

**Request for Proposal
for**

**Supply, Installation, Commissioning and
Comprehensive Annual Maintenance of Continuous
Ambient Air Quality Monitoring Station (CAAQMS) at
various GMDC Mines**

GMDC/ENV/04/2024-25



**General Manager (Environment)
Gujarat Mineral Development Corporation Limited
Khanij Bhavan, 132-foot Ring Road, Gujarat University
Ground, Vastrapur, Ahmedabad- 380052**

January 2025

DISCLAIMER

This RFP is being issued by the Gujarat Mineral Development Corporation Ltd. (GMDC) (hereunder called "Authority"/ "GMDC") to the Bidders/Suppliers interested in supply, installation, Commissioning and comprehensive annual maintenance of Fixed Continuous Ambient Air Quality Monitoring Station (CAAQMS) at various projects of GMDC in Gujarat State.

It is hereby clarified that this RFP is not an agreement, and the purpose of this RFP is to provide the Bidder(s) with information to assist in the formulation of their proposals/Bids. While the RFP has been prepared in good faith with due care and caution, GMDC does not accept any liability or responsibility for the accuracy, reasonableness, or completeness of the information, or for any errors, omissions, or misstatements, negligent or otherwise, relating to any feasibility / detailed project report or any other reference document mentioned, implied or referred herein. Each Proposer/Bidder should conduct its own investigations and analysis and should check the accuracy, reliability, and completeness of the information in this RFP and where necessary, obtain independent advice from appropriate sources.

Bidder should carefully examine and analyze the RFP and bring to the notice of GMDC any error, omission or inaccuracies therein that are apparent and to carry out its own investigation with respect to all matters related to the captioned subject, seek professional advice on technical, financial, legal, regulatory and taxation matters and satisfy himself of consequences of entering into any agreement and / or arrangement relating to the captioned subject. GMDC and its employees make no representation or warranty, express or implied, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the information contained in the RFP or in any material on which this RFP is based or with respect to any written or verbal information made available to any Proposer or its representative(s).

GMDC may in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP as per its requirements. GMDC reserves the right not to proceed with the project, to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the Project further with any party submitting a Proposal. No reimbursement of cost of any type will be paid to bidders, persons, entities submitting a Proposal/Bid.

The bidder shall bear all costs associated with or relating to the preparation and submission of its bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by GMDC, or any other costs incurred in connection with or relating to its bid, regardless of the conduct or outcome of the bidding process.

TABLE OF CONTENTS

ABBREVIATIONS	8
SECTION I: BACKGROUND	9
SECTION II: SCOPE OF WORK	9
1 Scope of Work 10	
1.1 Part 1: Supply, Installation, Testing and Commissioning of CAAQM Stations.....	10
1.2 Part 2: Operation and Comprehensive Annual Maintenance of CAAQMS During Warranty and Maintenance Period.....	12
1.3 Training 14	
2 Timeline 14	
3 Other Terms and Conditions	14
4 Roles and Responsibilities:	16
SECTION III: TECHNICAL SPECIFICATIONS	18
CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION BILL OF MATERIALS	18
The detailed Technical Specifications can be referred to in Annexure 13.	19
SECTION IV: SERVICE LEVEL	20
SECTION V: INSTRUCTIONS TO BIDDERS	23
1. INTRODUCTION	23
1.1. Bidding Process.....	23
1.2. Due Diligence	23
1.3. Acknowledgement by Bidder	23
1.4. Cost of Bidding.....	24
1.5. RFP Fee	24
1.6. Schedule of Bidding	25
2. GENERAL 27	
2.1. Bid Validity.....	27
2.2. Numbers of Bids by Bidder	27
2.3. Governing Law and Jurisdiction	27
2.4. Authority’s Right to Accept and Reject any Bids or all Bids.....	28
2.5. Earnest Money Deposit (EMD)/Bid Security	28
3. DOCUMENTS AND PRE-BID CONFERENCE	30
3.1. Content of RFP.....	30
3.2. Clarification to RFP Documents	30
3.3. Pre-Bid Meeting.....	31
3.4. Amendment of Bidding Documents.....	31

*RFP for Supply, Installation, Commissioning and Comprehensive Annual Maintenance of
Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC*

4. PREPARATION AND SUBMISSION OF BIDS	31
4.1. Language of Bid	31
4.2. Bid Currency	32
4.3. Format and Signing of Bid	32
4.4. Submission Format & Sealing and Marking of Proposals	32
4.5. Bid Due Date	33
4.6. Late Submission	34
4.7. Modification and Withdrawal of Bids	34
5. BID EVALUATION CRITERIA	34
5.1. Qualification Criteria	35
5.2. Evaluation of Price Bid	35
6. EVALUATION PROCESS	37
6.1. Opening of Technical Bid	37
6.2. Evaluation of Technical Bid	37
6.3. Opening of Financial Bid	38
6.4. Determination of Lowest Price Bidder	38
6.5. Clarification of Bids and Request for additional/missing information	38
6.6. Verification and Disqualification	38
6.7. Contacts during Bid Evaluation	40
6.8. Correspondence with Bidder	40
6.9. Confidentiality	40
7. SELECTION OF SUPPLIER AND SIGNING OF AGREEMENT	40
7.1. Notification of Award	40
7.2. Signing of Agreement	41
7.3. Performance Security	41
7.4. Commencement of Work/Assignment	42
7.5. Proprietary Data	42
7.6. Tax Liability	42
8. FRAUD AND CORRUPT PRACTICES	43
9. CONFLICT OF INTEREST	44
10. MISCELLANEOUS	45
SECTION VI: PRICES AND PAYMENT TERMS	47
1. Prices and Payment Terms for Supply, Installation and Commissioning of CAAQM Station (Capital Items)	47
1.1. Prices for Supply, Installation and Commissioning of the CAAQM Station (Capital Items)	47
1.2. Payment Terms for Supply, Installation and Commissioning of CAAQM Stations (Capital Items)	47
2. Prices and Payment Terms for Comprehensive Annual Maintenance Contract of CAAQM Station	48

SECTION VII: CONTRACT TERMS AND CONDITIONS	50
1. GENERAL	51
2. GENERAL TERMS	55
3. OBLIGATIONS OF THE SUPPLIER	57
4. FORCE MAJEURE	62
5. SUSPENSION OF AGREEMENT	66
6. OBLIGATIONS OF GMDC	66
7. PAYMENT TO THE SUPPLIER	67
8. LIQUIDATED DAMAGES AND PENALTY	67
9. EVENT OF DEFAULT AND TERMINATION	69
10. DISPUTE RESOLUTION	72
11. FAIRNESS AND GOOD FAITH	74
12. MISCELLANEOUS	74
13. PROJECT HANDOVER	75
14. POST TERMINATION SUPPORT	76
SECTION VIII: ANNEXURES	77
Annexure 1: Letter of Bid Submission	77
Annexure 2: Bidder's Organization details	78
Annexure 3: Auditor's Certificate for Turnover for bidder	79
Annexure 4: Declaration for Non-Blacklisting	80
Annexure 5: Work Experience Details	81
Annexure 6: Manufacturing Authorization Form (MAF)	82
Annexure 7: Undertaking	83
Annexure 8: Format of Power of Attorney for authorizing Bidder's Signatory	84
Annexure 9: Price Bid Format	85
Annexure 10: Performance Bank Guarantee Format	87
Annexure 11: Format of Earnest Money deposit in the form of Bank Guarantee	89
Annexure 12: List of Approved Banks	92
Annexure 13: Detailed Technical Specifications	93

DEFINITIONS

In this RFP, the following word (s), unless repugnant to the context or meaning thereof, shall have the meaning(s) assigned to them herein below:

1. **“GMDC”/Authority** shall mean the Gujarat Mineral Development Corporation Ltd. who shall appoint the Supplier for the captioned work.
2. **“Bidder”** shall mean any firm or body corporate which is a Proprietorship, Limited Liability Partnership registered under LLP act or a company under the Indian Companies Act 1956/2013 which submits a Bid to supply, installation, commissioning and comprehensive annual maintenance of Continuous Ambient Air Quality Monitoring Station for GMDC along with Bid Security and RFP Fees as per the terms of this RFP within the stipulated time for submission of Bids. Consortiums are not permitted.
3. **“Bid/Proposal”** means the Bid submitted by the Bidder(s) in response to this RFP in accordance with the provisions hereof including Qualification Criteria, Technical Bid and Price Bid along with all other documents forming part and in support thereof as specified in this RFP.
4. **“Bid Due Date”** means last date of Bid submission as set out in clause 1.6 of SECTION V
5. **“Agreement/Contract”** is the agreement entered into between ‘Gujarat Mineral Development Corporation Ltd. (GMDC)’ and ‘Supplier comprising of all terms and conditions stated in this RFP.
6. **“Corrupt practice”** shall have the meaning ascribed thereto under clause 8 of SECTION V.
7. **“Contract Price”** shall mean the total value of Contract i.e. Cumulative Value of supply, installation, commissioning, warranty for Continuous Ambient Air Quality Monitoring Station (CAAQMS) (1 Year) and CAMC (5 Years after the end of warranty period) charges, for total five years.
8. **“Conflict of Interest”** shall have a meaning specified in clause 9 of SECTION V.
9. **“Comprehensive Annual Maintenance Contract/CAMC”** shall mean the regular upkeep/maintenance and major maintenance involving the replacement of spares of items of the CAAQMS during the Warranty (1st year) and Maintenance Period (5 Years after the end of warranty period).
10. **“Rates/Price for capital items and Service Charges for Comprehensive Annual Maintenance Services”** shall mean the charges payable by GMDC for the supply, installation and commissioning with comprehensive annual maintenance for Continuous Ambient Air Quality Monitoring Station (CAAQMS).
11. **“Qualification Criteria”** means criteria specified in clause 5.1 of SECTION V
12. **“Evaluation Process”** means steps of evaluation specified in clause 5.2 of SECTION V
13. **“EMD/ Bid Security”** means the Bid security/ earnest money deposit to be submitted by the Bidder as per clause 2.5 of SECTION V
14. **Letter of Award”** shall have the meaning ascribed thereto under clause 7 of RFP SECTION V

15. **“Supplier”** shall mean the successful Bidder who is selected by Authority/GMDC as per the process outlined in this RFP Document for executing the complete Scope of Work specified in this RFP.
16. **“Parties”** means the parties to the Agreement and **“Party”** means either of them, as the context may admit or require.
17. **“Preferred Bidder”** shall have a meaning specified in Clause 7 of RFP SECTION V
18. **“Successful Bidder”** means the Preferred Bidder selected in terms hereof and to whom GMDC shall issue the Letter of Award in accordance with the provisions hereof and who shall undertake the Scope of Work as per the terms specified in this RFP.
19. **“Scope of Work”** means all the activities as per Scope of Work mentioned in this RFP, which the Supplier is required to carry out as per the requirement of this RFP. Detailed Scope of Work is specified in SECTION II of RFP.
20. **“Service Levels”** shall have a meaning specified in Section IV
21. **“Technical Specification”** means the specification of CAAQMS as specified in Section III & Annexure 13
22. **“Third Party”** means any Person other than GMDC and the Supplier.

Any other term(s), not defined herein above but defined elsewhere in this RFP shall have the meaning(s) ascribed to such term(s) therein and shall be deemed to have been included in this Section.

ABBREVIATIONS

Abbreviation	Full Form
GMDC	Gujarat Mineral Development Corporation Ltd
GoG	Government of Gujarat
CAAQMS	Continuous Ambient Air Quality Monitoring Station
CAAQM	Continuous Ambient Air Quality Monitoring
CPCB	Central Pollution Control Board
GPCB	Gujarat Pollution Control Board
CAMC	Comprehensive Annual Maintenance Contract

SECTION I: BACKGROUND

Gujarat Mineral Development Corporation Ltd. (GMDC) is the leading State-owned Mining and Minerals Company of Gujarat with operational experience over 60 years and having product portfolio across mining, value added products and power. GMDC is a zero-debt company listed on National and Bombay Stock Exchanges. The Government of Gujarat (GoG) disinvested 26% stake to the public shareholders vide an IPO in 1997 while the balance ownership is held by the Government of Gujarat.

GMDC's mining activities are spread across the state of Gujarat in Kutch, Devbhoomi Dwarka, Panchmahal, Bhavnagar, Bharuch, Surat and Chhota Udaipur districts. It currently mines Lignite, Bauxite, Manganese, Ball Clay, Silica Sand, Bentonitic Clay and Limestone. It has five (5) operational lignite mines and six (6) upcoming lignite mines. GMDC also value adds to minerals through works such as pyrite removal from lignite. The Company has set up 2 x 125 MW lignite based Thermal Power Station at Nani Chher in Kutch as a forward integration, wind power plant of 200.9 MW at Maliya, Jodiya, Godsar, Bhanvad, Bada, Verbala, Rojmal and Solar Power plant of 5 MW at Panandhro Project.

In order to continuously monitor Air Quality Parameters at GMDC's project sites, GMDC intends to install total three nos. of fixed Continuous Ambient Air Quality Monitoring Station (CAAQMS) at its Bhavnagar, Mata No Madh and Tadkeshwar Lignite mines in Gujarat state. Through this RFP, GMDC is inviting Bids/ proposals from interested competent parties to supply and install Three numbers of fixed CAAQM Stations at the indicated project locations. The Supplier shall be responsible for supply, installation and commissioning of the CAAQMS while also undertaking Comprehensive Annual Maintenance for Five years post the Warranty Period of one year.

SECTION II: SCOPE OF WORK

1 Scope of Work

The Scope of Work is divided into following two parts.

- **Part 1:** Supply, Installation, Testing, and Commissioning of CAAQM stations along with Comprehensive Maintenance during Warranty period including calibration.
- **Part 2:** Comprehensive Maintenance of CAAQMS up to next 5 years after the completion of 1 year Warranty Period including calibration.

The detailed Scope of Work for each of above part is specified below.

1.1 Part 1: Supply, Installation, Testing and Commissioning of CAAQM Stations

The Supplier shall be completely responsible for the supply, installation, testing and commissioning including calibration of Three numbers of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at GMDC projects.

- (i) The Supplier shall assist GMDC in identifying the appropriate location for establishing CAAQMS
- (ii) The Supplier shall supply Three (3) nos. of fully assembled CAAQMS and same shall be used for continuous monitoring of ambient air at different locations. CAAQMS shall be supplied at GMDC's Bhavnagar, Mata No Madh and Tadkeshwar Lignite Mines.
- (iii) The quantities of CAAQMS devices to be supplied at three mines are specified in table below:

<i>Mine</i>	No. of CAAQMS Units
<i>Bhavnagar lignite mine</i>	1
<i>Mata No Madh lignite mine</i>	1
<i>Tadkeshwar lignite mine</i>	1

- (iv) The CAAQMS shall consist of all system and components as specified in sub-clause (viii) hereunder and Annexure 13 of this RFP.
- (v) The Supplier shall procure the components of CAAQMS as per the specifications of the RFP in the name of "Gujarat Mineral Development Corporation Ltd."
- (vi) The Supplier shall be responsible for packing, transportation, insurance, custom clearance, port clearance and handling, inland transportation, inland transit insurance (if so required) and delivery to GMDC sites, installation, testing and commissioning of equipment including calibration and provision of training of GMDC's Officials.
- (vii) The supplier shall assist GMDC in finalizing the locations where the CAAQMS shall be installed at the respective project sites.
- (viii) The supplier will be required to submit the complete Bill of Materials (BOM), system architecture and technical literature of the system.
- (ix) Each CAAQMS should be confirming to Technical Specification specified in Section III and Annexure 13. It should be an integrated system complete with all accessories including, but not limited to followings (the "CAAQM Station/CAAQMS");

- a) Continuous Ambient Air Quality Monitoring Station analyzers [for gases and Particulate Matters (PM10 & PM2.5)] as per the technical specifications specified in Annexure 13) and related system such as sampling system, calibrators, Racks, etc. as per the CPCB guideline.
 - b) Weather Monitoring Station as per the Technical Specifications listed in SECTION III.
 - c) Uninterrupted Power Supply (UPS) along with Battery as per the technical specifications as listed in SECTION III and Annexure 13.
 - d) Data acquisition and Communication system (Computer System, Networking components, Rack for local Server/Computer System, Software for Data Acquisition, Internet connectivity modem/infrastructure including SIM Card) as per the technical specifications.
 - e) Connectivity devices enabling the connection of the CAAQMS to the internet. Such connectivity devices should enable real time data communication to GMDC's Central Servers as well as CPCB – New Delhi & GPCB - Gandhinagar Servers.
 - f) Any and all other accessories which may be required to successfully operate the CAAQMS as specified in SECTION III and Annexure 13.
- (i) The CAAQMS supplied by the Supplier should be complete in all respects with all the accessories, cables, power supply, etc. required for the successful installation—and commissioning of the CAAQM Station.
 - (ii) The supplier must submit authorized/genuine/licensed copies of all software used in the Continuous Ambient Air Quality Monitoring Station (CAAQMS) in 2 Pen Drives. The Supplier shall also share all the relevant manuals for the operation & maintenance of the devices / components of the CAAQMS.
 - (iii) The Analyzers and Meteorological equipment's parameters data to be connected to the data acquisition system for data logging, report generation and transmitting the data on real time basis through proper communication system to GMDC central office, through internet. Providing Internet connectivity at the Project site shall be the responsibility of the supplier. Such data shall also be transmitted to CPCB – New Delhi & GPCB - Gandhinagar central servers at a predefined frequency required by CPCB and GPCB. The format of reports and data logging parameters to be in compliance with CPCB, GPCB and GMDC requirements
 - (iv) The Supplier shall also be responsible for integration API of the CPCB & GPCB Central Systems with CAAQMS Software for Realtime data transmission.

(v) Testing

a) Testing at Supplier's Premises

- a.1 The relevant test certificates for all devices forming part of CAAQMS shall be submitted to the Authority prior to supply.
- a.2 All equipment shall be tested in accordance with the standards specified to determine its performance. The supplier shall furnish the procedures and methods of testing used to determine the performance of devices.

b) Testing at the site of installation

- b.1 Upon delivery of CAAQMS, the Supplier shall inspect CAAQMS component at site and confirm that the devices/components are without any damage/ Faults and also check whether supplied equipment are complying with specifications specified in the RFP immediately after arrival of the equipment/devices at each Location.
- b.2 Thereafter, the Supplier shall undertake installation and commissioning activities for CAAQMS as per the CPCB guideline.

c) Commissioning of the CAAQMS

- c.1 On completion of erection on each project site, the Supplier shall carry out tests at site to prove that each item supplied (i) complies with the requirements and in accordance with the specifications (ii) to prove that the equipment supplied is capable of achieving the performance parameters specified as well as check the compliance with CPCB guideline, 2019 or latest. The Supplier shall be responsible for undertaking security checks/ tests of software so as to remove any virus and or cybersecurity threats. The Supplier shall ensure virus free software and also install necessary firewall.
- c.2 Upon successful performance tests and commissioning of the CAAQM Stations, the Supplier shall notify the authorized representative of GMDC for demonstration / trial run for 7 days at each of the respective project sites. Before taking up the trial run of individual units in an integrated system, it should be tested under actual condition for their proper performance and rated capacity.
- c.3 A list of defects observed during the trial run for commissioning will be rectified without any extra cost and in a reasonable time.
- c.4 In case the Supplier is unable to match the agreed performance parameters, the supplier shall carry out necessary modifications to achieve desired results without any extra cost. In such case the commissioning trial of the system shall be demonstrated again for the next 7 days on a continuous basis.
- c.5 GMDC/Authority shall issue "Go Live" Certificate (the "Installation and Commissioning Certificate") upon successful trial for a period of 7 days. The Issuance of Go Live Certificate shall indicate start of the Warranty Period.
- c.6 Any other work not defined above but ascertained to be necessary for the successful installation and commissioning of the CAAQMS shall also be undertaken by the supplier.

1.2 Part 2: Operation and Comprehensive Annual Maintenance of CAAQMS During Warranty and Maintenance Period.

- (i) The prices quoted by the Supplier for Supply, Installation and Commissioning shall be comprised of one year Warranty Period.
- (ii) The Warranty Period shall be a period of one year from the date of issuance of Go Live Certificate/ Installation and Commissioning Certificate (the "Warranty Period"). The Comprehensive Maintenance Period shall be for a period of five years from the date of end of the Warranty Period (the "Maintenance Period").

- (iii) During the Warranty Period and Maintenance Period, the Supplier shall need to maintain the CAAQMS as per the Good Industry Practices. During the Warranty Period and Maintenance Period, the Supplier shall be responsible for the comprehensive repair, Calibration, maintenance, replacement of devices/ equipment if found damaged/not performing as per the good industry Practices and all other incidental expenses for the same.
- (iv) The Supplier shall be responsible for Comprehensive Maintenance of CAAQMS for a period of five (5) years from the date of end of the 1 year Warranty Period, which can be extended up to an additional (1) year at the mutually agreed rates and terms and conditions.
- (v) Responsibilities of Supplier during the Warranty as well as Maintenance Period shall be as follows.
 - a) Undertake preventive and breakdown maintenance of supplied CAAQMS including all of its accessories.
 - b) The supplier shall carryout the regular calibration of the CAAQMS as per CPCB/GPCB Guidelines.
 - c) Provide maintenance and repair support on a 24 X 7 basis for all the CAAQMS components including all hardware, devices operating system, application software, other integrated system software and other components forming part of CAAQMS.
 - d) Update the CAAQMS regularly during the Warranty and Maintenance Period with all new releases of software and firmware.
 - e) Replacement of spares required during the Warranty and Maintenance period. The Prices of Comprehensive Maintenance Cost shall be inclusive of comprehensive repair, maintenance, spare replacement, Calibration and Data Transfer to CPCB & GPCB etc.
 - f) The Supplier shall ensure availability of spares during the Maintenance Period by making inventory of spares available.
 - g) Supplies shall need not to deploy technical representative all the time. However, it shall deploy technical representative on site during the entire Warranty Period and Maintenance Period, as and when required, for imparting uninterrupted maintenance services.
 - h) The supplier shall have to deploy additional qualified personnel for major maintenance as well as calibration, as and when required.
 - i) The Supplier shall also check the quality of the data generated from the devices/ equipment and ensure that it shall not be shared other than the intended purpose.
 - j) The supplier shall submit the performance / Availability report at the end of every month as per the SLAs defined in section IV. The format for the same will be decided mutually between GMDC and the supplier.
 - k) Ensure availability of the CAAQMS as per the Service Levels specified in Section IV.
 - l) Undertake calibration of all analyzers at an interval of every six weeks and as per the CPCB guideline amended time to time.
 - m) The Supplier shall be responsible for undertaking security checks of software regularly during the Warranty and CAMC period.
- (vi) The supplier will ensure quick troubleshooting of any issues ensuring smooth operation.
- (vii) GMDC shall provide power for the operation of the CAAQM Stations at its own cost.

1.3 Training

The Supplier shall be responsible for providing hands on training on operation, installation, maintenance, data interpretation, data transfer, calibration etc. of the CAAQMS to GMDC's designated staff during regular intervals during the Contract Period as per GMDC's instructions. The Supplier shall prepare required training manuals in English / Gujarati languages.

2 Timeline

As part of the project scope, the Supplier shall follow the below timelines with the deliverables list as per the defined scope of work activities.

Sr. No	Deliverables	Timelines (In Months) (T= Agreement Signing Date)	Cumulative Timeline for reference (In Months)
1)	Supply, Installation & Commissioning of CAAQMS as per the specifications and Integration with CPCB/GPCB Server	T1= T+ 5 Months	5 Months
2)	Warranty Period	T2 = T1+ 12 Months	17 Months
3)	Comprehensive Maintenance after Warranty Period of One year	T3 = T2+ 60 Months	77 Months
Total Period			77 Months including Commissioning

3 Other Terms and Conditions

- (i) In accordance with the contract specifications, the equipment shall have no defects arising out of design, material or workmanship & the complete unit shall be warranted for 12 months from the date of successful installation/commissioning of equipment. The warranty shall cover for total unit so that ultimate responsibility lies only with the Supplier.
- (ii) The supplier shall be responsible for any defect that may, under the conditions provided for by the contract and under proper use, arise due to faulty materials, design or workmanship and shall remedy such defect at his own cost. If it becomes so necessary for the supplier to replace or to renew any defective part, such replacement or renewal shall be made by the supplier at no cost to GMDC on FOR Destination basis within 30 days from the date of intimation by GMDC in this regard. The Supplier will be required to stock items to take care of warranty failures/failure during Maintenance period.

- (iii) All required civil works for construction of foundation for shelter etc. will be in the scope of the Supplier.
- (iv) Documents and drawings to be Supplied with CAAQMS
- Complete set of drawings for the analyzer shelter indicating Structural, Architectural, Illumination, Ventilation and Air conditioning details.
 - Drawings for analyzer shelters.
 - General Arrangement drawings for the panels.
 - Power supply distribution scheme.
 - Technical literature/ catalogues
 - Datasheets of the equipment offered.
 - Wiring diagram.
 - System Configuration Drawing.
 - Power Distribution Scheme.
 - Earthing Scheme.
 - Communication Drawing.
 - Operation manuals for each of the analyzers.
- (v) Quality and Workmanship
- a) All the equipment supplied, and materials used shall be new and best of their respective kinds and shall comply with the latest revision of relevant Indian/International standards USEPA / TUV (QAL1). They shall also comply with all statutory requirements of CPCB - GoI & GPCB - GoG. The method of measurement should also be complied with NAAQS 2009.
- b) The Supplier shall submit necessary testing and inspection certificates for the materials under the Supplier's scope of supply.
- (vi) Makes of Equipment
- All equipment/item shall be un-used and brand new and of reputed make.
- (vii) Safety
- a) For all the safety appliances/kits required for the personnel during erection and commissioning, the supplier should arrange the same.
- b) The safety precautions shall conform to norms set by relevant safety regulations and Safety practices followed by GMDC.
- c) As per the requirements, the Supplier shall provide danger boards, safety charts, fire extinguishers, sand buckets etc. at the Project site.
- d) All the workers of the supplier should have training in safety before starting the work.
- (viii) Earthing

The Supplier shall complete the earthing of equipment for lightening and for shelter. The earthing system shall be as per the latest revisions of IS 3043.

4 Roles and Responsibilities:

Sr. No.	Description	GMDC's Scope	Supplier's Scope
1	Supply of 3 NOS. CAAQMS		The Supplier shall supply 3 NOS. of CAAQMS as per the timeline specified in Cl. 2 of the Scope of Work at various projects sites of GMDC
2	Installation & Commissioning	GMDC shall provide suitable land for installation & commissioning of CAAQMS.	The Supplier shall install & commission 3 NOS. of CAAQMS at various projects sites of GMDC
3	Comprehensive Maintenance during Warranty Period		The Supplier shall have to carry out the Comprehensive Maintenance during the Warranty Period
4	Comprehensive Maintenance during Maintenance Period		The Supplier shall have to carry out the Comprehensive Maintenance of the CAAQMS during the Maintenance Period.
5	Spares	GMDC shall provide space to the Supplier for stocking their spares if required.	The Supplier shall have to ensure a stock of essential spares so as to ensure quick serviceability of the CAAQMS
6	Electricity	GMDC shall provide electricity connection near the site of CAAQMS at a feasible location. The expense for recurring power cost shall be borne by GMDC.	The Supplier's personnel shall establish and ensure proper connection to GMDC's Provided power source to operate the CAAQMS

*RFP for Supply, Installation, Commissioning-and Comprehensive Annual Maintenance of
Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC*

7	Accommodation for Supplier's staff	GMDC may provide accommodation for the supplier's visiting staff on chargeable basis, subject to the availability, if required.	
9	Insurance for the CAAQMS		The supplier shall procure the insurance in the name of GMDC and bear the cost of the insurance of the CAAQMS on behalf of GMDC.
10	Civil Work		All required civil works for construction of foundation / shelter etc. for the CAAQMS will be in the scope of the Supplier
11	Internet Connectivity		Supplier shall arrange for internet availability at local station through wireless dongle/sim cards and bear the recurring expenditure for the same
12	Erection Facilities	GMDC shall allow free use of water and power available in the area for erection purposes.	

SECTION III: TECHNICAL SPECIFICATIONS

CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION BILL OF MATERIALS

	Qty. in 1 Nos. CAAQMS	Total quantities for Three CAAQMS
CAAQM STATION – HOUSING/CONTAINER		
Housing/Container for Continuous Ambient Air Quality Monitoring (CAAQM) Station including sampling system, internal fittings, instrument racks, electrical and gas line fittings, tools (electrical & mechanical), etc. as per the Specifications provided in Annexure 13.	1 No.	3 Nos.
Split Air Conditioner (2.0 Ton Capacity)	2 Nos.	6 Nos.
Split Air Conditioner (1.0 Ton Capacity)	1 Nos.	3 Nos.
Online UPS 10 KVA, capacity (Three Phase I/P and Single Phase O/P, with 01 hrs backup) (for Air Conditioner)	1 No.	3 Nos.
Online UPS 5 KVA, capacity (Single Phase I/P and Single Phase O/P, with 02 hrs backup) (for Analysers and the Work Station Computer)	1 No.	3 Nos.
Sampling System	1 No.	3 Nos.
19" Rack	3 Nos.	9 Nos.
Continuous Ambient SO ₂ , Analyser	1 No.	3 Nos.
Continuous Ambient NO-NO ₂ -NO _x Analyser	1 No.	3 Nos.
Continuous Ambient CO, Analyser	1 No.	3 Nos.
Continuous Ambient PM ₁₀ Monitoring Analyser(β-RAY)	1 No.	3 Nos.
Continuous Ambient PM _{2.5} Monitoring Analyser(β-RAY)	1 No.	3 Nos.
Multi Point Gas Calibration System	1 No.	3 Nos.
Meteorological, Flow and Electronics Calibration	1 No.	3 Nos.
Meteorological System comprising of sensors for (A) Wind Speed, (B) Wind Direction, (C) Ambient Temperature, (D) Relative Humidity, (E) Solar Radiation, (F) Barometric pressure & (G) Rainfall, mounted on (H) Telescopic Crank-up Meteorological Tower	1 No.	3 Nos.
Data acquisition and handling system at stations	1 No.	3 Nos.

*RFP for Supply, Installation, Commissioning-and Comprehensive Annual Maintenance of
Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC*

Work Station Computer inside CAAQMS (for AQI Preparation)	1 No.	3 Nos.
Work Station Computer at GMDC's Corporate Office Ahmedabad for Central Station	-	1 No.
Remote Monitoring Tool/Software	1 No.	4 Nos. (3 local + one central location)
DATA ACQUISITION SOFTWARE FOR STATION (CAAQMS) / CORPORATE OFFICE	1 No.	4 Nos. (3 local + one central location)
DATA DISPLAY BOARD (1.5Ft x 3Ft) mounted on CAAQMS – Outside	1 No.	3 Nos.

The detailed Technical Specifications can be referred to in [Annexure 13](#).

SECTION IV: SERVICE LEVEL

The Authority shall monitor the Supplier's performance / CAAQM Station performance through Comprehensive Service Levels described in this section.

The Supplier shall have to abide by the Service Levels as specified below. In case of Non-meeting the Service Levels/ breach of Service Levels, the corresponding damages as defined below shall apply (the "Service Levels").

The Service Levels are categorized into following.

1. Delay in Supply, Installation and Commissioning
2. Default in Performance of CAAQM Stations during the Warranty and Maintenance Period /CAMC Period

Each of above Service Levels are further specified below.

1. Delay in Supply, Installation and Go Live

- (i) The Supplier shall adhere to the time schedule specified in Section II clause 2 of this RFP for the timely supply, installation and commissioning including assisting in obtaining any clearances (if any).
- (ii) In case the Supplier fails to adhere to the timeline for the entire supply installation and commissioning of the CAAQMS, unless such failure is due to Force Majeure or due to Authority's defaults or reasons not attributable to the Supplier, in such case the Authority shall recover damages equivalent to 0.5% of Value of Contract Price excluding CAMC charges (i.e. Value of Supply, installation and Commissioning) per week of delay subject to maximum of 10% of Value of Contract Price excluding CAMC charges. Such damages shall be recovered from the next bill/ invoice of Supplier.
- (iii) In addition to sub clause (ii) , If any delay is anticipated by the Supplier in the delivery of the Material(s)/ Equipment(s)/ Service(s)/ Work(s) or any of them beyond the stipulated time schedule of delivery, the Supplier shall forthwith inform the Authority in writing of such anticipated delay and of the steps being taken by the Supplier to remove or reduce the anticipated delay, and shall promptly keep the Authority informed of all subsequent developments. The Supplier shall submit the status through fortnightly Progress Report to the Authority.

2. Breach in Availability and Performance of CAAQMS during the Warranty and Maintenance Period/ CAMC Period/ Comprehensive Annual Maintenance Period

Availability of the CAAQMS

Service Level Item	Target Service Level	Measurement Period	Measuring Methodology	Damages
Availability of the CAAQMS	95%	Quarterly	<p>% of Availability = [(No. of Hours in a Quarter – Breakdown Hours + Schedule Downtime in a Quarter*) X 100] / No. of Hours in a Quarter</p> <p>*Schedule down time in a quarter shall be decided by GMDC and the Supplier in consultation with each other.</p>	<p>(i) If availability is $\geq 90\%$ but $< 95\%$: 2% of quarterly value of respective CAMC Period</p> <p>(ii) If availability is $\geq 85\%$ but $< 90\%$ - 4% of quarterly value of respective CAMC Period</p> <p>(iii) For Lower than 85% : For every fall of 1% in availability, the damages shall increase by additional 1% of quarterly value of respective CAMC Period subject to maximum of 10 % of value of the entire CAMC price.</p> <p>(iv) Above Damages shall apply subject to exclusions*.</p>

***Notes for exclusions.**

- Schedule preventive maintenance time shall not be considered as breakdown.
- If the CAAQMS fails due to, Natural Calamity such as earthquake, thunderstorm, heavy tempest etc., the breakdown for the period due to the above will not be consider as breakdown.
- If the CAAQMS is not operative due to non-deployment by mine management/Authority/ GMDC and power failure or other reasons attributed to GMDC, no deduction of the penalty shall be charged for the period.

3. Performance of CAAQM Station

- In addition to breakdown of CAAQMS, In case of failure to share the mandated data with regulatory bodies results in any loss of production, the same will be recovered from supplier to a maximum value of 10% of total value of the supply order in the name of the supplier, in addition to statutory obligation on part of supplier through PBG deposited by the supplier.

SECTION V: INSTRUCTIONS TO BIDDERS

1. INTRODUCTION

1.1. Bidding Process

- a. GMDC has adopted a two-stage online bidding system separately for Technical Bid and Financial Bid with evaluation as per the **Lowest Price Bid basis** as per the Evaluation Method as detailed out in this RFP for Supply, Installation, Commissioning, Operation and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) (the “**Bidding Process**”). Eligibility Bid and Technical Bid shall be submitted physically whereas Financial Bid/ Price Bid shall be submitted online through <https://gmdctender.nprocure.com>. The Bidders are required to place pen drive comprising of soft copy of Eligibility and Technical proposal/Bid as part of Technical Bid submission along with Physical copy. Price Bid to be submitted online only and the Bids for which the Financial Bid/Price Bid is submitted in hard copy / physical form/ pen drive shall be rejected as non-responsive. Complete Bid shall be submitted on or before the time and date fixed for submission of Bid (“**Bid Due Date**”). Bid delivered after Bid Due Date will be rejected.
- b. The Bidders need to offer their Bid which conforms to the Scope of Work and Terms and Conditions provided as part of this RFP Document.
- c. In a first step, evaluation of Technical Bid will be carried out as specified in Clause 6.2 of SECTION V. Based on Technical evaluation, the Financial Bids/Price Bid of only those Bidders meeting Responsiveness Test and Qualification Criteria as specified in clause 5.1 and 6.2 respectively shall be opened.
- d. In the second stage, a Financial Bid/Price Bid Evaluation of Technically Qualified Bidders will be carried out as per Clause 5.2. The Bidder’s Price Bid shall be evaluated on Present Value Method as detailed out in clause 5.2 and thereafter Bidders shall be ranked from the Lowest to the Highest as per the Present Value of Price Bid. The Bidder who shall determine the Lowest shall be considered as Preferred Bidder (the “**Preferred Bidder**”).

1.2. Due Diligence

The Bidders are encouraged to examine and familiarize themselves fully about the nature of assignment, scope of work, all instructions, forms, terms and conditions of RFP, local condition and any other matters considered relevant by them before submitting the Bid by paying a visit to the site, sending written queries to GMDC, and attending a Pre-Bid meeting.

1.3. Acknowledgement by Bidder

By submitted the bid or proposal, the bidder acknowledges that:

- 1) Made a complete and careful examination of the RFP.
- 2) Received all relevant information requested from GMDC.
- 3) Accepted the risk of inadequacy, error or mistake in the information provided in the RFP or furnished by or on behalf of GMDC relating to any of the matters referred to in Clause 1.2 above; and

- 4) Acknowledged that it does not have a Conflict of Interest.
- 5) Agreed to be bound by the undertakings provided by it under and in terms hereof.

GMDC shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the RFP or the Bidding Process, including any error or mistake therein or in any information or data given by GMDC.

1.4. Cost of Bidding

The Bidders shall be responsible for all of the costs associated with the preparation of their Bids and their participation in the Bid Process. GMDC will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

1.5. RFP Fee

- a) Bidder will need to submit nonrefundable RFP Document/Tender Fee **of INR 17,700 (i.e., RFP fees of INR 15,000 plus 18% GST)**. The RFP Document Fees shall be submitted (i) in the form of a Demand Draft in favor of **“Gujarat Mineral Development Corporation Limited”** and payable at Ahmedabad along with the Bid as per marking and sealing section or (ii) by depositing the stated amount directly into GMDC bank account through NEFT/RTGS. In such a case, while submitting the online bid on <https://gmdctender.nprocure.com>, when Bidders are prompted to input the DD number, the Bidder may enter the NEFT/RTGS transaction number. Details for payment in favor of GMDC Limited through electronic mode is specified below:

Bank Name: ICICI Bank, Ahmedabad Branch
Account Number: 002405019379
IFS Code: ICIC0000024
SWIFT Code: ICICINBBXXX

- b) If payment is made through electronic mode, then Bidder shall submit the receipt of the same in the technical bid documents.
- c) In case of Demand Draft then Demand Draft shall be from any bank among the list of scheduled commercial Bank in India published by RBI. This demand Draft for RFP document shall be non-refundable. Bids that are not accompanied by the RFP fees in acceptable amount and form shall considered non-responsive and shall be summarily rejected.
- d) Relaxation in terms of submission of RFP Fee shall be given to the bidder who is holding valid Certificate issued under the MSME Act, 2006 on the date of submission of bid to this RFP.

1.6. Schedule of Bidding

Event Description	Date, Time and Address																				
Brief Description of work	Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC																				
Date from which RFP documents will be available	RFP shall be available from 16/01/2025 from website http://www.gmdcltd.com & https://gmdctender.nprocure.com																				
Last date for receiving Pre-Bid queries/clarifications	<p>Bidders may send their queries by 22/01/2025 up to 17:00 hrs to following contacts or reach out for any assistance.</p> <p>GMDC Limited</p> <p>General Manager (Environment)</p> <p>Email: gm.env.co@gmdcltd.com</p> <p>Address: Khanij Bhavan, 132 ft Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad.</p> <p>The queries to be submitted in following format in excel format:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="background-color: #d3d3d3;">Bidders Request for Clarification</th> </tr> <tr> <th style="width: 25%;">Name and Address of the Organization submitting request</th> <th style="width: 25%;">Name and Position of Person submitting request</th> <th colspan="2" style="width: 50%;">Contact details of the Organization / Authorized Representative</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"></td> <td></td> <td colspan="2">Tel: Mobile: Email:</td> </tr> <tr> <th style="width: 25%;">Sr. No.</th> <th style="width: 25%;">RFP Document Reference (Section and Page no.)</th> <th style="width: 25%;">Content of RFP requiring clarification</th> <th style="width: 25%;">Clarification sought</th> </tr> <tr> <td style="text-align: center;">1.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Bidders Request for Clarification				Name and Address of the Organization submitting request	Name and Position of Person submitting request	Contact details of the Organization / Authorized Representative				Tel: Mobile: Email:		Sr. No.	RFP Document Reference (Section and Page no.)	Content of RFP requiring clarification	Clarification sought	1.			
Bidders Request for Clarification																					
Name and Address of the Organization submitting request	Name and Position of Person submitting request	Contact details of the Organization / Authorized Representative																			
		Tel: Mobile: Email:																			
Sr. No.	RFP Document Reference (Section and Page no.)	Content of RFP requiring clarification	Clarification sought																		
1.																					
Pre-Bid Meeting	Pre-Bid Meeting will be held on 24/01/2025 at 12.00 Hours. Venue of pre-bid meeting will be Corporate Office, GMDC, Ahmedabad (Gujarat).																				

*RFP for Supply, Installation, Commissioning-and Comprehensive Annual Maintenance of
Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC*

Event Description	Date, Time and Address
Online Submission of Price Bid	<p>The Price Bid is to be submitted online only at designated place on https://gmdctender.nprocure.com 18/02/2025 up-to 17:00 hrs. and (i) any submission of offline price bid (i.e., physical submission) or (ii) submission of price bid along with technical bid will lead to disqualification.</p> <p>Technical Bid is not to be submitted online but should be submitted in physical offline mode after the submission of the Price Bid at the designated address by the deadline mentioned.</p>
Last Date and Time of Submission of Technical Bid, RFP Fees & EMD in Hard Copy	<p>The Technical Bid is to be submitted offline, on or before 19/02/2025 up to 17:00 Hrs. to GM (Environment), GMDC office situated at Khanij Bhavan, 132-ft. Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad- 380052, by Speed Post/RPAD/Hand delivery/Courier in sealed cover duly super scribed as mentioned in the RFP.</p>
Opening of Technical Bid	On 19/02/2025 at 17:30 Hrs. at GMDC office
Opening of Price Bid	To be indicated after completion of Technical Evaluation
Signing of Agreement	Within 30 days from the date of issuance of LOA.
General and Important Terms and Conditions	<p>GMDC reserves absolute right/discretion to accept and/or reject any or all the RFPs received or invite fresh bid at any stage or split the work between more than one Bidders as the case may be.</p> <p>The Bidders are required to quote the rate strictly as per the terms and conditions mentioned in the RFP document. Conditional RFP shall not be entertained and will be rejected summarily without assigning any reasons.</p> <p>GMDC may issue amendments/corrigendum in the RFP documents, schedule, forms etc. at any time during the period between publication of notice and submission of bids of the RFP on website. The Bidders in their own interest are advised to visit the website regularly till the last date of submission of the bid. No separate newspaper advertisement will be released for amendments /corrigendum.</p>

Event Description	Date, Time and Address
	<p>GMDC reserves the rights to modify or alter any Condition of the RFP.</p> <p>The Bidders are advised to submit their price bid online on https://gmdctender.nprocure.com only. Physical price bid shall not be accepted and shall be rejected summarily without assigning any reasons.</p> <p>Failure to submit bid online in stipulated time due to any reason whatsoever by any Bidder shall result in disqualification of bid. In such circumstances, bid submitted physically along with supporting documents, RFP processing fees, EMD amount etc. shall not be considered as bid submitted and the same will be returned back to the Bidder without opening the same. GMDC reserves the right to take suitable decision in this regard.</p>

GMDC shall endeavour to adhere to the bidding schedule as specified above. However, there may be changes due to unavoidable circumstances. Any change shall be informed by placing the Corrigendum on the website and n-procurement portal.

2. GENERAL

2.1. Bid Validity

- a. Bids shall remain valid for a period of not less than 180 days (One Hundred and Eighty days) from the Bid Due Date/Bid Submission Date (the “**Bid Validity Period**”). The Bid of the Bidder shall be considered non-responsive if such Bid is valid for a period less the Bid Validity Period.
- b. In exceptional circumstances, prior to the expiry of the original Bid Validity Period, the Authority may request the Bidders to extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing. A Bidder may refuse the request without forfeiting his Bid Security/EMD. A Bidder agreeing to the request will not be required or permitted to modify his Bid but will be required to extend the validity of his Bid Security/EMD for the period of the extension, and in compliance with Clause 2.5 of RFP SECTION VI in all respects.

2.2. Numbers of Bids by Bidder

No Bidder shall submit more than one Bid pursuant to this RFP. If a Bidder submits or participates in more than one Bid, such Bids shall be disqualified.

2.3. Governing Law and Jurisdiction

The Bidding Process shall be governed by, and construed in accordance with, the laws of India

and the Courts at Ahmedabad shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process.

2.4. Authority's Right to Accept and Reject any Bids or all Bids

- a) Notwithstanding anything contained in this RFP, GMDC reserves the right to accept or reject any Bid and to annul the Bidding Process /Bid Evaluation Process and reject all Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.
- b) It shall be deemed that by submitting the Bids, the Bidder agrees and releases GMDC, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Bidding Process and waives, to the fullest extent permitted by applicable laws, any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or in future.
- c) Without prejudice to the generality of Clause (a) and (b) above, GMDC reserves the right to reject any Proposal/Bid if:
 - 1) Bid does not meet the Pre-qualification qualification criteria specified in this RFP.
 - 2) at any time, a material misrepresentation is made or discovered, or
 - 3) The Bidder found to be indulging in Fraudulent and Corrupt Practices as defined in this RFP.
 - 4) the Bidder does not provide, within the time specified by GMDC, the supplemental information sought by GMDC for evaluation of the Bid.
 - 5) Bidder submits conditional Bid.
- d) If such disqualification / rejection occurs after the Bids have been opened and the Preferred Bidder as per award criteria gets disqualified / rejected, then GMDC reserves the right to consider the next best Preferred Bidder or take any other measure as may be deemed fit in the sole discretion of GMDC, including annulment of the Selection Process.

2.5. Earnest Money Deposit (EMD)/Bid Security

- a) The bidder shall furnish, a separate Bid Security (also referred to as "Earnest Money Deposit" (EMD)/ Bid Security") for Captioned work as part of his Bid as per the given format. The Bid Security/EMD shall be sealed in a separate sealed envelope along with RFP Fees and super scribing "Earnest Money Deposit and RFP Fees ". An Earnest Money Deposit of amount **INR 5 lakh (INR Five Lakh)** shall be provided in favor of "**Gujarat Mineral Development Corporation Ltd**", in any one of the following forms/formats. The List of Approved Banks is provided in Annexure 11.
 - i. Account payee Demand Draft /Banker's Cheque from any bank among the list of

scheduled commercial Bank in India published by RBI.

- ii. An irrevocable Bank Guarantee (the “**Bank Guarantee**”), payable at Ahmedabad from Approved Bank by the Government of Gujarat from time to time (except Cooperative Banks) to Authority as per the Annexure 11 and valid for a period of 210 days (Two Hundred and Ten Days) from the Bid Due Date in the format prescribed in the bid documents (Annexure 11). The validity of Bank Guarantee may be extended as may be mutually agreed between Authority and Bidder from time to time as per clause 2 of RFP SECTION VI. In case Bidder intends to provide Bank Guarantee then it should be provided Compulsory e-Bank Guarantee Confirmation through ICICI Bank through SFMS¹ under our IFS Code: ICIC0000024 and UIC GMDC530265584 for Field 7037. Bank Name: ICICI BANK LTD.
- b) Relaxation in terms of submission of EMD shall be given to the bidder who is holding valid Certificate issued under the MSME Act, 2006 on the date of submission of bid to this RFP.
 - c) Any bid not accompanied with valid Earnest Money Deposit and RFP fee in the acceptable amount, form and validity period will be summarily rejected by GMDC as being non-responsive and bids of such Bidder shall not be evaluated further.
 - d) GMDC shall not be liable to pay any interest on the Bid Security/EMD deposit and the same shall be interest free. The EMD shall be furnished in Indian Rupees only.
 - e) The Bid Security of unsuccessful Bidders will be returned by GMDC, as promptly as possible on acceptance of the Bid of the Preferred Bidder or if and when GMDC cancels the Bidding Process. Bidders may by specific instructions in writing to GMDC give the name and address of the person in whose favor the said demand draft shall be drawn by GMDC for refund, failing which it shall be drawn in the name of the Bidder and shall be mailed to the address given on the Bid.
 - f) The Preferred Bidder’s EMD will be returned, without any interest, upon the Preferred Bidder signing the Agreement and furnishing the Performance Security in accordance with the provision thereof or if and when GMDC cancels the bidding.
 - g) GMDC shall be entitled to forfeit and appropriate the Bid Security as Damages inter alia in any of the events specified below. The Bidder, by submitting its Bid, shall be deemed to have acknowledged and confirmed that GMDC will suffer loss and damage on account of withdrawal of its Bid or for any other default by the Bidder during the period of Bid validity as specified in this RFP. No relaxation of any kind on Bid Security shall be given to any Bidder.
 - i. If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice as specified in Clause 8 of this RFP SECTION V;
 - ii. If a Bidder withdraws its Bid during the Bid Validity Period as specified in this RFP and

¹ Structured Finance Messaging System (SFMS) is a RBI mandated Bank Guarantee Messaging System.

as extended by mutual consent of the respective Bidder(s) and GMDC;

iii. In the case of Successful Bidder, if it fails within the specified time limit –

- 1) to sign and return the duplicate copy of LOA
- 2) to sign the Agreement within the time period specified by GMDC.
- 3) to furnish the Performance Security within the period prescribed therefore in the RFP; or
- 4) In case the Successful Bidder, having signed the Contract, commits any breach thereof prior to furnishing the Performance Security.

3. DOCUMENTS AND PRE-BID CONFERENCE

3.1. Content of RFP

This RFP comprises the Disclaimer set forth hereinabove, the contents as listed below and will additionally include any Addenda issued in accordance with Clause 3.4 of this section.

Notice Inviting Tender

- SECTION I: Background
- SECTION II: Scope of Work
- SECTION III: Technical Specifications
- SECTION VI: Service Levels
- SECTION V: Instruction to Bidders (ITB)
- SECTION VI: Payment Terms
- SECTION VII: Contract Terms & Conditions
- SECTION VIII: Annexure

3.2. Clarification to RFP Documents

- a) Bidders requiring any clarification on the RFP may notify GMDC in writing through email at the address provided in clause 1.6 of Section 6. They should send in their queries on or before the date mentioned in clause 1.6 in order to enable Authority to have adequate notice of the said queries so that the same can be addressed at the Pre-Bid Meeting or shortly later. GMDC shall Endeavour to respond to the queries at short span of time prior to Bid Due Date. The responses to queries will be uploaded on website of GMDC <http://www.gmdcltd.com> and <https://gmdctender.nprocure.com> . GMDC is not bound to take cognizance of any queries raised after the date mentioned in the Bid Sheet Section for sending queries.
- b) GMDC shall endeavor to respond to the questions raised or clarifications sought by the Bidders. However, GMDC reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring GMDC to respond to any question or to provide any clarification.

- c) GMDC may also on its own motion, if deemed necessary, issue interpretations and clarifications and amendment to RFP. All clarifications and interpretations issued by GMDC shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by Authority, or its employees or representatives, shall not in any way or manner be binding on GMDC.

3.3. Pre-Bid Meeting

- a) A pre-bid meeting would be held at time and an address specified in clause 1.6 of Section. Bidders shall bear their own cost of attending any pre-bid meeting.
- b) During the course of pre-bid meeting, the Bidders will be free to seek clarifications and make suggestions for consideration of GMDC. GMDC shall endeavour to provide clarifications and such further information as it may, in its sole discretion, considered appropriate for facilitating a fair, transparent and competitive Bidding Process.
- c) Clarifications/responses would be shared by uploading such responses online only at website of Authority (i.e. <http://www.gmdcltd.com> and <https://gmdctender.nprocure.com>) if required in the form of an addendum and or corrigendum.
- d) Non-attendance at the pre-bid conference shall not be a cause for disqualification of a Bidder. However, terms and conditions of the Addendum(s) shall be legally binding on all the Bidders irrespective of their attendance at the Pre-Bid Conference.

3.4. Amendment of Bidding Documents

- a) At any time prior to the Bid Due Date, GMDC may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP by the issuance of Addenda/corrigendum.
- b) Any Addendum/Corrigendum issued hereunder and shall be uploaded only on Authority website <http://www.gmdcltd.com> and <https://gmdctender.nprocure.com>.
- c) In order to afford the Bidders a reasonable time for taking an Addendum into account, or for any other reason, GMDC may, in its sole discretion, extend the Bid Due Date.

4. PREPARATION AND SUBMISSION OF BIDS

4.1. Language of Bid

- a) The Bids and all related correspondence and documents in relation to the Bidding Process shall be in English language. All supporting documents and printed literature furnished by the Bidders with the Bid may be in any other language provided that they are accompanied by translations in the English language, duly authenticated and certified by the Bidder.
- b) The Bidders shall ensure that any number mentioned in the Bid shall be followed by words in relation to such numerical format of the number, and in the event, there is a conflict in

the numerical and the word format of the number, the number provided in words shall prevail.

4.2. Bid Currency

All prices quoted in the Bid shall be quoted in Indian National Rupee(s) (INR).

4.3. Format and Signing of Bid

- a) The Bidder shall provide all the information sought under this RFP. GMDC will evaluate only those Bids that are received in the required formats and complete in all respects.
- b) The Bid must be properly signed by the authorized signatory (the “Authorized Signatory”) as detailed below:
 - (1) by a duly authorized person holding the Power of Attorney, in case Bidder is either a Limited Company or a Limited Liability Partnership firm or Proprietorship.
- c) In case of the Bidder being Company incorporated under Indian Companies Act 1956/2013, the Power of Attorney shall be supported by a Board Resolution in favor of the person vesting power to the person signing the Bid.

4.4. Submission Format & Sealing and Marking of Proposals

- a) The original instruments of the EMD/Bid Security of the required value and in approved format as specified in clause 2.5 of Section V and RFP Fees as specified in clause 1.5 of Section V shall be sealed in an envelope on which the following shall be superscribed:

“RFP for Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC - EMD and RFP Fees.”
- b) **The Technical Bid** shall be submitted in **Hard copy**. The documents and format to be submitted for Technical Bid shall be as follows.

Sr. No	Annexure No.	Particulars
1.	1	Letter of Bid Submissions signed by authorized signatory of Bidder
2.	2	Bidder’s Organization details: Certificate of registration in India, GSTIN certificate, PAN details OR Partnership deed, GSTIN registration, PAN details OR Incorporation certificate, MOA, AOA, GSTIN Registration, PAN details as may be applicable.
3.	3	Statutory Auditor/Registered Chartered accountants statement specifying audited Turnover for last three Years as per clause 5.1 of Section V Audited Financial statements for last three years as per clause 5.1 of Section VI

RFP for Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC

4.	4	No Blacklisting certificate on Stamp Paper
5.	5	Work Experience details
6.	6	Manufacturer's Authorization Form (MAF)
7.	7	Undertaking for information and document provided are true.
8.	8	Authorization of signatory in the form of Board Resolution/ or Power of Attorney (POA notarized and Applicable in case of bid not being signed by the person directly authorized by the firm), as applicable
9.		Original RFP documents issued along with updated addendums /amendments thereto, duly signed by the Bidder through its authorized signatory on all pages.
10.		A pen drive comprising of soft copy of Technical Bid also to be submitted as part of Technical Bid

The documents of Technical Bid shall be submitted in hard copy (physical submission) as per the list of submittals provided in table hereinabove of this RFP and should comprise of all documents required to be submitted as per the said Annexure. All documents of the technical proposal/Bid shall be placed and sealed in an envelope on which the following shall be super scribed:

“RFP for Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC - Technical Bid”

Both envelopes specified in sub clause a) and b) shall be placed in outer envelopes, super scribed and delivered by the Due date as per the address given:

“RFP Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC – Bid Submission”

Addressed to:

General Manager (Environment)

Gujarat Mineral Development Corporation

Khanij Bhavan, 132-ft. Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad- 380052

c) **Financial Bid/ Price Bid (Online)** to be filled up at designated places **only on <https://gmdctender.nprocure.com>** as per the format provided in the Annexure 9.

d) The Bidders are required to submit their Bids (i.e. Technical Bid and Price Bid) on or before the Bid Due Date specified in clause 4.5 of Section V.

4.5. Bid Due Date

- a) The last date and time of submission of the Bids (the “Bid Due Date/Bid Submission Date”) is specified in clause 1.6 of this Section.
- b) GMDC may, in its sole discretion, extend the Bid Due Date by issuing an Addendum uniformly for all Bidders as per clause 3.4. In such event, all rights and obligations of

Authority and Bidders previously subject to the earlier deadline will thereafter be subject to the Bid Due Date as extended. Any such change in the Bid Due Date shall be notified to the Bidders by dissemination of requisite information in this behalf by uploading the Addenda on Authority website of GMDC <https://gmdctender.nprocure.com>.

4.6. Late Submission

- a) Physical submissions for Technical Bid and EMD & RFP fees received by GMDC after the specified time and Date shall not be eligible for consideration and shall be summarily rejected.
- b) Authority shall not be responsible for any delay or non-receipt / non-delivery of any documents/ or technical issues pertaining to online Bid. The bidder is expected to take its registration for e-tendering well in time and complete all procedure relating to e submission well in time so that there is time for handling any technical glitches. Bidders who are not familiar with the procedure for online bidding may advantage of training made available by e bidding platform nProcure. The contact details of (n)Procure are as follows:

(n)Code Solutions (A Division of GNFC Ltd.)

403, GNFC Info tower, Bodakdev,

Ahmedabad - 380054. India

Sales : 079- 4000 7323

Support : 079- 4000 7300

Email : nprocure@ncode.in

4.7. Modification and Withdrawal of Bids

- a) Bidder shall not be able to modify any part of its Bid after the Bid Due Date. In order to avoid forfeiture of Bid Security, a Bidder may withdraw his Bid after online submission thereof. The Bidder may online modify, substitute or withdraw its bid after submission, prior to the Bid Due Date and time.
- b) Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by GMDC, shall be disregarded.

5. BID EVALUATION CRITERIA

All bids must be considered responsive as described in **clause 6.2 a) in** order to be considered fit to be evaluated. To be considered eligible and qualified, each Bidder should meet Qualification Criteria specified hereunder and will progress to the next stage of Price Bid opening. The Qualification Criteria are described below.

5.1. Qualification Criteria

A Bidder must meet Qualification Criteria as specified hereunder in order to qualify for next stage of Price Bid evaluation.

- a) The Bidder should be a legally registered entity under respective laws in India.
- b) The Bidder should be either OEM of CAAQMS OR its Authorized Dealer/Distributor of OEM in India (whenever manufacturer is not quoting directly as a matter of policy). In case of OEM, the Bidder shall have to submit Manufacturing License/Certificate. In case of authorized dealer/distributor of OEM, the dealership distribution certificate of their principal with date of appointment and validity signed by authorized signatory along with copy of the principal's manufacturing license/Certificate.
- c) The offered CAAQMS/ its analyzers shall be approved by the USEPA / TUV (QAL1) and Notarized Certified Approval of USEPA / TUV (QAL1) must be provided by the bidder. All offered items like Analyzers, Monitors, Calibrators and Sensors etc. should be made of the same manufacturer.
- d) The Average audited Turnover of the Bidder for three financial years out of last five financial years should be Rs 3 crore (i.e. Year 2019-20, 2020-21, 2021-22, 2022-23, 2023-24).

The Bidders shall be required to submit Auditor/CA certificate and financial statements for three years.

- e) During the last five years, the Bidder should have supplied at least five (05) nos. of USEPA / TUV (QAL1) approved fixed CAAQMS matching to CPCB requirements/guideline in last 5 years with at least monitoring capability of 05 CAAQMS parameters along with Data acquisition software in India. The bidder should have also provided maintenance support for at least two years post the supply of the said CAAQMS units.

The Bidder shall have to submit a supply order and its satisfactory performance certificate from the client as evidence.

- f) The Bidder shall have after sales support network/offices in India.
- g) The Supplier shall offer devices / CAAQMS complying to the Specifications specified in Section III and Annexure 13. The Bidder or its OEM should provide data sheets of offered model /statement consisting of comparison of specifications provided in Section III with the offered Model. This Data sheet/ statement should be signed and sealed by the authorized representative of Bidder/OEM. The Bidder/ its OEM should also provide catalogue /brochure of Offered model. The offered product should be 100% compliant with all the technical specifications. The Bidder should provide compliance of quoted product with Technical Specifications.
- h) The Bidder should provide Manufacturing Authorizations Form (MAF) from OEM for items such as analyzers, monitors, calibrators and sensors etc. as per the Annexure 6.

5.2. Evaluation of Price Bid

- a) The Price Bid of only Qualified Bidder passing the Responsiveness Test specified in clause 6.2 (a) and meeting the Qualification Criteria specified in Clause 5.1 shall be opened. The

Price Bid opening process is specified in clause 6.2.

- b) Bidders are required to quote price for Supply, Installation and Commissioning of CAAQMS as well as Service Charges for Comprehensive Annual Maintenance Contract in two separate formats as specified **Annexure 9** of this RFP.

1. Prices for Supply, Installation and Commissioning of CAAQMS (Capital Items)

The price for above shall be inclusive of Warranty Period and maintenance period of one year and inclusive of all taxes. Taxes shall be specified separately. Rates with quoted Applicable Tax rate shall be taken into account for evaluation.

2. Annual Service Charges for Comprehensive Annual Maintenance Contract (CAMC) of CAAQMS for five years from the end of 1 year Warranty Period.

It is to be noted that Bidders are required to quote rates for sr. no. 2 above from the second year onwards (Refer Annexure -9 on an annual basis, i.e. during each year from Year 2 to Year 6 of the Comprehensive Annual Maintenance Contract Period.

The Prices for the Annual Service charges for CAMC shall be exclusive of GST but inclusive of any other Applicable Taxes. However Applicable GST at the time of invoicing shall be paid by the Authority/GMDC. CAMC Charges exclusive of GST shall be taken into account for evaluation.

Payment shall be made based on detailed payment terms specified in this RFP.

- c) For evaluation purposes, the annual CAMC charges shall be reduced to Present value terms and added to the cost of capital items using the formula specified below.

Present Value of Price = Prices for Supply, Installation and Commissioning of CAAQMS (Capital Items) as per clause 5.2 b) 1 + Present value of Annual CAMC charges as per clause 5.2 b) 2.

$$\text{Present value of Annual CAMC charges} = \sum \frac{\text{Annual Service Charges for CAMC for Year N}}{(1 + \text{Discount rate})^N}$$

Where,

Year N = Years 2,3,4,5,6

Discount Rate = 10%

- d) The Authority shall determine the responsiveness of Price Bid of Bidder in relation to the Market rates, Authority's Internal Estimate, Good Industry Practice or inter-se allocation of costs between different heads. In case the bid is found to be seriously imbalanced, inconsistent or far variant in above respects, the Authority shall be entitled to solicit, at its sole discretion, detailed price analysis for any or all items specified in Price Bid all Bidders to demonstrate the above. In case of the Price Bid of the Bidder, which is unrealistically lower or Higher than internal estimate or market rate or Good Industry

Practice and which could not be substantiated satisfactorily by the bidder, may be rejected as non-responsive. Authority also retains the right to suggest rebalancing between different costs heads to balance out any frontloading of costs. Authority also retains the right to cancel the bid and order re-bidding in the event of high costs in relation to above.

6. EVALUATION PROCESS

6.1. Opening of Technical Bid

- (i) GMDC shall open the Technical Bids received to this RFP, at time, date and Place specified in clause 1.6 of Section V in the presence of the Bidders who wants to attend. The Bidders' representatives who are present at such opening shall sign a register evidencing their attendance as a witness to the Bids opening process.
- (ii) The Bidder's name, the presence or absence of requisite RFP Fees and Bid Security and such other details as Authority in its sole discretion may consider appropriate, shall be announced at the opening of Technical Bid.
- (iii) GMDC will subsequently examine and evaluate Technical Bids in accordance with the provisions set out hereunder in clause 5.1.

6.2. Evaluation of Technical Bid

The Bidders shall be required to submit documents as listed in this RFP document as per **clause 5.1 of Section V** along with supporting documents. GMDC shall examine and evaluate the Technical Bids as per the evaluation steps specified below.

a) *Test of Responsiveness for EMD, RFP Fee, Timely and proper Submission*

- 1) Prior to evaluation of Technical Bids (i.e., Qualification Criteria), GMDC shall determine whether each Bid is responsive to the requirements of the RFP. A Bid shall be considered responsive only if:
 - (i) The Technical Bid is submitted in Hard copy and Price Bid online properly as per the terms of the RFP.
 - (ii) Technical Bid is accompanied by RFP fee and the EMD as specified in the clause 1.5 and 2.5 of ITB respectively.
 - (iii) Physical submission of Technical Bid, RFP fee and EMD is made within specified timeline.
 - (iv) The Bid and physical submissions are received by the Bid Due Date including any extension thereof pursuant hereto.
 - (v) It contains all the information (complete in all aspects) as requested in this RFP and/or Bid Documents (in formats same as those specified in the RFP).
 - (vi) It does not contain any conditionality; and
 - (vii) It is not non-responsive in terms hereof and any other conditions specified elsewhere in RFP.

- 2) GMDC reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by GMDC in respect of such Bid.
- 3) Evaluation of Qualification Criteria and document checks of only those Bidders shall be carried out whose Bids are determined to be responsive.

b) Assessment of Qualification Criteria

- 1) GMDC shall examine and evaluate the Qualification of each received Bid upon determining its responsiveness as per sub clause (a) above.
- 2) The Bidder must meet Qualification Criteria specified in clause 5.1 in order to qualify for next stage of assessment.
- 3) The Financial Bids/ Price Bids of only Technically Qualified Bidders shall be opened. Evaluation of Financial Bid/ Price Bids of only Technically Qualified Bids/ Bidders shall be carried out.

6.3. Opening of Financial Bid

- (i) The Financial Bid shall be filled up by the Bidder as per E-Tendering at designated places through <https://gmdctender.nprocure.com> as per the indicative format specified in Annexure 8 to this RFP.
- (ii) The Price Bids of the Bidders determined to be Responsive and meeting the Qualification Criteria in accordance with Clause 5.1, shall be opened in the presence of such of the Bidders and/or their authorized representatives who wants to attend.
- (iii) The time and date of opening of Financial Bids shall be informed to the Bidders who are declared as Qualified Bidders pursuant to sub clause 6.2 in advance. The Bidders' authorized representatives who are present shall be required to sign and record their attendance. The name of Bidder, bid rates, etc. will be announced at such opening.
- (iv) GMDC shall evaluate the Price Bid in accordance with the provision set forth in clause 5.2.

6.4. Determination of Lowest Price Bidder

- (i) A Ranked list of bidders based on their Price in ascending order shall be prepared.
- (ii) The Bidder determining the Lowest (L1) as per the clause 5.2 shall be declared as Preferred Bidder (the "Preferred Bidder") and considered for award after following the due process including negotiation.

6.5. Clarification of Bids and Request for additional/missing information

To facilitate evaluation of Bids, GMDC may, at its sole discretion, seek in writing clarifications / documents / missing information in writing from any Bidder regarding its Bid. If the response from the Bidder is not received by GMDC before the expiration of the deadline prescribed in the written request, GMDC reserves the right to proceed with evaluation process at the total risk and cost of the Bidder.

6.6. Verification and Disqualification

- (i) GMDC reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP and the Bidder shall, when so required by GMDC, make available all such information, evidence and documents as may be necessary for

such verification. Any such verification or lack of such verification, by GMDC shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of GMDC there under.

(ii) GMDC reserves the right to reject any Bid and/or appropriate the EMD if:

- at any time, a material misrepresentation in terms of misleading or false representation is made or uncovered, or
- Bidder is blacklisted/barred by any Government Agency.
- In case of fraudulent Bid and the Bidder found to be involved in fraudulent and corrupt practice as per RFP Clause 8 of section 6.
- In case the Bidder has Conflict of Interest as per clause 9 of Section 6.
- a Bidder makes an effort to influence Authority in its decisions on Evaluation process/Selection process.
- while evaluating the Bid, if it comes to Authority's knowledge expressly or implied, that some Bidders may have compounded in any manner whatsoever or otherwise joined to form an alliance resulting in distorting competitive price discovery or delaying the processing of proposal.
- Record of poor performance such as abandoning the work, rescinding of contract for which the reasons are attributable to the non-performance of the Bidder, consistent history of litigation awarded against the applicant or financial failure due to bankruptcy.
- A bidder who submits or participates in more than one Bid under this RFP.

Such misrepresentation/ improper response/blacklisting/record of poor performance shall lead to the disqualification of the Bidder. If such disqualification / rejection occur after the Bids have been opened and the Preferred Bidder gets disqualified / rejected, then GMDC reserves the right to:

- a) invite the remaining Bidders to submit their Bids or
- b) take any such measure as may be deemed fit in the sole discretion of GMDC, including annulment of the Bidding Process.
- c) In case it is found during the evaluation of Bids or at any time before signing of the Contract or after its execution and during the period of subsistence thereof, that one or more of the prequalification criteria/ Technical Score Criteria /conditions have not been met by the Bidder, or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Consultant either by issue of the LOA or entering into of the Contract, and if the Successful Bidder has already been issued the LOA or has entered into the Contract, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by GMDC to the Successful Bidder or the Consultant , as the case may be, without GMDC being liable in any manner whatsoever to the Successful Bidder or the Consultant. In such an

event, GMDC shall be entitled to forfeit and appropriate the EMD or Performance Security, as the case may be, without prejudice to any other right or remedy that may be available to GMDC under the RFP and/or the Contract.

6.7. Contacts during Bid Evaluation

Bids shall be deemed to be under consideration immediately after they are opened and until such time GMDC makes official intimation of award/ rejection to the Bidders. While the Bids are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain, save and except as required under the Bidding Documents, from contacting by any means, GMDC and/ or their consultants/ employees/representatives on matters related to the Bids under consideration.

6.8. Correspondence with Bidder

Save and except as provided in this RFP, GMDC shall not entertain any correspondence with any Bidder in relation to acceptance or rejection of any Bid.

6.9. Confidentiality

Information relating to the examination, clarification, evaluation and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising GMDC in relation to, or matters arising out of, or concerning the Bidding Process. GMDC will treat all information submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. GMDC may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or GMDC or as may be required by law or in connection with any legal process.

7. SELECTION OF SUPPLIER AND SIGNING OF AGREEMENT

7.1. Notification of Award

- (i) Prior to expiry of the Bid Validity Period, Authority shall notify the Preferred Bidder(s) as the Successful Bidders through letter that his/their Bid has/have been accepted (the "Successful Bidder(s)"). This letter ("Letter of Award"/ "LOA") shall be issued, in duplicate and shall specify the sum which GMDC shall pay to the Successful Bidder and sum that the Successful Bidder shall pay to Authority in consideration of Project scope as per the terms of Contract.
- (ii) Successful Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Successful Bidder is not received by the stipulated date, GMDC may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as damages on account of failure of the Successful Bidder to acknowledge the LOA, and the next Eligible and Qualified Bidder may be considered.

7.2. Signing of Agreement

- (i) After acknowledgement of the LOA as aforesaid by the Successful Bidder, it shall cause the Successful Bidder, subject to furnishing the performance security as per the RFP provisions, to execute/sign the Agreement within the 30 (thirty) days from the date of LOA (the "Execution Date"). The Successful Bidder shall not be entitled to seek any deviation, modification or amendment in the Draft Agreement
- (ii) The Draft copy of Agreement (the "Contract") is specified in Section VIII of this RFP.
- (iii) The Successful Bidder shall get correct amount of Stamp Duty adjudicated (Stamp Paper of Rs. 100 denominations can be used), at Ahmedabad in accordance with applicable law, and submit the same in two copies duly stamped and executed within thirty (30) days from the dispatch of Letter of Award. GMDC shall return one copy duly sealed and signed as a token of acceptance of the Contract. Stamp Duty, and any other charges as may be levied under applicable law, shall be paid by the Successful Bidder.
- (iv) After the signing of Agreement, the Successful Bidder shall be called the "Supplier".

7.3. Performance Security

- (i) The Successful Bidder shall furnish Performance Security to Authority for securing the due and faithful performance of its obligations under the Agreement, in the form of Demand Draft or an unconditional and irrevocable bank guarantee from GOG approved banks except co-operative banks from time to time (Annexure 11) as below (the "Performance Security").
 - a) The Performance Security of amount equivalent to 10% of Supply, installation and commissioning Prices (Capital Items) and valid up to end of the Warranty Period. The Successful Bidder shall submit this Performance Security within 20 days from the LOA.
 - b) At the end of the Warranty Period, the Performance Security shall be returned to the Supplier without any interest, subject to any deductions which may be made by GMDC in respect of any outstanding dues under the terms of the Agreement.
 - c) The Performance Security of amount equivalent to 10% of cumulative CAMC charges for all five years shall be submitted 10 days prior to end of the Warranty Period and it shall remain valid till the end of Maintenance Period of 5 years.
- (ii) Above performance Security shall be submitted in favor of **Gujarat Mineral Development Corporation Ltd.** and admissible and payable at Ahmedabad branch from Approved Bank to Authority/ GMDC. The Performance Security shall be submitted in the form of BG/DD/RTGS
- (iii) In case Contract Period is extended then the Supplier shall have to renew Performance Security for a period of extended Contract Period.
- (iv) If the Successful Bidder fails to furnish the Performance Security, it shall be lawful for GMDC to forfeit the EMD and cancel the contract or any part thereof.

- (v) GMDC shall be entitled to forfeit and appropriate the amount of the Performance Security in whole or in part:
 - a) in the event GMDC requires to recover any sum due and payable to it by the Supplier including but not limited to Damages; and which the Supplier has failed to pay in relation thereof; and
 - b) in relation to Supplier's breach in accordance with the terms contained in the Agreement.
- (vi) At any time during the Validity Period, the Performance Security has either been partially or completely been encashed by GMDC in accordance with the provision of the Agreement. The Supplier shall within 15 (fifteen) days of such encashment either replenish, or provide fresh performance security, as the case may be, failing which GMDC shall be entitled to terminate this Agreement.
- (vii) At the end of the Contract Period, the Performance Security shall be returned to the Supplier without any interest, subject to any deductions which may be made by GMDC in respect of any outstanding dues under the terms of the Agreement.

7.4. Commencement of Work/Assignment

The Supplier shall commence the Work within fifteen days of the Signing of Agreement, or such other date as GMDC may permit. If the fails to either sign the Agreement as specified in Clause 7.2 of this section or commence the assignment as specified herein, in such an event, the LOA or the Agreement, as the case may be, may be cancelled / terminated.

7.5. Proprietary Data

Subject to the provisions of Clause 6.9, all documents and other information provided by GMDC or submitted by Bidder to GMDC shall remain or become the property of GMDC. Bidder and the Supplier, as the case may be, are to treat all information as strictly confidential. GMDC will not return any Bid or any information related thereto. All information collected, analyzed, processed or in whatever manner provided by the Supplier to GMDC in relation to this Project pursuant to the Scope of Work shall be the property of GMDC.

7.6. Tax Liability

- (i) The rates quoted in Price Bid Annexure 8 for capital items shall be inclusive of all taxes, duties, surcharge Levies, GST etc. as applicable ("Price Quote"). The rates quoted for CAMC charges shall be inclusive of all taxes except applicable Goods and Service Tax. Applicable GST at the time of invoicing shall be reimbursed by GMDC.
- (ii) GMDC shall be entitled to deduct tax at source as may be applicable. The TDS certificate(s) shall be submitted as per the due date specified in the Income Tax Act.

8. FRAUD AND CORRUPT PRACTICES

- a) The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOA and during the subsistence of the Contract. Notwithstanding anything to the contrary contained herein, or in the LOA or the Contract, GMDC may reject a Bid, withdraw the LOA, or terminate the Contract, without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder or as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, GMDC shall be entitled to forfeit and appropriate the EMD, as the case may be, without prejudice to any other right or remedy that may be available to GMDC under the Bidding Documents and/ or the Contract, or otherwise. In case of cancellation of Contract, if already awarded, Authority shall be entitled to recover from the Bidder the amount of any loss arising from such cancellation in accordance with provisions of RFP Document.
- b) Without prejudice to the rights of GMDC under sub Clause (a) hereinabove and the rights and remedies which GMDC may have under the LOA or the Contract or otherwise if a Bidder or Supplier as the case may be, is found by GMDC to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOA or the execution of the Contract and/or otherwise, such Bidder or Consultant shall not be eligible to participate in any tender or RFP issued by GMDC during a period of 2 (two) years from the date such Bidder or Supplier as the case may be, is found by GMDC to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.
- c) For the purposes of this Clause 8, the following terms shall have the meaning hereinafter respectively assigned to them:
- (i) **“corrupt practice”** means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of GMDC who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOA or has dealt with matters concerning the Contract or arising there from, before or
 - (ii) after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of GMDC, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Contract, any person in respect of any matter relating to the Project or the LOA or the Contract

or otherwise, who at any time has been or is a legal, financial or technical adviser of GMDC in relation to any matter concerning the Project;

- (iii) “**Fraudulent practice**” means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;
- (iv) “**Coercive practice**” means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person’s participation or action in the Bidding Process;
- (v) “**Undesirable practice**” means (i) establishing contact with any person connected with or employed or engaged by GMDC with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- (vi) “**Restrictive practice**” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

9. CONFLICT OF INTEREST

- a) The Bidder shall not have a conflict of interest that may affect the Selection Process or the Consultancy (the “Conflict of Interest”). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, GMDC shall forfeit and appropriate the Bid Security, if available, or as mutually agreed genuine pre-estimated compensation and damages payable to GMDC for, inter alia, the time, cost and effort of GMDC including consideration of such Bidder’s Proposal/Bid, without prejudice to any other right or remedy that may be available to GMDC hereunder or otherwise.
- b) GMDC requires that the Supplier provides professional, objective, and impartial advice and at all times hold GMDC’s interest’s paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The Supplier shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of GMDC.
- c) Without limiting the generality of the above, shall be deemed to have a Conflict of Interest affecting the Selection Process, if the relationship between two Bidders is established through common holding, either directly or through Associates, of at least 26% holding of equity/profit sharing in another company/firm, or in each other and other terms as specified hereunder;
- A. The Bidder, its member or Associate (or any constituent thereof) and any other Bidder, its Member or Associate (or any constituent thereof) have common controlling ownership interest. Common controlling ownership interest for Company, Limited Liability Partnership Firm is defined as follows. Associates of the Bidding firm shall mean Parent and/or Subsidiary and/or sister concerned firm having meaning specified in **definition section**.

- (1) **If Bidder is a Company:** In such case, the Bidder (including its Associate or any shareholder thereof of Bidder and/or its Associates) possessing over 26% of the paid up and subscribed capital in its own company or Associate as the case may be, also holds:
 - a) more than 26% of the paid up and subscribed equity capital in the other Bidder, its member or Associate of such other Bidder or Associates is Company; and/or
 - b) more than 26% of profit sharing in other Bidder or Associates such other Bidder or Associates is a Limited Liability Partnership firm. and/or
 - (2) **If Bidder is a Limited Liability Partnership Firm:** In such case, the Bidder or its Partners or Associate having a profit sharing of more than 26% of such Bidder or its Partners or Associate as the case may be also holds;
 - a) more than 26% of the paid up and subscribed equity capital in the other Bidder or Associate of such other Bidder, its member or Associates is Company; and/or
 - b) more than 26% of profit sharing in other Bidder or its Associates such other Bidder or its Associates is a Limited Liability Partnership firm. and/or
- B. a constituent of such Bidders is also a constituent of another Bidders; or.
 - C. such Bidders receives or has received any direct or indirect subsidy or grant from any other Bidder/s, or has provided any such subsidy to any other Bidders, or
 - D. such Bidder has the same legal representative for purposes of this Bid as any other Bidders; or
 - E. such Bidders has a relationship with another bidder, directly or through common third parties, that puts them in a position to have access to each other's' information about, or to influence the Bid of either or each of the other Bidders; or
 - F. there is a conflict among this and other consulting assignments of the Bidder (including its personnel and other members, if any) and any subsidiaries or entities controlled by such Bidder or having common controlling shareholders. The duties of the Supplier will depend on the circumstances of each case. While providing consultancy services to GMDC for this particular assignment, the Supplier shall not take up any assignment that by its nature will result in conflict with the present assignment; or
 - G. Bidder shall furnish an affirmative statement as to the existence of, or potential for conflict of interest on the part of the Bidder or any prospective subcontractor due to prior, current contracts, engagements, or affiliations with Authority. Additionally, such disclosure shall address any and all potential elements (time frame for service delivery, resource, financial or other) that would adversely impact the ability of the Bidder to complete the requirements as given in the RFP.

10. MISCELLANEOUS

- a) The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Ahmedabad shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process.

- b) GMDC, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;
 - (i) Suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
 - (ii) consult with any Bidder in order to receive clarification or further information;
 - (iii) retain any information and/ or evidence submitted to GMDC by, on behalf of, and/ or in relation to any Bidder; and/ or
 - (iv) Independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.

- c) It shall be deemed that by submitting the Bid, the Bidder agrees and releases GMDC, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Bidding Process and waives, to the fullest extent permitted by applicable laws, any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or in future.

- d) **No Partnership:** Nothing contained in the RFP shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any authority to bind the other in any manner whatsoever other than as per provisions laid out in this Agreement.

- e) The Supplier shall be deemed to be acting as an independent contractor of Authority and shall not be deemed an agent, legal representative, joint venture or partner of Authority. Neither party is authorized to bind the other to any obligation, affirmation or commitment with respect to any other person or entity.

SECTION VI: PRICES AND PAYMENT TERMS

1. Prices and Payment Terms for Supply, Installation and Commissioning of CAAQM Station (Capital Items)

1.1. Prices for Supply, Installation and Commissioning of the CAAQM Station (Capital Items)

- a) Authority hereby covenants to pay the Prices to the Supplier for the Supply, Installation and commissioning of the CAAQMS at agreed price specified hereunder.

Sr. No.	Item	Unit (A)	Quantities (B)	Base Rate (Rs/ Unit) (C)	Applicable Taxes (D)	Total Quote in INR [E = B X (C+D)]
1.	Supply, Installation and Commissioning of CAAQM Station along with all accessories.	No.	3			
Total Fees (INR)						

- b) The prices of Supply, Installation and Commissioning of CAAQM Station shall be inclusive of all taxes, duties and GST.
- c) The price specified in table hereinabove specified in subclause a) above shall be inclusive of Warranty Period and O&M period of one year and inclusive of all taxes. The taxes shall be specified separately. Rates with quoted Applicable Tax rate shall be taken into account for evaluation.

1.2. Payment Terms for Supply, Installation and Commissioning of CAAQM Stations (Capital Items)

- a) Authority/ GMDC shall make payment for capital items as per the provisions specified below.

Milestone	Payment Amount	Timeline for processing invoice	Submission and Approval required for the Payment
Delivery of CAAQM Station	60% of Value of total delivered CAAQMS Units	Within 15 days from the receipt of Invoice after the successful delivery	<ul style="list-style-type: none"> Invoice. Delivery challan and equipment acceptance at site

RFP for Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC

		of CAAQMS at projects	by GM Projects of respective site.
Installation, Successful Commissioning and issuance of Go Live Certificate	30% of Value of total installed and commissioned CAAQMS Units	Within 15 days from the receipt of Invoice after GO Live Certificate	<ul style="list-style-type: none"> • Invoice. • Go Live Certificate issued by GM Projects of respective site.
Twelve months of successful operation and Maintenance after the Issuance of Go Live Certificate	10% of Value of CAAQMS Units	Within 15 days from the receipt of Invoice after successful completion of 1 year warranty period	<ul style="list-style-type: none"> • Invoice • Certificate stating 1 year of successful operation issued by GM Projects of respective site.

- b) The Supplier shall submit invoices upon achieving corresponding milestones herein above. Authority shall make payment within 15 days of submission of invoices upon verifying the milestone for which invoice is submitted subject to deduction of any damages pursuant to SLAs and contract conditions.
- c) The Prices mentioned in the clause 1.1 a) in this section are inclusive of all applicable taxes including custom duty, GST etc as on the date of submission of the Bid. The taxes shall remain fixed during irrespective of any changes in taxes.
- d) GMDC shall be entitled to deduct applicable tax at source as may be applicable. The TDS certificate(s) shall be submitted as per the due date specified in the Income Tax Act.

2. Prices and Payment Terms for Comprehensive Annual Maintenance Contract of CAAQM Station

- a) Authority hereby covenants to pay the Prices to the Supplier for the Supply, Installation and commissioning of CAAQM Stations at agreed price specified hereunder.

Sr. No.	Item	Comprehensive Annual Maintenance Charges (CAMC Charges) (to be paid on quarterly basis by dividing by 4)					
		Year 2	Year 3	Year 4	Year 5	Year 6	Total
1	CAAQMS (Per Unit)						

*RFP for Supply, Installation, Commissioning-and Comprehensive Annual Maintenance of
Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC*

2	Quantities	3	3	3	3	3	
	Total (1x2)						

- b) The prices of CAMC charges shall be exclusive of GST but inclusive of any other Applicable Taxes . However Applicable GST at the time of invoicing shall be paid by the Authority/ GMDC. CAMC Charges exclusive of GST shall be taken into account for evaluation.
- c) The Prices for CAMC are inclusive of all scope items related to CAMC specified in Section II.
- d) The Payment for the CAMC shall start after the end of each Quarter during the Maintenance Period. The Maintenance Period shall start from the end of Warranty Period of one year and end after the completion of five years from the start date. The Warranty Period shall start from the date of issuance of Go Live Certificate, and it shall end at the end of one year from the date of issue of this certificate.
- e) The Supplier shall submit quarterly invoice at the end of each quarter during the Maintenance Period.
- f) All payments shall be made by the Authority/ GMDC to the Supplier within 15 days from receipt of the invoice after making (i) any tax deductions at source as applicable under Income Tax law governing in India and (ii) deduction pertaining to SLAs.

SECTION VII: CONTRACT TERMS AND CONDITIONS

THIS AGREEMENT is entered into on this the _____ day of _____, 20_____

BETWEEN

Gujarat Mineral Development Corporation Limited, a company incorporated under Indian Companies act, 1953 and having its corporate office at Khanij Bhavan, 132-Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad- 380052 (hereinafter referred to as the “Authority/GMDC” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of ONE PART;

AND

_____, (i.e. Name of the Supplier) having its registered office at _____, hereunder referred to as the “**Supplier**” which expression shall unless repugnant to the context include its successors and permitted assigns, of the OTHER PART.

GMDC and the Supplier are hereinafter individually referred to as “Party” and collectively as “Parties”.

WHEREAS

- A. GMDC vide its Request for Proposal, dated ____ invited Bids from competent parties through transparent and competitive bidding process for “**RFP for Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) for GMDC**” as per the terms specified in RFP and this Agreement (hereinafter called the “**Project**”);
- B. Pursuant to the evaluation of the bids received, GMDC has accepted the bid of the Supplier dated _____ as per the terms and conditions specified in RFP documents, subsequent Addendum and terms specified in this Agreement and issued a Letter of Award (LOA) No. _____ dated _____ accepting the particular Bid Proposal.
- C. The Supplier has accepted the LOA by its letter dated _____, requiring inter alia the execution of the Contract. GMDC hereby agrees to appoint the **Supplier for the Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) for GMDC** on the terms, conditions and covenants hereinafter set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties (GMDC and Supplier) hereto **hereby agree as follows:**

The following documents attached hereto shall be deemed to form an integral part of this Agreement (the “Agreement”):

This Agreement along with all Annexure/schedule hereto.

1. Request for Proposal Document issued by GMDC in its entirety including all its parts/sections, annexure, corrigendum and Addendums thereto.
2. Letter of Acceptance (LOA) no. _____ issued on _____.
3. Performance Security as per _____
4. Scope of Work provided in RFP SECTION II (which shall be placed as Schedule I in the contract when it is executed).
5. Technical Specifications provided in Section III (which shall be placed as Schedule II in the contract when it is executed).
6. Payment Terms provided in RFP SECTION VI (which shall be placed as Schedule III in the contract when it is executed).
7. Any relevant correspondence between the two parties that the signatories have agreed to include as part of the Contract for validating and clarifying any points in the Contract or by way of revised or improved understanding of any terms of the Contract as appended herein.

While all above documents are deemed to be part of the Agreement, in the event of any discrepancy / conflict in the terms of the above referred documents or interpretation thereof, the provisions of the more recent document, date wise, shall prevail over the older document.

1. GENERAL

1.1. Definition and Interpretation

- 1.1. In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively ascribed to them hereunder:
 - a. **“Applicable Law”** means all the laws, acts, ordinances, rules, regulations, notifications, guidelines or bye-laws, in force and effect, as of the date hereof and which may be promulgated or brought into force and effect hereinafter in India, including judgments, decrees, injunctions, writs or orders of any court of record, as may be in force and effect during the subsistence of this Contract, including without limitation those laws/regulations applicable to the Project;
 - b. **“Applicable Clearances”** means all clearances, permits, no-objection certifications, exemptions, authorizations, consents and approvals required to be obtained or maintained under Applicable Law, in connection with the Project during the subsistence of this Agreement.
 - c. **“Authority”** or **“GMDC”** means the Gujarat Mineral Development Corporation Limited [including without limitation its authorized representatives];
 - d. **“Supplier”** means firm selected for supply, installation, commissioning and thereafter Comprehensive Annual Maintenance for CAAQMS.
 - e. **“Contract”** means the Contract signed by the Parties and all the attached documents listed in Preliminary and the Annexures/schedules.
 - f. **“Contract Period”/“ Agreement Period”** shall have a meaning specified in clause 2.9
 - g. **“Day”** means calendar day.

- h. **“Dispute”** shall have a meaning specified in clause 0
- i. **“Effective Date”** shall have meaning specified in clause 2.1.
- j. **“Encumbrance”** shall mean any encumbrance such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations and shall include without limitation any designation of loss, payees or beneficiaries or any similar arrangement under any insurance policy pertaining to this Project, physical encumbrances, claims for any amounts due on account of taxes, cesses, electricity, water and other utility charges and encroachments on the Facility premises.
- k. **“Force Majeure”** shall have a meaning specified in clause 4.
- l. **“Good Industry Practices”** shall mean such relevant standards with respect to the industry as are considered to be standard either through their publication or expression by a recognized central industry body or association of that industry or Government or if such are not published then those which are accepted as standard through popular practice.
- m. **“Insurance”** shall have a meaning specified in clause 3.13
- n. **“Local Currency”** means Indian Rupees.
- o. **“Material Breach”** means breach serious enough to destroy the value of this Agreement and to give a basis for an action for breach of Agreement.
- p. **“Party”** means the “Authority” or the Supplier, as the case may be, and **“Parties”** means both of them.
- q. **“Performance Security”** shall have a meaning specified in clause 8.1
- r. **“Personnel”** means professionals and support staff provided by the Suppliers and assigned to perform the Services or any part thereof.
- s. **“Project”** shall mean GMDC’s Tadkeshwar Mine located in Gujarat **including** components and facilities within the premises namely (i) all tangible assets such as land, civil works (buildings) and machineries, and equipment, other commercial space, electric light, administrative office, electrical system (ii) all amenities and facilities (iii) Applicable Permits relating to or in respect of the Project.
- t. **“Scope of Work (SOW)/Scope of Services”** means the work to be performed by the Supplier pursuant to this Contract, as described in RFP SECTION II.
- u. **“Third Party”** means any person or entity other than the “Authority”, or the Supplier.
- v. **“Device/ CAAQMS / CAAQM Station”** means Continuous Ambient Air Quality Monitoring Station as defined in Scope of Work and Technical Specification section.

1.2. Principles of Interpretation

- a. The table of contents, numbers, headings and marginal headings in this Agreement are solely for the purpose of facilitating reference and shall not impact the construction or interpretation of this Agreement.
- b. Words importing Persons or Parties shall include firms, companies, corporations, trusts, associations and any organizations, having legal capacity to sue and be sued in their names.
- c. Words importing the singular also include the plural and vice versa where the context requires.
- d. Words importing one gender also include other gender.
- e. In case of ambiguities or discrepancies in this Agreement, the following shall apply:
 - (i) Between the Articles and the Schedules, the Articles shall prevail:
 - (ii) Between any value written in numerals and that in words, the latter shall prevail.

1.3. Relationship between Parties

Nothing contained herein shall be construed as establishing a relation of master and servant or of agent and principal as between GMDC and the Supplier. The Supplier shall, subject to this Agreement, have complete charge of Personnel performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

1.4. Rights and Obligations

The mutual rights and obligations of GMDC and the Supplier shall be as set forth in the Agreement, in particular:

- a) the Supplier shall carry out the Services and supply the Device/ CAAQM Stations in accordance with the provisions of the Agreement; and
- b) GMDC shall make payments to the Supplier in accordance with the provisions of the Agreement.

1.5. Governing Law and Jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the courts at Ahmedabad, India shall have exclusive jurisdiction over matters arising out of or relating to this Agreement.

1.6. Language

All notices required to be given by one Party to the other Party and all other communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

1.7. Table of Content and Heading

The table of contents, headings or sub-headings in this Agreement are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Agreement.

1.8. Notices

Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified hereunder.

If to Authority.

General Manager (Environment)

Email: gm.env.co@gmdcltd.com

Address: Khanij Bhavan, 132 feet Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad

Land Lines: 079-27912747

Board Lines: 079-27913501, 079-27913200

If to Supplier.

1.9. Location

The product shall be supplied, and the associated services hence be performed at GMDC's Project sites specified in clause 1.1 (ii) of section II of this RFP and at any location incidental to fulfil the scope.

1.10. Authorized Representative

- a) Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the "Authority" or the Supplier may be taken or executed by the officials specified hereunder.
- b) GMDC may, from time to time, designate one of its officials as GMDC Representative. Unless otherwise notified, GMDC Representative shall be General Manager (Environment).
- c) The Supplier may designate one of its employees as Supplier's Representative. Unless otherwise notified, the Supplier's Representative shall be: _____

2. GENERAL TERMS

2.1. Effectiveness of Agreement

This Agreement shall come into force and effect on the date of this Agreement (the "Effective Date").

2.2. Use of the Facility

The Supplier shall not use the Project site (the "Facility") for any purpose other than for the purposes specified in the Scope of Work. The Supplier shall not at any time do, cause or permit any nuisance on the Project site/ do anything which shall cause unnecessary disturbances or illegal activities.

2.3. Rights and Title over the Project Site

The Authority shall remain the sole owner of the Project. The Supplier hereby assures and undertakes that:

- a) It shall have rights to use the Project facility only for the purpose of Supply, Installation, Commissioning and Comprehensive Maintenance during the Contract Period and in accordance with the provisions of this Agreement.
- b) It shall not Part with or create any Encumbrance on the whole or any Part of the Project Site.
- c) The rights are being granted to the Supplier purely for the specific purpose of supply Installation and commissioning of CAAQMS units and thereafter, maintenance during Warranty period and Maintenance period. The property shall remain a property fully controllable by the Authority. Under no circumstances shall this Agreement create any interest of the Supplier in the property of any nature analogous to lease, ownership, partial or full title. The Authority shall continue to possess the right to evict the Supplier from the site at any time as per the terms and conditions of this Agreement.
- d) Under no circumstances does the Supplier shall have any rights over the land, property, buildings, utilities, equipment or any structure standing on the site of the Project other than those rights which are expressly given under this Agreement and the Supplier agrees to vacate the Project facility peacefully at the end of the Agreement Period.

2.4. Ownership of CAAQM Station

- a) With exceptions of proprietary software, the ownership of all Hardware, equipments and goods forming part of the CAAQM Stations / Project shall be transferred to the Authority at the time of delivery and commissioning or otherwise under terms that may be mutually agreed upon by the Parties.

- b) In cases where the customized software is developed and installed exclusively for the Authority, the ownership of all such shall rest exclusively with Authority upon delivery and commissioning.
- c) The Software Licenses and Licenses for other proprietary, all third-party software license and standard Hardware shall be transferred to the Authority upon delivery and installation. All such Software Licenses shall be taken in the name of Authority.
- d) The License Period of proprietary software of the Supplier shall be similar to the Contract Period.
- e) Authority shall remain sole owner of the data generated all times during the Contract period. The Supplier shall not have any claim on and for such data and shall not for any reason withhold such data from Authority.
- f) Supplier shall not share, sell or in any manner use the data created out under the purview of this RFP.

2.5. Existing Structure and Surroundings of the Facility

The Supplier shall have to ensure that any of its activities at the Project sites during the Agreement Period shall not cause any damage to any existing assets or third party. The cost /compensation for any such damages caused by the Supplier shall have to be borne solely by itself if such damages are caused by negligence of staff deployed by the Supplier.

2.6. Facility to be free from Encumbrances.

The Supplier shall not part with or create any encumbrance on the whole or any part of the Project or Project site and shall not place or create nor permit any Contractor or other person to place or create any encumbrance or other interest over all or any part of the Project/ Project site, save and except as may be expressly provided in this Agreement.

2.7. Entire Agreement

- a) This Agreement and the Annexes/ schedules together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement are abrogated and withdrawn; provided, however, that the obligations of the Supplier arising out of the provisions of the RFP shall continue to subsist and shall be deemed to form part of this Agreement.
- b) Without prejudice to the generality of the provisions of Clause 2.7 (a) , on matters not covered by this Agreement, the provisions of RFP shall apply.

2.8. Modification of Agreement

- a) Modification of the terms and conditions of this Agreement, including any modification of the scope of the supply and services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification made by the other Party.
- b) Without Prejudice to the provision stated in subclause a) hereinabove, Managing Director, GMDC or his nominated GMDC Officer shall have rights to take suitable decision and action in case of requirement to amend/ alter the Agreement conditions/ scope of the supply and services/ extension of the Contract Period/ allotment of additional quantities of work/ fees etc., if necessary, after considering the conditions prevailing at that time.
- c) For any reasons, if it is required, the GMDC reserves right to cancel, terminate, amend and / or alter the contract and / or bifurcate and / or increase and/or reduce the contract services or supply at any time without giving any notice or reason to the supplier and without incurring any responsibility. For such cases, the supplier shall have to take away his staff and shall leave the site at once or shall have to carry out the instructions of the GMDC.

2.9. Agreement Period / Contract Period

- a) Unless terminated earlier pursuant to Clauses 4.5 or 9.2 hereof, this Agreement shall, unless extended by the Parties by mutual consent as per the sub clause (c) hereunder, the Agreement shall remain in force for a period of **six years and five months (One Year Warranty, five years of Comprehensive Annual Maintenance Period and five months of supply, installation and commissioning period)** from the Effective Date (the "Contract Period"). Upon Termination, GMDC shall make payments of all amounts due to the supplier hereunder for which the services were delivered.
- b) The Warranty Period shall be a period of One year starting from the date of issuance of "Go Live Certificate "(the "Warranty Period"). The Maintenance Period shall start from the date of completion of Warranty Period and ends after five years from the Start date (the "Maintenance Period/ Comprehensive Annual Maintenance Period/ CAMC Period").
- c) Subject to satisfactory performance of the Supplier during the Maintenance Period, the Authority may, at its sole discretion, extend the Maintenance Period for additional one year upon mutual consent at terms which may be discussed and fixed thereupon.

3. OBLIGATIONS OF THE SUPPLIER

3.1. Scope of Work

The Scope of Work to be performed by the Supplier is specified in the RFP SECTION II. The technical specifications of the CAAQM Stations are specified in RFP SECTION III. The Supplier shall be required to execute the Scope of Work professionally and diligently and in adherence to the timelines specified therein.

3.2. Standard of Performance

- a) The Supplier shall perform the scope of work and carry out their obligations stated in this Agreement with all due diligence, in accordance with generally accepted professional practices, and shall observe sound management practices, and employ appropriate, safe and effective methods.
- b) The performance of the Supplier shall be assessed based on the Service Level Agreements specified in Section IV of the RFP.

3.3. Responsibilities during Supply, Installation and Commissioning

- a) The Supplier shall adhere to the time schedule specified in Section II clause 2 of this RFP for the timely installation and commissioning.
- b) In case the Supplier fails to adhere to the timeline for the entire supply installation and commissioning of the CAAQM Station, unless such failure is due to Force Majeure or due to Authority's defaults or reasons not attributable to the Supplier, in such case the Authority shall recover damages as specified in Cl. 1 of RFP SECTION IV.
- c) The supplier shall ensure full support and operation of the software required to operate the CAAQM Station.

3.4 Responsibilities during the Warranty Period and Maintenance Period

- a) The Supplier shall undertake Scope specified in Section II pertaining to Warranty Period and Maintenance Period diligently and with utmost care.
- b) The supplier shall ensure at least 95% availability during both warranty Period and Maintenance/CAMC Period.
- c) The Supplier shall adhere to the Service Levels specified in clause 2 Section IV, failing which the damages for the nonperformance specified therein shall apply.

3.5 Responsibilities Pertaining to the Software

- a) The Supplier shall ensure the continuous functionality and support of the software necessary for the operation of the CAAQM Stations throughout the term of the agreement/ Contract Period.
- b) This includes, but is not limited to, providing updates, patches, bug fixes, and technical assistance to address any issues or concerns related to the software's performance or compatibility with the CAAQM Station.
- c) The Supplier shall promptly notify the Authority of any planned maintenance or upgrades that may temporarily affect the availability or performance of the software and shall make reasonable efforts to minimize any disruption to the Authority's operations during such periods.

3.6 Applicable Laws

The Supplier shall perform the scope of work in accordance with the Applicable Laws and shall take all practicable steps to ensure the Personnel and agents of the Supplier, comply with the Applicable Laws.

3.7 Conflict of Interest

The Supplier shall not have a Conflict of Interest, and any breach hereof shall constitute a breach of the Agreement.

3.8 Suppliers not to Benefit from Commission, Discounts etc.

The remuneration of the Suppliers pursuant to Payment Terms specified in RFP SECTION VI hereof shall constitute the Supplier's remuneration in connection with this Contract or the supply and services and, the Supplier shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the supply and services or in the discharge of their obligations hereunder, and the supplier shall use their best efforts to ensure that any Personnel and agents of them, similarly shall not receive any such additional remuneration.

3.9 Suppliers and Affiliates not to engage in Certain Activities

- (a) The Supplier shall hold the GMDC's interest paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their corporate interests.
- (b) The clause shall not prohibit the Supplier from serving competing clients and clients with potentially conflicting interests as well as counterparties in merger, acquisition and alliance opportunities. However, in such cases, the Supplier agrees to a professional responsibility to maintain the confidentiality of GMDC's information.

3.10 Confidentiality

The Supplier and their personnel shall not, either during the term or after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, this Contract or GMDC's business or operations without the prior written consent of GMDC, provided however that this clause shall not apply to any information (a) which already forms part of the public domain; or (b) which is received from a third party; or (c) which is independently developed; (d) which is required to be submitted to any regulatory, statutory or governmental authority; (e) information related to contract's scope which the Supplier can share as the credential of the Supplier in future after the 1 (one) year beyond the contract period.

3.11 Reporting Obligations

The Supplier shall submit to GMDC the documents, log sheets, reports, etc. as mutually agreed time to time and within the time periods set forth in latest directives as issued by regulatory bodies. Additionally, the Supplier shall also submit monthly, quarterly and annual reports about performance of the CAAQM Station as well as an overview of the data collected over the indicated time period.

3.12 Obligations pertaining to Technical Specifications

The Supplier shall adhere to the technical specification criteria stated in RFP Section III.

3.13 Insurance to be taken out by the Supplier.

(i) The Supplier shall procure and maintain, at its own cost, all time during the subsistence of contract, below mentioned insurance.

(a) Group Personal Accident Policy

(b) Third Party Liability;

(c) Any Other policy which the Supplier may find fit for indemnifying the asset of the Owner

(ii) Application of Insurance Proceeds: All money received under insurance policies shall be promptly applied by the Supplier towards the cure of breach of its obligations stated in this Agreement.

(iii) Validity of the Insurance Cover

The Supplier shall pay the premium payable on such insurance policy/ policies so as to keep the insurance in force and valid throughout the Contract Period and furnish copies of the same to the Authority for each year/ policy period. If at any time the Supplier fails to purchase, renew and maintain in full force and effect, any and all of the Insurances required under this Agreement, the Authority may at its option purchase and maintain such insurance and all sums incurred by the Authority therefore shall be reimbursed by the Supplier forthwith on demand, failing which the same shall be recovered by the Authority by encashment of Performance Security, exercising right of set off or otherwise.

(iv) The Supplier shall indemnify GMDC for any liability pertaining to loss of any life, health, accidents, travel and any other losses to its personnel including specialists deployed by the Supplier as well as assets deployed to perform its scope of work specified under this Contract.

(v) GMDC undertakes no responsibility in respect of any life, health, accident, travel and other insurance which may be necessary or desirable for the Personnel of the Supplier or its specialists associated with the Supplier for the purposes of the Services, nor for any member of any such person.

3.14 Indemnity

(i) The Supplier shall indemnify GMDC for any liability pertaining to loss of any life, health, accidents, travel and any other losses to its personnel including the manpower employed at project site as well as the assets deployed by the Supplier to perform scope of work specified under this Contract or any asset /equipment deployed by the Supplier for the execution of the scope.

- (ii) The Supplier shall indemnify GMDC for any physical damage to the Project/ CAAQM Station occurred due to reasons attributable to the Supplier/its' staff. On the occurrence of such events, the Supplier shall cure the Project/ CAAQM Station at its own costs and reinstate the CAAQM Station in its original condition.
- (iii) The Supplier shall indemnify GMDC and hold it harmless from against all claims, liability, loss including damage or expense including counsel/legal fees arising from or by reasons of an action with respect to any part of the execution of Scope of Work.
- (iv) The Supplier shall also fully indemnify, hold harmless and defend the Authority and Authority indemnified persons from and against any loss or damages arising out of or with respect to:
 - Failure of Supplier to comply with Applicable laws and Applicable permits.
 - Payment of taxes required to be made by Supplier in respect of income or other taxes of Supplier's contractors, suppliers and representatives.
 - Non-payment of amounts due as a result of materials or services furnished to the Supplier or any of its contractors which are payable by the Supplier and its contractors.

3.15 Safety Obligations

- (i) The Supplier will be required to maintain and carry out practices for Environment, Health and Safety (EHS) as per Good Industry Practices.
- (ii) During the course of this Agreement, the Supplier must satisfy all safety requirements as per the statutory requirements and Good Industry Practice. The Supplier shall also ensure that safety requirements are followed without any deviations throughout the Contract Period at its own cost.
- (iii) The Supplier shall be responsible for the safety of its staff deployed and it shall bear all financial, and legal liabilities associated with any safety incident.
- (iv) The Supplier shall take the highest precautions for the safety and security of its staff while carrying out its responsibilities.
- (v) The Supplier shall bear complete responsibility for the safety and security of the Project/ staff employed throughout the Contract Period.
- (vi) All costs and expenses arising out of or relating to meeting the Safety requirements or for making any corrections in the Project facility for safety purposes shall be borne by the Supplier.
- (vii) Supplier must not tamper with Authority's or other Contractors' equipment. Authority's electric cables can't be touched without permission. The supplier must employ qualified electricians for temporary electrical installations' maintenance.

3.16 Accounting, Inspection and Auditing

- (i) The Suppliers shall keep accurate and systematic accounts and records of the work performed by it under the Contract including details of all invoices raised and

payments received and shall make the same available to GMDC as and when requested by GMDC.

- (ii) Any such inspection shall be subject to prior notice. Nothing herein shall obligate the Supplier to disclose to the Authority any documents or other material relating to the profitability or internal profit and loss/balance sheets associated with Supplier's business, payroll information, or information or material that constitute, in the opinion of Supplier's legal counsel, legally privileged documents or information that Supplier is bound to maintain as confidential by written obligation to a third party

4 FORCE MAJEURE

4.1 Force Majeure Event

As used in this Agreement, Force Majeure Event means occurrence of any act, event or circumstance or a combination of events and circumstances which affects the Party claiming such Force Majeure Event from performing its obligations under this Agreement ("Affected Party"), which Act or event satisfies all the following conditions:

- i. It is beyond the reasonable control of the Affected Party and materially and adversely affects the performance of an obligation by a Party;
- ii. The Affected Party could not have prevented or reasonably overcome the event or circumstance with the exercise of Good Industry Practices or reasonable skill and care.
- iii. It does not result from the negligence or misconduct of the Affected Party or the failure of such Party to perform its obligations hereunder; and
- iv. Any consequences of which, prevent, hinder or delay in whole or in Part the performance by such Party of its obligations under this Agreement.

Force Majeure includes the following events and/ or circumstances to the extent that they or their consequences satisfy each of the requirements set forth in this Clause.

- a) An act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, terrorist or military action, civil commotion, or politically motivated sabotage, act of terrorism, Industry wide or state wide or India wide strikes or industrial action which prevents the operation of the Facility for a period exceeding a continuous period of 10 (Ten) days in an accounting year.
- b) The occurrence of pressure waves caused by aircraft or other aerial devices travelling at supersonic speeds, fire or explosion, radioactive or chemical contamination or ionizing radiation directly affecting the Project, unless the source or cause of the explosion, contamination, radiation or hazardous substance is brought to or near the

Facility by the Supplier or any Affiliate of the Supplier or any Contractor or any such affiliate or any of their respective employees, servants or agents;

- c) Strikes, go-slows and/ or lockouts or other industrial action or labour dispute which are in each case widespread, nationwide or political and other than those involving the Supplier or their respective employees/representatives or attributable to any act or omission of any of them.
- d) Any effect of the natural elements, including lightning, fire, earthquake, unprecedented rains, tidal wave, flood, storm, cyclone, typhoon or tornado, and other unusual or extreme adverse weather or environmental conditions or actions of the elements within India;
- e) Epidemic or plague or pandemic within India;
- f) Compliance with a request from the Authority pursuant to the directions of any Government decree, the effect of which is to close all or any part of the Facility.
- g) Any judgment or order of any court of competent jurisdiction or statutory authority in India made against the Supplier in any proceedings for reasons other than failure of the Supplier to comply with any Applicable Law or Applicable Permits or on account of breach thereof, or of any contract, or enforcement of this Agreement or exercise of any of its rights under this Agreement by the Authority;
- h) Any public agitation which prevents the operation of the Facility for a continuous period exceeding 10 (Ten) days in an accounting year.
- i) Any unlawful or unauthorized or without jurisdiction revocation of, or refusal to renew or grant without valid cause any consent or approval required by the Supplier or any of the Contractors to perform their respective obligations under the Agreement provided that such delay, modification, denial, refusal or revocation did not result from the Supplier's or any Contractor's inability or failure to comply with any condition relating to grant, maintenance or renewal of such consents or permits.
- j) Any event or circumstances of a nature analogous to any events set forth above within India.

Provided that none of the following matters or their consequences shall be capable of constituting or causing Force Majeure Event:

- failure or inability to make any payment
- the effects of market conditions

4.2 Procedure in case of Force Majeure Event

If a Party (i.e. Affected Party) claims relief on account of a Force Majeure Event, then the Party claiming to be affected by the Force Majeure Event shall, immediately on becoming aware of the Force Majeure Event, give notice of 15 days and describe in detail:

- a) the Force Majeure Event(s) that has occurred,
- b) the date of commencement, nature and estimated duration of such event of Force Majeure Event
- c) the manner in which the Force Majeure event affects the Affected Party's obligation(s) under this Agreement.
- d) the measures which the Affected Party has taken or proposes to take, to alleviate the impact of the Force Majeure Event or to mitigate the damage in terms of Clause 4.4 of this Agreement, and
- e) any other relevant information.

Within 15 days following the date of such notice of such event of Force Majeure Event, the Affected Party having invoked such Force Majeure Event as a cause for such delay shall submit to the other Party sufficient proof of the nature of such delay or failure and its anticipated effect upon the time for performance.

No Party shall be able to suspend or excuse the non-performance of its obligations hereunder unless such Party has given the notice specified above. The Affected Party shall be excused from its obligations as per Clause **4.6** of this Agreement.

4.3 Consequences of Force Majeure Event

- (i) Provided it complies with Clause 4.2, if the Affected Party is rendered unable to perform any of its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such obligations as per Clause 4.6 to the extent it is unable to perform the same on account of such Force Majeure Event.
- (ii) In the event the Affected Party is the Supplier and is unable to perform the entire scope of work as stipulated in this Agreement, the Contract timelines shall be extended suitably by the period for which the entire operations for the Project have been suspended due to the said Force Majeure Event.
- (iii) During the period of its inability to perform the Services as a result of an event of Force Majeure, the Supplier shall be entitled to be reimbursed for payment due up to the Services Delivered as per Scope of Work completed as provided in RFP Section VI.
- (iv) The Affected Party shall continue to perform such of its obligations which are not affected by the Force Majeure Event, and which are capable of being performed in accordance with this Agreement.

4.4 Mitigation and Consultation

- a) During the period of Force Majeure, the Affected Party shall in consultation with the other Party, make all reasonable efforts to limit or mitigate the effects of the Force Majeure Event on the performance of its obligations under this Agreement. The Affected Party shall also make efforts to resume the performance of its obligations under this Agreement as soon as possible and upon resumption shall notify the other Party of the same in writing. The Affected Party shall take all reasonable steps to prevent, reduce to a minimum and mitigate the effect of such event of Force Majeure Event. The other Party shall afford all reasonable assistance to the Affected Party in this regard.
- b) Not later than 30 (thirty) days after the Supplier has, as the result of an event of Force Majeure, become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

4.5 Termination

- a) If Force Majeure event continues for more than 30 (thirty) days, then either Party shall have the right to terminate this Agreement by giving a notice of 30 days in respect thereof (“Termination Notice”) and the date on which such termination shall become effective shall be called the “Termination Date”.
- b) In case of Termination, Authority shall.
if Termination occurs after the Supply, Installation and Commissioning.
 - 1) Retain possession and control of all assets/ equipment/ CAAQM Station used in Project along with the purchased spares forthwith.
 - 2) Prohibit the Supplier and any person claiming through or under this Contract from entering upon the assets /dealing with or any part thereof.
 - 3) Appoint another party that may carry of the remaining obligations of the Supplier.
 - 4) Authority shall return Performance Security to the Supplier.In case Termination occurs prior to Supply, Installation and Commissioning, in such case Supplier shall retain the possession of CAAQM Station and the Authority shall return the Performance Security.

4.6 Excuse from performance of obligations by Party affected by Force Majeure.

If the Affected Party is rendered wholly or partially unable to perform its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such of its obligations, upon delivery of the notice of the occurrence of a Force Majeure Event to the other Party to the extent it is unable to perform on account of such Force Majeure Event provided that:

- a) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event.
- b) the Affected Party shall make all reasonable efforts to mitigate or limit damage to the other Party arising out of or as a result of the existence or occurrence of such Force Majeure Event [and to cure the same with due diligence.
- c) When the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party written notice to that effect and shall promptly resume performance of its obligations hereunder.
- d) Where the Affected Party is the Supplier and the Force Majeure Event has the reduced the Supplier incapable/ unable to perform the Scope of work, then in such an event the payment shall stand suspended until such time as the Supplier resumes activities in terms of the Agreement.

4.7 Liability for other losses, damages etc. in case of Force Majeure Event:

Save and except as expressly provided in this Article, neither Party hereto shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant to this Clause.

5 SUSPENSION OF AGREEMENT

GMDC may, by written notice of suspension to the Supplier, suspend all payments to the Supplier hereunder if the Supplier shall be in breach of this Agreement or shall fail to perform any of its obligations under this Agreement, including the carrying out of the Services; provided that such notice of suspension (i) shall specify the nature of the breach or failure, and (ii) shall provide an opportunity to the Supplier to remedy such breach or failure within a period not exceeding 15 (fifteen) days after receipt by the Supplier of such notice of suspension.

6 OBLIGATIONS OF GMDC

6.1 Assistance in clearance

Unless otherwise specified in the Agreement, GMDC shall make best efforts to ensure that GMDC shall:

- a) Provide rights to the Supplier to execute the Scope of Work.
- b) provide the Supplier and its Personnel with work permits and such other documents as may be necessary to enable the Supplier or its Personnel to perform the Services.
- c) issue to officials, agents and representatives of GMDC all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services.
- d) Accommodation on chargeable basis, as and when required, subject to the availability.

6.2 Payment

In consideration of the supply and services performed by the Supplier under this Agreement, GMDC shall make to the Supplier such payments and in such manner as is provided in RFP Part – VI.

6.3 Documents and Other Support

GMDC shall provide all necessary information/documents/data subject to internal and external confidentiality requirements. A Non – disclosure Agreement will be signed whenever deemed necessary by GMDC.

7 PAYMENT TO THE SUPPLIER

Authority shall make payment to Supplier as per the terms specified in SECTION VI of RFP.

8 LIQUIDATED DAMAGES AND PENALTY

8.1 Performance Security

- (i) The Successful Bidder shall furnish Performance Security to Authority for securing the due and faithful performance of its obligations under the Agreement, in the form of Demand Draft or an unconditional and irrevocable bank guarantee (Annexure 11) as below (the “Performance Security”).
 - a) The Performance Security of amount equivalent to 10% of Supply, installation and commissioning Prices and valid up to end of the 1 year Warranty Period. The Successful Bidder shall submit this Performance Security within 20 days from the LOA.
 - b) The Performance Security of amount equivalent to 10% of cumulative CAMC charges for all five years. This Performance Security shall be submitted 10 days prior to end of the 1 year Warranty Period and it shall remain valid till the end of Maintenance Period of five years.
- (ii) Above performance Security shall be submitted in favor of Gujarat Mineral Development Corporation Ltd and admissible and payable at Ahmedabad branch from

Approved Bank to Authority/ GMDC. The Performance Security shall be submitted in the form of BG/ DD/RTGS

- (iii) In case Contract Period is extended then the Supplier shall have to renew Performance Security for a period of extended Contract Period.
- (iv) GMDC shall be entitled to forfeit and appropriate the amount of the Performance Security in whole or in part:
 - a) in the event GMDC requires to recover any sum due and payable to it by the Supplier including but not limited to Damages; and which the Supplier has failed to pay in relation thereof; and
 - b) in relation to Supplier's breach in accordance with the terms contained in the Agreement.
- (v) At any time during the Validity Period, the Performance Security has either been partially or completely been encashed by GMDC in accordance with the provision of the Agreement. The Supplier shall within 15 (fifteen) days of such encashment either replenish, or provide fresh performance security, as the case may be, failing which GMDC shall be entitled to terminate this Agreement.
- (vi) At the end of the Contract Period, the Performance Security shall be returned to the Supplier without any interest, subject to any deductions which may be made by GMDC in respect of any outstanding dues under the terms of the Agreement.

8.2 Encashment and Appropriation of Performance Security

GMDC shall have the right to invoke and appropriate the proceeds of the Performance Security, in whole or in part, without notice to the Supplier in the event of breach of this Agreement or for recovery of liquidated damages/ damages or penalties specified in Section IV and provisions of Clause 9.2.

8.3 Liquidated Damages

- (a) In case of delay solely attributable to the Supplier in Supply, Installation and Commissioning then liquidated damages as specified in clause 1 of Section IV shall be applicable.

8.4 Penalty for Deficiency in Services

- (a) In addition to the liquidated damages not amounting to penalty, as specified in Section IV, warning may be issued to the Supplier for minor deficiencies on its part.
- (b) GMDC shall have the right to claim damages as per the Service Level Agreements specified in section IV of this RFP.
- (c) In the case of significant deficiencies in Services causing adverse effect on the Project or on the reputation of GMDC and such deficiencies not cured within the reasonable cure period granted by the Authority then the Authority may initiate penal actions as

permitted under law including but not limited to encashment of Bank Guarantee in lieu of Performance Security.

9 EVENT OF DEFAULT AND TERMINATION

9.1 Event of Default

Event of Default means the Supplier Event of Default or the Authority Event of Default or both as the context may admit or require (the "Event of Default").

a) Supplier Event of Default

Any of the following events shall constitute an event of default by the Supplier ("Supplier Event of Default") unless such event has occurred as a result of Authority Event of Default or a Force Majeure Event.

- (1) If the Supplier does not fulfil the scope of work within the period specified in Clause 2 of Section II of the RFP and Liquidated Damages and or SLAs penalties thereof exceed 10% of the Contract Value.
- (2) Any representation made or warranties given by the Supplier under this Agreement is found to be false or misleading.
- (3) the Supplier becomes insolvent or bankrupt or enters into any agreement with its creditors for relief of debt or take advantage of any law for the benefit of debtors or goes into liquidation or receivership whether compulsory or voluntary.
- (4) Supplier creates any Encumbrance on the Project in favour of any person save and except as otherwise expressly permitted under this Agreement.
- (5) If the Supplier fails to furnish Performance Security as per the terms of the agreement.
- (6) the Supplier fails to remedy any breach hereof or any failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to Clause 5, within 30 (thirty) days of receipt of such notice of suspension or within such further period as GMDC may have subsequently granted in writing;
- (7) Supplier is in material breach of its obligations stated in this Agreement.
- (8) Supplier repeatedly fails to fulfil its obligations.
- (9) The Performance Security has been encashed and appropriated in accordance with the RFP conditions and the Supplier fails to replenish or provide Fresh Performance Security within 30 (Thirty) days.
- (10) Supplier submits to the Authority any statement which is false in material particulars, and which has a material effect on the Authority's right, obligations or interests.
- (11) A resolution is passed by the shareholders of the Supplier for the voluntary winding up of the Supplier company.
- (12) If there is a defect/ deviation from the terms of this Agreement and the Supplier fails to correct it within a reasonable time provided by the Authority as per the terms of the agreement.
- (13) Any petition for winding up of the Supplier is admitted by a court of competent jurisdiction or the Supplier is ordered to be wound up by Court except for the purpose

of amalgamation or reconstruction, provided that, as part of such amalgamation or reconstruction, the property, assets and undertaking of the Supplier are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Supplier under this Agreement and provided that:

- the amalgamated or reconstructed entity has the technical capability and operating experience necessary for the performance of its obligations under this Agreement;
 - the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and has credit worthiness at least as good as that of the Supplier as at Commencement Date; and
 - each of the Project Agreements remains in full force and effect.
- (14) The Supplier suspends the services at the Project without any prior written consent of Authority, provided that the Supplier shall be deemed not to have suspended/ abandoned operation if such suspension/ abandonment was (i) as a result of Force Majeure Event and is only for the period such Force Majeure is continuing, or (ii) is on account of a breach of its obligations under this Agreement by Authority or of Authority under the State Support Agreement.
- (15) The Supplier repudiates this Agreement or otherwise evidences an intention not to be bound by this Agreement.
- (16) The Supplier is otherwise in Material Breach of this Agreement or commits a default in complying with any other provision of this Agreement.
- (17) Repeatedly non-adherence to obligations stated in this Agreement
- (18) In case of repeated breach of Supplier's obligations specified elsewhere in this Agreement.
- (19) If the Supplier fails to make any payments/damages/penalties due to Authority within the period specified in this Agreement or extended period as mutually agreed by the Parties without any valid reason.
- (20) the Supplier fails to comply with any final decision reached as a result of arbitration proceedings pursuant to provisions of this Agreement.
- (21) if the Supplier's staff is found to be involved in theft/ illegal activities and if such staff members are not replaced by the Supplier.

b) Authority Event of Default

The following events shall constitute events of default by Authority (each an "Authority Event of Default"), unless any such Event of Default has occurred as a result of Supplier Event of Default or due to a Force Majeure Event:

- (1) Authority is in material breach of this Agreement and has failed to cure such breach within 30 (Thirty) days of receipt of notice in that behalf from the Supplier.
- (2) Authority repudiates this Agreement or otherwise evidences an intention not to be bound by this Agreement.

- (3) Authority has by an act of commission or commission created circumstances that have a material adverse effect on the performance of its obligations by the Supplier and has failed to cure the same within 30 (Thirty) days of notice thereof by the Supplier.
- (4) Any representation made or warranties given by the Authority under this Agreement is found to be false or misleading.

9.2 Termination due to Events of Default and Termination Payment

a) Termination for Supplier's Event of Default

Without prejudice to any other right or remedy which Authority may have in respect thereof under this Agreement, upon the occurrence of an Supplier Event of Default, Authority shall be entitled to terminate this Agreement by issuing a Termination Notice of 30 days in writing to the Supplier, provided that before issuing the Termination Notice, Authority shall by a notice in writing of 30 (thirty) days inform the Supplier of its intention to issue the Termination Notice (the "Preliminary Notice"). In case the underlying breach/default is not cured within a period of 30 (thirty) days from the date of the Preliminary Notice (the Cure Period), the Authority shall be entitled, to terminate this Agreement with 30 (Thirty) days' Termination Notice.

Provided further, that-

- a) Upon Termination by Authority on account of occurrence of a Supplier Event of Default, no Termination Payment shall be due or payable to the Supplier. Further the Authority shall be entitled to encash and forfeit the Performance Guarantee.

a) Termination for Authority Event of Default

Upon the occurrence of an Authority Event of Default, Supplier shall be entitled to terminate this Agreement by issuing a Termination Notice of 30 days in writing to the Authority, provided that before issuing the Termination Notice, Supplier shall by a notice in writing inform the Authority of its intention to issue the Termination Notice (the "Preliminary Notice"). In case the underlying breach/default is not cured within a period of 30 (thirty) days from the date of the Preliminary Notice (Cure Period) Supplier shall be entitled, to terminate this Agreement by issuing the Termination Notice. Upon Termination on account of an Authority Event of Default, no termination payment shall be due or payable to the Supplier and the Authority shall return to the Supplier, subject to its rights to deduct any amounts due and payable by the Supplier, within 30 days of such termination.

9.3 Rights of Authority on Termination

- (i) **Upon Termination of this Agreement for Supplier Event of Default**, Authority shall have the power and authority to:
 - 1) Retain possession and control of all assets used in Project forthwith.
 - 2) Prohibit the Supplier and any person claiming through or under the Supplier from entering upon the project assets /dealing with or any part thereof;

- 3) Appoint another party or Supplier that may carry of the remaining obligations of the Supplier.
 - 4) Forfeit the Performance Security.
- (ii) **Upon Termination of this Agreement for Authority Event of Default**, Authority shall have the power and authority to:
- 1) Retain possession and control of all assets used in the Project.
 - 2) Prohibit the Supplier and any person claiming through or under the Supplier from entering upon the assets /dealing with or any part thereof;
 - 3) Appoint another party or Supplier that may carry out the remaining obligations of the Supplier.
 - 4) GMDC shall make the payments to the Supplier as per the provision set forth in RFP Part VI hereof for Services performed prior to the date of termination.
 - 5) The authority shall return Performance Security

9.4 Disputes about Events of Termination

If either Party disputes whether an event specified in Clauses 9.2 and 4.5 hereof has occurred, such Party may, within 30 (thirty) days after receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to Clause 10 hereof, and this Agreement shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

10 DISPUTE RESOLUTION

10.1 Amicable Solution

- (a) Save where expressly stated otherwise in this Agreement, any dispute, difference or controversy of whatever nature howsoever arising under, out of or in relation to the Agreement including incompleteness of the Scope of Work /Payment between the Parties and so notified in writing by either Party to the other (the "Dispute") in the first instance shall be attempted to be resolved amicably by GMDC and Supplier in accordance with the procedure set forth in sub-article (b) below.
- (b) Either Party may require the Dispute to be referred to a committee of two senior executives of each GMDC and the Supplier, for the time being for amicable settlement. Upon such reference, the committee shall meet at the earliest mutual convenience and in any event within 15 days of such reference to discuss and attempt to amicably resolve the Dispute. If the Dispute is not amicably settled within 15 (fifteen) days of such meeting between the two, either Party may refer the Dispute to an independent Dispute Review Expert (also referred to as an adjudicator) who may be an impartial person of experience in legal / dispute matters and both parties mutually select Dispute Review Expert.

- (c) Dispute Review Expert shall give a decision in writing within 28 days of receipt of Notification of the Dispute. Reimbursable expenses pertaining to the Dispute Review Expert shall be divided equally between GMDC and the Supplier. Either Party may refer a decision of the Dispute Review Expert to the Arbitrators within 28 days of the Dispute Review expert's written Decision as per the agreement. If neither party refers the dispute to Arbitration within the next 28 days, the decision of the Dispute Review Expert will be final and binding.

10.2 Arbitration

(a) Arbitrators

Any Dispute/questions/differences whatsoever, which may at any time arise between the parties to this Contract or any matter arising out of or in relation thereto and which is not resolved amicably as provided in Clause 0 shall be finally settled by binding Arbitration under the Arbitration and Conciliation Act, 1996. The Dispute shall be referred for the fast-track Arbitration to sole Arbitrator as per the provisions of Arbitration and Conciliation Act, 1996 and subsequent amendment thereto (clause 29B of said act).

(b) Place of Arbitration

The place of arbitration shall be Ahmedabad. The Language of the Arbitration shall be in English only.

(c) Procedure

The procedure to be followed within the arbitration, including appointment of arbitrator / arbitral tribunal, the rules of evidence which are to apply shall be in accordance with the Arbitration and Conciliation Act, 1996.

(d) Enforcement of Award

Any decision or award resulting from arbitration shall be final and binding upon the Parties. The Parties hereto hereby waive, to the extent permitted by law, any rights to appeal or to review of such award by any court or tribunal. The Parties hereto agree that the arbitral award may be enforced against the Parties to the arbitration proceeding or their assets wherever they may be found and that a judgment upon the arbitral award may be entered in any court having jurisdiction in Ahmedabad only.

(e) Fees and Expenses

The fees and expenses of the arbitrators and all other expenses of the arbitration shall be initially borne and paid by respective Parties subject to determination by the arbitrators. The arbitrators may provide in the arbitral award for the reimbursement to the prevailing party of its costs and expenses in bringing or defending the arbitration claim, including legal fees and expenses incurred by Party.

10.3 Performance during Dispute Resolution

Pending the submission of and/or decision on a Dispute, difference or claim or until the amicable solution or arbitral award is published; the Parties shall continue to perform all of

their obligations under this Agreement without prejudice to a final adjustment in accordance with such solution or award.

11 FAIRNESS AND GOOD FAITH

11.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Agreement and to adopt all reasonable measures to ensure the realization of the objectives of this Agreement.

11.2 Operation of Agreement

The Parties recognize that it is impractical in this Agreement to provide for every contingency which may arise during the life of the Agreement, and the Parties hereby agree that it is their intention that this Agreement shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Agreement either Party believes that this Agreement is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but failure to agree on any action pursuant to this Clause 11.2 shall not give rise to a dispute subject to arbitration in accordance with Clause 0 hereof.

12. MISCELLANEOUS

12.1 Assignment and Charges

- (a) Notwithstanding anything contained herein this Agreement, the Supplier shall not assign, in whole or in Part, any right or delegate any duty/ rights/ obligations under the Agreement to any third party.
- (b) The Supplier shall not create nor shall permit to subsist any encumbrance over Project premises except with prior consent in writing of Authority, which consent Authority is entitled to decline without assigning any reason whatsoever.

12.2 Severability

If for any reason whatever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable. Provided failure to agree upon any such provisions shall not be subject to dispute resolution under this Agreement or otherwise.

12.3 Damage to the Devices / CAAQM Station

- a) The CAAQM Stations delivered and installed by the Supplier shall be located in outdoor condition and it should last rough usage in outdoor conditions including all weather conditions. All such equipment/components shall be designed to be vandal proof/vandal resistance. Damage to equipment of CAAQM Stations due to regular wear and tear under field conditions, damage or failure due to exposure to outdoor conditions such a moisture and heat, faulty manufacture, latent manufacturing defects within design limit, mechanical, electrical or electronic failure, shall be the liability of the Supplier during the Contract Period. In such case, Supplier shall repair, replace the equipment if it is under warranty, and change the spare such that the repaired unit has full functionality during the Contract Period. It is responsibility of the Supplier to ensure that all equipment/hardware/software continues to function as per functionality specified in Technical Specification and maintain the Service Levels during the Warranty and Maintenance Period. All costs towards repair/modification/changing spare/replacement shall be borne by the Supplier.
- b) Damages due to Vandalism, tampering of equipment by Authority staff or Authority appointed contractor's staff and damage due to accidents of any kind shall be the liability of the Authority. In such case, Authority shall request the Supplier to repair/replace the damaged unit and reinstall the same. All costs towards the same shall be reimbursed by the Authority to the Supplier less of insurance proceeds.

12.4 No Partnership

Nothing contained in this Agreement shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any authority to bind the other in any manner whatsoever.

13. PROJECT HANDOVER

13.1 Handing Over of Project

Upon expiry of the Agreement by efflux of time and in the normal course or prior termination of this Agreement due to Event of Default or dissolution or insolvency or Force Majeure , the Supplier shall at the end of the Agreement Period or prior termination of this Agreement, as the case may be, hand over free from Encumbrances the peaceful possession of the assets including all software, database and Hardware/ equipment at no cost to Authority.

13.2 Inspection and Removal of Bugs and Deficiency

- a) The handing over process shall be initiated at least two months before the actual date of expiry of the Agreement Period in normal course or during the Notice Period in case of early termination by a joint inspection by the Authority and the Supplier.
- b) The objective of this stage will be to conduct full tests of the functionality of each piece of Project as a whole, progressively, in order to identify faults, isolate them and rectify them in the most efficient manner in terms of cost and time before handing over to Authority.

- c) The Supplier shall be entitled to remove promptly any bugs or defects observed during the Tests in the Project Components. Such bugs and deficiencies shall be removed and cured respectively in a time period commensurate with type of bugs and defects.

13.3 Recovery of Balance due of Authority from Supplier

The dues payable to Authority by the Supplier on any account, if any, at the end of the Agreement shall be recovered by the Authority from the Performance Guarantee.

14. POST TERMINATION SUPPORT

- (a) In case the Agreement between the Authority and Supplier is terminated for any reason whatsoever, either on account of Supplier Provider Event of Default and /or Authority Event of Default or even for any reason not envisaged in the Agreement, then the Supplier shall be responsible for operation, maintenance and management of CAAQMS project at agreed terms specified in this Agreement till Authority appoints and handover the CAAQMS project to new /replacement Supplier.
- (b) Supplier shall provide support in terms of smooth transition and handing over of software, APIs, protocols and passwords. Inability or unwillingness of the Supplier shall be considered an Event of Default.

SECTION VIII: ANNEXURES

Annexure 1: Letter of Bid Submission

{On Bidder's letterhead}

Dated:

To,

General Manager (Environment)
Gujarat Mineral Development Corporation Ltd
Khanij Bhavan,
132-Ring Road, Gujarat University Ground, Vastrapur,
Ahmedabad- 380052.

Subject: Submission of Bid in response to RFP for Supply, Installation and Commissioning, Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) on various Projects of GMDC

Dear Sir/Madam:

We, the undersigned, offer to Supply, Install, Commissioning and provide operation and maintenance services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Bid. We are hereby submitting our Bid, which includes this Technical Bid, and a Price Bid as follows.

A. Physical submission of

- (i) Technical Bid- Pre-Qualification and Qualification documents and**
- (ii) RFP Fee and EMD as per the requirement of the RFP**

B. Online submission of Price Bid: Price Quote per the provisions of RFP.

We are submitting our Bid in individual capacity. We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Bid, i.e., before the date indicated in RFP, we undertake to negotiate. Our Bid/Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Bid is accepted, to initiate the supply and services related to the assignment not later than the period specified in the RFP.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Annexure 2: Bidder's Organization details

1. [Provide here a brief description of the background and organization of your firm/entity. The brief description should include ownership details, date and place of incorporation of the firm, objectives of the firm etc. The Bidder shall be a legal entity registered in India under the relevant legislation. In order to meet above requirements, the Bidder may submit any of the following documentary evidence as applicable. Certificate of registration in India, GSTIN certificate, PAN details OR Partnership deed, GSTIN registration, PAN details OR Incorporation certificate, MOA, AOA, GSTIN Registration, PAN details]
2. Provide Contact Details of Authorized representatives of the Bidder.
3. In case of OEM, the Bidder shall have to submit Manufacturing License/ Certificate. In case of authorized dealer/ distributor of OEM, the dealership distribution certificate of their principal with date of appointment and validity signed by authorized signatory along with copy of principal's manufacturing license/Certificate.

Annexure 3: Auditor's Certificate for Turnover for bidder

{On Statutory Auditor's/ Registered Chartered Accountant's letterhead}

I hereby declare that I have scrutinized and audited the financial statement of M/s_____. Following is the audited Turnover.

Years*	Turnover (Rs. Crore)
2019-20	
2020-21	
2021-22	
2022-23	
2023-24	

(Signed and Sealed by the statutory auditor/Registered Chartered Accountant)

[Please also attach Audited Financial statements for above Financial years]

Annexure 4: Declaration for Non-Blacklisting

<<To be printed on 300 Rs. Stamp paper and signed by Authorized signatory>>

Date: dd/mm/yyyy

To,
General Manager (Environment)
Gujarat Mineral Development Corporation Ltd
Khanij Bhavan,
132-Ring Road, Gujarat University Ground, Vastrapur,
Ahmedabad- 380052.

I M/s. (Name of the Bidder), (the names and addresses of the registered office) hereby certify and confirm that we or any of our promoter/s / director/s are not barred by Government of Gujarat (GoG) / any other entity of GoG or blacklisted by any state government or Government of India / any Government or regulatory Agency in Foreign country from participating in Project/s, either individually or as member of a Consortium as on the _____-(Bid submission Date).

We further confirm that we are aware that our Bid for the captioned Project would be liable for rejection in case any material misrepresentation is made or discovered with regard to the requirements of this RFP at any stage of the Bidding Process or thereafter during the agreement period. Dated thisDay of, 202_.

Name of the Bidder
Signature of the Authorized person
Name of the Authorized Person

Signature and Stamp of the Bidder

Annexure 5: Work Experience Details

Sr. No.	Client Name	Location of Supply	No. of units Supplied	Year of Supply	Attachment (supply order and its satisfactory performance certificate from the client)
1					
2					

Attach the supply order and its satisfactory performance certificate from the client

Signature and Stamp of the Bidder

Annexure 6: Manufacturing Authorization Form (MAF)

- (i) Provide the MAF, and Declaration specific to this tender along with the technical bid along with declaration from OEM stating that Products quoted are not end of life technology products and there will be spares availability, patches and service support for the quoted Products during the project/contract period.
- (ii) Such MAF and Declaration should explicitly state the responsibility of the OEM comprising of Supply, Implementation and after sales services during the Contract Period. Further Performance Warranty Certificate shall also be provided from the OEMs. The tenure of such arrangement should be coinciding with the Contract Period of this Project.

Annexure 7: Undertaking

(Notarized and on stamp Paper of Rs 300)

It is certified that the information furnished here in and as per the document submitted is true and correct and nothing has been concealed or tampered with. We have gone through all the conditions of RFP, and we are liable to any punitive action for furnishing false information / documents.

Dated this _____ day of _____ 202_.

Signature

(Company Seal)

In the capacity of duly authorized to sign bids for and on behalf of:

Signed by

Authorized Signatory with designation

Annexure 8: Format of Power of Attorney for authorizing Bidder's Signatory

[To be provided by the Bidder]

KNOW ALL MEN by these presents that we,[name of the firm], a FIRM incorporated under the _____ and having its Registered Office/ office at[Address of the Company firm] (hereinafter referred to as "Company/firm"):

WHEREAS in response to the RFP for _____ [Name of the Assignment] ("Project"), the Company/ firm is submitting Bid for the project and GMDC and is desirous of appointing an attorney for the purpose thereof.

WHEREAS the Company deems it expedient to appoint or authorize Mr ___ son of ___ resident of _____, holding the post of _____ as the authorized signatory of the company/ firm in connection with the request for proposal titled (Name of the RFP) RFP Number: _____ dated _____, issued by the (Name of the other party) (the "RFP") and to execute and deliver for and on behalf of the Company the RFP documents and to comply with any other requirements connected to or arising from the RFP documents and/or from the RFP process for the firm/company in its name and on its behalf, that is to say:

To act as the Company's/firm's official representative for submitting the Bid comprising Technical Bid and Price Bid for the said project and other relevant documents in connection therewith.

To sign all the necessary documents, papers, testimonials, applications, representations and correspondence necessary and proper for the purpose aforesaid RFP;

To RFP documents, receive and make inquiries, make the necessary corrections and clarifications to the Proposal and other documents, as may be necessary;

To do all such acts, deeds and things in the name _____
and on behalf of the Company as necessary for the [name & designation of the
compliance of the requirements with any other person]
requirements connected to or arising from the RFP _____
documents and/or from the RFP process. The [_____
common seal of [name of the company/firm] was _____
here unto affixed pursuant to a resolution passed at _____
the meeting of Committee of Directors held on ---
Day of -----, 20__ in the presence of [name &
designation of the person] and countersigned by _____
[name & designation of the person] of the _____
Company/firm of [name of the company]

Annexure 9: Price Bid Format

(This is indicative format for Bidder’s reference only. The PRICE PROPOSAL SHOULD BE SUBMITTED ONLINE ONLY at designated places through <http://gmdctender.nprocure.com> . Price Bid should not be submitted in hard copy AND/OR placed with Technical Bid. Prices submitted in hard copy and or placed with Technical Bid shall result in outright rejection of bid)

Subject: Submission of Bid in response to RFP for Supply, Installation, Commissioning, Operation and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC

A. Supply Installation and Commissioning of CAAQM Station

Sr. No.	Item	Unit (A)	Quantities (B)	Base Rate (Rs/ Unit) (C)	Applicable Taxes (D)	Total Quote in INR [E = B X (C+D)]
1	Supply, Installation and Commissioning of CAAQM Station along with all accessories.	No.	3			
Total (INR)						

Notes:

- a) The prices of Supply, Installation and Commissioning of CAAQM Station shall be inclusive of all taxes, duties and GST.
- b) The price specified in table hereinabove specified in subclause a) above shall be inclusive of Warranty Period and Maintenance period of one year and inclusive of all taxes. The taxes shall be specified separately. Rates with quoted Applicable Tax shall be taken into account for evaluation.
- c) GMDC shall be entitled to deduct tax at source as may be applicable. The TDS certificate(s) shall be submitted as per the due date specified in the Income Tax Act.
- d) Payment shall be made as per the payment terms specified in this RFP Section VI.

B. Comprehensive Annual Maintenance Contract of CAAQM Station

Sr. No.	Item	Comprehensive Annual Maintenance Charges (CAMC Charges) (to be paid on quarterly basis by dividing by 4)					
		Year 2	Year 3	Year 4	Year 5	Year 6	Total
1	Comprehensive Annual Maintenance Contract of CAAQMS (Per Unit)						
2	Quantities	3	3	3	3	3	
	Total (1x2)						

Notes:

*RFP for Supply, Installation, Commissioning-and Comprehensive Annual Maintenance of
Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC*

- a) The prices of CAMC charges shall be exclusive of GST but inclusive of any other Applicable Taxes . However Applicable GST at the time of invoicing shall be paid by the Authority/ GMDC. CAMC Charges exclusive of GST shall be taken into account for evaluation.
- b) The Prices for CAMC are inclusive of all scope items related to CAMC specified in Section II.
- c) The Payment for the CAMC shall made on quarterly basis as per the payment terms specified in Section VI.
- d) GMDC shall be entitled to deduct tax at source as may be applicable. The TDS certificate(s) shall be submitted as per the due date specified in the Income Tax Act.

Each Bidder must quote his rates after through reading of this RFP document and Estimates of his cost thorough detailed due diligence of the site, statutory laws/regulations. ***Authority reserves right to seek any clarifications regarding price quoted from bidders before any decisions.***

Annexure 10: Performance Bank Guarantee Format

(To be stamped in accordance with Stamp Act)

Ref: Bank Guarantee No.

Date:

To,
Gujarat Mineral Development Corporation
Khanij Bhavan
132 ft Ring Road, Ahmedabad

Dear Sir,

1.WHEREAS..... (Name of Supplier) hereinafter called "the Supplier" has undertaken, in pursuance of Agreement dated, (here in after referred to as ____ RFP Name). AND WHEREAS it has been stipulated in the said Agreement that the Supplier shall furnish a Bank Guarantee ("the Guarantee") from a scheduled bank for the sum specified therein as security for implementing PROJECT.

2. WHEREAS we _____ ("the Bank", which expression shall be deemed to include its successors and permitted assigns) have agreed to give the GMDC the Guarantee:

THEREFORE, the Bank hereby agrees and affirms as follows:

The Bank hereby irrevocably and unconditionally guarantees the payment of all sums due and payable by the Supplier to GMDC under the terms of their Agreement dated _____. Provided, however, that the maximum liability of the Bank towards GMDC under this Guarantee shall not, under any circumstances, exceed _____ in aggregate.

3. In pursuance of this Guarantee, the Bank shall, immediately upon the receipt of a written notice from GMDC in that behalf and without delay/demur or set off, pay to GMDC a²ny and all sums demanded by GMDC under the said demand notice, subject to the maximum limits specified in Clause 1 above. A notice from GMDC to the Bank shall be sent by Registered Post (Acknowledgement Due) at the following address:

Attention Mr. _____.

4. This Guarantee shall come into effect immediately upon execution and shall remain in force for a period of _____ months from the date of its execution. The Bank shall extend the Guarantee for a further period which may mutually decide by the Supplier & GMDC. The liability of the Bank under the terms of this Guarantee shall not, in any manner whatsoever, be modified, discharged, or otherwise affected by:

- Any change or amendment to the terms and conditions of the Contract or the execution of any further Agreements.
- Any breach or non-compliance by the Supplier with any of the terms and conditions of any Agreements/credit arrangement, present or future, between Supplier and the Bank.

5. The BANK also agrees that GMDC at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance without proceeding against the Supplier and not withstanding any security or other guarantee that GMDC may have in relation to the Supplier's liabilities.

6. The BANK shall not be released of its obligations under these presents by reason of any act of omission or commission on the part of GMDC or any other indulgence shown by GMDC or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the BANK.

7. This Guarantee shall be governed by the laws of India and the courts of Ahmedabad shall have jurisdiction in the adjudication of any dispute which may arise hereunder.

Dated this the Day of

Witness

(Signature)

(Name)

(Signature)

Bank Rubber Stamp

(Name)

(Official Address)

Designation with Bank Stamp

Plus, Attorney as per Power of Attorney No. Dated:

Annexure 11: Format of Earnest Money deposit in the form of Bank Guarantee

(On Non-judicial Stamp paper to be submitted along with submission of bids)

..... (Name of the Bank)
Address.....Guarantee No.....
A/C Messer's..... (Name of Bidder)
Date of Expiry..... Limit to liability (currency & amount).....
Invitation For RFPNo..... dated.....(bidding document)
For..... (Name of Facilities)

Subject: Earnest Money Deposit Bank Guarantee.

Date.....20

To,
Gujarat Mineral Development Corporation Ltd.
132 Ft Ring Road, Near University Ground
Vastrapur, Ahmedabad.
Bank Code:

Dear Sir,

In consideration of Gujarat Mineral Development Corporation (hereinafter called "GMDC") which expression shall unless repugnant to the subject of context include his successors and assigns having agreed to exempt M/s..... (herein after called "Bidder") from demand under the terms and conditions of "Technical Bid Document" (hereinafter called the said "Bidding Document") issued by the GMDC vide RFQ No. _____ for the work _____

(Name of the facilities) from Earnest Money Deposit (EMD) of Bid for the due fulfillment by the Bidder of the terms and conditions contained in the said Bidding Document on production of Bank Guarantee for INR _____ (_____ only) (figure in words).

1. We the _____ (Name of Bank) hereinafter referred to as "Bank" having our registered office at _____ (address of Bank) do hereby undertake and agree to indemnify and keep indemnified GMDC to extent of INR _____ (_____ only) (figures in words) against any losses, damage cost, charges and expenses caused to or suffered by or that may be caused or suffered by GMDC by reason of any

breach or breaches by the Bidder of any of the terms and conditions contained in the said Bidding Document and unconditionally pay the amount claimed by GMDC on demand and without demur to the extent aforesaid.

2. We _____ (Name of Bank) do hereby undertake to pay the amounts due and payable under the guarantee without any demur merely on a demand by you stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by you by reason of any breach by the said Bidder of any of the terms or conditions contained in the said Bidding Document by reason of the Bidder's failure to fulfill the conditions of said Bidding Document. Any such demand on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding INR _____.
3. We _____ (Name of Bank) further agree that GMDC shall be the sole judge of and as to whether the Bidder has committed any breach or breaches of terms and conditions of the said Bidding Document and the extent of loss, damages, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by GMDC on account hereof to the extent of the Bid Security required to be deposited by the Bidder in respect of the said document and the decision of GMDC that the Bidder has committed such breach or breaches and as to the amount or amounts of loss, damages, costs, charges, and expenses caused to or suffered by or that may be caused to or suffered by GMDC shall be final and binding on us.
4. We _____ (Name of Bank) further agree that guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance on the said Bidding Document and that it shall continue to be enforceable till you certify that terms and conditions of the said Bidding Document have been fully and properly carried out by the said Bidder and accordingly discharge the guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the (date) _____ we shall be discharged from all liability under this guarantee.
5. We _____ (Name of Bank) further agree with you that you have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Bidding Document or to extend time of performance by the said Bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by you against the said Bidder and to forbear or enforce any of the terms and conditions relating to the said Bidding Document and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Bidder or for any forbearance act or omission on your part or any indulgence by you to the said Bidder or any such matter or thing whatsoever under the law relating to sureties would but for this provision have effect of so relieving us.
6. It shall not be necessary for GMDC to proceed against the Bidder before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank, notwithstanding any security which GMDC may have obtained from the Bidder at this time when proceeding are taken against Bank hereunder be outstanding or unrealized.

7. We _____ (Name of Bank) further undertake to unconditionally pay the amount claimed by GMDC merely on demand and without demur to the extent aforesaid.
8. We, the said Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of GMDC in writing and agree that any change in the constitution of GMDC or the Bidder or the said Bank shall not discharged our liability hereunder dated _____ day of _____ 20 . _____ for _____ (Name of Bank)

Yours faithfully

For.....(Name of the Bank)

Please note the following details for Compulsory e-confirmation for Bank Guarantee through ICICI Bank through SFMS under our:

Gujarat Mineral Development Corporation Limited (GMDC), 132 Ft Ring Road, Near University Ground Vastrapur, Ahmedabad. Bank Name: ICICI Bank Ltd, IFS Code: ICIC0000024

UIC GMDC530265584 for Field 7037 MT760

Annexure 12: List of Approved Banks

Annexure I.

Finance Department, GR. No.: FD/MSM/e-file/4/2023/0057/D.M.O.

Date: 21/04/2023

(A) Guarantees issued by the following banks will be accepted as SD/EMD on permanent basis:

❖ **All Nationalized Banks**

(B) Guarantees issued by the following Banks will be accepted as SD/EMD for the period up to March 31, 2024. The validity cut-off date in the GR is with respect to the date of issue of Bank Guarantee irrespective of the date of termination of Bank Guarantee.

Sr No	Name of Banks	Sr No	Name of Banks
1	AXIS Bank	17	Kotak Mahindra Bank
2	AU Small Finance Bank	18	South Indian Bank
3	Bandhan Bank	19	Standard Chartered Bank
4	BNP Paribas	20	Tamilnadu Mercantile Bank
5	City Union Bank	21	Utkarsh Small Finance Bank
6	CSB Bank	22	The Kalapur Commercial Co-op. Bank
7	DBS Bank India Limited	23	Ahmedabad Mercantile Co-op. Bank
8	DCB Bank	24	Nutan Nagarik Sahakari Bank Ltd.
9	Equitas Small Finance Bank	25	Rajkot Nagarik Sahakari Bank Ltd.
10	FEDERAL Bank	26	Saraswat Co-Operative Bank Ltd
11	HDFC Bank	27	SVC Co-Operative Bank LTD.
12	HSBC Bank	28	The Gujarat State Co-operative Bank
13	ICICI Bank	29	The Mehsana Urban Co-Op. Bank Ltd
14	IndusInd Bank	30	The Surat District Co-Operative Bank Ltd
15	Karnataka Bank	31	The Surat People's Co-Op. Bank Ltd
16	Karur Vysya Bank	32	Saurashtra Gramin Bank

All the eligible banks are instructed to collect the original documents/papers of guarantee from the concerned tendering authority.


(S. Chhakehuak)

Additional Secretary (Budget)
Finance Department

-----XXXXX-----

Annexure 13: Detailed Technical Specifications

1. CAAQM STATION – HOUSING/ CONTAINER (For each CAAQMS)

1.1 Housing/ Container: It is designed for housing the ambient air quality monitoring instruments to protect them from dust and heat. Temperature and Humidity sensors shall be installed in the housing for checking the humidity and temperature inside the station. Three Nos. 19” racks shall be installed inside the station so that the analyzers are easily accessible from front & back for calibration and maintenance.

1.1.1 Dimensions:	Inside Length:	4200 mm
	Inside Width:	3500 mm
	Inside Height:	2500 mm

1.1.2 Frame: All the material used for the construction of the floor, frame, roof frame etc. the 4 corner posts and 8 integrated, reinforced container corners should be of metal. The exterior panel of the container shall be made of pre-coated MS Sheet of approved colour shade. All other steel parts should be hot dipped galvanized having minimum rate of galvanization of 275 gram per square meter (IS277). All joints of like metal such as steel-to-steel or aluminum-to-aluminum shall be protected against corrosion by liberal application of joining compound. All joints of dissimilar metals such as steel to aluminum shall be protected against corrosion due to galvanic action by liberal application of dielectric compound as well as jointing compound on both mating surfaces. For lifting / fixing the container, International Standard eyebolts should be provided at the corners.

1.1.3 Paneling: The outer paneling will be of 1.2 mm of Pre-coated MS sheet to withstand external impacts and abrasions. Outer side of the MS Sheet i.e. exposed face of the sheet shall be permanently colour coated with silicon modified polyester coating of dry film thickness (DFT) 20 micron (min.) of approved colour shade over primer. Inner face of the sheet shall be provided with suitable pre-coating of minimum 7 micron off-white colour. The inner paneling will be of PVC coated 2 mm thick aluminum sheet, fixed over an inlay of 4 mm marine plywood. 100 mm thick polyurethane insulation will be used between the outer and inner walls (Pre-coated MS sheet and Marine plywood) as insulating material. Z spacers if required shall be made out of at least 2 mm thick galvanized steel sheet of grade 275 as per IS:277

1.1.4 Floor: The floor will be laid in frame of 600 x 600 mm centre to centre with 50 x50 x 6 mm MS angle. The floor surface will be of 19 mm marine plywood covered with robust quality Vinyl flooring, 2 mm thick of approved colour. The floor should be of acid and alkaline resistant, waterproof, easily cleanable / washable. Bottom plate of thickness 2 mm hot dipped galvanised MS Plate shall be provided.

1.1.5 Outer Door: One door of size 2000 x 900 mm will be provided at the front side (L = 4200 mm) of the station with isolated 3 – point locking & door handle flush fitted.

1.1.6 Electric Power Supply Box: Three - phase (3 Ø) electrical wiring will be laid in ducts. Copper wiring of appropriate gauge will be used. The terminal board should be mounted in a central power distribution box. Over voltage protection for each phase shall be provided along with the lightning arrester. 2 numbers Emergency cut off switch & Thermostat switch (max 35⁰C) for power disconnection, 6 free sockets and 3 fluorescent lamps for lighting will be provided. The station shall be properly grounded with chemical earthing or as per BIS Standards with proper plate and only copper strip at least on 2 corners (diametrically opposite). One three phase energy meter (Digital Type) shall be installed. Weatherproof cubicles / enclosure for housing of MCB / TP & N Switch of main power termination (outside shelter) and weatherproof telephone junction box for terminations of telephone line are to be provided. Proper earthing for telescopic mast of meteorological system shall be provided. There should be conduction between the telescopic mast of the meteorological system and the station. Ropes or wires shall be provided for supporting the mast.

List of Consumables per CAAQMS Unit:

All Fuses	: 02 set
Lightning arrester	: 02 set
Emergency Switch	: 02 pcs
Thermostat	: 01 pc

1.1.7 Partitioning for Calibration Gas Cylinders, Meteorological Mast and UPS:

The housing will be partitioned as per drawing to create space for storing of gas cylinders, Meteorological mast & UPS. The size will be 2000 x 1400 x 2300 mm. A lockable door of size 900 x 2000 mm along-with 3 – Point locking system shall be provided on the outer wall of the housing. A 300 mm, single-phase (230 volts ± 10 volts AC and 50 Hz ± 3%) exhaust fan with safety grills will be provided. Mounting brackets in 2 levels for fixing of at-least 06 (six) gas cylinders should be provided. The internal lights of the housing should be sensor based.

Air conditioners shall be mounted on proper rust proof supporting structures with rubber blocks to avoid vibration of structures. Proper caging / grill should also be provided for the safety of ACs. Sun shades for external AC units shall be provided with fabricated pre-coated MS sheet (same as monitoring station) with supporting arrangements. AC unit's external piping shall be placed in GI trays. Cable trays fixed on exterior wall shall be covered with pre-coated MS sheet, of same colour shade of monitoring station. Roof top sheet to be levelled and sloped properly. Rain water spout shall be fixed at top with rain water down pipe at two corners. The external lights of the station should be Solar Power operated.

1.1.8 Station Furnishing:

- (i) 19" racks – 03 Nos.
- (ii) Fire extinguishers – 02 Nos. (Most suitable Clean Agent – 2 KG each)
- (iii) Sand Buckets of 5 Liters – 08 Nos.
- (iv) Furniture:
 - a) Material - Furniture made of water-resistant laminated board
 - b) Cupboard
 - c) Working table – Powdered coated MS frame size 1400 x 900 x 750 mm (w x d x h) and top 19 mm thickness Board
 - d) Revolving tilting chair – 02 Nos.
- (v) Miscellaneous
 - a) The exhaust gases from the analyser should be collected and discharged by a common exhaust pipe and vented out.
 - b) Folding aluminum ladder for roof access
 - c) Step Ladders for the access to CAAQMS Cabin Chamber with Railings.
 - d) Sensor for measuring the inside temperature of the station and Display
 - e) Hygrometer for measurement of Humidity inside the station and Display
 - f) Mounting bracket for the ladder
 - g) No smoking stickers
 - h) Vacuum cleaner with minimum 100 watt power
 - i) Tool Kit having following tools:
 - 1. Two screw driver set
 - 2. Two Digital multi-meter (Philips, Micro or equivalent make)
 - 3. Two box spanner set
 - 4. Two D spanner set
 - 5. Two watch maker set
 - 6. Two Hammer set
 - 7. Two precision screw driver set
 - 8. Two pliers set
 - 9. Two Tong tester
 - 10. Two Soldering Iron with stand
 - j) One Emergency LED Cluster light
 - k) Sign boards along-with logo of Gujarat Mineral Development Corporation Ltd., to be embedded with size 1500 x 900 mm on the front of the container and on the two side of the container, The name of the Station i.e. Continuous Ambient Air Quality MONITORING Station, (Location) both in English and Gujarati language to be inscribed. The Signs boards to be mounted on the station with proper spacers.

1.1.9 Container Foundation (RCC)

L X W 6000 x 6000 mm

Height 300 mm from ground

Pillars: Nine concrete pillars of 300 mm above the ground level and below the ground level with 200 x 200 mm beam and between pillar bricks to be used for filling the space (concrete ratio of 1:2:4). Outer wall of the foundation to be plastered with 1:4, Cement: Sand ratio and same has to be painted with weather proof coat.

Top of the platform: RCC 150 mm with concrete ratio of 1:1:2 and to plaster and painted with weatherproof paint.

Staircase: RCC Steps to approach the main door of the container and the UPS / Gas room door in the side to be provided and each step should not be more than 150 mm

1.1.10 Security Cabin

A 4 feet x 4 feet wooden / Paneled security cabin with door, chair and small folding table for security guard with covered overhead selves to be provided separately with the station container.

2. SPLIT AIR CONDITIONER

2.1 SPLITAIR CONDITIONER (2.0 TON CAPACITY)

2.1.1 Type & Capacity: 2 Nos. split type, 2-ton cooling only capacity Inverter AC, roof mounted of 5 star rating with an automatic timer. Separate Automatic Voltage stabilizer will be provided with each unit.

2.1.2 The indoor units should be running alternately at an interval of four hours with timer control and the temperature inside the station should be maintained at 25°C inside during all the time including peak summer months.

- a. Cooling Capacity: 7000 W
- b. Star Rating: BEE 5 star Inverter with Copper Coil
- c. Indoor Noise Level: 40-50 dbA (cooling)
- d. Control Type: Remote
- e. Compressor: Inverter
- f. Refrigerant: Eco Friendly
- g. Feature: filter clean Indicator, defrosting Sensor
- h. Power supply: 230 volts \pm 10volts AC and 50 Hz \pm 3%
- i. Standard Warranty
- j. Remote: LCD Wireless.

2.2 SPLITAIR CONDITIONER (1.0 TON CAPACITY)

2.2.1 Type & Capacity: 1 Nos. split type, 1 ton cooling only capacity Inverter AC, of 5 star rating with an automatic timer. Separate Automatic Voltage stabilizer will be provided with each unit.

2.2.2 The indoor units should be running alternately at an interval of four hours with timer control and the temperature inside the station should be maintained at 25°C inside during all the time including peak summer months.

- a. Cooling Capacity: 3400 W
- b. Star Rating: BEE 5 star Inverter with Copper Coil
- c. Indoor Noise Level: 40-50 dbA (cooling)
- d. Control Type: Remote
- e. Compressor: Inverter
- f. Refrigerant: Eco Friendly
- g. Feature: filter clean Indicator, defrosting Sensor
- h. Power supply: 230 volts \pm 10volts AC and 50 Hz \pm 3%
- i. Standard Warranty
- j. Remote: LCD Wireless.

3. ONLINE UNINTERRUPTED POWER SUPPLY (UPS)

3.1 ONLINE UPS 10 kVA, CAPACITY (Three Phase I/P & Single-Phase O/P, with 01 hours backup) (for Air Conditioner)

Three phase 10 kVA UPS along with Automatic Delayed Restoration Device (ADRD) with 1 hour backup in full capacity should be provided for the smooth operation of one 2 Ton capacity split AC at the station. Automatic Phase Sequencer Device has to be installed along with the UPS.

a)	Capacity	:	10.0 kVA
b)	Technology	:	PWM using IGBT / MOSFETS
c)	Crest Factor	:	More than 3: 1

d)	Input	Voltage	: 415 V AC
		Voltage Range	: $\pm 25\%$
		Frequency	: 50 Hz $\pm 3\%$
e)	Output	Voltage	: 230 V AC
		Voltage regulation	: $\pm 1\%$
		Frequency	: 50 Hz
		Frequency regulation	: $\pm 0.01\%$
		Waveform	: Pure sine wave
f)	Battery	Battery type	: Sealed maintenance free
		Back up time	: 1 Hour at full load
		Battery Capacity	: For required backup time
		Recharge time	: 5 hrs to 90% after complete discharge
g)	Distortion		: Less than 1% on linear load
h)	Power factor		: 0.9 to 1
i)	Indicator		: L.E.D. – Battery Charge, Load level, on Line, over load, on battery, replace battery
j)	Alarm		: Audible alarm for battery backup, battery low, and fault
k)	Protections	Surge	: Surge suppression meets BIS or International standard
		Overload	: Fuse & current limited
		Short circuit	: Fuse & current limited & cut – off
		Battery low cut – off	: No battery drain after cut - off
l)	Overload Capacity		: 110% for continuous load
m)	Efficiency		: More than 90%
n)	Environment	Operating Temp.	: 0 – 50 ⁰ C
		Operating Hum.	: 10% to 95% (Non condensing)
		Audible Noise	: Less than 45 db (at 1 meter)

3.2 ONLINE UPS 5 kVA, CAPACITY (Single Phase I/P & Single Phase O/P, with 02 hours backup) (01 for Analyzers)

Single phase 5 kVA UPS along with Automatic Delayed Restoration Device (ADRD) with 2 hour backup in full capacity should be provided for the smooth operation of Analyzers and peripherals at the station.

RFP for Supply, Installation, Commissioning and Comprehensive Annual Maintenance of Continuous Ambient Air Quality Monitoring Station (CAAQMS) for GMDC

a)	Capacity	:	5.0 kVA
b)	Technology	:	PWM using IGBT / MOSFETS
c)	Crest Factor	:	More than 3: 1
d)	Input	Voltage	: 230 V AC
		Voltage Range	: ± 25%
		Frequency	: 50 Hz ± 3%
e)	Output	Voltage	: 230 V AC
		Voltage regulation	: ± 1%
		Frequency	: 50 Hz
		Frequency regulation	: ± 0.01%
		Waveform	: Pure sine wave
f)	Battery	Battery type	: Sealed maintenance free
		Back up time	: 3 Hours at full load
		Battery Capacity	: For required backup time
		Recharge time	: 5 hrs to 90% after complete discharge
g)	Distortion	:	Less than 1% on linear load
h)	Power factor	:	0.9 to 1
i)	Indicator	:	L.E.D. – Battery Charge, Load level, online, over load, on battery, replace battery
j)	Alarm	:	Audible alarm for battery backup, battery low, and fault
k)	Protections	Surge	: Surge suppression meets BIS or International standard
		Overload	: Fuse & current limited
		Short circuit	: Fuse & current limited & cut – off
		Battery low cut – off	: No battery drain after cut - off
l)	Overload Capacity	:	110% for continuous load
m)	Efficiency	:	More than 90%
n)	Environment	Operating Temp.	: 0 – 50 ⁰ C
		Operating Hum.	: 10% to 95% (Non condensing)
		Audible Noise	: Less than 45 db (at 1 meter)

4. CONTINUOUS AMBIENT AIR QUALITY MONITORING ANALYSERS for SO₂, NO-NO₂-NO_x and CO

4.1 (General Specifications for all Analysers)

- 4.1.1 The analyzers should be 19" rack mounting model with facilities for fixing the analyzers from front side.
- 4.1.2 The front panel preferably have ON / OFF Switch.
- 4.1.3 The display of the entire important status signal viz. Sample flow, temperature, concentration, range selection, manual / auto mode, zero / span mode and all error messages should be on front panel.
- 4.1.4 The analyzers should operate at operating voltage 230 volts \pm 10 volts AC and 50 Hz \pm 3% frequency. The power supply input to be protected against spikes from and to the analyzer by an LC filter. The power connection cable should be CEE type complete with 15 Amperes plug adaptable to Indian mains socket.
- 4.1.5 The analyzers must function properly in Indian conditions without any defect between 0 – 40^o C ambient temperature, 10 – 95% relative humidity and in high ambient dust levels. The data capture rate should not be less than 90% of operational time.
- 4.1.6 The Manufacturer shall provide comprehensive hands-on training for operational & preventive maintenance for one week on each site for three persons per station.
- 4.1.7 The analyzers should complete with calibration system. The calibration system should be delivered along-with respective span gas cylinder and permeation tubes. The span gas concentration should be within 60 – 90% of first measuring range. **The analyzer must have zero point internal calibration system and in agreement with minimum detection limit of each analyzer.** The calibration procedures are to be integrated into the software system for automatic calibration & remote calibration.

CALIBRATION GAS CYLINDER

- 4.1.8 **The supplier has to supply the calibration gas cylinder (highly polished aluminium 10 liters water capacity), along with SS Regulator, traceable to NIST for each component (SO₂, NO & CO) along with SS regulator for the multipoint calibration.** The synthetic air and N₂ cylinder (99.99% purity with certificate) should be in Carbon Steel cylinder of 47 Liters water capacity along with SS Regulator.
- 4.1.9 The analyzers shall be supplied with all ancillaries necessary for operation with pump (preferably in built) and any other items such as charcoal scrubber, Teflon air sample intake filter, drier, Teflon tubing suitable for connection to air sampling manifold. All such items are to be itemized. Dust filter in all the analyzers should be provided before solenoid valve to protect frequent chocking of solenoid valve.
- 4.1.10 The connector systems for out-going signal for recording and the computer terminal should be on back panel with screw type connecting pins.
- 4.1.11 All analyzers shall be approved by the USEPA / TUV (QAL1). **Method of measurement used shall also comply with the stipulation on National Ambient Air Quality Standards (NAAQS) 2009** (Details of Methods of Measurement is available at MoEFCC and CPCB websites). All analyzers shall be micro – processor controlled with automatic calibration

using an external dilution calibrator and calibration standards. All analyzers should be fully integrated in the rack cabinet, fully calibrated & tested before supply and ready for start – up at the respective sites. Analyzer must exhibit performance equal to or better than values specified in the Calibration & test certificate provided with each analyzer.

4.1.12 The manufacturer shall specify the cross sensitivity of measurement for all the analyzers.

4.1.13 Each set of analyzers shall be supplied with two copies of elaborate operation manuals comprising details as below:

Parts (I) should comprise installation, operational and trouble shooting details;

Parts (II) should have details about preventive, routine and corrective maintenance;

Parts (III) should comprise details of all electrical, electronic and pneumatic circuit diagrams, details of each spare parts, catalogue No. etc. and details of each electronic card / PCB's; and

Parts (IV) Schematic diagram for possible repair & maintenance.

Parts (V) Standard Operating Procedure (SOP) for each analyzer.

Parts (VI) List of equipments and other accessories along with contact details of supplier.

4.1.14 Digital Output:

- a) Multi drop RS 232 port shared between gas Analyzers, Dust Analyzer (PM2.5& PM10), Meteorological Sensors and computer for data, status and control. Communication should have a USB port, TCP/IP Ethernet connection

4.1.15 Quality Control and Standard

Data shall be collected and validated according to USEPA standards, using the methodologies included in 40 Code of Federal Regulations. All analyzers shall have current USEPA reference or equivalent method designation and shall be of the latest design.

The supplier shall submit a Standard Operating Procedure for the air quality monitoring stations after commissioning. This Standard Operating Procedure shall be approved by the Buyer prior to award. The Standard Operating Procedure shall contain the following:

- i. Operating procedures for all analyzers and meteorological sensors
- ii. Calibration procedures

- iii. Calibration schedule
- iv. Maintenance procedures
- v. Maintenance schedule
- vi. Data validation procedures
- vii. Quality Assurance procedures
- viii. Sample quality assurance documentation
- ix. Sample Air Quality Report

The calibration procedures for analyzers shall conform to USEPA methodologies and shall include daily calibration checks, by weekly precision checks and linearity checks every six weeks. All analyzers shall undergo full calibration in every three months. Data obtained from these calibration checks and copies of associated Quality Assurance and calibration documentation, shall be submitted to the Buyer along with the Air Quality Data.

Air Quality Data shall be submitted to the Buyer on Real Time basis through automated system and on a monthly basis in the form of an Air Quality Report. This report shall include tabular and graphic information on gas and dust concentrations as well as meteorological data for each site. The data shall be reported in the form of 15 minute averages and shall also include daily, weekly and monthly averages, minimum, maximum, standard deviations, total data captured and percent data capture. It should also have stat validation mechanism and delayed data check mechanism. The Air Quality Report shall also include wind roses where wind speed and direction are measured.

4.2 SAMPLING SYSTEM

A suitable sampling system as specified by USEPA having 10 ports manifold and fitted with a suction pump to draw ambient air. System duly equipped with moisture removal systems should be provided for sampling of ambient air separately for gaseous and dust measurement.

Gases sampling system:

- | | | |
|-------|--------------------------------|---|
| 4.2.1 | Height of the sampling system: | Approx. 1.0 meter above the roof |
| 4.2.2 | Roof entry cut out: | Stainless Steel |
| 4.2.3 | Conduit: | Stainless Steel |
| 4.2.4 | Inner sampling system: | Borosilicate glass |
| 4.2.5 | Sampling head: | Stainless Steel |
| 4.2.6 | Manifold: | 10 ports for tubes 6 x 1 mm, self-tightening. |
| 4.2.7 | Sample air flow sensor | Uni-directional sample air flow measuring device should be installed at the sampling system to measure the flow of ambient air through sampling system. The output of signal should be connected to computer to ascertain the continuous flow of sample from ambient air. The suction pump operational status should also |

be connected to the computer as a separate channel.

4.3 19" RACK

Suitable 19" Rack cabinet to accommodate all analyzers, calibrators, Zero air generators, data logger etc. The dimension of the rack without doors, with aluminum section and rear of 2 mm steel sheet, one removable roof plate, fitted with 4 lifting eyebolts. Four roof fixing screws included in package to replace the lifting eyebolts. One gland plate three part, one pair of 475 mm (19") mounting angles depth adjustable in 25 mm pitch pattern fitted on two fixing angles approximately 150 mm unit from the front standard. To accommodate panel width of 19" size: width = 600 mm, Height = 1400 mm and Depth = 800 mm. The 19" racks should be screwed to the floor of the station with anti-vibration pads. All nuts and bolts shall be cadmium coated.

5. AMBIENT AIR QUALITY MONITORING ANALYSERS (GAS)

5.1 AMBIENT SULPHUR DIOXIDE (SO₂) ANALYSER

01.	Principle	:	UV Fluorescence
02.	Measurement	:	SO ₂ in Ambient Air
03.	Display	:	Digital
04.	Ranges	:	Auto ranging 0 - 200 ppb
05.	Lower Detectable Limit	:	1 ppb
06.	Noise Level	:	0.5 ppb
07.	Zero Drift	:	< 1 ppb/24 Hrs. with automatic zero compensation
08.	Span Drift	:	<1 ppb in 24 hrs.
09.	Linearity	:	± 1% of full scale
11.	Response Time	:	120 sec or less
12.	Calibration	:	Please see Multi-calibration section (Sl. No. 7) and also calibration section in General Specifications (4.1.7 to 4.1.9)
13.	Analog Output	:	0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA
14.	Digital Output	:	Multiple drop RS 232, USB port /TCP/IP, Ethernet
15	Approval	:	USEPA/TUV CAL1 approved Analyzer

5.2 AMBIENT OXIDES OF NITROGEN (NO-NO₂-NO_x) ANALYSER

01.	Principle	:	Chemiluminiscence
02.	Measurement	:	NO-NO ₂ - NO _x in Ambient Air
03.	Display	:	Digital
04.	Ranges	:	Auto ranging 0-2000 ppb
05.	Lower Detectable Limit	:	1 ppb
06.	Noise Level	:	0.5 ppb
07.	Zero Drift	:	< 1 ppb/24 Hrs.
08.	Span Drift	:	< 2% in 15 days of full scale
09.	Linearity	:	± 1% of full scale
10.	Response Time	:	120 sec or less
11.	Calibration	:	Please see Multi-calibration section (Sl. No. 7) and also calibration section in General Specifications (4.1.7 to 4.1.9).
12.	Analog Output	:	0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA
13.	Digital Output	:	Multi drop RS 232 port, USB port /TCP/IP, Ethernet

14	Approval	:	USEPA/TUV QAL1 approved Analyzer
----	----------	---	----------------------------------

5.3 AMBIENT CARBON MONOXIDE (CO) ANALYSER

01.	Principle	:	Non Dispersive Infra-Red (NDIR) with Gas Filter Correlation/ Cross Flow Modulation Method
02.	Measurement	:	CO in Ambient Air
03.	Display	:	Digital
04.	Ranges	:	Auto ranging 0 - 100 ppm.
05.	Lower Detectable Limit	:	0.1 ppm
06.	Noise Level	:	0.05 ppm with time constant ☑ 30 seconds
07.	Zero Drift	:	< 0.2 ppm/7 days
08.	Span Drift	:	< 1% full scale in 24 hrs.
09.	Linearity	:	Continuous + 1%
10.	Response Time	:	60 seconds or less
11.	Calibration	:	Please see Multi-calibration section (Sl. No. 7) and also calibration section in General Specifications (4.1.7 to 4.1.9).
12.	Analog Output	:	0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA
13.	Digital Output	:	Multiple drop RS 232port, USB port /TCP/IP, Ethernet
14.	Approval	:	USEPA/TUV CAL1 approved Analyzer

6. CONTINUOUS AMBIENT AIR QUALITY MONITORING ANALYSERS (PARTICULATES)

6.1 CONTINUOUS PM₁₀ MONITORING ANALYSER (β -RAY ATTENUATION)

Based on the principle of β-ray attenuation, particulate sampled through the instrument and collected on fiberglass filter tape. Before and after sampling, β - ray radiation is measured by scintillation / G.M. counter. An internal microprocessor handles all sequences and automatically calculates the concentration of PM₁₀.

01.	Principle	:	β-ray attenuation
02.	Particle Size Cut Off	:	0 - 10 Microns
03.	Measuring Range	:	0 – 1000 µg/m ³
04.	Resolution	:	1% of the measurement range
05.	Lower Detection Limit	:	< 4.8 µg/m ³ (1 hour)
06.	Detector	:	Plastic Scintillator / GM Counter / Silicon-Semiconductor base
07.	Air Flow Rate	:	16.7 Liters / minute
08.	Filter Material	:	Glass Fiber Filter
09.	Display	:	LED / LCD
10.	Sampling Head	:	Dynamic heated sampling line with proper outer insulation for measurement of PM ₁₀ , with adjustable temperature 20 – 70 °C
11.	Calibration	:	Reference membrane facility should be provided for calibration of analyzer.
12.	Compatibility	:	Analyzer should be compatible with protocols of DAS system to be used in station.
13.	Analog Output	:	0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA
14.	Digital Output	:	Multi drop RS 232 port USB port /TCP/IP /Ethernet
15.	Roll Length	:	Minimum 20 meters
16.	Measurement cycle time	:	1 hour
17.	Approval	:	USEPA/TUV CAL1 approved Analyzer

6.2 CONTINUOUS PM_{2.5} MONITORING ANALYSER (β -RAY ATTENUATION)

Based on the principle of β-ray attenuation, particulate sampled through the instrument and collected on fiberglass filter tape. Before and after, sampling β - ray radiation is measured by scintillation / G.M. counter. An internal microprocessor handles all sequences and automatically calculates the concentration of PM_{2.5}.

01.	Principle	:	β -ray attenuation
02.	Particle Size Cut Off	:	0 – 2.5 Microns
03.	Measuring Range	:	0 – 1000 $\mu\text{g}/\text{m}^3$
04.	Resolution	:	1% of the measurement range
05.	Lower Detection Limit	:	< 4.8 $\mu\text{g}/\text{m}^3$ (1 hour)
06.	Detector	:	Plastic Scintillator / GM Counter / Silicon-Semiconductor base
07.	Air Flow Rate	:	16.7 Liters / minute
08.	Filter Material	:	Glass Fiber Filter
09.	Display	:	LED / LCD
10.	Sampling Head	:	Dynamic heated sampling line with proper outer insulation for measurement of PM2.5 with adjustable temperature 20 – 70 $^{\circ}\text{C}$
11.	Calibration	:	Reference membrane facility should be provided for multipoint calibration of analyzer.
12.	Compatibility	:	Analyzer should be compatible with protocols of DAS system to be used in station.
13.	Roll Length	:	Minimum 20 meters
14.	Analog Output	:	0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA
15.	Digital Output	:	Multi drop RS 232 port ,USB port /TCP/IP ,Ethernet
16.	Measurement Cycle Time	:	1 hour
17.	Approval	:	USEPA/TUV QAL1 approved Analyzer

Note: A distance of around 1.5 meter should be maintained between two sampling heads of PM2.5 and PM10samplers.

7. MULTICALIBRATOR

Calibration system should provide for the calibration of the ambient air quality monitoring analysers (Gas).

7.1 MULTI POINT GAS CALIBRATION SYSTEM:

1. The Gas Calibration System should be capable to do the following:
 - (i) Multipoint calibration using automatic dilution system for the calibration of SO₂, NO, SOX, NOX and CO analysers.
 - (ii) Auto calibration (user selectable).
 - (iii) Generate zero air of 99.9% purity (High Performance Zero Air Generator to be provided).
 - (iv) Having facility for O₃ Generator for stable and repeatability calibration.

- (v) Gas Phase Titration (GPT) with O₃ generator having 100% converter efficiency for conversion of NO to NO₂.
 - (vi) Calibration using permeation tubes for which at least two chambers based Permeation system has to be provided.
 - (vii) The Permeation System should be capable to accept permeation tubes up to 6 cm in length and 2cm in diameter with user selectable temperature setting of 40°C and 50°C.
2. System should be 19" rack mountable.
 3. System should be DAS compatible for remote calibration from Central Server.

7.2 METEOROLOGICAL, FLOW AND ELECTRONICS CALIBRATION

The supplier should provide calibration devices or calibration check devices for all the meteorological parameters namely temperature, wind speed, wind direction, relative humidity, solar radiation, rain fall as per the specifications of the manufacturers.

8. METEOROLOGICAL SYSTEM

- 8.1** The meteorological instrumentation should be interfaced directly with the Data Acquisition System after passing through a lightning protection isolation box. A crank - up telescopic 10 meters tower should be erected for mounting of meteorological sensors. The relative humidity and solar radiation sensors should be mounted on the tower. The specifications are as follows:

(A) WIND SPEED

Range (Operation)	:	0 – 60 m/s or better
Sustainability	:	Upto 75 m/sec
Accuracy	:	± 0.5 m/sec or better
Resolution	:	0.1 m/sec
Sensor Type	:	Ultrasonic
Threshold	:	0.5 m/sec or less
Response time	:	10 sec or better

(B) WIND DIRECTION

Range	:	0 – 359 degree
Accuracy	:	± 3 degree or better
Resolution	:	1 degree
Sensor type	:	Ultrasonic
Threshold	:	0.5 m/sec or less
Response time	:	10 sec or better

(C) AMBIENT TEMPERATURE

Range	:	-10 ° C to 60 ° C
Accuracy	:	± 0.2 ° C or better (with radiation shield)
Response	:	10 seconds in still air
Resolution	:	0.1 °C
Sensor type	:	Resistance type
Response time	:	10 sec or better

(D) RELATIVE HUMIDITY

Range	:	0 to 100% RH
Accuracy	:	± 3.0 % or better
Resolution	:	1%
Sensor type	:	Capacitive / Solid State
Response Time	:	10 sec or better

(E) SOLAR RADIATION

Range	:	0 to 1500 W/m ² or better
Accuracy	:	± 5.0 % or better
Resolution	:	5W/m ²
Sensor type	:	Silicon Photo diode

(F) RAINFALL

Range	:	0.2 mm to 100 mm/hr
Accuracy	:	± 5% or better
Resolution	:	0.2 mm
Sensor type	:	Tipping bucket rain gauge or any other suitable sensor
Response Time	:	10 sec or better

(G) TELESCOPIC CRANK – UP METEOROLOGICAL TOWER

A crank - up telescopic tower (height should be as per the requirements for proper readings) should be erected for mounting of meteorological sensors. The wind speed, wind direction, temperature, relative humidity and solar radiation sensors are to be mounted on the Meteorological Tower. The tower is to be a free standing four section

telescopic tower provided with a hand crank to raise and lower the instruments mounted on the tower. Specifications are as follows:

Extended Height	:	10 meters
Retracted Height	:	2 meters
Wind load Limit	:	0.7896 sq. m. (8.5 sq. ft) at 50 mph
Number of Sections	:	4
Construction material	:	Galvanised steel or aluminium

Note:

- (i) Humidity and temperature sensors are to be supplied with weather and thermal radiation shield made of anodized aluminium and sensor should be supplied with all necessary cables, connector and mounting arrangements as required.
- (ii) All the meteorological sensor should be certified/ traceable to World Meteorological Organization (WMO) and software should also have certification from the appropriate international agency.

9. DATA ACQUISITION AND COMMUNICATION SYSTEM

9.1 Typical Architecture for Data Connectivity

- The Supplier shall ensure data connectivity with GMDC's central station as well as CPCB/GPCB servers as per the data architecture provided in CPCB guideline issued in July, 2019.
- Above architecture defines data transmission from all connected CAAQM Stations to GMDC Central office and the central servers of CPCB and GPCB in parallel through internet in real time basis.
- All CAAQM Stations are to be connected by static IP address with GMDC Central office and CPCB/GPCB Server (Central Data Server) for uninterrupted NAQI.
- There should also be provision in the station itself for data display of Pollutants parameters, Meteorological parameters and NAQI on display system near to Station.
- Each CAAQM Station measures their respective pollutant and meteorological parameters and gets them stored in data logger before transmission.
- From Data logger, data transmits for data display, and also through internet the same data is transmitted to GMDC Central office and the central servers of CPCB and GPCB.
- Data display system at all locations displays Pollutant, Meteorological and NAQI data on real time basis of all connected CAAQM Stations.

9.2 Data Acquisition and Handling System at CAAQM Station

Type 1: System comprises of data logger having DAS and station computer. Or

Type 2: System comprises of station computer with DAS facilities.

Data logger/DAS with 8 analog, 24 digital inputs. Ability to log channels at different intervals and should have capability of averaging and displaying real time data and averaged data over a period of 1 min, 15 min, ½ hr, 1 hr, 4 hrs, 8 hrs, 24 hrs, 1 month and year. Communication between data logger and station computer should be using standard USB/RS232/RS485/ Ethernet Connector. The data logger should have internal battery with charger and if it is PC based UPS serves the purpose.

The data logger/DAS should support LAN and Internal GSM modem/ Wifi for data transfer to central server. Station computer for data logging will be in addition to workstation computer required for calculating AQI, and will be of same or better specifications than of workstation computer.

The supplier is supposed to install Computer System along with DAS of suitable high-end specification as per the design & specifications of DAHS. Real Time Data to be simultaneously transmitted from station computer to Central Servers at respective SPCB and CPCB.

Computer:

Brand new latest model Computer of reputed make like HP, Dell, Lenovo, IBM, Apple, Microsoft of configuration mentioned in the item “Work Station Computer for AQI” or better and compatible with DAHS to be supplied.

9.3 WORKSTATION COMPUTER FOR AQI

This has to be installed at CAAQM station for the preparation of AQI along with the station computer.

The supplier will maintain the Computer System (Hardware, OS, etc.)

Sr. No.	Specifications	
1	CPU	Intel® Core i5 - i7 13 th generation or higher
2	Memory	16 GB DDR-IV, or better
3	Ethernet ports	Integrated intel® Ethernet LAN 10/100/1000 or better
4	PCI Slots	Two PCIe16 half height
5	Optical Drive	DVD R/W Internal
6	HDD's	1TB, SSD
7	Power Supply	Standard suitable power supply
8	Key board	Optical Wireless Keyboard same as OEM
9	Mouse	Standard Optical Wireless Mouse same as OEM
10	I/O ports	Minimum 6 USB (at least 4 ports of 3.0)
11	Monitor	24" Wide or higher LED FHD Color Monitor
12	Wireless adapter	USB Wireless adapter x 1 no.
13	OS support	Open source Linux CentOS
14	Type	Desktop – Flat /Tower

WORKSTATION COMPUTER FOR CENTRAL COMMAND AT GMDC'S CORPORATE OFFICE

This has to be installed at GMDC's Corporate office for the assimilation and compilation of the data received from all the CAAQM Station . The supplier will maintain the Computer System (Hardware, OS, etc.)

Sr. No.	Specifications	
1	CPU	Intel® Core i5 - i7 13 th generation or higher
2	Memory	16 GB DDR-IV, or better
3	Ethernet ports	Integrated intel® Ethernet LAN 10/100/1000
4	PCI Slots	Two PCIe16 half height
5	Optical Drive	DVD R/W Internal
6	HDD's	8TB, SSD
7	Power Supply	Standard suitable power supply
8	Key board	Optical Wireless Keyboard same as OEM
9	Mouse	Standard Optical Wireless Mouse same as OEM
10	I/O ports	Minimum 6 USB (at least 4 ports of 3.0)
11	Monitor	27" Wide or higher LED FHD Color Monitor
12	Wireless adapter	USB Wireless adapter x 1 no.
13	OS support	Open source Linux CentOS
14	Type	Desktop – Flat /Tower

9.4 REMOTE MONITORING TOOL/SOFTWARE

Remote calibration & validation management software and its licenses for the entire project duration for all of the CAAQMS.

Data Acquisition Software (DAS) & it's licenses to be provided for all of the CAAQMS.

9.5 PRINTER SPECIFICATIONS

COLOUR Laser Jet Multi Function Printer (Print-Scan-Copy)

- Print speed black: 25 ppm min
- Print Speed Colour : 5 ppm min
- Scanner
- Resolution: 1200 x 1200 dpi
- Processor speed 1200 MHz Print or better
- Paper handling input, standard 250-sheet input tray or better
- Duplex printing Automatic (standard)
- Media sizes supported A4 and A5
- wireless connectivity and automatic two-sided printing
- automatically connect to wireless network,
- Easily print from virtually anywhere in the office with Ethernet and wireless connectivity
- Connect via USB, and access tools from PC to manage printer.
- 1,500-page toner cartridge or better

9.6 CONNECTIVITY FOR DATA TRANSFER

Any of the following's tool for providing connectivity.

A) LEASED LINE CIRCUIT

1Mbps capacity leased line connectivity with 99% uptime service level agreement (SLA) to be provided by the firm at each station location. The leased line may be provided on copper or optical fiber or through RF depending upon the location. 04 nos. of Real IPs to be obtained alongwith the Lease Line Circuit. Router equipped with 01 WAN Port and minimum 08 LAN Ports is to be procured alongwith the Leased Line Circuit.

B) BROADBAND

1Mbps capacity broadband connectivity from other than one already providing leased line connectivity shall be provided by the firm at each station.

C) GSM /Hotspot Connectivity

Internet connectivity will have to be provided by the Supplier for the entire project duration at LED location either using GSM or Hotspot connectivity

10. DATA ACQUISITION SOFTWARE FOR CAAQMS / LOCAL DATA ACQUISITION SYSTEM

The Local data acquisition systems will be installed at various locations where CAAQMS units shall be installed.

The PC Based Local Data Acquisition System (LDAS) should be able to collect and store air quality data from all instruments listed above. The DAS should be designed to acquire, transmit, process and store data. For connectivity of Local DAS at GMDC Ltd. Mines, spare Ethernet port shall be made available by the purchaser at distance of not more than 50 M from the station. For data connectivity, necessary UTP cable laying (within a GI conduit to protect against light & other interferences) from Ethernet switch to Data acquisition systems shall be under the scope of the Supplier. Internet availability at local data station will also be in the Supplier's scope.

The data capture rate should not be less than 90% during warranty & CAMC period. The Integration of the 3 nos. of local DAS with the Central DAS system at Head Office will also in the Supplier's scope. At all the locations necessary components for interfacing shall be in the Supplier's scope.

DAS should include following minimum features:

- "Multi drop" RS485 or TCP/IP Communication enabling digital. Analog communication with all supported monitoring equipment.
- Supports remote communication through radio, switched telephone, cellular telephone, as well as short haul modems.
- Data storage space for minimum 30 days of 5-minute historical data
- Captures minimum, maximum, average values and standard deviations.
- Lightning & surge protection facilities.

- Full control over calibration cycle periods.
- Password Protection.
- DAS should be designed for unattended use.
- Should be able to acquire data from sensors either using Analog inputs or RS 485 to be integrated into the Data Acquisition Software
- The system hardware and software required for the Local DAS are given below

(i) Data Acquisition

- a) Frequency of data acquisition
 - i) User selectable 1,5,30,60,120 second averaging duration online digitally.
 - ii) Minimum frequency will be subject to capability of analyzer cycle.
- b) Channel size
 - i) 32 Channels or more supported
 - ii) Expandable to 64 channels, if required in future
- c) Data input
Either Analog (0-1 volt/0-10 volt/2-20mA/4-20mA) or Digital to configure with the PC. The condition is that system should remotely operatable.
- d) User configurable channels, stations and equipment with communication parameters.
- e) Analyzer data channel should comprise of Name, Units, Communication Address, Validity Range, Operation and Error Status.
- f) Provision to incorporate conversion factors such as PPB to $\mu\text{g}/\text{m}^3$ etc.
- g) Software should be equipped to configure the analyzers with it, irrespective of company make and communication protocol of the analyzer and the output mode i.e. Analog or Digital (RS 232) of the instrument.
- h) The output should be provided in user defined units.

(ii) Data Collection

- a) Average data over user selectable time (1,5,30,60 seconds time interval) period.
- b) Operational status, Error status, calibration status and calibration values observed from the analyzer should be captured and should be made available along with the data with a frequency of maximum five minutes.
- c) System should collect of the diagnostics of the instrument comprising actual diagnostics parameters and their values at least once in every five minute to check the state of the health analyzer.
- d) Calibration parameters
 - i) Provision to entering zero calibration, span calibration values of gas cylinder/permeation to devices
 - ii) Provision for collecting zero calibration, span calibration values (pre calibration & post calibration) into the database for further analysis.
 - iii) Provisions to collect electronic system pre calibration & post calibration values from the analyser to ascertain the percentage deviation/correction applied during each calibration and record it in database at station & Central computer.

(iii) Data Storage

- a) Data along-with diagnostic, calibration, alarms should be stored at station computer at a defined path.
- b) Interval of data dumping will be same as defined in the data collection.
- c) System should be capable to keep every second acquired data from 32 channels for a period of minimum seven years.
- d) Current data should be stored as per ISO-7168-1:1999I format and should be available in folder named as c:\Data\ at an interval of 15 minutes. As an example c:\data\01.05.2015.xml. the file will be appending without double data entry and as per ISO format.
- e) Data should also be stored for last two years in E:\data\Year\Month\day i.e. e:\data\2015\05\01.05.2015.xml
- f) If data encryption is done, then decryption procedure should be made available in soft file format to check the data at station at any point of time. To convert data on continuous basis for exporting to AQI software, procedure should be available without any licensing. AQI calculating Software will be provided by CPCB/SPCB.

(iv) Data Display (Statistical analysis of data)

- a) Main window for real time display of all measured parameters with status of all analyzers/sensors.
- b) In 4-in-4 graphs and 4-in-1 graph formats
- c) In tables of 4-in-1 format
- d) Real time multi – graphs over user selectable time period i.e. 6.00 AM to 6.00 AM etc.
- e) Display of graphic & tabular display of the current data.
- f) Graphical form should comprise of 4-4 graphs, 4-1 graphs in user defined format (1, 5, 10, 15, 30 min, 1hour, 4, 8, 24 hour, 30 days and yearly; user definable time series)
- g) Tabular form should comprise of 4 channel list in user defined format (1, 5, 10, 15, 30 min, 1hour, 4, 8, 24 hour, 30 days and yearly; user definable time series)
- h) Station instruments basic configuration etc. should be visible on screen continuously.
- i) Statistical analysis tools like regression analysis, co-relation analysis and other analysis as per industry standards in the field of environment should be available and if not the firm should develop these for CPCB within a time frame of six months.
- j) The system should have procedures for normal analysis tools like calculation of data with respect to a threshold value, average, minimum, maximum, calculation of violating value with respect defined values (National Ambient Air Quality Standards) for defined period for the database etc.
- k) Data analysis of diagnostics parameters
- l) Data analysis of Pre calibration and post calibration data (if facility not available, should be developed within six months)
- m) Data analysis of corrections applied of each calibration cycle (if facility not available should be developed within six months)

(v) Data Backup

- a) There should be defined data backup procedure through which data can be extracted from station computer in simple text format/excel/pdf/ISO format (user definable).
- b) There should be defined restore procedure also to restore the data in case of data loss.
- c) A display screen should be available to update the user about data availability.

(vi) Data Validation automatic checks at station software.

- a) Zero level and span level checks if performed cyclically and defined results are not obtained up to +/- 5%(user definable 0-10%) then system should alarm the user of system failure and the recorded alarm should be transmitted to central software.
- b) After instruments perform the calibration the results obtained should be recorded and should be transmitted to central computer.
- c) There should be provision of two databases one is raw database and another corrected database.
- d) Validation of data through calibration database Pre calibration & post calibration values collected.

(vii) Calibration of systems

- a. Calibration window for analyzer for the calibration from computer.
- b. Remote Access to Calibration: Calibration exercise need to be done remotely. All necessary arrangements for it should be made in the system.
- c. Calibration data file may be prepared separately, and data should be excluded from the database
- d. Calibration database need to be formed, stored and transmitted to central server.
- e. Calibration cycles to be as per the models of the instruments.
- f. Calibration records should store the calibration values displayed by instrument.
- g. Diagnostics during calibration should also be recorded.

(viii) Location of station

- a) Fixed Stations location to be recorded and North correction feature should be available.
- b) Latitude and longitude of stations be recorded

(ix) Data transfer to Central

- All data captured at station computer should be transferred to GMDC Server at central location.
- a) User selectable time frame for transmission of data to central server.
 - b) Diagnostics (actual diagnostics parameter values recorded each time in the station), configurations (station channel configurations), alarms (generated alarms) should be transmitted.

(x) Data transfer to Display Boards at the site near main gate of project

software should have provisions to connect data output including current pollutants concentration, AQI, advertisement, etc. to the display boards (LEDs), to be installed at public site. For the purpose Data display device has been recommended in the document.

11. DATA ACQUISITION SOFTWARE SYSTEM AT GMDC'S CENTRAL OFFICE

The Central Data Acquisition System will be located at GMDC's Head Office. The PC Based Central Data Acquisition System (CDAS) should be able to collect and store air quality data from the Local Data Acquisition Systems. The DAS should be designed to acquire, transmit, process and store data. This Central PC Based Data Acquisition System should be provided with PC & Software configuration similar to Local Data Acquisition System. Facility for communication between Local & Central Data Acquisition systems should be through internet connectivity. The Central DAS software shall also support additional CAAQM Stations installed at different locations in future.

The central Data acquisition system should meet all the specifications and requirements specified in Clause No. 11 of CPCB guidelines for CAAQMS dated July, 2019. The software shall also have capability for report generation as per details given below:

- a) To prepare reports hourly, weekly, monthly, yearly in user defined interval and formats.
- b) Mean, Median, Percentile, Maximum, Standard deviation, Frequency analysis and Maximum Frequency analysis.
- c) Data Comparison
Software should be able to compare any of the four channels irrespective of type of data in the system with respect to each other on a single time scale user selectable.
- d) Data Comparison on different time scale
Software should be able to compare data on the basis of different time scales like one station (x) parameter (y) of one given date is compared with other station (z) parameter (y) on any other date in a single graph.
- e) Data reports, calibration reports and status reports with user time periods.
- f) Historic multi – curves / graphs over user selectable time period.
- g) Report generation over user selectable time period (instantaneous or averaged over a period of 1, 15, 30 min, 1 hr, 4, 8, 12, 16 and 24 hrs etc.).
- h) Diurnal variation, standard deviation, regression and other statistical parameter reporting possibilities with various available mathematical methods.
- i) If required separate report generation procedures have to be developed for which firm will be responsible for project duration.
- j) Daily report from each station should be generated and sent through email for hourly data of each parameter (including meteorological parameters, diagnostics of instruments and calibration of instruments if performed during that day) automatically format for which can be mutually agreed upon.

- k) Data should be downloadable in Excel Sheet, CSV format through user selection.
- l) Provision should be there to use raw as well as validated data for generation of all types of graphics including wind roses and pollution roses.

12. SECURITY

- a. Software should be totally secured with protection against virus, malware etc.
- b. Security device like firewall for VPN Tunneling should be installed.

13. OTHER TECHNICAL CONDITIONS

1. Compatible Hardware required for data transmission through Data Display Connection Device has to be installed.
2. Should support the latest formats of Windows 32 bit or 64 bit. Any new patches developed or upgraded software during project duration should be provided without additional cost.
3. Manual of complete system should be provided.
4. Firm should provide the hardware required for data acquisition along with all the software's required like OS, Networking software, Remote functionality software and should maintain hardware and software for project duration.
5. All softwares like OS, Data Acquisition Software, Remote Calibration Software, Content Management Software etc. used for the entire project, should be either open source or with license. Copy of licenses should be provided to GMDC.

The CAAQM Station should also have capability to transmit relevant data simultaneously to CPCB and/or GPCB. If required, the system should also provide remote mechanism with controlling AQI software in CAAQMS PC.

14. DAY LIGHT & NIGHT VISIBLE TRUE COLOR DATA DISPLAY SYSTEM

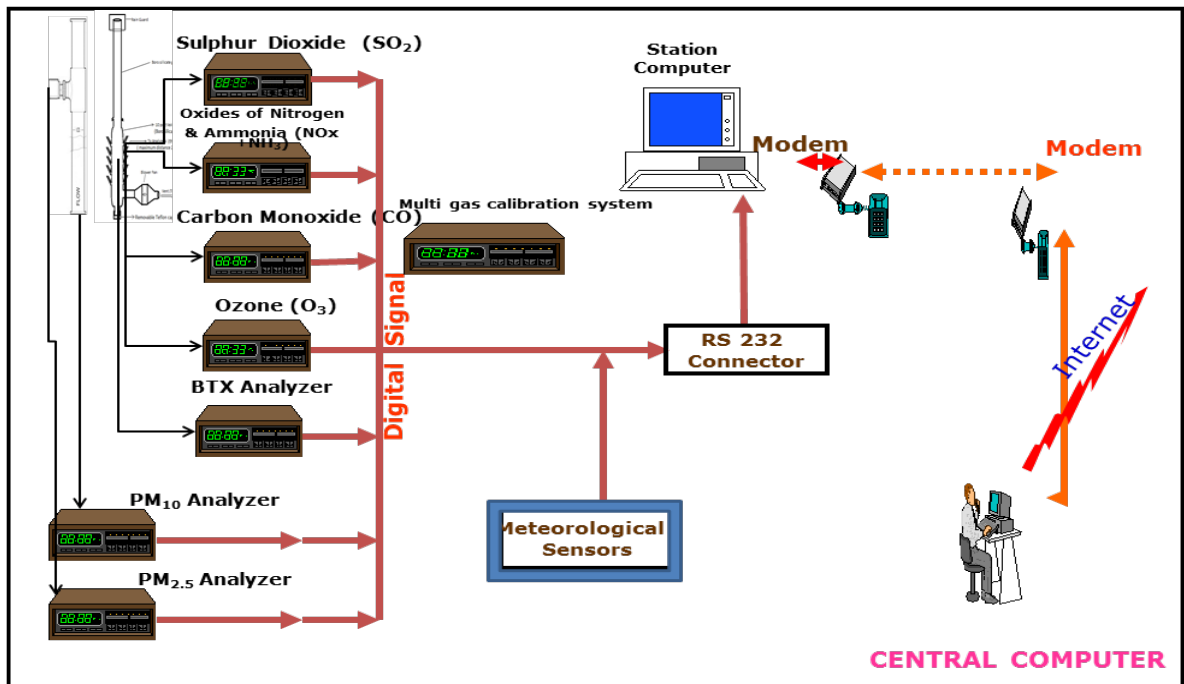
(A) LOCATION NEAR TO CAAQM STATION

1.	Size of Display System (H X W) feet and Pixel	4 X 8 feet , P6, 6mm (+/- 0.5 mm) pixel pitch,
2.	Visibility Range	~10 Meters (Day time)
3.	Brightness	7000 NIT or higher
4.	Display of Colour Elements	SMD 3535 or better
5.	Minimum Life span of the system	LED Life 100000 Hours
6.	Viewing angle	Viewing angle of 140 ⁰ Horizontal/140 ⁰ Vertical
7.	Operating and non-operating Temperature	-15 to 55 ⁰ C
8.	No of Color	281 trillion Colors, 256 brightness level dimming capability
9.	Data processing	16-bit data processing, 100 % Digital

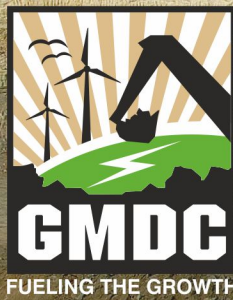
10.	Scan rate and refresh frequency	Scan Ratio 1:1 and with minimum 1920 Hz refresh frequency
11.	LED internal and External Cabinet type , Serviceability	Internal LED frame should be made of Aluminum and External cabinet should be factory made without pin holes, LED Display should be serviceable from front and back.
12.	Color Temperature - Adjustable	4500 - 9000 K range
13.	Input Power Requirement/ Consumption	220 V, 50/60Hz, Power consumption 200 W (maximum) / m ²
14.	Display Board Mounting	Structure based upon location. Uni-Pole (05 meters) arrangement or Handing is in the scope of supplier
15.	General	The system should also have the facility to display the environmental picture through video camera/vcr/cd player etc. for public awareness.
16.	Power Cable Laying	Depending upon location, cabling is to be done by the firm
17.	Device at Display Board to pick up data from stations and transmit it to LED Display.	Display data connectivity device/system with GSM SIM has to be installed nearby LED board which will pick up data from station computer through Internet. LED to be placed away from through Internet. LED to be placed away from the station premises.
18.	Certification	BIS
19.	IP Rating	Display Module IP67, Cabinet IP 65
20.	Design/ Branding	The display board's design as well as its output shall align with GMDC's branding theme/ design. The approval for the design of data display system shall be obtained from GMDC before installation.

15. Additional Information

(A) Protocol for Data Transmission from CAAQM Stations



The protocol for Data transmission should be as per the CPCB guideline. This should comprise of Data format, data mapping, Standard Parameter Naming Protocol and Conversion factors Table provided in CPCB Guideline for CAAQMS dated July 2019.



Gujarat Mineral Development Corporation Ltd.
(A Government of Gujarat Enterprise)

CIN No. : L14100GJ1963SGC001206

Khanij Bhavan, 132 ft. Ring Road, Near Gujarat University Ground, Vastrapur, Ahmedabad- 380052 India