender for	
	goods and services offered for supply by our	
	authorized firm .	
	To enable the Principal Company to provide	
	authorisation, we request you to amend the format	
	as:	
1	MANUFACTURER'S / PRINCIPAL	

	COMPANY'S AUTHORIZATION FORM:	
	Dear Sir,	
	Tender No	
	We who are established and reputed manufacturer /	
	Supplier	
	of (name & description of goods	
	offered) having factories at (address of factory) do	
	hereby authorize M/s (Name & address of agent)	
	which has been our dealer/distributor since, to	
	submit a bid, and sign the contract with you for the	
	goods manufactured / supplied by us against the	
	above tender.	
	No company or firm or individual other than M/s	
	are	
	authorized to bid and conclude the contract for	
	goods manufactured / supplied by us against this	
	specific tender.	
	We hereby extend our full guarantee and defect	
	liability period as per the clause of Condition of	
	Contract and Additional Specific Conditions of	
	Contract of above tender for goods and services	
	offered for supply by our authorized firm .	
63.	Vol 1- Page 3	Tender terms & conditions
05.	v 01 1- 1 age 5	prevail.
	Pariod of work completion 4 Months	prevan.
	Period of work completion – 4 Months	
	Considering the buge questum of work and	
	Considering the huge quantum of work and	
	imported equipment which needs to be arranged,	
	we request you to kindly amend the work	
<i>c</i> 1	completion time to minimum 8 Months	
64.	Vol-III, Special Conditions of Contract, Page No.	Tender terms & conditions
	SCC-, Clause 39.2.4, Page 25	prevail.
	Water Supply & Power Supply:	
	The contractor will provide water & electricity to	
	the Consultant's office free of cost for the required	
	quantity by the Consultant's site office.	
	MGPS Works require very less electrical power	
	and water for construction purposes.	
	We request to delete the sentence: The contractor	
	will provide water & electricity to the Consultant's	
	office free of cost for the required quantity by the	
	Consultant's site office.	
65.	Vol-II, General Conditions of Contract, Clause	Tender terms & conditions
	47.1 & Annexure-B (Appendix To Tender), Page	prevail.
	38 & 71	F-2. min
	50 W / 1	
	Liquidated Damages for Delay:	
	Amount of Liquidated damages : 1% (one percent)	
	ranount of Equivaled Gamages . 170 (one percent)	

		1
	of contract price per calender week of delay	
	Limit of liquidated damages : 10% (Ten percent)	
	of contract price.	
	of contract price.	
	Please consider the aggregate maximum of	
	liquidated damages payable under clause No. 47.1	
	shall not exceed 0.5% of contract value per week	
	of delay and shall be subjected to maximum	
	amount of 5% on overall contract price.	
66.	General Point	Tender terms & conditions
		prevail.
	Release of Final 10% Payment	
	•	
	After completion of installation works, if the	
	Commissioning / Trial Run of the MGMS system is	
	delayed for more than 3 months due to reasons	
	not attributable to Contractor, then the final 10%	
	payment should be released without any further	
	delay against submission of Bank Guarantee.	
	Please confirm acceptance of this.	
67.	General Point	Tender terms & conditions
		prevail.
	DLP Period Start Date	
	DEI Tenod Start Date	
	After completion of installation works, if the	
	After completion of installation works, if the	
	Commisioning / Trial run of the MGMS system is	
	delayed for more than 3 months due to reasons not	
	attributable to Contractor, then DLP period start	
	date would be considered from that date. Please	
	confirm acceptance of this.	
68.	General Point	Tender terms & conditions
		prevail.
	Customs Duty	
	Customs Duty	
	Diagon confirm quetomo duty is under sustemor or	
	Please confirm customs duty is under customer or	
	bidders scope.	
	Also confirm the applicable rate of customs duty	
	for the job.	
	Also confirm if CDEC (Customs Duty Exemption	
	Certificate) would be issued by customer. If Yes,	
	what would be the rate of Customs Duty	
	exemption.	
69.	General Point	Tender terms & conditions
09.		
	Statutory Dution	prevail.
	Statutory Duties	
	In case of any statutory variation in duties like	
	GST, Customs Duty, IGST etc within the	
	contractual delivery date shall be borne by client.	
	Kindly confirm this.	
L	~	ı

70.		
70.	Fully Automatic Oxygen Control Panel:	Deleted
/1.		
	The Automatic Control Panel should be installed in	
	such a way to meet the peak flow requirement of the	
	Hospital/Institute (If the requirement is more than flow	
	capacity requirement automatic control panel the	
	bidders has to supply 02 numbers of Automatic Control	
	Panel and design the system in such a way to meet the	
	flow requirement of respective institute).	
	now requirement of respective institute).	
	To be deleted from tender specification	
	This paragraph is contradicting with tender BOQ and	
	Flow rate mentioned in the tender. Incase you require	
	additional Control panel, same should be added in	
	tender BOQ as it is invalid to ask for additional Control	
	Panel in the cost of 1 no. Control Panel as mentioned in	
	tender BOQ. Kindly delete this paragraph from	
70	technical specifications of tender documents.	
72.	Oxygen Manifold Supply System	Should be as per standards
	The culture encoded by placed with the balance of culture	as mentioned in the tendered
	The cylinder should be placed with the help of cylinder	specification.
	brackets and fixing chains which should be galvanized.	1
	The last state of the second state of the seco	
	To be deleted from tender specification	
	NFPA doesn't mandate to install cylinder brackets and	
	fixing chain with Manifold due to its design, however the	
	same is a mandatory requirement of HTM / ISO	
	Standards and not applicable for those who are bidding	
	as per NFPA Standard. You are therefore requested to	
	kindly delete standard specific requirement from tender.	
73.	Emergency Oxygen Manifold (Without Cylinders)	Should be as per standards
		as mentioned in the tendered
	The cylinder should be placed with the help of cylinder	specification.
	brackets and fixing chains which should be galvanized.	specification.
	To be deleted from tender specification	
	NFPA doesn't mandate to install cylinder brackets and	
	fixing chain with Manifold due to its design, however the	
	same is a mandatory requirement of HTM / ISO	
	Standards and not applicable for those who are bidding	
	as per NFPA Standard. You are therefore requested to	
	kindly delete standard specific requirement from tender.	
74.	Oxygen Flow meter with Humidifier Bottle	The humidifier bottle should be
		made of unbreakable &
	The humidifier bottle is made of unbreakable &	reusable polycarbonate
	reusable polycarbonate /polysulfone material	/polysulfone / Polypropylene
	autoclavable at 121 degree centigrade.	material autoclavable at 121
		/134 degree centigrade .
	The humidifier bottle is made of unbreakable &	
	reusable polycarbonate /polysulfone / Polypropylene	
	material autoclavable at 121 /134 degree centigrade .	
	material autobavasio at 121710+ acgree contigrade.	
	As an data, been itals recommend a surbular material	
	As on date, hospitals recommend newly launched	
	Polypropylene material autoclavable at 134 deg. C	
	made Humidifier Bottle instead of polycarbonate	

	the last free to the last has the free to the free to	
	/polysulfone due to its long lasting feature. Easy to	
	clean and less chances of breakage feature. You are	
	requested to kindly add the same.	
75.	LIQUID MEDICAL OXYGEN STORAGE TANK-20KL	Liquid Medical Oxygen
	CAPACITY	Storage Tank-20KL Capacity
		shall prevail.
		onum provum
	LIQUID MEDICAL OXYGEN STORAGE TANK – 10KL	
	CAPACITY	
	20 KL Tank is on higher side. Kindly amend the same	
	to 10 KL capacity instead of 20 KL	N
76.	LIQUID MEDICAL OXYGEN STORAGE TANK	Max. working Pressure: 17.6
		Bar G
	Max working pressure : 17 Bar G	
	Max. working Pressure: 17.6 Bar G	
	, , , , , , , , , , , , , , , , , , ,	
	Max working pressure needs to be revised to 17.6 Bar	
	G from 17 Bar G. Kindly amend the same.	
77.	LIQUID MEDICAL OXYGEN STORAGE TANK	Hydraulic test pressure : 26 bar
	Hydraulic test pressure : 26 bar G	G/As per EN code.
	Hudroulia taat procedure . As par EN Cada	
	Hydraulic test pressure : As per EN Code	
	Hydraulic test pressure should be revised to "As per EN	
	Code". Kindly amend the same.	
78.	LIQUID MEDICAL OXYGEN STORAGE TANK	Inspection : By 3rd party
70.		(SGS/LLOYDS/TUV / BVIS)
	Increation + By 2rd party (SCS/LLOV/DS/TLIV)	
	Inspection : By 3rd party (SGS/LLOYDS/TUV)	
	Inspection : By 3rd party (SGS/LLOYDS/TUV / BVIS)	
	Kindly add one more reputed name for third inspection,	
	i.e BVIS.	
79.	LIQUID MEDICAL OXYGEN STORAGE TANK	Tender terms & conditions
17.		
		prevail.
	Vaporiser Coil	
	Duty cycle: Continuous duty	
	Duty Cycle: 6-8 hours	
	, ,	
	The Duty Cycle of venerizer soil is C. C. hours only Mary	
	The Duty Cycle of vaporizer coil is 6-8 hours only. You	
	are requested to amend the same.	
80.	LIQUID MEDICAL OXYGEN STORAGE TANK	Vessel Low Liquid level alarm/
80.		low pressure alarm shall be
		provided.
	Safety Fittings - • Vessel low liquid level alarm	
	ourory i mingo vosser low liquid level alarm	
	To be deleted	
	In Safety Fitting, Vessel Low Liquid level alarm is not	
	required since low pressure alarm will be provided.	
<u> </u>	Kindly delete the same.	
81.	Fully Automatic Nitrous Oxide Control Panel	Deleted

r		
	The Automatic Control Panel should be installed in such a way to meet the peak flow requirement of the Hospital/Institute (If the requirement is more than flow capacity requirement automatic control panel the bidders has to supply 02 numbers of Automatic Control Panel and design the system in such a way to meet the flow requirement of respective institute)	
	To be deleted from tender specification	
	This paragraph is contradicting with tender BOQ and Flow rate mentioned in the tender. Incase you require additional Control panel, same should be added in tender BOQ as it is invalid to ask for additional Control Panel in the cost of 1 no. Control Panel as mentioned in tender BOQ. Kindly delete this paragraph from technical specifications of tender documents.	
82.	Nitrous Oxide Manifold (Without Cylinders)	Should be as per standards
02.	The cylinder should be locked with the help of cylinder brackets and fixing chains which should be galvanized.	as mentioned in the tendered specification.
	To be deleted from tender specification	
	NFPA doesn't mandate to install cylinder brackets and fixing chain with Manifold due to its design, however the same is a mandatory requirement of HTM / ISO Standards and not applicable for those who are bidding as per NFPA Standard. You are therefore requested to kindly delete standard specific requirement from tender.	
83.	Emergency N2O Manifold (Without Cylinders)	Should be as per standards
	The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.	as mentioned in the tendered specification.
	To be deleted from tender specification	
	NFPA doesn't mandate to install cylinder brackets and fixing chain with Manifold due to its design, however the same is a mandatory requirement of HTM / ISO Standards and not applicable for those who are bidding as per NFPA Standard. You are therefore requested to kindly delete standard specific requirement from tender.	
84.	MEDICAL AND SURGICAL AIR SYSTEM	Coalescing filter upstream of
	Stage 1: Coalescing filter upstream of the desiccant dryer for removing liquid water particles down to 1micron.	the desiccant dryer for removing liquid water particles down to 1micron or as per laid down standards.
	Stage 1: Coalescing filter upstream of the desiccant dryer for removing liquid water particles down to 0.01 micron.	
	As per NFPA Standard, Pre-filter / Coalescing Filters removes liquid particles down to 0.01 micron instead of	

	1 micron. Kindly amend the same.	
85.	System Controls - The control include individual self- protected combination motor controls with short circuit protection, single phase and thermal overload protection, individual control circuit transformers with fuse less primary and secondary protection	Should be as per standards as mentioned in the tendered specification.
	System Controls - The control include individual self- protected combination motor controls with short circuit protection, single phase and thermal overload protection, individual control circuit transformers with fused primary and secondary protection	
	In NFPA Standard, Transformers used are fused instead of Fuseless. You are requested to kindly amend the same.	
86.	Vacuum System	Should be as per standards
	System Controls - The control include individual self- protected combination motor controls with short circuit, single phase and thermal overload protection, individual control circuit transformers with fuse less primary and secondary protection .	as mentioned in the tendered specification.
	System Controls - The control include individual self- protected combination motor controls with short circuit, single phase and thermal overload protection, individual control circuit transformers with fused primary and secondary protection .	
	In NFPA Standard, Transformers used are fused instead of Fuseless. You are requested to kindly amend the same.	
87.	Low Flow Ward Vacuum Unit	Low Flow Vacuum Unit –
	Low Flow Vacuum Unit –	It should have a Digital Suction Regulator.
	It should have a Digital Suction Regulator.	
	Same as Ward vacuum unit, Low flow vacuum unit should also have digital suction regulator. You are requested to kindly mention the same.	
88.	AREA VALVE SERVICE UNIT	Should be as per standards
	The Area Valve Service Unit should incorporate a ball valve with NIST/else connectors either side mounted in a lockable box with emergency access.	as mentioned in the tendered specification.
	The Area Valve Service Unit should incorporate a ball valve with NIST/else connectors / Gauges either side mounted in a lockable box with emergency access.	
	In NFPA Standard, AVSU provided are with Guages instead of NIST, since NIST is the specific requirement of HTM Standards. You are requested to kindly amend and mention the same.	

00	Kindly add Area Valya Canvias unit (Mithaut Valyas)	
89.	Kindly add: Area Valve Service unit (Without Valves)	Tender terms & conditions prevail
	Since the quantities of Valves are already considered in	provun
	item Sr. No.13 of tender BOQ, you are requested to kindly correct and mention the same.	
90.	ALARM SYSTEM	The alarm should be Touch
		typed/ LCD type with Display
	Master Alarm	size of minimum 10".
	Kindly add: It should be LCD type with Display size of minimum 10".	
	For better visibility, kindly mention that the alarm should be LCD type with Display size of minimum 10".	
91.	Medical Gas Area Alarm	The alarm should be Touch
		typed/ LCD type with Display
	Kindly add: It should be LCD type with Display size of minimum 10".	size of minimum 10".
	For better visibility, kindly mention that the alarm should	
	be LCD type with Display size of minimum 10". Horizontal/ Vertical Bed Head Panel	It should be DIS/European OF
92.	nonzontal/ vertical Bed nead Pañel	It should be BIS/European CE certified with 4 digit notified
	Kindly Add: It should be European CE certified with 4	body number or American
	digit notified body number or American ETL/UL listed.	ETL/UL listed.
	Since all the equipments asked in the tender are of	
	imported origin, we recommend the same to be	
	mentioned for bed head panel also.	
93.	Site Modification	Tender terms & conditions
	i. Bidder should be responsible for Ironite flooring in the manifold room with minimum thickness 5mm.	prevail
	To be added in Tender BOQ	
	Kindly add the same in Tender BOQ along with required quantities to enable us to consider pricing in tender BOQ.	
	ii. Bidder should provide a raised Loading/Unloading Platform of suitable sized adjacent to manifold room, so that cylinder can be loaded & unloaded easily form the lorry/vehicle.	
	To be added in Tender BOQ	
	Kindly add the same in Tender BOQ along with required quantities / Size of Area to enable us to consider pricing in tender BOQ.	
	iii. Bidder should be responsible for foundation of Plant Room (If required) for Medical Air Plant, Vacuum Pant & AGSS Plant.	
	To be added in Tender BOQ	
	Kindly add the same in Tender BOQ along with required quantities / Size of Area to enable us to	

	consider pricing in tender BOQ.	
94.	Extra Works (optional)	Tender terms & conditions
	· · · · /	prevail
	a. Construction of MGPS Operator Room & Toilet	provun
	(Optional)	
	b. Construction of Overhead/Under Ground trench size	
	approx 1.5mx1m (Optional)	
	c. Construction of 9" brick wall	
	d. Demolition of brick wall 200 Cu.ft.	
	Extra works to be added in tender BOQ.	
	All the Extra works mentioned under optional work	
	should be considered in tender BOQ to enable bidders	
	to quote accordingly.	
95.	Page 26. of Technical Specification	Tender terms & conditions
	The following eventeen from a next he from the	prevail
	The following systems/items must be from the same principal company /Manufacturer:	
	a. Control Panels & Manifold for O2, N2O & CO2	
	b. Medical air plant	
	c. Medical Vacuum Plant	
	d. AGSS Plant	
	e. Area & Master Alarm	
	f. All types Outlets	
	g. AVSU h. Line Isolation valves	
	i. High Pressure tubes	
	The following systems/items must be from the same principal company /Manufacturer:	
	a. Control Panels & Manifold for O2, N2O & CO2	
	b. Medical air plant	
	c. Medical Vacuum Plant	
	d. AGSS Plant	
	e. Area & Master Alarm	
	f. All types Outlets	
	g. AVSU	
	h. Line Isolation valves i. High Pressure tubes	
	j. Oxygen Flow meter with Humidifier Bottle	
	k. Ward Vacuum Unit	
	I. Theatre Vacuum Unit	
	m. Low Flow Vacuum Unit	
	You missed out to mention SOT's in the list. Kindly	
	consider the same.	Tou don tours 9
96.	Page No.23 of Technical Specification	Tender terms & conditions
	The payment of CMC will be made on six monthly basis	prevail
	after satisfactory completion of said period, duly	
	certified by end user on receipt of bank guarantee for	
	2.5 % of the cost of the equipment shall be valid till 2	
	months after expiry of entire CMC period.	
	The payment of CMC must be revised to monthly basis	
	The payment of CMC must be revised to monthly basis instead of Six monthly basis.	
	noted of on monthly buolo.	

-		
	Since CMC includes spares which are purchased on chargeable basis, we therefore request you to kindly	
	make amendment in payment of CMC from six months	
	to monthly basis.	
97.	Page No.25 of Technical Specification	Tender terms & conditions
		prevail
	Responsibility of bidder	1
	Deint No.10 Didder shall be reapensible for free	
	Point No.10 - Bidder shall be responsible for free maintenance of all component of Gas pipeline system	
	during warranty period including all filters &	
	consumables.	
	Kindly delete "including all filters & consumables".	
	Consumables are those accessories which are	
	consumed as per client usage / requirement and it is	
	invalid to add the cost of consumable items like filters	
	and other consumables in bidder scope, since actual	
	requirement can't be / measured / considered at the	
	time of tender. Hence the same must be deleted from bidders responsibility. However the same can be	
	procured through bidder on chargeable basis by	
	hospital as and when required.	
98.	Page No.25 of Technical Specification	Revised BOQ enclosed
	Deint No 40 Minimum 00TD AO (dustable and	_
	Point No.18 - Minimum 20TR AC (ductable and exhausts) should be considered.	
	20TR AC cost should be mentioned in tender BOQ	
	Since Air Conditioning is equipment, which is also a	
	costly item, hence pricing of the same can't be absorbed. Kindly mention the same in tender BOQ.	
99.	Point No.19 - Bidder should be responsible for	Revised BOQ enclosed
· · · ·	dedicated earthling (Chemical type) for MGPS Plant	Revised DOQ enclosed
	room (If required)	
	To be added in Tender BOQ.	
	Ridders scope of work is confined to SITC Of MODE	
	Bidders scope of work is confined to SITC Of MGPS only. Chemical Earthing is not our specialization, hence	
	it should be deleted from our scope and to be added in	
	the scope of work of Electrical contractor or the same	
	should be considered in tender BOQ to enable us to	
100	give quote. Point No. 23 - Inter connection to Manifolds with LMO	Parriaged POO areal 1
100	tank with necessary automatic switchover panels	Revised BOQ enclosed
	between LMO & Manifold will be up to responsibility of	
	bidder upto 100m distance.	
	To be added in Tender BOQ	
	In the tender POO you have only entroided a 2014	
	In the tender BOQ, you have only considered 20 KL Tank with Vaporizer. To do the switchover, 1 No.	
	additional Control Panel is required. Copper Piping for	
	interconnection from Manifold to LMO tank required and	
	the same is not considered in tender BOQ. You are	
	requested to kindly add the same.	

101 Page No.19- SCC Tender terms & conditions prevail Performance Security – The successful bidder shall furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 10 percent of the contract sum. Performance Security – The successful bidder shall furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 5 percent of the contract sum. Performance Security – The successful bidder shall furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 5 percent of the contract sum. You are requested you to kindly reduce the performance Security from 10% to 6%, since you are going to deduct retention money @ 10% from Contractor RA Bills as mentioned in clause 60.5 of Volume-II, GCC of Tender documents. Revised BOQ enclosed 102 Bill of Quantity Revised BOQ enclosed Item No.3 Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 4500-5000 LPM and 2250-2500 LPM as standby as per specification. Revised BOQ enclosed Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000 - 5500 LPM and 1000 - 1500 LPM or Total Plant Capacity should be minimum 6500 LPM The Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM 103 Bill of Quantity Revise	101	Deres No. 40, 000	
Performance Security – The successful bidder shall furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 10 percent of the contract sum. Performance Security – The successful bidder shall furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 5 percent of the contract sum. You are requested you to kindly reduce the performance Security from 10% to 5%, since you are going to deduct retention money @ 10% from Contractor RA Bills as mentioned in clause 60.5 of Volume-II, GCC of Tender documents. Revised BOQ enclosed 102 Bill of Quantity Revised BOQ enclosed Item No.3 Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 4500-5000 LPM and 2250-2500 LPM as standby as per specification. Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000-5500 LPM and 1000 - 1500 LPM or Total Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM Revised BOQ enclosed 103 Bill of Quantity Item No.4 Revised BOQ enclosed Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000	101	Page No.19- SCC	
furnish to the consultaint a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an amount of 5 percent of the contract sum. You are requested you to kindly reduce the performance Security from 10% to 5%, since you are going to deduct retention money @ 10% from Contractor RA Bills as mentioned in clause 60.5 of Volume-II, GCC of Tender documents. Revised BOQ enclosed 102 Bill of Quantity Revised BOQ enclosed item No.3 Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 4500-5000LPM and 2250-2500 LPM as standby as per specification. Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000-5500 LPM and 1000 - 1500 LPM or Total Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM 103 Bill of Quantity Revised BOQ enclosed 103 Bill of Quantity Revised BOQ enclosed 104 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000		furnish to the consultant a security in the form of a bank Guarantee from Nationalized / Scheduled bank for an	prevail
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102 Bill of Quantity Revised BOQ enclosed Item No.3 Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 4500-5000LPM and 2250-2500 LPM as standby as per specification. Revised BOQ enclosed Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000-5500 LPM and 1000 - 1500 LPM or Total Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM Revised BOQ enclosed 103 Bill of Quantity Revised BOQ enclosed Item No.4 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000		performance Security from 10% to 5%, since you are going to deduct retention money @ 10% from Contractor RA Bills as mentioned in clause 60.5 of	
Item No.3 Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 4500-5000LPM and 2250-2500 LPM as standby as per specification. Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000- 5500 LPM and 1000 - 1500 LPM or Total Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM 103 Bill of Quantity Item No.4 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000	102		Revised BOO enclosed
electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 4500-5000LPM and 2250-2500 LPM as standby as per specification. Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000- 5500 LPM and 1000 - 1500 LPM or Total Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM 103 Bill of Quantity Item No.4 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000	10-		
electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000- 5500 LPM and 1000 - 1500 LPM or Total Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM 103 Bill of Quantity Item No.4 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000		electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 4500-5000LPM and 2250-2500 LPM as	
revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500 LPM 103 Bill of Quantity Revised BOQ enclosed Item No.4 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000		electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 5000- 5500 LPM and 1000 - 1500 LPM or	
103 Bill of Quantity Revised BOQ enclosed Item No.4 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000		revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 6500	
Item No.4 Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000	103		Revised BOQ enclosed
Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 7000-8000 LPM as primary and 7000-8000			
LPM as standby and as per specification		Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system	
Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 6500 -7000 LPM as primary and 6500-7000 LPM or Total Plant Capacity should be minimum 12,500 LPM		Installation, testing and commissioning of Rotary Vane type medical vacuum plant having a minimum system capacity of 6500 -7000 LPM as primary and 6500-7000 LPM or Total Plant Capacity should be minimum 12,500	
The Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 12,500 LPM		revise the same. Kindly also mention total plant capacity (working + standby) should be minimum	
104 Item No.8 Revised BOQ enclosed	104	Item No.8	Revised BOQ enclosed

AGSS System: Supply installation and commissioning of AGSS system. As per specification	
AGSS System: Supply installation and commissioning of AGSS Plant having a minimum system capacity of 1200 -1500 LPM working and 1200 -1500 LPM as standby or Total Plant Capacity should be minimum 2500 LPM	
The Plant Capacities mentioned are fixed type. Kindly revise the same. Kindly also mention total plant capacity (working + standby) should be minimum 2500 LPM	

All other terms & conditions remain unchanged.

Sr. Chief General Manager -I, HSCC (I) Ltd. For and behalf of Director, AIIMS, Raebareli