Tender for **Supply of Liquid Medical Oxygen at various Medical Colleges and Hospitals in West Bengal and** installation of **Centralized Medical Gas pipelines system** Including suction pipeline and allied works at **M. R. Bangur Hospital**

No. WBMSC/Medical Gas Pipeline/ 253/B  
Date: 09.03.2012 / 20.04.2012

To  
M/s. ____________________________  

(To be returned duly completed latest by 30.04.2012 till 1 P.M. otherwise tender shall not be accepted.)

Department of Health and Family Welfare, Government of West Bengal, has entrusted West Bengal Medical Services Corporation for **selection of agencies for supply of Liquid Medical Oxygen and installation of Centralized Medical Gas pipeline system in the various Medical Colleges and Hospitals of the state.**

Managing Director West Bengal Medical Services Corporation invites Tender for Setting up of Liquid Oxygen Tanks along with annual supply of the Liquid Oxygen and maintenance of centralized Medical gas pipeline including suction pipelines as per specifications detailed in **Annexure-I** and on terms and conditions enclosed herewith.

Each Tender document should be submitted in **separate sealed envelope & super scribed the name of the Respective Schedule and the Name of the respective institution.** Each outer envelope will consist of sealed separate Technical and Financial Bids envelopes inside as

**Schedule ‘A’ for LMO Supply: Name of Institution**

**Schedule A- I** (Calcutta Medical College & Hospital LMO Supply) /  
**Schedule A- II** (NRS Medical College & Hospital LMO Supply) /  
**Schedule A- III** (S.S.K.M. Hospital & B.I.N. LMO Supply) /  
**Schedule A- IV** (R. G. Kar Medical College & Hospital LMO Supply) /  
**Schedule A- V** (Bankura Sammilani Medical College & Hospital LMO Supply) /  
**Schedule A- VI** (Burdwan Medical College & Hospital LMO Supply) /  
**Schedule A- VII** (North Bengal Medical College & Hospital LMO Supply) /  
**Schedule A- VIII** (Medinipur Medical College & Hospital LMO Supply) /  
**Schedule A- IX** (Dr. B. C. Roy PG Institute of Pediatric Sciences LMO Supply) /  
**Schedule A- X** (Calcutta National Medical College & Hospital LMO Supply) /  
**Schedule A- XI** (M R Bangur Liquid Medical LMO Supply) /  
**Schedule A- XII** (School of Tropical Medicine LMO Supply) /  
**Schedule A- XIII** (Chittaranjan Seva Sadan, Kolkata LMO Supply) /

**Schedule ‘B’ for New Oxygen / Nitrous Oxide Manifolds and Vacuum System**
Schedule B- I  \( \text{O}_2 \) Manifold 2+2 with Control Panel) with all accessories
Schedule B- II  \( \text{O}_2 \) Manifold 4+4 with Control Panel) with all accessories
Schedule B- III  \( \text{O}_2 \) Manifold 8+8 with Control Panel) with all accessories
Schedule B- IV  \( \text{O}_2 \) Manifold 10+10 with Control Panel) with all accessories
Schedule B- V  \( \text{N}_2\text{O} \) Manifold 2+2 with Control Panel) with all accessories
Schedule B- VI  \( \text{N}_2\text{O} \) Manifold 3+3 with Control Panel) with all accessories
Schedule B- VII  \( \text{N}_2\text{O} \) Manifold 4+4 with Control Panel) with all accessories
Schedule B- VIII Vacuum with tank size 500L with dual pumps, filter and accessories
Schedule B- IX Vacuum with tank size 1000L with dual pumps, filter and accessories
Schedule B- X Vacuum with tank size 2000L with dual pumps, filter and accessories
Schedule B- XI Vacuum with tank size 3000L with dual pumps, filter and accessories

Schedule ‘C’ for Copper Pipeline and Outlet points
Schedule C- I Per meter* Copper Pipeline with all accessories
Schedule C- II Per New Outlet Point* with all accessories
Schedule C- III Digital/ Analogue Gas flowmeters, providing mass and volume measurement, with installation and all accessories

Schedule ‘D’ for New Manifold with complete pipeline installation
Schedule D-I for MR Bangur
Schedule D-II for School of Tropical Medicine

The individual sealed envelope will have the respective Technical and Financial Bids for that schedule.

The tender box will be placed in WBMSC till 1 P.M. on 30.04.2012 for submission of bids.

The bids will be opened on 30.04.2012 at 2.00 p.m. onwards in the Conference Room of WBMSC in presence of tenderers or their representative who wish to be present. In case 30.04.2012 is declared holiday bids will be opened on next working day at the same time and venue.

<table>
<thead>
<tr>
<th>IMPORTANT ACTIVITIES</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication of the Tender Document</td>
<td>09.03.2012</td>
</tr>
<tr>
<td>Pre-bid Conference</td>
<td>19.03.2012 at 2 pm</td>
</tr>
<tr>
<td>Site Visits by Interested bidders</td>
<td>22.03.2012 to 07.04.2012</td>
</tr>
<tr>
<td>Bid Submission date and time</td>
<td>30.04.2012 till 1 pm</td>
</tr>
<tr>
<td>Opening of Technical Bids</td>
<td>30.04.2012 at 2 pm</td>
</tr>
<tr>
<td>Opening of Financial Bids for technically qualified bidders</td>
<td>30.04.2012 at 5 pm</td>
</tr>
<tr>
<td>Award of Work</td>
<td>By 02.05.2012</td>
</tr>
<tr>
<td>Submission of Performance Security</td>
<td>By 09.05.2012 by 3 pm</td>
</tr>
<tr>
<td>Signing of Agreement</td>
<td>By 09.05.2012 by 5 pm</td>
</tr>
</tbody>
</table>
| Supply and Installation of L.O. Tanks and Gas Pipelines from | By 28.05.2012 / or as per the
<table>
<thead>
<tr>
<th>L.O. Tanks to Manifolds</th>
<th>actual completion of all legal requirement and construction activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charge Makeover-Takeover and Switch over exclusively to the L.O. * (* 10 days Hand Holding period for test and stabilizing the L.O. system with the existing cylinder system for support)</td>
<td>By 08.06.2012 onwards, as per the date of completion / expiry of existing contracts</td>
</tr>
</tbody>
</table>

A pre-bid meeting with the interested bidders will be held on 19th March at 2 pm and 18th April at 1 pm in the Conference Room of WBMSC.

Yours Sincerely,

Sd/-
MD WBMSC
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Section 1: Instructions to Bidders

1. Scope of Bid

1.0 Background: The department of Health and Family Welfare introduced supply of Medical gas (Oxygen) through pipeline from year 2006 onwards in different medical colleges and hospitals (MCHs) under B-O-T (Built-Operate-Transfer) contract for a period of 5 years. The period of contract of 5 years is already over in a number of MCHs and in other institutions will expire shortly as per Table 1 below. From the expiry of contract period the infrastructure built in MCHs belongs to Department of Health and Family Welfare. Meanwhile, a committee constituted to examine the existing system of the pipeline gas supply system recommended installation of Centralized Liquid Medical Oxygen supply system utilizing the infrastructure already created. The Department has accepted the recommendation as it will ensure financial efficiency and improved supply of medical gas to patients.

In the view of above, the work of supply of Liquid Medical Oxygen (as per latest I.P. requirement) and pipeline system in the MCHs has been undertaken herewith.

Suitable agencies are hereby invited for the supply of Liquid Medical Oxygen (LMO) and installation and maintenance of necessary infrastructure.

1.1 The detailed Scope of Work and the relevant Schedules of the bid is mentioned below:

a. LMO Supply and related work (Schedule A-I to A-XIII)

(i) Conversion of existing centralized compressed medical gas pipeline system to Liquid Medical Oxygen (LMO) system at the locations mentioned in Annexure 1
(ii) Operation & maintenance of the existing pipeline system (medical oxygen, medical nitrous oxide, vacuum system), all outlets, all existing manifold where the 5 year BOT contract has expired.
(iii) Comprehensive maintenance of existing pipeline system, all outlets and existing manifolds.
(iv) Performance parameters of medical gases and vacuum to be maintained as per standards.

(v) Installation of VIE tank of adequate capacity along with all accessories and obtaining Central Explosives License for the same and maintenance of the same.

(vi) Installation of new outlets for medical oxygen along with pipelines and vacuum points, as required, in the expansion of work in these institutions

**Note:**

a) Nitrous oxide will be continued to be supplied in present compressed form.

b) Since the Space of the **Manifold Room** is the property of the respective hospitals, the same will be utilized for the purpose of LMO supply irrespective of the status of existing contract. However, new Manifold rooms may be required to be built to cover the expanded area of coverage with LMO. The hospital authorities will provide the space for such purpose of building additional manifolds, as necessary.

c) Pipeline laying from Oxygen Vessel/ Tank to the Manifold room will be the responsibility of the respective LMO supplier and the cost of the pipeline etc. should be incorporated in the rate of LMO. After 5 years the pipeline from vessel to the Manifold will become the property of the user institution.

Liquid Medical Oxygen should be supplied through mobile vehicles and will be stored in 990 litres / 2600 litres / 5 kL / 6 kL / 10 kL / 13kL / 20 kL tanks or vessels, depending on the LMO consumption volumes, space availability, numbers and locations of Manifolds and the spread of LMO consuming departments and buildings.

The rate will be quoted per unit m$^3$ of the LMO inclusive of all the transportation and maintenance expenses- Rs “A” per m$^3$ of Liquid Oxygen, the price is inclusive of all the transportation and vessel charges (#)

The responsibility of installing Copper gas pipeline and outlets for departments currently using piped oxygen lies with the LMO supplier. The rate of any additional Oxygen points and the rate of enhancement in length of gas pipeline in the buildings currently using piped Oxygen Supply will be admissible to the LMO supplier as per the L1 rate received for Schedule C (explained later) for the unit Copper Pipe extension and unit outlet point installation.
The responsibility for new buildings/ departments (like SNCUs) where pipelines are being laid afresh lies with the L1 bidder in the Schedule C (explained later).

<table>
<thead>
<tr>
<th>schedule for quoting rate of Liquid Oxygen Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Liquid Oxygen supply, transportation, storage, maintenance rate</td>
</tr>
<tr>
<td>Rs A per m$^3$ of Liquid Oxygen, the price is inclusive of all the transportation and vessel charges and manpower charges</td>
</tr>
</tbody>
</table>

**NOTE:**

1. (#)-The operation and maintenance of the entire Liquid Medical Oxygen supply system, including the maintenance of pipeline and of outlet points and of the gas vessels and meters and installation, for the MCH will be the responsibility of the Liquid Oxygen supplier (L-1 Bidder). The rates of the maintenance are considered inclusive of the manpower resources and are required to be included in the above mentioned per unit price of Liquid Oxygen.

2. The liquid oxygen tank will remain under the ownership of the supplier. The license for the Liquid Oxygen Tank installation will technically be in the name of the authority of the hospital, however, the responsibility of safe and secured maintenance of the entire infrastructure will belong to the LMO supplier of specified MCH / other Health Institutions during the contract period.

3. Rate per M$^3$ is the key L-1 determination criteria for the supply of Liquid Oxygen in MCHs

4. Liquid Oxygen Supply - The L-1 bidder will be responsible for the supply of Liquid Oxygen gas at per m$^3$ rates irrespective of the location/ department/ ward of the MCH, including future expansion areas, in the institutions mentioned in Annexure 1 and clause 1.4 of this Section.

5. Measurement of consumption / supply of Liquid Medical Oxygen- The supply of LMO will be measured by Gas Mass Flowmeter installed in a well-protected area adjacent to the LMO vessel with the main outlet pipe, to be kept under the control of the concerned Hospital authority and the meter shall be read jointly by the Hospital authority and the supplier on the particular dates of each month as may be decided by the Hospital authority.
The same will also be measured and corroborated based on the consumption as measured by the sum total of the readings of Gas Mass Flowmeters attached with the main outlet of all the manifolds and those installed across the wards/ departments/ buildings of the hospitals.

The concerned authority may if so desires can ask for weight measurement of LMO supply (Gross Weight minus Tare Weight of the supply tanker) in addition to volume measurement as stated above, for the purpose of having additional information about the consumption as well as submission of information to higher authorities.

b. Schedule ‘B’ for New Oxygen / Nitrous Oxide Manifolds and Vacuum System

- **Schedule B- I** (O\textsubscript{2} Manifold 2+2 with Control Panel) with all accessories
- **Schedule B- II** (O\textsubscript{2} Manifold 4+4 with Control Panel) with all accessories
- **Schedule B- III** (O\textsubscript{2} Manifold 8+8 with Control Panel) with all accessories
- **Schedule B- IV** (O\textsubscript{2} Manifold 10+10 with Control Panel) with all accessories
- **Schedule B- V** (N\textsubscript{2}O Manifold 2+2 with Control Panel) with all accessories
- **Schedule B- VI** (N\textsubscript{2}O Manifold 3+3 with Control Panel) with all accessories
- **Schedule B- VII** (N\textsubscript{2}O Manifold 4+4 with Control Panel) with all accessories
- **Schedule B- VIII** Vacuum with tank size 500L with dual pumps, filter and accessories
- **Schedule B- IX** Vacuum with tank size 1000L with dual pumps, filter and accessories
- **Schedule B- X** Vacuum with tank size 2000L with dual pumps, filter and accessories
- **Schedule B- XI** Vacuum with tank size 3000L with dual pumps, filter and accessories

This work will be undertaken on as and when required basis for the expansion of the Liquid Oxygen Points in the various MCHs and other institutions which may require construction of new Manifolds for LMO and N2O and the creation of Vacuum.
c. **Schedule ‘C’ for Copper Pipeline and Outlet points**

This schedule will cover rate for **Physical Installation of Liquid Oxygen Pipelines and New Outlets** in Departments/ Units of Medical Colleges and District Hospitals/ Sub Division Hospitals that will be covered for supply of Oxygen to the patients

- **Schedule C- I** Per meter* Copper Pipeline with all accessories
- **Schedule C- II** Per New Outlet Point* with all accessories
- **Schedule C- III** Digital/ Analogue Gas flowmeters, providing mass and volume measurement, with installation and all accessories

The rates for the laying of fresh pipeline and new outlets in institutions/ buildings will be quoted as per Schedule C-I and C-II as per the Table below and the subsequent notes.

<table>
<thead>
<tr>
<th>TABLE 2.1</th>
<th>Schedule for quoting rate of Copper Pipeline and Outlet Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C-I. The rate of gas pipeline</strong></td>
<td>Rs C1 per meter of new copper pipeline, with all accessories, irrespective of the location/ department/ ward of the MCH and other Health Institutions.</td>
</tr>
<tr>
<td><strong>C-II. The rate of new Oxygen points</strong></td>
<td>Rs C2 per new Oxygen Outlet point been introduced, with all accessories, irrespective of the location/ department/ ward of the MCH and other Health Institutions. The rate quoted will be for twin point outlets.</td>
</tr>
<tr>
<td><strong>C- III. The rate for Digital/ Analogue Gas Flowmeters</strong></td>
<td>Rs C3 per Digital/ Analogue Gas flowmeters, providing mass and volume measurement, with installation and all accessories</td>
</tr>
<tr>
<td>Detailed Components in Section 3</td>
<td>Detailed Components in Section 3</td>
</tr>
</tbody>
</table>

*NOTE:

(1) **Laying of Pipeline and additional points in existing locations using piped oxygen** -
The responsibility of installation of Gas Pipeline and oxygen outlet points in the buildings...
and areas currently using piped oxygen supply, will lie with the L1 bidder, so as to not disrupt the medical operations, as selected in Schedule A-I to A-XIII

(2) **Laying of Pipeline (including vacuum) and additional points in new premises / buildings being covered under piped oxygen supply for first time**- For the installation of the gas pipeline and additional Oxygen Outlet points, in the buildings being brought under the Oxygen supply/ Liquid Oxygen supply for the first time, the responsibility of installation of Gas Pipeline and oxygen outlet points will be the responsibility of L1 bidder for the Schedule C-I & C-II.

(3) The submission of bids by various bidders shows that they understand that they may have to take unknown meter of copper pipeline extension and unknown number of new outlet points during the contract duration.

d. **Schedule ‘D’ for New Manifold with complete pipeline installation**
   - **Schedule D-I** for MR Bangur
   - **Schedule D-II** for School of Tropical Medicine

**1.2 Duration of the Project:**
The bid price will be valid for a **period of 5 years which shall be the contract duration**, with a mid-term review at the end of 3rd year, leading to **subsequent extension for two year period**. The **Mid-term extension** is subject to receipt of **Successful and Problem free supply and maintenance Certificate** from the MSVP/ Director / Superintendent of the concerned institutions.

In exceptional cases, if Non Satisfactory performance report is being observed and reported for any of the L1/ L2 suppliers, the authorities of the concerned institution will inform the Health and Family Welfare Department, Government and West Bengal Medical Services Corporation, for calling of fresh LMO supply tenders for such institutions, to begin the next year.

**1.3 Usage of Cylndered Oxygen Gas for Emergency Purposes:**
To maintain emergency services under any situation, 10% of the Annual Consumption of Oxygen (beginning with the last year’s consumption figures in Annexure 1) shall be maintained by the L-1 bidder of that particular MCH/ institution. The size (volume) of such cylinders will be decided by the MCH / Hospital authorities based on their requirements. The rates for such
cylindere Oxygen Gas supply will be as applicable through the CMS tendered rate for that year.

1.4 Smooth functioning of LMO Supply operations - provision of 2 vessels by two suppliers:
It has been observed in the past operations of gas supply that the suppliers tend to enjoy monopolistic practices in the supply of Oxygen Gas cylinders. This has often created Health Hazards for the patients and risk prone working conditions for the health authorities, if the supplies of life saving drug are threatened by the supplier at any stage or other corrupt practices of under supply or false billing are introduced through the same. To overcome any such situation, the individual MCH shall engage two supplier organizations for supply of Liquid Oxygen at the beginning of operations, and hence maintain tanks and gas vessels of both the suppliers. Institutions using less than 1500 m³ of LMO per month will require only a single vessel from a single supplier.

However, the L-1 bidder shall have assured supply order of 75-80% of the Current Consumption of Oxygen. The rest 10-15% Liquid Oxygen (since 10% Oxygen gas is provided through Cylinders) can be offered by the MCH/ Hospital authorities to the L-2 bidder at the offer price of L-1 bidder. In case of refusal by L-2 bidder, the offer may be passed to the L-3 bidder and so on.

Hence the L-1 bidder shall have a clear understanding that it may have to offer only 75-80% of the Liquid Oxygen and additional 10% cylindere oxygen (at CMS approved tender rates for the same) to the MCH/ Hospital, while 10-15% of the Liquid Oxygen may be supplied by the L-2 or other bidders. And that the L-1 bidder shall assist the MCH / Hospital authorities for the pipeline laying work.

| Table 2.2 Approximate Distribution of the proposed Annual LMO Supply in each institution |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Supply of LMO by L1 Bidder                      | Supply of LMO by L2 Bidder, @ L1               | Supply of Cylinder Oxygen for Emergency requirements by L1 bidder |
| 75% to 80%                                     | 15% to 10%                                    | 10%                                          |
|                                               |                                               | 10%                                          |
L2 Bidder will install his own tank and accessories and pipeline from the source tank to the common manifold.

The pressure to be maintained at the point of usage i.e. at the patient bed side should be as per the standard medical requirements.

The submission of bid by any bidder assumes clear understanding of the above provision, necessitated to avoid any monopolistic practices in essential lifesaving drug supply, and their agreeing to accept such provision.

The medical oxygen and nitrous oxide to be supplied should conform to I.P. 2010. Test reports are to be supplied with every batch.

1.5 Site visit for assessment of existing oxygen supply infrastructure and need analysis:

The hospital authorities are being requested to provide assistance to the interested bidders in site visit and for assessment of existing oxygen supply infrastructure and need analysis for Tank installation space etc. to make an accurate bid. The Director of Medical Education, Health and Family Welfare will be issuing a communication to the concerned Heads of the institutions to provide the access and support on the dates fixed for respective institution for the staff of the interested bidders.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Name of the Institution</th>
<th>Date(s) of visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Calcutta Medical College &amp; Hospital</td>
<td>27.03.2012 &amp; 28.03.2012</td>
</tr>
<tr>
<td>II</td>
<td>NRS Medical College &amp; Hospital</td>
<td>31.03.2012 &amp; 02.04.2012</td>
</tr>
<tr>
<td>III</td>
<td>S.S.K.M. Hospital &amp; B.I.N.</td>
<td>29.03.2012 &amp; 30.03.2012</td>
</tr>
<tr>
<td>IV</td>
<td>R. G. Kar Medical College &amp; Hospital</td>
<td>24.03.2012 &amp; 26.03.2012</td>
</tr>
<tr>
<td>V</td>
<td>Bankura Sammilani Medical College &amp; Hospital</td>
<td>04.04.2012</td>
</tr>
<tr>
<td>VI</td>
<td>Burdwan Medical College &amp; Hospital</td>
<td>03.04.2012</td>
</tr>
</tbody>
</table>
VII North Bengal Medical College & Hospital 07.04.2012
VIII Medinipur Medical College & Hospital 05.04.2012
IX Dr. B. C. Roy Post Graduate Institute of Pediatric Sciences 06.04.2012
X Calcutta National Medical College & Hospital 22.03.2012 & 23.03.2012
XI M R Bangur 06.04.2012
XII School of Tropical Medicine 28.03.2012

The copies of layout of the various hospitals are available for issue to the authorized representatives of Liquid Oxygen manufacturers and suppliers. The authority letter should be issued by such firms to a single individual on their company letter head.

1.6 Site Preparation
The open air site(s) for the installation of the Liquid Oxygen Tanks will be selected during the visit to the institutions as mentioned above. The Civil/ Electrical Engineering work for the installation of LMO tanks will be undertaken by the hospital authorities with the help of concerned PWD units as per the approved Standards and drawings for this purpose.

The supplier of the Liquid Oxygen gas will be personally responsible to deploy resources during the construction work (Civil & Electrical) to ensure that the construction is as per the approved standards. They also have an option to undertake the construction through their own resources, as per the approved standard and design, and submit the cost estimate as per the PWD Schedule, to be paid by the Government. Such construction work, if undertaken by the LMO supplier agency, will be checked and verified by Govt. Engineer.

2. Source of Funds
WBMSC would apply the funds received from the TDE Cell of the Department of Health & Family Welfare, Government of West Bengal and various other funds including grants or projects funds as is received or may be received for this purpose.
3. Fraud and Corruption

3.1 It is WBMSC policy to require that Bidders, suppliers, and contractors and their subcontractors under WBMSC contracts, observe the highest standard of ethics during the procurement and execution of such contracts.

In pursuance of this policy, WBMSC:

(a) Defines, for the purpose of this provision, the terms set forth below as follows:
   (i) **Bribery** is an act of unduly offering, giving, receiving or soliciting anything of value to influence the process of procuring goods or services, or executing contracts:
   (ii) **Extortion or coercion** is the act of attempting to influence the process of procuring goods or services, or executing contracts by means of threat of injury to person, property or reputations:
   (iii) **Fraud** is the misrepresentation of information or facts for the purpose of influencing the process of procuring goods or services, or executing the contracts, to the detriment of WBMSC or other participants;
   (iv) **Collusion** is the agreement between Bidders designed to result in bids at artificial prices that are not competitive.

(b) Will reject a proposal to award a contract if it determines that a vendor recommended for award has engaged in corrupt practices in competing for the contract in question;

(c) Will declare a vendor ineligible, either indefinitely or for a stated period of time, to become a registered Vendor under any programme of the Government of West Bengal if it at any time determines that the vendor has engaged in corrupt practices in competing for or in executing a WBMSC contract;

(d) Will cancel or terminate a contract if it determines that a vendor has engaged in corrupt practices in competing for or in executing a WBMSC contract;

(e) Will normally require a vendor to allow WBMSC, or any person that WBMSC may designate, to inspect or carry out audits of the vendor’s accounting records and financial statements in connection with the contract.

3.2 Any vendor participating in WBMSC’s procurement activities, shall facilitate to WBMSC personnel upon first request, all documents, records and other elements needed by WBMSC to investigate the allegations of misconduct by either vendors or any other party to the procurement activities. The absence of such cooperation may be sufficient grounds for the
debarment of the vendor from WBMSC vendor roster and may lead to suspension following review by WBMSC Tender Review Committee.

3.3 As part of WBMSC Whistle Blower policy it is required that Vendors, their subsidiaries, agents, intermediaries and principals cooperate with WBMSC Internal Audits Group as well as with other investigations authorized by WBMSC or by the Government of West Bengal or the Central Govt. as and when required. Such cooperation shall include, but not be limited to the following: access to all employees, representatives, agents and assignees of the vendor; as well as production of all documents requested, including financial records. Failure to fully cooperate with investigations will be considered sufficient grounds to allow WBMSC to repudiate and terminate the contract, and to debar and remove the supplier from WBMSC’s list or registered vendors.

3.4 The objective of this bid is to ensure supply of best quality services at the most competitive price. If at any stage of the bidding, including at the stage of financial evaluation, it appears that the tendered rate is artificially hiked or is much lower compared to the prevailing market price and available rates of similar or identical services with the government or in market, WBMSC reserves the right to cancel the bids.

4. Eligible Bidders

4.1 A Bidder, and all parties constituting the Bidder, may have the nationality of any country.

4.2 Annual turnover for bidding for a particular institution is given below. If the interested bidders are bidding for more than 1 schedule, then the Annual Turnover requirement will be the sum of the aggregate of the all the bids quoted for.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Name of the Institution</th>
<th>Annual Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Calcutta Medical College &amp; Hospital</td>
<td>7 crore</td>
</tr>
<tr>
<td>II</td>
<td>NRS Medical College &amp; Hospital</td>
<td>5 crore</td>
</tr>
<tr>
<td>III</td>
<td>S.S.K.M. Hospital &amp; B.I.N.</td>
<td>8 crore</td>
</tr>
</tbody>
</table>
IV R. G. Kar Medical College & Hospital 8 crore
V Bankura Sammilani Medical College & Hospital 2 crore
VI Burdwan Medical College & Hospital 2.8 crore
VII North Bengal Medical College & Hospital 2 crore
VIII Medinipur Medical College & Hospital 2 crore
IX Dr. B. C. Roy Post Graduate Institute of Pediatric Sciences 2 crore
X Calcutta National Medical College & Hospital 7.2 crores
XI M R Bangur 2 crore
XII School of Tropical Medicine 2 crore
XIII Chittaranjan Seva Sadan 50 lakhs

4.3 Must be the manufacturers/ suppliers of Liquid Medical Oxygen and must have either supplied the LMO to Medical institutions either themselves or through their agencies/ vendors. The experience of such supplies of LMO directly or indirectly (through the agencies) and installation & maintenance of medical gas pipeline & VIE should be at least 10 such installations across the country.

4.4 Should be able to provide credit facility for at least 90 days, due to the quarterly payment system of the Government institutions

**Domestic Preference**- In case of Schedule B/ C/ D, All SSI or Public Sector Units in West Bengal will have to confirm to the Technical and Financial criteria. The State SSI Units and PSU’s will however get a price preference in keeping with the G.O. 10500 F-dated 19.11.2004.

4.5 Should have GMP approved medical gas plant and valid drug license of its own or of its principal producer of Liquid Medical Oxygen.

4.6 Having ISO 9001: 2008 and ISO 14001 certified facility will be preferred
4.7 **A Bidder shall not have a conflict of interest.** All Bidders found to have conflict of interest shall be disqualified. Bidders may be considered to have a conflict of interest with one or more parties in this bidding process. If he submits more than one bid in this bidding process. Bidders will be considered to have common interest hence having conflict of interest if

(i) The Bidder, its Member or Associate (or any constituent thereof) and any other Bidder, its Member or any Associate thereof (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of a Bidder, its Member or an Associate thereof (or any shareholder thereof having a shareholding of more than 5 percent of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be) in the other Bidder, its Member or Associate is less than 5% (five percent) of the subscribed and paid up equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 4A of the Companies Act 1956. For this purpose indirect shareholding held through one or more intermediate persons shall be computed as follows:

(a) Where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the “Subject Person”) shall be taken into account for computing the shareholding of such controlling person in the Subject Person: and

(b) Subject always to sub-clause (a) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided however, that no such shareholding shall be reckoned under this sub-clause (b) If the shareholding of such person in the intermediary is less than 26% of the subscribed and paid up equity shareholding of such intermediary; or

4.9 A constituent of such Bidder is also a constituent of another Bidder; or
4.10 Such Bidder, or any Associate thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder, or any Associate thereof or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder, its Member of any Associate thereof; or

4.11 Such Bidder has the same legal representative for purposes of this Application as any other Bidder; or

4.11.1 Such Bidder, or any Associate thereof has a relationship with another Bidder, or any Associate thereof, directly or through common third party/parties, that puts either or both of them in a position to have access to each others’ information about, or to influence the Application of either or each other; or

4.12 Such Bidder or any Associate thereof has participated as a consultant to the Authority if the preparation of any documents, design or technical specifications of the project.

4.13 A Bidder shall be liable for disqualification if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Bidder, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Bidder, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this Tender. Nor will this disqualification apply where such adviser is engaged after a period of 3(three) years from the date of commercial operation of the Project.

4.14 **Explanation:**

*In case a Bidder is a JV or a Consortium,* then the term Bidder as used in this Clause 4 shall include each Member of such JV or Consortium.

4.15 A Bidder that is under a declaration of ineligibility by WBMSC in accordance with Instructions to Bidders Clause 3, at the date of contract award, shall be disqualified. Bidders shall not be eligible to submit a bid when at the time of bid submission:

1. Suppliers are already suspended by WBMSC; or
2. Suppliers are suspended by the Government of West Bengal or Central Government or any other State Government or WBMSC,
3. Suppliers have been declared ineligible by Government of West Bengal or Central Government or any other State Government or WBMSC.

4.16 Bids may be submitted by a Joint Venture (JV), In the case of a JV:
   a. All parties to the JV shall be jointly and severally liable; and
   b. The JV shall nominate a Representative who shall have the authority to conduct all businesses:
      - For and on behalf of any and all the parties of the JV during the bidding process; and
      - In the event the JV is awarded the Contract, during contract execution.

Explanation:
In the event of a Joint Venture being selected for contract award, the Contract Agreement can only be in the name of the Joint Venture and all payments will be made in name of JV. Any request, declaration or agreement by any or all member of JV to the contrary will not be accepted and the Award of work will be cancelled or terminated as the case may be.

4.17 It may be noted that the consortium or JV will be allowed with maximum three members only and the change in membership or pattern of membership of consortium or JV will be not be allowed during the entire period of Contract.

5. Period of Validity of Bids, EMD

Bid shall remain valid for a period of 120 days after the completion of the existing contracts of the Medical Oxygen Gas supply of the various institutions and their respective buildings. A bid valid for a shorter period shall be rejected by WBMSC as non-responsive. In exceptional circumstance, prior to the expiration of the bid validity period, WBMSC may request the bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. In such case, the bid security (EMD) shall also be extended for a corresponding period.

Hence, the Earnest Money deposit in the form of Bank Draft may require extension of its date by way of revalidation from the issuing bank. In case of the EMD submitted in the form of
Bank Guarantee, the date of validity of the bids and the date of end of the current contracts shall be taken into account by the bidders while submitting their EMD.

The successful bidder will be eligible to withdraw the EMD after submission of the Performance Security in the form of Bank Guarantee. Performance Security will be valid for the entire project duration of 5 years, as per the details explained in Section 2, Clause 2.2.h

6. Clarification of Bidding Documents

5.1 A prospective Bidder requiring any clarification of the Bidding Documents shall contact WBMSC in writing at wbmsc.wbhealth@gmail.com or wbmsc@wbhealth.gov.in. WBMSC will respond in writing to any request for clarification, provided that such request is received no later than 3 (Three) days prior to the deadline for submission of bids, WBMSC shall publish copies of its response in its website including a description of the enquiry but without identifying its source.

5.2 Pre-bid Meeting- A pre-bid meeting with the interested bidders will be held on 19th March at 2 pm in the Conference Room of WBMSC. All doubts should be informed by E-Mail or through Courier, atleast 48 hours before the pre-bid meeting for circulation before the meeting. Communication on these points raised and decisions taken will be informed by WBMSC, within 24 hours of the pre-bid meeting.

7. Amendment of Bidding Documents

6.1 At any time prior to the deadline for submission of bids, WBMSC may amend the Bidding Documents by issuing amendment.

6.2 Any amendment issued shall be part of the Bidding Documents and shall be communicated to all by publishing the same in its website www.wbmsc.co.in

6.3 To give prospective Bidders reasonable time in which to take an amendment into account in preparing their bids, WBMSC may, at its discretion, extend the deadline for the submission of bids.
Section 2: Bid Submission

Note: The interested bidders are requested to visit the sites of proposed constructions to check the actual position and for proposal planning and financial value estimation.

2.1 Preparation of Bids

Cost of Bidding
The Bidder shall bear all costs associated with the preparation and submission of its bid.

Language of Bid
The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and WBMSC, shall be written in the English language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into English, authenticated by the manufacturer, for purposes of interpretation of the Bid such translation shall govern.

Alternative Bids
Alternative Bids will not be accepted. In the event of a supplier submitting more than one Bid, the following shall apply:

a. All Bids marked alternative Bids will be rejected and only the base Bid will be evaluated.

All such bids will be summarily rejected wherein a supplier in his own capacity or in form of member of JV or member consortium has submitted bids with one or more JV’s or Consortiums.

Currencies of Bid
The Bidder shall quote in INR only.

2.2 Two sealed envelope bid process-

The bid will be submitted in two sealed envelopes as explained below:

(i) Technical Bid Envelope – The Envelope should be clearly marked with the details of the Schedules for which it is submitted. There will be only 1 envelope for the Technical bid for any number of bids under one of the groups as given below:
✓ Technical Bid for the supply of Liquid Medical Oxygen gas (Schedule A-I to A-XII)/
✓ Technical Bid for the installation of New Oxygen / Nitrous Oxide Manifolds and Vacuum Systems (Schedule B-I to B-XI)/
✓ Technical Bid for the supply of Copper pipelines and Outlet points (Schedule C-I, C-II and C-III)
✓ Technical Bid for the installation of New Manifold with complete pipeline installation (Schedule D-I for MRB, Schedule D-II for STM)

It should consist of the following documents:

a. A detailed profile of the supplier, specific to the Schedule for which they are bidding
b. Their Financial Statements for last 3 years- Their annual turnover in the last three years should be at least 3 times the expected bid price of that schedule, specifically for the Schedules B/ C/ D where specific turnover has not been mentioned.
c. Excise Duty, Income tax and VAT documents, Registration Documents and
d. Trade License/ Drug License/ GMP (as applicable, for the producer or principal producer in case of supplier)
e. The past experience (and value) of projects undertaken in Private and Government Healthcare institutions for Medical Gas Pipeline installation
f. IMPORTANT: The last version of tender document, as updated on 20.04.2012, with all the pages of the tender document signed by an authorized representative of the bidder.
g. The technical bid should contain a non-refundable DD as per the table below as bid application fees payable to West Bengal Medical Services Corporation Ltd.

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Schedule</th>
<th>Application Fees (Bid Price)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A-I to A-XIII</td>
<td>Rs 5000, for each schedule*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Say, for a bidder bidding in 5 Schedules, the bid price will be Rs 25,000/-</td>
</tr>
<tr>
<td>2</td>
<td>B-I to B-XI</td>
<td>Rs 3000 for the entire Schedule B</td>
</tr>
</tbody>
</table>
The technical bid will have a **DD/ Bank Guarantee** as per the amounts given below as **Earnest Money Deposit** drawn in favour of **West Bengal Medical Services Corporation Ltd** and payable in Kolkata.

### TABLE 3.2 - Earnest Money Deposit

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Name of the Institution and Nature of Work</th>
<th>Earnest Money Deposit</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Calcutta Medical College &amp; Hospital</td>
<td>7 lakh</td>
</tr>
<tr>
<td>II</td>
<td>NRS Medical College &amp; Hospital</td>
<td>5 lakh</td>
</tr>
<tr>
<td>III</td>
<td>S.S.K.M. Hospital &amp; B.I.N.</td>
<td>8 lakh</td>
</tr>
<tr>
<td>IV</td>
<td>R. G. Kar Medical College &amp; Hospital</td>
<td>8 lakh</td>
</tr>
<tr>
<td>V</td>
<td>Bankura Sammilani Medical College &amp; Hospital</td>
<td>2 lakh</td>
</tr>
<tr>
<td>VI</td>
<td>Burdwan Medical College &amp; Hospital</td>
<td>3 lakh</td>
</tr>
<tr>
<td>VII</td>
<td>North Bengal Medical College &amp; Hospital</td>
<td>2 lakh</td>
</tr>
<tr>
<td>VIII</td>
<td>Medinipur Medical College &amp; Hospital</td>
<td>2 lakh</td>
</tr>
<tr>
<td>IX</td>
<td>Dr. B. C. Roy Post Graduate Institute of Pediatric Sciences</td>
<td>2 lakh</td>
</tr>
<tr>
<td>X</td>
<td>Calcutta National Medical College &amp; Hospital</td>
<td>7 lakh</td>
</tr>
<tr>
<td>XI</td>
<td>M.R Bangur</td>
<td>2 lakh</td>
</tr>
<tr>
<td>XII</td>
<td>School of Tropical Medicine</td>
<td>2 lakh</td>
</tr>
<tr>
<td>A-XIII</td>
<td>Chittaranjan Seva Sadan</td>
<td>1 lakh</td>
</tr>
<tr>
<td>B</td>
<td>New Oxygen / Nitrous Oxide Manifolds and Vacuum System</td>
<td>Rs 50,000/-</td>
</tr>
<tr>
<td>C-I &amp; C-II</td>
<td>Installation of Pipeline and new outlets in buildings/ premises/ institutions currently not</td>
<td>Rs 2 lakh</td>
</tr>
</tbody>
</table>
covered in Piped Oxygen Gas Supply System across the State

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-III</td>
<td>Digital/ Analogue Gas flowmeters, providing mass and volume measurement, with installation and all accessories, in the institutions across the state</td>
<td>Rs 2 lakh</td>
</tr>
<tr>
<td>D-I</td>
<td>Pipeline and new points Installation with physical infrastructure at M R Bangur</td>
<td>Rs 50,000/-</td>
</tr>
<tr>
<td>D-II</td>
<td>Pipeline and new points Installation with physical infrastructure at at School of Tropical Medicine</td>
<td>Rs 50,000/-</td>
</tr>
</tbody>
</table>

i. **The Performance Security** to be submitted by the successful bidder for each of the locations will be 10% of the quoted charges for the entire work at that location and shall be retained till 60 days after the completion of the project/ work duration (Project Duration implies 3 years in case of non-extension beyond the third year, or otherwise- 5th year, as applicable). The performance security will be payable as a **DD or Bank Guarantee** in favour of **West Bengal Medical Services Corporation Ltd.**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Year</th>
<th>Performance Security retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Second</td>
<td>8%</td>
</tr>
<tr>
<td>3</td>
<td>Third</td>
<td>6%</td>
</tr>
<tr>
<td>4</td>
<td>Fourth</td>
<td>4%, if supply order is extended</td>
</tr>
<tr>
<td>5</td>
<td>Fifth</td>
<td>2%, if supply order is extended</td>
</tr>
</tbody>
</table>

This shall take into account the volume of the last year of consumption of the Oxygen Gas by the respective institution, along with the per m³ rate quoted by the bidders.

(ii) **Financial Bid Envelopes**-

a. The Financial bids of the technically compliant firms alone will be opened.

b. Bidders may submit the Financial Bid in **separate sealed envelopes for any number of schedules** specified below, provided they meet the financial and other technical requirements

   - Financial Bid for the supply of Liquid Medical Oxygen gas
     
     **(Schedule A-I to A-XIII)**/
Financial Bid for the installation of New Oxygen / Nitrous Oxide Manifolds and Vacuum Systems (Schedule B-I to B-XI)/
Financial Bid for the supply of Copper pipelines and Outlet points (Schedule C-I, C-II and C-III)
Financial Bid for the installation of New Manifold with complete pipeline installation (Schedule D-I for MRB, Schedule D-II for STM)

The Financial Envelope should be clearly marked with the details of the Schedule it is been submitted for as shown above.

c. The selection of bidders will be on the lowest cost (L1) to government basis, taking into account the cost of the equipments, installations and consumables on one-time/ recurring cost basis, as applicable.

(iii) Formats for submission of Financial Bids:
The Financial Bid Envelope will have separate sealed envelopes for each of the schedule given below:

A) Financial Bid for the supply of Liquid Medical Oxygen gas (Schedule A-I to A-XIII)

<table>
<thead>
<tr>
<th>SCHEDULE</th>
<th>Name of the Institution</th>
<th>Liquid Oxygen supply, transportation, storage, maintenance rate and man power charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Calcutta Medical College &amp; Hospital</td>
<td>Rs __ per m³ of Liquid Oxygen, the price is inclusive of all the manpower, operation, transportation and vessel charges, Taxes Extra as applicable</td>
</tr>
<tr>
<td>II</td>
<td>NRS Medical College &amp; Hospital</td>
<td>Rs __ per m³ of Liquid Oxygen</td>
</tr>
</tbody>
</table>
### Table 4-B Price Bid for New Manifolds and Vacuum Systems

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Description of the Items</th>
<th>Rate (In Rs), Taxes as applicable extra</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schedule B-I</strong></td>
<td>(O₂ Manifold 2+2 with Control Panel) with all accessories</td>
<td></td>
</tr>
</tbody>
</table>
Schedule B- II  (O₂ Manifold 4+4 with Control Panel) with all accessories
Schedule B- III  (O₂ Manifold 8+8 with Control Panel) with all accessories
Schedule B- IV  (O₂ Manifold 10+10 with Control Panel) with all accessories
Schedule B- V  (N₂O Manifold 2+2 with Control Panel) with all accessories
Schedule B- VI  (N₂O Manifold 3+3 with Control Panel) with all accessories
Schedule B- VII  (N₂O Manifold 4+4 with Control Panel) with all accessories
Schedule B- VIII  Vacuum with tank size 500L with dual pumps, filter and accessories
Schedule B- IX  Vacuum with tank size 1000L with dual pumps, filter and accessories
Schedule B- X  Vacuum with tank size 2000L with dual pumps, filter and accessories
Schedule B- XI  Vacuum with tank size 3000L with dual pumps, filter and accessories

The details of the pump capacity in 'cfm' for the various vacuum tanks is as follows

<table>
<thead>
<tr>
<th>Pump capacity in CFM</th>
<th>Tank size</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>500</td>
</tr>
<tr>
<td>50</td>
<td>1000</td>
</tr>
<tr>
<td>100</td>
<td>2000</td>
</tr>
<tr>
<td>150</td>
<td>3000</td>
</tr>
</tbody>
</table>

C)  Financial Bid for the Copper Pipeline and Outlet Supply

TABLE 4-C
Schedule for quoting rate of Copper Pipeline and Outlet Supply
C-I. The rate of gas pipeline | Rs __________, per meter of new copper pipeline, with all accessories, irrespective of the location/ department/ ward of the MCH and other Health Institutions.
---|---
C-II. The rate of new Oxygen points | Rs __________, per new Oxygen Outlet point been introduced, with all accessories, irrespective of the location/ department/ ward of the MCH and other Health Institutions. The rate quoted will be for twin point outlets.
---|---
C- III. The rate for Digital/ Analogue Gas Flowmeters | Rs __________, per Digital/ Analogue Gas flowmeters, providing mass and volume measurement, with installation and all accessories
---|---
Detailed Components in Section 3 | Detailed Components in Section 3

NOTE:
Consumables- The bidder who will install new Pipelines and outlets will provide one time the necessary consumables like 600/1000 ml reusable collection jar in wards and 2000X2 ml reusable collection jar in OTs. The Hospital authority will provide further requirement of consumables.

Accessories: The bidders will explicitly mention in the price bid the accessories provided by them with the outlet points and gas pipeline, to make the system fully operational, as per the requisite standards.

**Single L-1 Rate calculation in ‘C-I & C-II’ Schedules**- The rate for the L-1 bidder will be calculated using the rates quoted for both the C-I and C-II schedules, for the supply and installation of Copper pipeline and outlet points (twin point outlet). *There will be a single L-1 bidder identified for the C-I and C-II schedules as per the process detailed in a, b and c points below:*

a. **Rate of Copper Pipeline**- The rate of L1 bidder for Schedule “C” for the supply and installation of copper pipe line will be calculated based on the average of the frequently used diameters of pipe line, and for which rate has been called for in Schedule C-I.
The following pipes will be required:

- 42 mm. outer diameter – Rate per Meter ____________
- 28 mm. outer diameter – Rate per Meter ____________
- 22 mm outer diameter – Rate per Meter ____________
- 15 mm outer diameter – Rate per Meter ____________
- 12 mm outer diameter – Rate per Meter ____________

**Average Rate per Meter** - Average of above mentioned Rates

b. The rate of an outlet point will be quoted inclusive of all components and accessories, such as BPC flow meter with humidifier for Oxygen Outlet, Ward Vacuum Units for Vacuum point and other accessories, and relevant accessories for N₂O outlet points also

- B1. Rate of every Standard outlet point with Standard Accessories- Rs ____ per Oxygen outlet point
- B2. Rate of every Standard outlet point with Standard Accessories- Rs ____ per N₂O outlet point
- B3. Rate of every Standard outlet point with Standard Accessories- Rs ____ per Vacuum outlet point

c. **Formula for calculating L-1 Bidder for combined C-I and C-II schedule**-
Since there is approximate 2 meters of pipe line requirement for every outlet point, the L1 rate will be calculated for this schedule as the Rate for 2 meters of copper pipeline (averaged) + Rate of an Oxygen outlet point

**D) Financial Bid for the set-up of New Manifold with complete pipeline installation in MR Bangur and School of Tropical Medicine**

| Table 4-D Price Bid for New LMO System with Manifold installation in MRB and STM |
|---------------------------------|-------|------|------|------|--------|
| Requirements                    |       |      |      |      |        |
| No of O₂ Number Vacuum O₂ N₂O TOTAL Copper |

West Bengal Medical Services Corporation Ltd.  Page 30
## Schedule D-I for MR Bangur *

### Specification Details in Section 3

<table>
<thead>
<tr>
<th>Points</th>
<th>of N₂O Points</th>
<th>Manifold Size</th>
<th>Manifold Size</th>
<th>(In Rs), Taxes extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>310 twin points</td>
<td>19 points</td>
<td>90 points</td>
<td>8+8 with Control Panel and all accessories and alarm system</td>
<td>Rs________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Length as per Actuals.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with tank size 2000L with dual pumps, filter and accessories</td>
<td></td>
<td>Payment admissible as per the approved rates in C-I &amp; C-II Schedules</td>
</tr>
</tbody>
</table>

## Schedule D-II for School of Tropical Medicine

### Specification Details in Section 3

<table>
<thead>
<tr>
<th>Points</th>
<th>of N₂O Points</th>
<th>Manifold Size</th>
<th>Manifold Size</th>
<th>(In Rs), Taxes extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 twin points</td>
<td>-</td>
<td>90 points</td>
<td>4+4 with Control Panel and all accessories and alarm system</td>
<td>Rs________</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with tank size 2000L with dual pumps, filter and accessories</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2+2 with Control Panel and all accessories and alarm system</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes
- Specification Details in Section 3
- Length as per Actuals.
- Payment admissible as per the approved rates in C-I & C-II Schedules.
Cost to be quoted in separate envelopes for each as per the requirement in various locations
Section 3: Technical Specification

Specifications for installation of Centralized Medical Gas pipelines system including suction pipeline and allied works at Various Medical Colleges and Hospitals and other healthcare institutions in West Bengal.

Note:

1. The interested bidders are requested to visit the sites of proposed construction, across the various MCHs to check the actual position and for accurate proposal planning.
2. They are requested to coordinate this visit with the MSVP/ Superintendent of the concerned MCHs and MR Bangur Hospital

Design and Structure of the Gas Pipeline System

Standard should comply as follows:

1. Standard should comply as follows:
   a. The entire installation should be compliant to NFPA 99C or HTM 0201 or EN 737-3 standards
   b. Terminal unit shall comply with ISO 9170-1
   c. Gas-specific connector shall comply with the body of a NIST or DISS connector complying with ISO 5359.
   d. Manifold and line pressure regulator shall comply with ISO 10524-2.
   e. Pressure gauges shall comply with the requirement given in ISO 10524-2

2. All equipments, parts, and accessories will be of approved quality meeting the relevant standards, as applicable.
3. Pipe to be certified by the international recognized body eg. LLOYDS/ SGS, IIIrd Party inspection
4. All Imported items will have a five year comprehensive warranty. The LMO supplier would be expected to verify the specifications of the products installed in Schedule B/C/D, as per the tender specifications and requirements.

5. The system required for the tender comprises of the following items, as required in various schedules

   1. Liquid oxygen supply (Schedule A)
   2. Oxygen manifold with fully automatic oxygen control panel (As may be required in the LMO expansion stage of various institutions- Schedule B)
   3. Nitrous oxide manifold (As may be required in the LMO expansion stage of various institutions- Schedule B)
   4. Vacuum supply system (As may be required in the LMO expansion stage of various institutions- Schedule B)
   5. Distribution piping with Monitoring and alarm system and accessories (Schedule C)
   6. Outlets and accessories (Schedule C)
   7. Digital/ Analogue Flowmeters (Schedule C)
   8. Installation of complete Manifold and Pipeline system for MR Bangur and School of Tropical Medicine
   9. Other Accessories

The specifications for the same are given below:

Specification of Various equipment and accessories required

1.0 Oxygen System

Oxygen System Shall consists of the followings:-

   a) Oxygen Manifold System with Automatic Control Panel
   b) Oxygen Emergency supply system

1.a Oxygen Manifold
i. **The oxygen manifold shall be of size 2+2, 4+4, 8+8, 10+10 bulk cylinders, as may be applicable in individual hospital.** Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with required numbers of cylinder pigtail connections to suit cylinder valves as per IS 3224 incorporating a check valve at the header connection. The high-pressure header bar shall be designed in such a manner that it can be extended to facilitate additional cylinder connections. Each header bar assembly shall be provided with a high-pressure shut-off valve.

ii. The manifold should be so designed that it shall suit easy cylinder changing and positioning.

iii. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be zinc plated.

iv. **The manifold should be suitable to withstand a pressure of 140-150 Kg/cm^2. The manifold should be tested (hydraulically) at 3500 psig pressure and to be supplied along with necessary test certificate.**

v. **The Oxygen Manifold System shall be compatible to allow integration with the Liquid Oxygen Tank.**

### 1.b Fully Automatic Oxygen Control Panel *(Imported)*

a. The Oxygen Control Panel shall be of microprocessor based and preferably Digital Display Type. Pressure reduction shall be in two stages. Panel shall be integrated with pressure gauges inside panel on downstream of pressure regulator. Panel shall be fitted with standby line regulator. Line regulators shall have pressure relief mechanism for testing and servicing purpose.

b. Panel shall be Fully Automatic and shall switch over from “Bank in Use” to ‘Reserve Bank’ without fluctuation in delivery line pressure. After the switch—over, the “Reserve Bank” shall become the “Bank in Use” and the “Bank in Use” shall become the “Reserve Bank”. The Control Panel will be
powered by a microprocessor. The unit shall be compact and enclosed in NEMA 1 enclosure.

c. A Microprocessor circuit board assembly shall provide a relay output to give indication when or just before the manifold switches from one bank of cylinders to another. The switch over shall be mechanically controlled, not electrically.

d. To avoid excess pressure being supplied to the distribution system, a pneumatically relief valve for the line regulator shall be incorporated. An intermediate pressure relief valve shall be installed between the high-pressure regulators and the line delivery regulators.

e. The control panel incorporates six coloured LED’s, three for the Left Bank and three for the Right Bank: Green for Bank in use, Amber for Bank ready and Red for Bank empty. Both the Left and Right bank pressures and the main line pressure should be displayed on the front door of the cabinet by means of LED’s. All pressure transducers, micro switches, and display LED’s shall be pre-wired to an internal microprocessor circuit board.

f. All components inside the Control Panel like Pressure Regulators, piping and control switching equipment shall be cleaned for Oxygen Service and installed inside the cabinet to minimize tampering with the regulators or switch settings.

g. The Control Panel should be made to provide Heavy Duty with a Flow Capacity of over \textit{1000 lpm at 60 psig}.

1.c Emergency Oxygen System:

It will have emergency arrangement of one set of \textit{three-cylinder configuration} with Copper tail pipes, Non Return Valves & high flow regulator with pressure gauges for Cylinder & line pressure and safety valve. Pressure regulator shall be detachable from the manifold.
2.0 Nitrous-oxide system

Nitrous Oxide system shall consist of the followings:

a. Nitrous Oxide main manifolds supply system
b. Fully automatic control panel
c. Emergency supply system

2.a Nitrous Oxide Manifold

i. **The Nitrous Oxide manifold shall be of size 3+3 bulk cylinders.**

   Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with 10 numbers of cylinder pigtail connections to suit cylinder valves as per IS 3224 incorporating a check valve at the header connection. The high-pressure header bar shall be designed in such a manner that it can be extended to facilitate additional cylinder connections. Each header bar assembly shall be provided with a high-pressure shut-off valve.

ii. The manifold should be so designed that it shall suit easy cylinder changing and positioning.

iii. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be zinc plated.

iv. **The manifold should be suitable to withstand a pressure of 140-150 Kg/cm². The manifold should be tested (hydraulically) at 3500 psig pressure and to be supplied along with necessary test certificate.**

2.b Fully Automatic Nitrous Oxide Control Panel *(Imported)*

i. The Nitrous Oxide Control Panel shall be of microprocessor based and preferably Digital Display Type. Pressure reduction shall be in two stages. Panel shall be integrated with pressure gauges inside panel on down stream of pressure regulator. Panel shall be fitted with standby
line regulator. Line regulators shall have pressure relief mechanism for testing and servicing purpose.

ii. Panel shall be Fully Automatic and shall switch over from “Bank in Use” to ‘Reserve Bank’ without fluctuation in delivery line pressure and without the need of external electrical power. After the switch–over, the “Reserve Bank” shall become the “Bank in Use” and the “Bank in Use” shall become the “Reserve Bank”. The Control Panel will be powered by a microprocessor. The unit shall be compact and enclosed in NEMA 1 enclosure.

iii. A Microprocessor circuit board assembly shall provide a relay output to give indication when or just before the manifold switches from one bank of cylinders to another. The switch over shall be mechanically controlled, not electrically.

iv. To avoid excess pressure being supplied to the distribution system, a pneumatically relief valve for the line regulator shall be incorporated. An intermediate pressure relief valve shall be installed between the high-pressure regulators and the line delivery regulators.

v. The control panel incorporates six coloured LED’s, three for the Left Bank and three for the Right Bank: Green for Bank in use, Amber for Bank ready and Red for Bank empty. Both the Left and Right bank pressures and the main line pressure should be displayed on the front door of the cabinet by means of LED’s. All pressure transducers, micro switches, and display LED’s shall be pre-wired to an internal microprocessor circuit board.

vi. All components inside the Control Panel like Pressure Regulators, piping and control switching equipment shall be cleaned for Oxygen Service and installed inside the cabinet to minimize tampering with the regulators or switch settings.

vii. The Control Panel should be made to provide Heavy Duty with a Flow Capacity of over 1000 lpm at 60 psig.
2.c Emergency Nitrous Oxide System:

Emergency system shall have arrangement of one set of Single Cylinder configuration with Copper tail pipes, Non Return Valves & high flow regulator with pressure gauges for Cylinder & line pressure and safety valve. Pressure regulator shall be detachable from the manifold.

3.0 Vacuum (suction) System

i. Vacuum system shall be stack mounted 150 cfm capacity/ appropriate capacity suited for the tank size. The appropriate capacity in CFM for the various tank sizes is given below for quoting the rates in Schedule B

<table>
<thead>
<tr>
<th>Pump capacity in CFM</th>
<th>Tank size</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>500</td>
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<tr>
<td>50</td>
<td>1000</td>
</tr>
<tr>
<td>100</td>
<td>2000</td>
</tr>
<tr>
<td>150</td>
<td>3000</td>
</tr>
</tbody>
</table>

ii. The package shall include lubricated rotary vane vacuum pumps and associated equipment, one vertical ASME tank and one control panel. The only field connections required would be system intake, exhaust and power connection at the control panel. All components shall be completely pre-piped and pre-wired to single-point service connections. All interconnecting piping and wiring shall be completed and operationally tested at the site of manufacturer. Provide liquid tight conduit, fittings and junction boxes for all control and power wiring.

iii. The medical vacuum pumps shall be of the rotary vane air-cooled design with integral, fully recirculating oil supply with sight gauge to indicate oil
level. The oil separation system shall be integral and shall consist of no less than four stages of internally installed oil and smoke eliminators. This system shall be capable of removing 99.9% of oil and smoke particles from the exhaust. Each pump shall include a built-in anti-suck-back valve mounted at the pump inlet; and each pump shall be equipped with three non-asbestos vanes, each having a minimum life of 30,000 to 40,000 hours.

iv. Water vapour condensation in the cylinder shall be prevented by means of an automatic gas ballast valve. A non-return valve to prevent oil migration upon shutdown. Each pump should have a 5-micron inlet filter. Each reservoir shall be fitted with shutoff valves, a drain valve, and a vacuum gauge.

v. Each vacuum pump shall be driven by a suitable HP motor.

vi. The system shall include the following accessories for each pump: inlet check valve, inlet isolation valve, vacuum control switch, oil temperature gauge, thermal malfunction switch and vacuum control switch. Provide flexible connectors on inlet and exhaust of each pump, exhaust tee with union, drip-leg with cock valve as well as copper tubing with shut-off cock for gauge and vacuum switches. The system shall include a 500 litres/1000 litres/2000 Litres/3000 Litres vacuum storage tank of ASME construction. The tank shall be rated for full vacuum service and shall be equipped with a valved by-pass, vacuum gauge and manual tank drain. The inside of the tank shall be coated for rust protection with a two component coating which provides a hard, durable lining.

vii. Provide vibration mounting per as NFPA latest recommendations.

viii. The system shall include a UL listed control panel in a NEMA 12 enclosure with the following accessories for each pump:

ix. Externally operable fusible disconnect with door interlock, control circuit transformer with fused primary and secondary coils, H-O-A switch, magnetic starter with 3 leg overload protection, hour meter, motor running light and minimum run timer to prevent short cycle operation.
x. Provide the panel with a plug-in type programmable controller with removable terminals to allow quick and easy replacement in the field. The system should be designed to function even if the programmable controller fails. If one of the pumps is out of service the system control shall omit the pump from the alternating cycle, automatically alternating between the remaining pumps only. The system shall revert to normal alternation automatically when the condition is corrected. In addition to standard automatic alternation, the system shall be equipped with forced time alternation in the event that the pump is unable to satisfy the demand in 30 minutes. The system shall be equipped with a flashing light pump failure alarm/shutdown at any of the following conditions: motor overload tripped, main disconnect is off, blown fuse, control transformer failure, starter coil failure, H-O-A is off.

xi. Provide audible and visual local alarm (complete with indicating lights and individual sets of auxiliary contacts wired to the terminal strip for remote alarm indication) for the following: vacuum pump thermal malfunction and reserve vacuum pump in use. Provide manual reset for thermal malfunction shut-down. All control and alarm functions shall remain energized while any vacuum pump in the system remains electrically online. The lag vacuum pump shall be able to start automatically if the lead vacuum pump fails to operate.

4.0 Specification of Copper pipe:

Copper Pipe Specifications for connection between the LMO vessel and Manifold Room

<table>
<thead>
<tr>
<th>Outer Dia.</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 54mm</td>
<td>1.2mm</td>
</tr>
<tr>
<td>2. 76 mm</td>
<td>1.5mm</td>
</tr>
</tbody>
</table>

The following pipes will be required for header pipeline and dropdown pipeline:

<table>
<thead>
<tr>
<th>Outer Dia.</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 12mm</td>
<td>0.7mm</td>
</tr>
</tbody>
</table>
2. 15mm  0.9mm  
3. 22mm  0.9mm  
4. 28mm  0.9mm  
5. 42mm  1.2mm  

**Specification:-**

**Materials:-** Copper pipes should be solid drawn seamless deoxidised non arsenical, half hard tempered and degreased and delivered capped at both ends. Copper pipe should confirm to BS: 6017,1981, and manufactured as per BS: 2871, 1971 part- I

i. Isolation valves will be non-lubricated ball type, suitable for oxygen service.

ii. All valves should be pneumatically tested for twice the working pressure and factory degreased for medical gas service before supply.

iii. Copper fitting shall be made of copper and suitable for a steam working pressure of 17 bar and specially made for brazed socket type connection. All copper fittings will confirm to BS 864

iv. Pipes should be accompanied with manufacturer’s text certificates for the physical properties and chemical composition.

v. The supply of pipes shall be further substantiated with inspection certificates from third party inspectors like LLOYDS.

**Installation and testing**

i. Pipe fixing clamps should be of non-ferrous or non-deteriorating plastic suitable for diameter of the pipe.

ii. All pipe joints should be made using flux less brazing method.
iii. All joints should be made of copper to copper and brazed by silver brazing filler material without flux.

iv. Adequate support to be provided while laying pipelines. All pipe clamps should be non-reactive to copper.

v. All piping system shall be tested in the presence of the site engineer or two authorized representative, to be tested at a pressure equal to 1.5 times of the working pressure or 150 psig whichever is higher for a period of not less than 24 Hours.

**Painting**

i. All exposed pipes should be painted with 2 coats of synthetic enamel paint compatible with existing colour coding.

5.0 Alarm System

a. The master and area alarms as per required locations.

b. Alarm shall be microprocessor based with individual microprocessors on each area display and sensor board. The sensors shall be capable of local or remote mounting. Each area display module/sensor unit shall be gas specific. With an error message display for an incorrect connection.

c. The alarms shall be field expandable with the addition of extra modules. Upto six services can be accommodated per standard box.

d. Each specific service shall be provided with an LED digital read out comprising of 0-250 psi for positive pressure and 0-30 inch Hg for vacuum. The digital readout shall provide a constant indication of each service being measured. A bar graph trend indicator shall be provided for each service indicating a green “NORMAL”, yellow “CAUTION” and a red “HIGH” or “LOW” alarm condition. Under normal operation the bar graph display shall move up and down in the green range depending on service usage. If an alarm occurs, the “RED” alarm light will flash and the audible alarm will sound.
Pushing the “ALARM SILENCE” button will cancel the audible alarm but the unit will remain in the alarm condition until the problem is rectified.

e. The default set points shall be +/- 20% variation from normal condition.

f. In the calibration mode the following parameters shall be field adjustable:

   i) High/Low set points
   
   ii) Imperial/Metric Units

   iii) Repeat alarm enable/disable

g. Set points shall be adjustable by two on board push buttons.

h. In addition “PUSH TO TEST” & “ALARM SILENCE” buttons shall be easily accessible to operate and test the unit.

i. Combination master/area alarms shall have no moving parts and shall require no maintenance after initial installation.

6.0 Specification of High Pressure A/S Tubing’s

   i. High pressure tube for O²
   
   ii. High pressure Tube for vacuum
   
   iii. LP Tubing

7.0 Specification of Outlets:

   i) Double lock outlets

   Specifications:-

   o Outlets should be of quick connecting and wall mounted type.
o Outlets manufactured with 165 mm length copper inlet pipe stub which is silver brazed to outlet body.

o Body of one piece of brass construction and outlet shall be equipped with a primary and secondary and the secondary check valve shall be rated at minimum 200 psi. In the event the primary check valve is removed for maintenance there should not be any leakage (on-line maintenance should be possible w/o disrupting the functioning of other outlets). Outlet bodies shall be gas specific by indexing each gas service to a gas specific dual pin indexing arrangement on the respective identification module.

o There should be a push button release mechanism for disconnecting apparatus accessible from top, bottom and side of outlets.

o A large color-coded front plate shall be used for ease of gas identification and aesthetic appeal.

o With the back rough in mounted the outlet shall adjust up to 25 mm variation in wall thickness.

o The latch valve assembly should accept only corresponding gas specific adaptors.

o All outlets shall be cleaned and degreased for medical gas service, factory assembled and tested.

ii) BPC flow meter with humidifier

Specifications:-

o Back pressure compensated flow meter with accurate gas flow measurement.

o Control within range of 0-15 liters per minute.

o Made of brass chrome plated materials.

o Humidifier bottle should be made of poly carbonate material and should be reusable and unbreakable and must be auto-clavable atleast at 121° centigrade.
iii) Ward Vacuum Units

**Specifications:**
Unit should consist of
- A regulator
- A 600 ml reusable collection jar made of unbreakable polycarbonate and autoclavable.
- Wall bracket for mounting jar assembly on wall.
- Have a Vacuum gauge which indicates suction supplied by regulator.
- Safety trap will be provided inside the jar to safeguard the regulator from overflowing.

iv). Isolation Ball Valve, of appropriate size, with brass adapter at every 25-50 outlets and in front of each facility

**Specifications:** - Lever operated, quarter turn valve with brass body and chrome plated brass ball.

v) Line pressure alarm- One for each facility, just outside the facility: Should be customizable visible and audible alarm at VIE installation facility and manifold room

8.0 Liquid oxygen supply system

**Liquid Oxygen: the Vacuum Insulated Evaporator or VIE**
Liquid oxygen will be primary source of oxygen supply and oxygen manifold shall be secondary and reserve source. It should automatically shift to secondary source in case of fault of primary. The unit will have capacity of 990 liters/ 2600 liters/ 5000 liters of two such tanks/ vessels with provision for further upgradation. Unit should be of latest version internationally. The unit should
be fitted with standard accessories as minimum and should have undergone standard inspection requirement. A certificate to that effect has to be submitted.

Specifications:

Liquid medical oxygen suppliers should ensure that the vessel installation is:

- stored upright, preferably in an open and well-ventilated area,
- the area should be protected using fencing as per the PESO requirements
- kept dry and clean and not subjected to extremes of heat and away from stocks of combustible material
- Warning notices prohibiting smoking and naked lights must be posted clearly in the cylinder storage area and the emergency services should be advised of the location of the cylinder stores and bulk stores.
- Liquid medical oxygen bulk storage tanks should be sited at least 5.5 meters from boilers and other sources of naked lights, fuel stores, paint stores and other volatile flammable materials.

9.0 Civil work for Liquid oxygen supply system and Installation of Vacuum system

Space as required for installation of Oxygen Supply System has been identified by the MCHs concerned and Hospital Administration in MR Bangur Hospital and the design and infrastructure proposal should comply with all regular standards.

The installation of LMO tank with all its accessories including the Alarm system will be compliant with the PESO (Petroleum and Explosives Safety Organization) standard and NFPA (National Fire Protection Association) standard 50.

Note: The interested bidders are requested to visit the site of proposed construction to check the actual position and for accurate proposal planning.
## Annexure 1: Status of Current Oxygen Supply Contracts and current oxygen consumption

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Institution</th>
<th>Current Oxygen Supplier Agency</th>
<th>Date of current commissioning</th>
<th>Date of expiry of the present Contract (Expiry date of current extension)</th>
<th>Current annual consumption of Oxygen in $M^3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Calcutta Medical College &amp; Hospital</td>
<td>BOC</td>
<td>April, 2007 onwards for various hospital buildings</td>
<td>March, 2012 (April 2012)</td>
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<td></td>
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<td></td>
<td></td>
<td>1. Eden Building (Contract End 31.03.2012)- 66 points</td>
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<td>2. MCH Building (Contract End 31.03.2012)- 22 points</td>
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<td>3. Green Building (Contract End 31.10.2012)- 102 points</td>
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<td>5. David Hair Building (Contract End 30.06.2014)- 43 points</td>
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<td>6. Ezra Building (Contract End 09.04.2014)- 29 points</td>
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<tr>
<td>2.</td>
<td>NRS Medical College &amp; Hospital</td>
<td>BOC</td>
<td>Dec 2006 onwards for various hospital buildings</td>
<td>1. February, 2012 (April 2012) - For the Centenary Building – 160 points</td>
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<td>Date of Commissioning</td>
<td>January 2013 for</td>
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<td>2. UNB Building- 147 points</td>
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<td>3. Fraser Building- 73 points</td>
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<td></td>
<td>September 2012 (Date of Commissioning)</td>
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<td>1. Ronald Ross Building- 28 points</td>
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<td>2. Cardiology Building- 61 points</td>
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<td>3. Urology Building- 63 points</td>
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<td>4. Gastroentrology Building- 29 points</td>
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<td>5. Cardiothoracic and Eye Building- 28 points</td>
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<td>November 2012</td>
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<td>1. RCU Building- 16 points</td>
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<td>2. Woodburn Building- 62 points</td>
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<td>3. BIN Old and New Building</td>
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<td>December 2012</td>
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<td></td>
<td></td>
<td>1. Obstetrics and Gynaecology Building- 36 points</td>
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<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th>189518 M³</th>
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<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td>Over 300000 M³</td>
</tr>
<tr>
<td>No.</td>
<td>Hospital Name</td>
<td>Supplier</td>
<td>Contract Start &amp; End</td>
<td>LMO Capacity</td>
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<tr>
<td>4.</td>
<td>R. G. Kar Medical College &amp; Hospital</td>
<td>SYTCO (PRAXAIR)</td>
<td>September, 2006 onwards</td>
<td>332099 M³</td>
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<td></td>
<td>1. Cardiology &amp; Emergency Buildings- 398 points</td>
<td></td>
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<td></td>
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<td>2. Surgical and Gynae Building- 168 points</td>
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<td>3. Oncology Building- 34 points</td>
<td></td>
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<tr>
<td></td>
<td>New 314 points under live contract excluded from LMO</td>
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<tr>
<td>5.</td>
<td>Bankura Sammilani Medical College &amp; Hospital</td>
<td>BOC</td>
<td>January, 2007 onwards for various hospital buildings</td>
<td>54000 M³</td>
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<tr>
<td></td>
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<td>February, 2012 (April 2012)</td>
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<td></td>
<td>1. Gobinda Nagar Main Building- 59 points</td>
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<td>2. Gynae Building- 65 points</td>
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<td>3. Lokepur Building- 39 points</td>
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<tr>
<td>6.</td>
<td>Burdwan Medical College &amp; Hospital</td>
<td>SYTCO (PRAXAIR)</td>
<td>September, 2007 onwards for various hospital buildings</td>
<td>117235 M³</td>
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<td></td>
<td></td>
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<td>September, 2012</td>
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<td></td>
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<td></td>
<td>1. Main Building- 159 points</td>
<td></td>
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<td></td>
<td>2. 2nd Manifold- 157 points</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Name of the Institution seeking New LMO Supply</td>
<td>System</td>
<td>Expected annual consumption of Oxygen</td>
<td></td>
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</tr>
<tr>
<td>7.</td>
<td>North Bengal Medical College &amp; Hospital</td>
<td>BOC</td>
<td>March, 2007 onwards for various hospital buildings</td>
<td>March, 2012 (April 2012)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. Main Building</td>
<td>2. Gynaecology Building</td>
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<td>3. Emergency Building</td>
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<td>Total 214 points</td>
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<td>(Contracts End between 15.04.2012- September 2012 for the above buildings)</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Medinipur Medical College &amp; Hospital</td>
<td>SYTCO</td>
<td>June, 2008</td>
<td>June, 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(PRAXAIR)</td>
<td></td>
<td>1. Main Building- 164 points</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Emergency- 6 points</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Dr. B. C. Roy Post Graduate Institute of Pediatric Sciences</td>
<td>SYTCO (PRAXAIR)</td>
<td>Decemb er, 2006</td>
<td>February, 2012 (April 2012)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. Old Building- 115 points</td>
<td>2. Annexe Building- 65 points</td>
</tr>
<tr>
<td>10.</td>
<td>Calcutta National Medical College &amp; Hospital</td>
<td>SYTCO (PRAXAIR)</td>
<td>Septemb er, 2007 onwards for various hospital buildings</td>
<td>February, 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BOC</td>
<td></td>
<td>Date of Commissioning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. RRM Building- Sept 2012 (131 points)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Gynae Building- October 2012 (71 points)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Chest Building- October 2012 (22 points)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Surgical Building- January 2013 (84 points)</td>
<td></td>
</tr>
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</tr>
<tr>
<td>11.</td>
<td>M R Bangur</td>
<td>New Connection</td>
<td>30660 M³</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>School of Tropical Medicine</td>
<td>New Connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Chittaranjan Seva Sadan</td>
<td>New Connection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** It may be seen that wherever there is a date difference between the date of current contract closure due to difference in date of signing of the agreements (between DoHFW & suppliers) and the commissioning of the piped oxygen supply. In such cases, the date of commissioning will be taken as the date for calculation of closure of existing contract. Hence, the selected bidders in the present bid shall make the necessary physical infrastructure creation accordingly in the time available in between.
Annexure 2: Draft Contract Document

This agreement is made this day, the___________ (the date) by and between the Governor of West Bengal, represented herein, by the ______________ ____________________________having its office at “SWASTHYA BHAWAN”, GN-29, Sector-V, Salt Lake City, Kolkata-700 091 of the ONE PART.

AND

(the name of the supplier/ seller), having its office at “__________________________
(address)”, a company incorporated under the Companies Act 1956 and having its Registered Office at (address), (hereinafter referred to as “SELLER”, which expression shall unless excluded or repugnant to the context to be deemed to include its successors in interest and assigns), of the “OTHER PART”.

West Bengal Medical Services Corporation Ltd.  Page 53
WHEREAS:

1. Seller carries on the business, inter alia, of manufacturing and supply of Liquid Medical Oxygen (LMO) and OXYGEN I.P. from its factory located at ________________ (address) as a distributor and / or supply of Nitrous oxide IP of ________________ (name of the producer) as a distributor.

2. The West Bengal Medical Services Corporation Ltd. invited the tender for supply of ________________ to the Medical Colleges and Hospitals as stated in the G.O. No. H/TDE/87/55/06/04 dated 25.01.2012.

NOW, IT IS HEREBY AGREED BY AND BETWEEN BOTH THE PARTIES AS PER THE FOLLOWING TERMS AND CONDITIONS:

1) Seller agrees to sell and the Department agrees to buy Medical Gases (Liquid Medical Gas IP / Nitrous Oxide IP) servicing through the existing Pipeline System and/ or extended Pipeline to be installed at the cost of the Seller along with the Medical Vacuum Services at… College & Hospital for the outlet points as stated hereunder:

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>Name of the Medical College &amp; Hospitals</th>
<th>Outlet Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liquid Medical Oxygen (LMO) I.P.</td>
<td>Nitrous Oxide I.P. * (As per CMS rate)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

2) The Seller agrees to supply LMO at the tank / or vessel to be installed at the selected locations in the Hospital premises as and when required. The Seller should also maintain the tank and all its accessories thereto.
3) Seller agrees to supply LMO and / or Nitrous Oxide IP through Manifold System and Medical Vacuum Services through the Pipeline system. The Equipment (manifold & other systems) beyond the existing facilities will be installed by the Seller at its own cost in the room provided by the Department at the convenient place. However, Seller will sell all the requirement of the above products at the contracted areas of the Department for the next three years and this period will be extended for a further period of two years upon satisfactory performance during the first three years of the tender period. The manifold room will have sufficient mechanism to supply LMO along with required number of duly filled bulk cylinders (of 7.0 Cu.M. capacity), as well as Nitrous gas IP, so as to maintain the easy flow of Medical Gases to the outlet points. The optimum pressure for the gases and Medical Vacuum shall be scientifically maintained 24 hours of 365 days to all the outlet points.

4) Installing Manifold Room as and when required: Manifold room / space is to be provided by the Hospital authority; similarly the plant room / space for housing the vacuum unit shall also be provided by the Hospital authority. The room should be of a minimum size of 20 x 20 feet.

5) **PRICE & PAYMENT:** The price of the gases connected with the gas supplies through Pipe Line System shall be as per the approved rates of the tender as stated below:

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>Name of the Medical College &amp; Hospitals</th>
<th>Rates of LMO I.P. per M3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The rates as quoted above shall include all Taxes and Duties as on date

6) **Timely Installation of the VIE vessel and commencement of LMO supply-**

️ Soil Test for the site identified for installation of VIE tank would be taken immediately after the award of work
The supplier will commence the work of installation of tank within 7 days from the date of handing over the site and receipt of initial permission for installation from PESO.

The supplier will have to complete the installation of LMO Tank and Gas Pipeline from tank to manifold within one month from the date of receiving the initial permission from PESO, failing which a penalty @ Rs 10,000 per day will be imposed upon the supplier for each day of delay in completion of installation.

The supplier will start supply of LMO within 3 days from the date of getting final license from PESO.

7) **Charge Makeover and takeover Status Report during handing over of facility** - As the supplier will maintain the existing Manifold, Control panel, Pipeline, Outlets, Vacuum system etc, as per the provision in the bid document, a status report will be jointly prepared by the existing maintenance agency and the L1 supplier of LMO, at the time of switching over to new system regarding the status of the assets.

8) **MAINTENANCE OF PIPELINE SYSTEM**: LMO supplier shall bear all the expenditure towards the maintenance cost of the Pipe Line System & undertake the responsibility of maintenance of the pipeline system including the Manifold, including day to day operation. All costs towards this including the manpower deployment shall be borne by them, to be included in the rate of the gas per m³

All payments for price of gases / replacement of other attachments shall be made by the __________________ within 90 (Ninety) days from the date of supply / submission of bill.

**COMMENT: UNDER REVIEW**

9) **Facility Charge**: Seller shall not charge facility for the system installed at the Departments premises as per the terms of the tender. However, the Seller shall sell all of the requirements of medical gases at the contracted areas of the Department for the next three years. The agreement shall be renewed for an additional period of two years, after expiry of the initial three-year period, upon satisfactory performance during the first three years.
10) A security Deposit of Rs……… (Rupees ……….. Only) for each hospital will be given by Seller in the form of Bank Guarantee in favour ________________________________________________West Bengal. The Bank Guarantee will be valid for the tender period. In the event of non-performance in regards to the servicing of Medical gases through pipeline system by Seller, the Security deposit furnished will be forfeited by the Authority concerned.

11) The Accounts Officer / the existing Drawing and Disbursing Officer attached to the concerned Medical institution will act as the Drawing and Disbursing Officer towards the cost of Medical Gases only as per the rates as approved __________________________ dated ___________ (To be finalized) and the charges will be debitable to appropriate Minor and Detail Heads subordinate to the following Heads in the State Budget (As to be communicated):

12) Seller agrees to supply Medical gases viz. LMO I.P., Oxygen I.P. & Nitrous Oxide I.P. through the Pipeline System at the cost of the Seller to ________________________ (Name of Medical & Hospital) along with the system of Medical Vacuum Service through the required and agreed number of outlet points for a period of five years.

The bid price will be valid for a period of 5 years which shall be the contract duration, with a mid-term review at the end of 3rd year, leading to subsequent extension for two year period. The Mid-term extension is subject to receipt of Successful and Problem free supply and maintenance Certificate from the MSVP/ Director / Superintendent of the concerned institutions.

In exceptional cases, if Non Satisfactory performance report is being observed and reported for any of the L1/ L2 suppliers, the authorities of the concerned institution will inform the Health and Family Welfare Department, Government and West Bengal Medical Services Corporation, for calling of fresh LMO supply tenders for such institutions, to begin the next year.

13) The works related to the installation of the tank and the additional Pipeline as required for the purpose of servicing Medical gases and the Medical Vacuum Service shall have to be completed and made operational within One Month from the date of the issuance of the work order ________________________________ or the date of completion of the existing contract, whichever is earlier. This shall exclude the time as may be required in getting the explosive license from the concerned department.
- Hospital authority to ensure maximum possible availability of various rooms (wards, OTs, ICUs, etc.) for the Seller to carry out the laying of additional pipeline and outlets.
- Clearance from the Hospital authority or PWD whichever is applicable for various civil works like foundation, drilling and other necessary repairing / modification job for laying of additional pipeline beyond the existing facilities and outlets.

14) Seller agrees to provide all the mechanism as stated in the respective Technical Specifications in the Section C of the Tender document.

15) Seller agrees to abide by the entire terms and conditions of the Tender Document. Seller shall ensure an uninterrupted supply of LMO I.P / Oxygen I.P and / or Nitrous Oxide I.P and other auxiliary services to the patient care service pertaining to a particular Hospital/Hospitals for which he enters into the contract.

16) **For the 10% oxygen supply through Cylinders in the Emergency conditions:** The Seller shall supply the required quantity of LMO, bulk medical oxygen cylinders of 7.0 M$^3$ each and N$_2$O cylinders of 17.1 M$^3$ each for the manifold system at adequate pressure. In case of LMO, the pressure gauge has to be attached with the tank to indicate the refilling status which will help to record the supply of LMO from time to time. The manifold system will have pressure gauge, which will indicate cylinder pressure for measurement of gas in the cylinder in case of supply of Oxygen I.P. through bulk cylinder. The total supply of full cylinders will be recorded in terms of volume of gas supply in CuM. The conversion factor will be as follows:-

- **For Bulk Oxygen Cylinders (Indicated by you as “C” type)**
  7.0 CuM of gas capacity at a minimum pressure range of 135kg /cm$^2$ to 145 kg/cm$^2$.
- **For Bulk N2O cylinders**
  17.1 CuM of gas capacity.

17) Hospital authority shall arrange for providing full support on the emergency basis (with top most priority) in regards to the service as may be required to be rendered time to time by the P.W.D., Civil & Electrical Department and any other Departments/Sections under
his control so as to facilitate the installation of LMO tank as well as additional Pipe Line System, as required, in his hospital even at the very busiest hours.

18) Hospital authority shall arrange for providing a spacious room to the Seller for the purpose of storage of the materials as may be required, to be fitted with the pipeline system and for their office / control room and the same shall remain temporarily under possession of the Seller for the entire valid tender period.

19) The Seller shall not use that room for any other purpose other than what mentioned in para 14 (Fourteen) of the agreement.

20) The Medical Gas shall be supplied by Seller only to the contracted area so that the Medical Gas and other auxiliary service is available continuously and uninterruptedly to the outlet points for which the agreement is signed. Under no circumstances, the Hospital authorities will use A & B Type cylinders in the contracted areas.

21) A Monitoring Cell shall be constituted with the following members:-
   a. To be updated
   b.

22) The Monitoring Cell shall look after the progress of the installation of LMO tanks and additional Pipeline as required in a particular hospital for which the agreement is made between the Department and the Seller. The Monitoring Cell shall discuss mutually and take decision in the following matters:-

   i) That the Terms & Conditions of the present tender has been followed without any variation subject to obligation clarified in this agreement.
   ii) That the Memorandum vide G.O. No. HF/O/TDE/117/5S-06/04 dated 16.2.2005 of the Asst. Secretary (TDE), Deptt. of Health & Family Welfare has been followed.
   iii) That any problem or hazard or disturbance that stands on the way for the installation of LMO tank and additional Pipeline is to be attended immediately and solved.
   iv) The Monitoring Cell shall meet periodically on a regular basis at least once in three months to evaluate the performance of the Seller. They will keep a chronological record of the performance of the Seller.
v) The Monitoring cell shall discuss all the matters relating to the technical specifications pertaining to the Pipeline System for servicing Medical Gases and the auxiliary services.

23) **Safe custody of LMO tank, Cylinders & Supply system:** It is clearly understood that the LMO tanks, cylinders and other accessories shall be kept safely by the LMO supplier for the respective hospitals. All tanks & cylinders will remain the property of Seller at all times. A list of the articles used in the LMO Pipeline System will be prepared and arrangement for joint inspection may be undertaken from time to time. If the supply system and / tanks/ cylinders are damaged or lost or stolen while in the custody of the Department, the matter pertaining to the cost of repairing / replacement of such supply system / cylinder will be referred to the Monitoring Cell and action will be taken as per the recommendation of the Monitoring Cell. The Hospital authority will have to ensure security of the pipeline construction materials & also ensure safety of the pipeline, manifold room & the outlet points during the currency of the contract.

**Safety and Security- In such work,** the Contractor maintaining the LMO vessel and pipeline shall follow standard operating precautions in maintaining the installation as per recognized standards (Scottish Health Technical Memorandum 02.01, HTM 2022) to ensure the safety and security of the personnel, patients and infrastructure.

The Hospital authorities shall ensure the physical security for the installations.

The third party liability of the contractor will not be applicable in event of force majeure including Acts of God (including flood, earthquake, storm, hurricane or other natural disaster), war, invasion, act of foreign enemies, hostilities (regardless of whether war is declared), civil war, rebellion, revolution, insurrection, terrorist activities, wanton acts of destruction provided the incident was beyond the control of the contractor, the incident was unforeseeable and the incident was not preventable.

In case of Cylinder supply, the hospital authority will place indent on Seller and Seller will deliver full cylinders for which the hospital authority will arrange to keep a record. Subsequent
supplies will be made by Seller against the indent of full cylinders on receipt of equal number of empty cylinders. Seller will invoice on hospital authority based on the total supply of full cylinders, which will be recorded in terms of volume of gas supply in CuM.

Medical Institutions will return each Cylinder to Seller within thirty (30) days following the termination of this Agreement or pay Seller the replacement value thereof as intimated by the Seller. Department’s obligations under this paragraph will survive the termination of this Agreement.

24) Seller shall replace the defective accessories immediately so as to maintain a continuous and uninterrupted supply of Medical Gases to the outlet points, provided the defects are arising out of manufacturing defects & if within the warranty period.

25) The Seller shall have to keep contact with the hospital authority in connection with the infrastructural arrangements (like Civil, Electrical & Mechanical works) at their own cost to facilitate the installation of the pipeline system. However all sorts of cooperation shall be extended by the Government offices to the Seller.

26) INDEMNITY: Each party hereby indemnifies and agrees to keep indemnified and hold harmless to each other, from and against all direct claims, liabilities, obligations, losses, damages expenses and costs (including without limitation reasonable legal fees) brought against or suffered by other or any of its respective offices, directors, employees or agents, resulting from rising out of or relating to:-

- A breach or non-performance of any of the representations, warranties, convenience and/or assurances contained herein.
- Failure to perform any obligations contained herein.
- A breach of any law, rule, regulation, notification or other statutory or legal provisions or requirements, or
- Any willful misconduct or negligent acts or omissions by it or any of its officers, directors, employees or agents and any consequent accidents or explosions resulting there from.
Each party hereby indemnifies and agrees to keep indemnified and hold harmless the other against all debts, taxes, liabilities, payments, claims, expenses and outgoing pertaining to it.

27) HEALTH, SAFETY AND LIABILITY: The installation of LMO tank with all its accessories including the Alarm system will be compliant with the PESO (Petroleum and Explosives Safety Organization) standard and NFPA (National Fire Protection Association) standard 50. Seller will provide documents to Department containing Seller’s safety and health information pertaining to Product, including Seller’s Material Safety Data Sheet(s). Department acknowledges that there are hazards associated with Product, including, without limitation, the storage, use and handling thereof, and Department agrees that its personnel concerned with Product are aware of such hazards. Department will notify Seller of any hazards and safety procedures at Department’s Location(s) and Department will notify Seller in advance of any anticipated construction, renovation, or change in operations in the area of any Supply System site so that any hazards associated with same can be minimized. Department will ensure safe handling of High pressure cylinders, manifold & gas as per MSDS & Do’s/Don’ts provided by Seller.

28) CONFIDENTIALITY: All information shared/disclosed by and between the Seller and the Department including this agreement, drawings, specification, operating data, pricing and costs are properties of the parties to this agreement. Either party will hold all information as confidential for a period of 5 years after the expiry of this agreement.

29) CONTINGENCIES: All supplies made during the currency of the tender period shall be subject to force majeure such as strike, lockout, riots, war, power failure, transportation failure/strike, non availability of basic raw materials and all such causes which are beyond our control. However obligations to make payment when due will not qualify as a contingency.

30) In the event of non-performance/ discontinuance of the works in connection with the servicing of Medical gases through the pipeline system, the Seller has to pay penalty to
the extent of Rs 25.0 lacs to the Government, but before that the same would be placed before the monitoring cell for review and recommendation. Further, the Government may also liquidate, part or complete Performance Security as may be required to meet the damages.

In case of damage or violation to the environmental rules the Seller has to pay the necessary compensation to the Concerned Authority.

31) Force Majeure:

If, any time during the currency of the Contract, the performance in whole or in part either party of any obligation under this Contract shall be prevented or delayed by reason of any war, hostilities, invasion, acts of public or foreign enemies, rebellion, revolution, insurrection, civil commotion, sabotage, large scale arson, floods, earthquake, large scale epidemics, nuclear accidents, any other catastrophic unforeseeable circumstances, quarantine restrictions, any statutory rules, regulations, orders or requisitions issued by a Government or competent authority or acts of God (hereinafter referred to as “event”) then, provided notice of the happening of such an event is given by either party to the other within 21 days of the occurrence thereof.

(a) Neither party shall by reason of such event be entitled to terminate the contract or have claim for damages against the other in respect of such non-performance or delay in performance.

(b) The obligations under the contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist.

(c) If the performance in whole or part of any obligations under the contract is prevented or delayed by reason of the event beyond a period mutually agreed to if any, or 90 days, whichever is more, either party may at his option terminate the contract.

(d) In case of doubt or dispute, whether a particular occurrence should be considered an “event” as defined under this clause, the decision of WBMSC Ltd. shall be final and binding.

(e) Works that have already been measured shall be paid by the employer even if the same is subsequently destroyed or damaged as a result of the event. The cost of
rebuilding or replacing any work that has been measured shall be borne by the Employer.

(f) If the Contract is terminated under this clause, the Contractor shall be paid fully for the work done under the contract, but not for any defective work or work done which has been destroyed or damaged before its measurement. The Employer shall have the option to take over any plant and materials lying at site, at rates provided for in the contract, failing that, as per rates which are determined to be fair and reasonable by WBMSC.

(g) If neither party issues notice regarding the event within 21 days of its occurrence, the said event shall be deemed not to have occurred and the contract will continue to have effect as such.

32) **Arbitration:**

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used in the work or as to any other questions, claim, rights, matter or thing whatsoever, in any arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or those conditions or otherwise concerning the works, or execution or failure to execute the same, whether arising during the progress of the work, after the completion, after termination or abandonment thereof shall be referred to WBMSC Ltd seeking arbitration. WBMSC Ltd. will appoint an Arbitrator not below the rank of Special Secretary to Department of Health and Family Welfare, Government of West Bengal, in service or retired belonging to any state or central Govt. departments or undertaking.

For referring such disputes for arbitration, the employer or the Contractor may give notice of intention to commence arbitration as to the disputes to the other party.

The decision of the Arbitrator shall be final and binding on the parties. The award shall be a speaking one, that is, the Arbitrator shall recite facts and assign reasons in support of the award after discussing fully the claims and contentions of the parties. Save as
aforesaid and / or otherwise provided in the Contract, the arbitration shall be conducted in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification or enactment thereof and shall be held at such a place and time in India as the Arbitrator may determine. The fees and travelling expenses of the Arbitrator will be borne equally by the Employer and the Contractor.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first above written.

WITNESS:

SIGNED FOR AND BEHALF OF
(Name of the supplier)

SIGNED FOR AND ON BEHALF OF THE GOVERNOR
OF THE GOVERNMENT OF WEST BENGAL.
Annexure 3: Bank Guarantee Format for Bid Security/ Earnest Money Deposit

EMD in the form of Bank Guarantee

Company name
Address ___________________
__________________________________

In consideration of West Bengal Medical Services Corporation Ltd, having its Registered Office at Swastha Bhawan, Institute Building, 1st floor, GN-29, Salt Lake City, Sector-V, Kolkata-700 091 (hereinafter called “WBMSC” which expression shall unless repugnant to the subject or context include is successors and assigns) having issued Notice inviting Tender No.____________________
__________________ dated _____________ and M/s. _________________ having its registered office at _______________________________________________ (hereinafter called the “Tenderer”) is to participate in the said Tender for supply of Liquid Medical Gas through Pipeline (Table-4-A) / new manifold and vacuum system (Table-4-B) / copper pipeline and outlet supply (Table-4-C), in ………………………………………………………………. Govt. Hospital Building at ……………………………
…………………………………………………………….. , whereas WBMSC Ltd., as a special case, has agreed to accept an
irrevocable and unconditional Bid security / Earnest Money Deposit (EMD) for an amount of Rs………………………..(Rupees…………………………………………………………………………………………………………………)
valid up to 60 days from the date of award of contract in lieu of cash deposit of Rs……………………….. (Rupees…………………………………………………………………………………………………………………) required to be made by the tenderer, as a condition precedent for participation in the said tender. We, the……………………. bank, having is Registered Office at ………………… ……………………. and branch office ………………………………………. hereinafter called the “Bank”), do hereby unconditionally and irrevocably undertake to pay to WBMSC Ltd. immediately on demand in writing and without demur/protest any amount but not exceeding Rs……………….. (Rupees …………………… ………………………………….). Any such demand made by WBMSC Ltd. shall be conclusive and binding on us irrespective of any dispute or differences that may be raised by the tenderer. Any change in constitution of the Tenderer or the Bank shall not discharge our liability under this Bank Guarantee.

We, the ………………………………………. Bank, lastly undertake not to revoke this Guarantee during its currency without the prior consent of WBMSC Ltd. in writing and this guarantee shall remain valid up to 09.07.2012. Unless a claim is made within three months from the date of expiry, i.e. ………………………., (three months after the date of expiry of Bank Guarantee), we shall be relieved of our liability under this guarantee thereafter.

Notwithstanding anything contained herein :-

1. Our liability under this Bank Guarantee shall not exceed Rs………………….. (Rupees ………………………………..).
2. This Bank Guarantee shall be valid up to ……………………………. and a claim period of three months, i.e. up to …….…..
3. We are liable to pay the guaranteed amount or any part thereof under this bank Guarantee if and only if you serve upon us a written claim or demand on or before ……………………………..
Annexure 4: Bank Guarantee Format for Performance Security

PERFORMANCE SECURITY (BANK GUARANTEE) FORM

______________________________________________
[Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: West Bengal Medical Services Corporations Limited (hereinafter called “WBMSC”),
            Swasthya Bhaban Complex; GN – 29, Salt Lake, Sector – V; Kolkata – 700091

Date: __________________________

PERFORMANCE GUARANTEE NO.: ____________________________

1. We have been informed that [name of the Contractor] (hereinafter called "the Contractor")
   has submitted to you its Contract dated (hereinafter called "the Contract") for the execution
   of .................................................. under Invitation to Bid No. WBMSC/............................... (“the ITB”).

2. Furthermore, we understand that, according to your conditions, Contracts must be
   supported by a Bank Guarantee.

3. At the request of the Contractor, we [name of Bank] hereby irrevocably undertake to pay
   you any sum or sums not exceeding in total an amount of Rs ....................... (Rupees
   .........................) upon receipt by us of your first demand in writing accompanied by a written
   statement stating that the Contractor is in breach of its obligation(s) under the Contract
   conditions or in the tender requirements, because the Contractor:

   a) has withdrawn its Contract during the period of Contract validity specified by the
      Contractor in the Agreement; or
   b) having been notified of the acceptance of its Contract by WBMSC during the period
      of Contract validity,
      i. fails or refuses to execute the Agreement; or
      ii. as compensation for any failure on part of "the Contractor" to complete its
          obligations under the Contract or in the tender requirements.

Notwithstanding anything contained herein

1. Our liability under this Bank Guarantee shall not exceed .................
2. This Bank Guarantee shall be valid upto .......................
3. We (Name of Bank) are liable to pay the guaranteed amount or any part thereof under this bank guarantee if, and only, if you serve us a written claim or demand on or before ............

_________________________________

[signature(s)]