

October 19, 2012

**“REPLY TO BIDDERS QUERIES AND AMENDMENT TO TENDER”:-**

**Sub. Supply Installation Testing & Commissioning of Oxygen Concentrator Module & Medical Gas Manifold System at Yangon Children Hospital, Myanmar**

**&**

**Oxygen Concentrator Module with Pipeline system for 4 OTs at Sittwe General Hospital, Myanmar**

**. Tender No : HSCC/PUR/MEA-Myanmar/OCM/2012**

**Date : 01.10.2012**

**CLARIFICATION / AMENDMENT No. – (II)**

<b>S.No.</b>	<b>Queries Raised</b>	<b>Reply</b>
i	The Oxygen Concentrator Module should not be combined with MGPS Projects and request to float separate tenders for Oxygen Concentrator & MGPS	Tender condition prevails.
ii.	Regarding Alarm Sr. No.7, suggestion for Alarm to be digital/Analog instead of digital	Amended as Digital/Analogue for Alarm System for Sr. No.7 of Yangon Children hospital and Sr. No.6 of Sittwe General hospital
iii.	The distribution Copper Piping of Sr. No.6 the standard mentioned are not medical grade and the Lloyds does not issue the certificate for Medical Grade manufactured as per the standard mentioned in specifications. Suggestion for manufacturing of Copper Pipe as per BSEN:13348 which is medical grade and the test certificates are issued by Lloyds Register should be incorporated.	Amended as the distribution Copper Pipe manufactured as per BSEN:13348 for Sr. 6 of Yangon Children hospital and Sr. No.3 of Sittwe General hospital
iv.	Flow Meter with Humidifier at Sr. No. 13.1. The requirement of Polycarbonate material of Humidifier Bottle autoclave at 134°C should be changed to 121°C	Amended as the Polycarbonate material of Humidifier Bottle autoclave at 121°C Sr. No Sr. No. 13.1 of Yangon Children hospital and Sr. No.6 of Sittwe General hospital.

S.No.	Queries Raised	Reply
v.	Compressed Air System of Sr. 1.2 consisting of Screw type Compressor and Refrigerated Air Dryer should be revised as Compressed air system consisting of Compressor (Non lubricated type) system to meet the peak atmospheric air and pressure requirement.	Amended as Compressed Air system consisting of Compressor of <b>Non lubricated type</b> to meet the peak atmospheric air and pressure requirement Sr. No.1.2 of Yangon Children hospital and Sittwe General hospital
vi	There is no need for Theatre Vacuum Unit as per Sr. No.6. Flow Meter with Humidifier should be incorporated instead.	Amended as Flow Meter with Humidifier (According to the specification of Sr. No.13.1 of Yangon Children hospital) instead of Theatre Vacuum Unit for Sr.6 of Sittwe General hospital.
vii	There is a typographical error for the item of Sr. No.1.2. It should be 30 Kw instead of 18.5 Kw	Amended as "The Compressor is non-lubricant type skid mounted fitted with 30 KW/40 HP electric, 3 phase 440volts 50 Hz motor".
viii	Touch Screen of Sr. No.1(iii) is of size 6" instead of 6"x6"	Amended as "the Touch Screen is of size 6" Screen for display for Sr. No.1(iii) of Yangon Children hospital
ix	<p>The gas outlets system specifications are of American Standard NFPA-99. The Specification for Gas Outlets(Imported) and Alarm System (Imported)are not as per HTM02-01, British standard .</p> <p>Specifications of Gas Outlets (Imported) and Alarm system (Imported) as per HTM 02-01, British standard should be in the tender specification for maximum participation of the companies.</p>	<p>Amended as "the specifications of Gas Outlets and alarm system shall be as per NFPA-99/HTM02-01.</p> <p>*Technical Specification of the Gas Outlets and Alarm System as per HTM 02-01 is noted as alternative to the existing specifications in the tender document.</p>
x	CGM (Proc. & F&A) is noted in the page No.7 of Pre-Qualification Document (Vol.-I) and CGM (Proc. & SES) noted in the amendment-I	Jt.Secretary (DPA III), MEA, NewDelhi should be instead of CGM (Proc. & F&A) in the page No.7 of Pre-Qualification Document (Vol.-I) and CGM (Proc. & SES) noted in the amendment-I.

**\* Technical Specification for the following items is incorporated as alternative in addition to the existing technical specification in the tender document:**

### **Gas Outlet Points**

Shall have gas indexing geometry to BS 5682:1998. Terminal unit front fascia should be metal and it should be hundred percent metal. Gas specific components comprising the terminal unit second fix shall be manufactured from die cast Zinc alloy or similar hard wearing metal. Plastic Components should not be acceptable. Terminal units socket shall be permanently coated with a low friction fluoropolymer for maximum reliability and service life.

The terminal unit socket die-casting shall incorporate a gas indexing pin to overcome the risk of loosening due to rough handling/mishandling. The second fix socket shall incorporate a sheer plane to safeguard the first fix and pipeline in the event of accidental damage or bed jacking. Gas specific components shall incorporate the gas identity marking permanently stamped or cast into the component surface. The first fix shall all metal construction with a brass base block and copper stub pipe. The first fix shall incorporate an integral check valve to enable servicing of the second fix and valve seals without isolation of the gas supply. Probe roller pins shall be manufactured from stainless steel. Wall mounted terminal units shall be Provided with white ABS mounting Box with matching fascia. The mounting box shall have smooth rounded corners to avoid the possibility of injury. A bezel shall be available to cover the plaster edge, provide a neat and easily to clean finish.

### **Alarm System (Imported)**

Alarm system should fully comply and meet with the requirement of HTM 02-01. It should be CE marked with notified body number specified. It should have microbial coating labels for touch control and capability of monitoring of installed gas services by means of sensors that detect deviations from the normal operating limits. The medical gas area alarm shall fully comply with requirements of BSEN 60601-1 and BS EN 60601-1-2 and BS EN ISO 7396-1. The cover, back box and bezel (if required ) shall be polyester powder. A single tamper proof fastener shall be used to gain access to the hinged door. The hinge shall operate through a minimum of 120° to provide adequate access. It should have each gas service shall be displayed by cored LED to show Normal (green), Low and High pressure (red) conditions. Medical vacuum systems shall be displayed in the Normal (green) and Low vacuum (red) conditions. Failure indicators shall be displayed by flashing lights and normal indications shall be steady. Each LED block indicator shall be a plug-in component with individual long life LED connected in parallel in two banks to provide duplex circuits. An audible warning shall sound simultaneously with any failure indication and a mute facility shall be provided. Following a mute selection the audible will resound after 15 minutes (approx.) or shall operate simultaneously should a further alarm condition occur. A Mute switch shall be provided inside the panel for use during any maintenance resulting in prolonged pipeline or plant shutdown. This facility shall automatically reset when the gas service returns to normal. The alarm panel shall have a Test facility to prove the integrity of the internal circuits, LED and audible warning. The alarm panel shall incorporate a volt free normally closed relay to allow for interconnection to either a medical gas central alarm system or an event recording circuit of a building management system. Each Alarm shall provide a green LED to indicate that electrical power is available at the panel and a red LED to indicate 'System Alarm'. In the event of an electrical power supply failure the 'System Alarm'

LED shall illuminate (flashing) and the audible warning shall be delayed for 30 seconds to enable standby generator tests. Line continuity monitoring circuits shall be provided to constantly monitor the integrity of the input sensors and interconnecting wiring . In the event of any fault the line continuity monitoring circuits shall initiate the specific gas service failure indication, a System alarm indication and an audible warning. Further aids to fault diagnosis shall be provided to allow connection of up to 5 repeater panels, enabling the visual and audible alarm signals to be repeated at other locations within department.

It should be connected through Pressure and Vacuum Switches. Pressure and Vacuum switches shall be manufactured with brass wetted parts and house a PCBA with line continuity monitoring resistors. Electrical connectors shall be designed for frequent disassembly (Spade connectors are not acceptable). Pressure switches shall include both high and low pressure settings in the same switch, using only a single 1/4" BSP threaded pipeline connection to minimize number of sealed joints. The body and housing of the Pressure switch shall be manufactured from impact resistance, rigid and inherently corrosion proof materials. (Coating or plating of Mild Steel is not acceptable). Pressure Switches shall connect directly to the Area Alarm Panel. (It is not acceptable to fit a separate connection Box to convert switch signals to data signal.)

All other terms and conditions of the tender documents shall remain same.

**Jt. Secretary (DPA III)**

**MEA, New Delhi**