

Amendment No: 1

14/08/2013

Ref: Tender Enquiry No: HLL/PCD/PMSSY-II/03/13-14 Dated 26.07.2013

The following amendments are incorporated in the referred Tender Enquiry Document which was uploaded in the websites on 26/07/2013.

Existing:

Sl. No.	Equipment Name	Total Quantity	EMD Details
1	Medical Gas Pipeline System	1	900,000

Read As:

Sl. No.	Equipment Name	Total Quantity	EMD Details (Rs.)
1	Medical Gas Pipeline System	1	900,000

Existing Para:

1. GENERAL

The medical gas contractor shall ensure that all plants installed and all works carried out are to the recommendation made in HTM 2022/HTM02-01/DIN/ NFPA or equivalent. The vendor shall be responsible turnkey installation of medical gas system for JNMC, Aligarh OPD & Trauma block and OBG block. The proposed manifold to be installed in the OBG block. Bidders are strongly advised to visit the site before submitting their offers. Bidder shall install liquid oxygen plant, standby oxygen manifold system, vacuum plant system, air compressor system and nitrous oxide manifold system on turnkey basis

Read as:

The medical gas contractor shall ensure that all plants installed and all works carried out are to the recommendation made in HTM 2022/HTM02-01/DIN/ NFPA or equivalent. The vendor shall be responsible turnkey installation of medical gas system for JNMC, Aligarh OPD & Trauma block and OBG block. The proposed manifold to be installed in the OBG block. Bidders are strongly advised to visit the site before submitting their

offers. Bidder shall install oxygen manifold system, vacuum plant system, air compressor system and nitrous oxide manifold system on turnkey basis.

Existing Para:

1D. Supply, Installation, Testing and Commissioning of Oxygen flow meter with Humidifier Bottle:

Back Pressure Compensated flow meter should be of accurate gas flow measurement with the following features and complies with NFPA standard or HTM 02-01, with CE or USFDA approved. Control within a range of 0 - 15 LPM. It meets strict precision and durability standard. The flow meter body is made of brass chrome plated materials. · The flow tube and shroud components are made of clear, impact resistant Polycarbonate/polysulfone. Inlet filters of stainless steel wire mesh to prevent entry of foreign particles. · The humidifier bottle is made of unbreakable polycarbonate/polysulfone material and autoclavable at 121⁰ Centigrade temperature Should be supplied with suitable connector to match with oxygen outlets.

Read as:

1D. Supply, Installation, Testing and Commissioning of Oxygen flow meter with Humidifier Bottle:

Back Pressure Compensated flow meter should be of accurate gas flow measurement with the following features and complies with CE or USFDA approved. Control within a range of 0 - 15 LPM. It meets strict precision and durability standard. The flow meter body is made of brass chrome plated materials. · The flow tube and shroud components are made of clear, impact resistant Polycarbonate/polysulfone. Inlet filters of stainless steel wire mesh to prevent entry of foreign particles. · The humidifier bottle is made of unbreakable polycarbonate/ polysulfone material and autoclavable at 121⁰ Centigrade temperature Should be supplied with suitable connector to match with oxygen outlets.

Existing Para: 3A. - Supply, Installation, Testing and Commissioning of Pentaplex 8.5 bar Medical Air Plant 4800 LPM (Package unit):

Read as: 3A. Supply, Installation, Testing and Commissioning of Quaterplex/Pentaplex 8.5 bar Medical Air Plant 4800 LPM (Package unit):

Existing Para:

Medical Air Plant of 8.5bar for both 4bar MA4 Air supply and SA7 Air supply. Pentaplex (5 x 15kw SCREW compressors), with duplex drier and filtration,

Read as:

Medical Air Plant of 8.5bar for both 4bar MA4 Air supply and SA7 Air supply. **Quaterplex /Pentaplex (5 x 15kw or 4X20 kw SCREW compressors)**, with duplex drier and filtration,

Existing Para:

- 5 x 15KW each screw air compressor base frame mounted.

Read as:

- **5 x 15kw or 4X20 kw** each screw air compressor base frame mounted.

Existing Para:

- 2 x 2500 liters capacity vertical air receiver as per BS 5169:1992.

Read as:

- 2 x **2000 - 2500** liters capacity vertical air receiver as per BS 5169:1992.

Existing Para:

2 X VERTICAL receivers 2500 LITRES Capacity.

Read as:

2 X VERTICAL receivers **2000 - 2500** LITRES Capacity

Existing Para:

Medical Air plant should consist of 5 identical screw air compressors of 1600 lpm capacity each.

Read as:

Medical Air plant should consist of 5 identical screw air compressors of 1600 lpm **or 4 identical screw air compressors of 2400 lpm** capacity each.

Existing Para:

Three identical compressors 1600 lpm capacity screw air compressors should run as primary supply to provide the full flow rate of 4800 lpm and the remaining two identical 3200lpm screw air compressors should be secondary supply. Medical quality air shall be

delivered at a nominal pressure of 400 kPa (4 bar) or 700 kPa (7 bar) gauge for supply of the hospital medical air system. The medical air plant shall deliver both medical and surgical air, with a minimum total flow rate of 4800 l/min.

Read as:

Three identical compressors 1600 lpm or **Two identical compressors 2400 lpm** capacity screw air compressors should run as primary supply to provide the full flow rate of 4800 lpm and the remaining two identical 3200lpm screw air compressors should be secondary supply. Medical quality air shall be delivered at a nominal pressure of 400 kPa (4 bar) or 700 kPa (7 bar) gauge for supply of the hospital medical air system. The medical air plant shall deliver both medical and surgical air, with a minimum total flow rate of 4800 l/min.

Existing Para: 4A. Supply, Installation, Testing and Commissioning of Pentaplex Medical Vacuum Plant of 4100LPM (Package unit):

Read as: 4A. Supply, Installation, Testing and Commissioning of Quaterlap/Pentaplex Medical Vacuum Plant of 3800 - 4100LPM (Package unit):

Existing Para: 5 x 5.5 KW rotary vane vacuum pump base/floor mounted 1350 lpm flow rates of each pump).

Read As: 5 x 5.5 KW rotary vane vacuum pump base/floor mounted.

Existing Para:

Medical Vacuum Plant should consist of 5 identical rotary vane vacuum pumps. Three identical vacuum pumps should run as primary supply to provide the full flow rate of 4100 l/min and the remaining two identical vacuum pumps should be secondary supply. Vacuum Plant shall comprise 5 Nos.1350lpm flow rate capacity, air cooled, oil lubricated rotary vane vacuum pumps suitable for both continuous and frequent start / stop operation at inlet vacuum vessels between 525mm Hg and 700 mm Hg.

Read as:

Medical Vacuum Plant should consist of 5 identical rotary vane vacuum pumps. Three identical vacuum pumps should run as primary supply to provide the full flow rate of **3800 -4100** l/min and the remaining two identical vacuum pumps should be secondary supply. Vacuum Plant shall comprise 5 Nos., air cooled, oil lubricated rotary vane vacuum pumps suitable for both continuous and frequent start / stop operation at inlet vacuum vessels between 525mm Hg and 700 mm Hg.

Existing Para: 5A. Supply, Installation, Testing and Commissioning of Duplex AGSS System 2900lpm of 50Hz:

Read as: 5A. Supply, Installation, Testing and Commissioning of Duplex AGSS System **2800** lpm of 50Hz:

Existing Para:

It should fully comply and meet with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) or NFPA-99C. It should be CE approved product. Duplex AGSS System - Twin stand alone AGSS pumps of 3 phase 2900 l/min capacity each with built in flow indication and pressure regulation valve. Mounted on single frame with control panel and separate warning label. One pump will be standby with the other in operation. Nominal Motor Power Per Blower 3KW and will be single stage.

Read as:

It should fully comply and meet with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) or NFPA-99C. It should be CE approved product. Duplex AGSS System - Twin stand alone AGSS pumps of 3 phase **2800** l/min capacity each with built in flow indication and pressure regulation valve. Mounted on single frame with control panel and separate warning label. One pump will be standby with the other in operation. Nominal Motor Power Per Blower 3KW and will be single stage.

Existing Para:

5D. Supply, Installation, Testing and Commissioning of AGSS outlet hose assembly-

It should fully comply and meet with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) or NFPA-99C. It should be CE approved product. It conducts the waste gases to the fixed system outlet point and comprises a 4 metre length of reinforced clear tube (colour coded yellow and blue as per the standard). This is fixed to the top of the vessel allowing the tube unimpaired 360° motion to reduce strain on the unit, and tube occlusion. The other end of the tube terminates in an AGSS probe.

Read as:

5D. Supply, Installation, Testing and Commissioning of AGSS outlet hose assembly-

It conducts the waste gases to the fixed system outlet point and comprises a 4 metre length of reinforced clear tube (colour coded yellow and blue as per the standard). This is fixed to the top of the vessel allowing the tube unimpaired 360° motion to reduce strain on the unit, and tube occlusion. The other end of the tube terminates in an AGSS probe.

Existing Para: 6A. Supply, Installation, Testing and Commissioning of CO2 Manifold Supply System (Cylinder Manifold Unit) 2x2 size:

It should fully comply and meet with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) or NFPA-99C. It should be CE approved product.

Read as: Deleted

Existing Para: 6C. Supply, Installation, Testing and Commissioning of CO2 Emergency Reserve Manifold 1x1 size

It should fully comply and meet with the requirements of the UK DOH Health Technical Memorandum 02-01 (HTM 02-01) or NFPA-99C. It should be CE approved product.

Read as: Deleted

Existing Para: 8. Supply, Installation, Testing and Commissioning of Vertical Bed Head Panel:

Read as: 8. Supply, Installation, Testing and Commissioning of Bed Head Panel:

Existing Para: Vertical/Horizontal Bed Head Panel (Extruded Aluminium alloy and Powder Coated) Size of the length will be 315 mm (L) x 235mm (W) x 3000 mm (H)

Read as: Vertical/Horizontal Bed Head Panel (Extruded Aluminium alloy and Powder Coated)

Existing Para: Vertical/Horizontal Bed Head Panel (Extruded Aluminium alloy and Powder Coated) Size of the length will be 315 mm (L) x 235mm (W) x 3000 mm (H)

Read as: Vertical/Horizontal Bed Head Panel (Extruded Aluminium alloy and Powder Coated)

Existing Para:

13. Supply, Installation, Testing and Commissioning of Medical Gas Hose Assemblies

Medical gas hose assemblies shall comply with BS EN ISO 5359

Hoses shall be color coded throughout their length as specified in BS EN 5359 as follows:

Read as:

Hoses shall be color coded throughout their length

BOQ

Existing Para:

1 a. Liquid Oxygen Tank 6KL, complete as per specification.

Read as:

Deleted

Existing Para:

1g. Imported Anodized aluminum body and control knob oxygen flow meter with humidifier bottle.

Read as:

Anodized aluminum body and control knob oxygen flow meter with humidifier bottle.

Existing Para:

2.e Imported N₂O H.P. tube with antistatic core, French blue.

Read as:

2.e N₂O H.P. tube with antistatic core, French blue.

Existing Para:

3a. Imported 3 Phase Pentaplex Medical Air Plant should have 11kw screw identical air compressors,Pentaplex 8.5 bar Medical Air Plant (Total FAD between 4800-5000 LPM) 2 air receiver tank 2500 LPM ,air dryer , Duplex filter system.

Read as:

3a. Imported 3 Phase **Quaterlap**/Pentaplex Medical Air Plant should have 15 or 20 kw screw identical air compressors, **Quaterlap**/Pentaplex 8.5 bar Medical Air Plant (Total FAD between 4800-5000 LPM) 2 air receiver tank **2000** -2500 LPM ,air dryer , Duplex filter system.

Existing Para:

3d.Imported H.P. antistatic tube black.

Read as:

3d. H.P. antistatic tube black.

Existing Para:

4a. Imported 3 Phase 5 x 5.5 kw Rotary Vane Vacuum pumps Imported Pentaplex Medical Vacuum Plant of 4100LPM (Package unit) 2 x 2700 liters Vertical vaccum vessels receiver tank and duplex bactreial vaccum filter, 4 starter units and 1 PCU control complete in all aspect.

Read as:

4a. Imported 3 Phase 5 x 5.5 kw Rotary Vane Vacuum pumps Imported Pentaplex Medical Vacuum Plant of **3800** or 4100LPM (Package unit) 2 x 2700 liters Vertical vaccum vessels receiver tank and duplex bactreial vaccum filter, 4 starter units and 1 PCU control complete in all aspect.

Existing Para:

4e. Imported Vacuum H.P. antistatic tube (Yellow)

Read as:

4e. Vacuum H.P. antistatic tube (Yellow)

Existing Para:

5c. Imported AGSS hose assembly.

Read as:

5c. AGSS hose assembly.

Existing Para:

6. Imported CARBON DIE OXIDE SYSTEM

(fully complies and meets with the requirements of NFPA-99Cor HTM 02-01 standards)

Read as:

6. CARBON DIE OXIDE SYSTEM

(fully complies and meets with the requirements of NFPA-99Cor HTM 02-01 standards)

Existing Para:

6e. Imported CO2 H.P. tube with antistatic core, French blue.

Read as:

6e. CO2 H.P. tube with antistatic core, French blue.

Existing Para: 8a. Bed head panels (1500mm size)

Read as: 8a. Bed head panels

Existing Para: 8b. Bed head panels (1800mm size)

Read as: 8b. Bed head panels

Existing Para: 11

a	15mm	Mtr	15
b	22mm	Mtr	10
c	28mm	Mtr	30

d	42mm	Mtr	12
e	54mm	Mtr	8
f	76mm	Mtr	2

Read as: 11

a	15mm	Mtr	25
b	22mm	Mtr	15
c	28mm	Mtr	40
d	42mm	Mtr	17
e	54mm	Mtr	13
f	76mm	Mtr	4

Existing Para:

13	Imported AVSU - Single Service Area Valve Service Unit of 22mm (fully complies and meets with the requirements of NFPA-99 or HTM 02-01 standard)		
a	O2		46
b	N2O		17
c	MA4		33
d	SA7		10
e	VACUUM		46
F	CO2		9

Read as: Deleted

Added para-

1. The unit rates should be offered for each above items.

2. AGSS wiring from plant room to OT is to be done by the vendor.

Section –VII
Technical Specifications

Existing Specification: Note 4:

The vendor shall have to coordinate and enter into an agreement in the form of MOU with the other approved vendor at the institute who would be simultaneously installing equipments, medical gas pipeline and communication /video – conferencing system etc so as to complete the entire job in a time bound manner .

Read as: Note 4

Deleted

Existing Specification: Note 6:

Earthing and bonding, intercom facilities between various services facilities on the OT Floor, telecommunications etc to be provided by the vendor.

Read as: Note 6

Suitable Earthing and bonding for the installation of the MGPS system.

Existing Specification: Note 7:

Telephones : Wireways and outlet plates for telephones

Read as: Note 7

Deleted

Existing Specification: Note 8:

Data: Wireways and outlets plates for data

Read as: Note 8

Deleted

Existing Specification: Note 9:

Security : Intruder alarm, main door entry system, Door Monitoring, Door interlocks

Read as: Note 9

Deleted

Existing Specification: Note 10:

New fully addressable fire alarm to existing hospital specification to new local fire sub panel, key operated isolation switch for smoke detection with visual indication, liaison with Hospital fire Alarm specialist Contractor

Read as: Note 10

Deleted

Existing Specification: Note 12:

Approval clearance from certificates from competent authorities like Atomic Energy Regulatory Board (AERB) for all types of radiation equipments , Central pollution control board (CPCB) approval for polluting units etc if applicable for the offered equipments must be attached.

Read as: Note 12

Deleted

Existing Specification: Note 13:

Provision for working drawing , Physical co-ordination of composite services drawing and site installations . The contractor to maintain the services at its own cost for atleast 60 months from the date of completion and acceptance of the same by the institute.

Any civil mechanical or electrical work or plumbing work required if any will be the sole responsibility of the vendor doing modular part , the institute will only be providing connection at one specific location.

Read as: Note 13

Provision for working drawing , Physical co-ordination of composite services drawing and site installations. Any civil mechanical or electrical work or plumbing work required for installation of the item, if any will be the sole responsibility of the vendor, the institute will only be providing connection at one specific location.

Existing Specification: Note 14:

The design and installation of building works and installation of building work and installation service shall comply with all statutory regulations of PWD. The design and installation shall comply with the requirements and design control authorities like :

- Electrical supply
- Water Supply
- Environmental Health
- Building Control
- Planning
- Fire

Gas Supply

The contractor shall issue relevant drawing and specification document to superintendent engineer of PWD for his comments and approval before commencing work at site.

Read as: Note 14

The design and installation of works and installation of work and installation service shall comply with all statutory regulations. The design and installation shall comply with the requirements and design control authorities like : Electrical supply, Water Supply, Environmental Health, Building Control, Planning, Fire , Gas Supply.

The supplier shall provide relevant drawing and specification document for approval before commencing work at site.

Existing Specification: Note 16:

Design Criteria and requirements:

The design and installation shall be in compliance with the following:-

Hospital Building Notes

Hospital Design Notes

HSE Guidance Notes

Electrical services supply and distribution

Emergency Electrical Services

Abatement of Electrical interface

Health building engineering installations

Commissioning and associated activities

Electrical safety code for low voltage system

Access and accommodation for engineering services

Ventilation in healthcare premise

Hot and cold water supply , storages and mains services

Control of Legionella in healthcare premises

Applicable standards- CEN, EN-685,DIN 423/DIN-51958,NFPA-99,93/87/EC,

73/23/EEC,93/68/EEC,89/336/EEC,92/31/EEC,93/97/EEC,DIN-4799,BS 5135, IP 54, EN60601-1.

Read as: Note 16

Deleted

SECTION – IX
Qualification Criteria

Clarification on Qualification Criteria:

The following clarifications are given against the words/phrases at:

Para-2(a):

the phrase “50% of the quoted quantity” shall be considered with respect to the items at sl. no. 1.d), 2.c), 3.a), 4.a), 5.a), 6.c), 8, 9, 10 & 11 as mentioned in the BOQ of the technical specification (pg. 58).

Para-2(b):

“authorized representative” shall mean “authorized agent”.

the phrase “25% of the quoted quantity” shall be considered with respect to the items at sl. no. 1.d), 2.c), 3.a), 4.a), 5.a), 6.c), 8, 9, 10 & 11 as mentioned in the BOQ of the technical specification (pg. 58).

All other terms and conditions of the TED remain unchanged.