



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

Request for Proposal

For

Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

RFP Reference No:

Date of Issue:

RFP Price: INR 20,000/- (Excluding Taxes)

Issued By:

Member Secretary
Maharashtra Pollution Control Board,
Kalpataru Point, 3rd floor,
Opp. PVR Cinema,
Sion Circle, Sion, Mumbai-400 022
Tel: 022-24087295
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Disclaimer

This Request for Proposal (RFP) for “Selection of Agency for Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra” (hereinafter referred to as “Project”), is issued by Maharashtra Pollution Control Board, GoM (herein referred to as ‘MPCB’).

Whilst the information in this RFP has been prepared in good faith, it is not and does not purport to be comprehensive or to have been independently verified. Neither MPCB, nor any of its officers or employees, nor any of their advisors nor consultants accept any liability or responsibility for the accuracy, reasonableness or completeness of the information contained in the RFP, or for any errors, omissions or misstatements, negligent or otherwise, relating to the proposed RFP for “Project”, or makes any representation or warranty, express or implied, with respect to the information contained in this RFP or on which this RFP is based or with respect to any written or oral information made or to be made available to any of the recipients or their professional advisors and, so far as permitted by law and except in the case of fraudulent misrepresentation by the party concerned, and liability therefore is hereby expressly disclaimed.

The information contained in this RFP is selective and is subject to updating, expansion, revision, and amendment at the sole discretion of MPCB. It does not, and does not purport to, contain all the information that a recipient may require for the purposes for deciding to participate in this process. Each Party must conduct its own analysis of the information contained in this RFP, to correct any inaccuracies therein and is advised to carry out its own investigation into the proposed MPCB Project, the regulatory regime which applies thereto and by and all matters pertinent to the MPCB Project and to seek its own professional advice on the legal, financial, and regulatory consequences of entering into any agreement or arrangement relating to the MPCB Project. MPCB shall not be responsible for any direct or indirect loss or damage arising out of or for use of any content of the RFP in any manner whatsoever.

MPCB shall be the sole and final authority with respect to qualifying a bidder through this RFP. The decision of MPCB in selecting the Service Provider who qualifies through this RFP shall be final and MPCB reserves the right to reject any or all the bids without assigning any reason thereof. MPCB further reserves the right to negotiate with the selected agency to enhance the value through this project and to create a more amicable environment for the smooth execution of the project.

MPCB may terminate the RFP process at any time without assigning any reason and upon such termination MPCB shall not be responsible for any direct or indirect loss or damage arising out of such a termination.

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Section I: Instruction to Bidders

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

Abbreviations

| Abbreviation | Description |
|--------------|--|
| CAAQMS | Continuous Ambient Air Quality Monitoring Stations |
| DSC | Digital Signature Certificate |
| EMD | Earnest Money Deposit |
| EnvCC | Department of Environment and Climate Change |
| GCC | General Contract Conditions |
| GOM | Government of Maharashtra |
| GST | Goods and Services Tax |
| MPCB | Maharashtra Pollution Control Board |
| NDA | Non-Disclosure Agreement |
| PBG | Performance Bank Guarantee |
| PDF | Portable Document Format |
| PKI | Public Key Infrastructure |
| RFP | Request for Proposal |
| SLA | Service Level Agreement |
| SSP | Selected Service Provider |
| TCS | Tax Collected at Source |
| TCV | Total Contract Value |
| TDS | Tax Deducted at Source |
| TEC | Tender Evaluation Committee |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

Definitions

| Term | Definition |
|------------------------------------|--|
| Authority/Owner | Means Maharashtra Pollution Control Board, Government of Maharashtra i.e., the issuer of this tender |
| Bidder(s)/Contractor | Eligible, reputed, qualified entities with strong technical and financial capabilities for scope defined in this RFP |
| Bid/ Proposal | This means the documents in their entirety comprising of the Eligibility Proposal, and Commercial Proposal, clarifications to these, technical presentation/ demo submitted by the Bidder, the Bidder herein, in response to the RFP, and accepted by MPCB |
| Bidder's Representative | The person or the persons appointed by the Bidder from time to time to act on its behalf for overall co-ordination, supervision, and execution of Project |
| Business Day | This means any day that is not a Sunday or a public holiday (as declared by Government of Maharashtra). |
| Contract / Project Period | The time period for completion of the entire project scope of work defined in the RFP |
| Day | A period of 24 hours running from midnight to midnight. It means "calendar day" unless otherwise stated. Where, because of a difference in time zone, the calendar day in one country differs from another country then the calendar day shall be deemed to be the calendar day applicable to India. |
| Deliverables | The equipment, services and other documentation, milestones and activities related to complete the Scope of Work for the Project, as defined in the RFP. |
| EMD/ Bid Security | This refers to the amount to be deposited by the Bidders to MPCB to demonstrate commitment and intention to complete the bid process of this RFP |
| End of Contract | This refers to the time when the Contract Period shall end |
| RFP Portal | The web portal https://mahatenders.gov.in/ that is official portal for all details and submissions related to this RFP process |
| Letter of Intent / Letter of Award | This refers to the letter issued by MPCB to the Successful Bidder indicating its selection as the Bidder for implementation of the Project |
| Project | To provide Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra |
| RFP/ Tender | Refers to Request for Proposal containing the technical, functional, commercial, and operational specification and including all clarifications/addendums, explanations and amendments issued by MPCB in respect thereof |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Term | Definition |
|---|--|
| Successful Bidder | Refers to the bidder who has gone through the selection criteria as mentioned in the RFP and has been selected by the department for the mentioned work |
| Total Contract Value/ Contract Value | Value (Exclusive of all taxes, levies, and duties) finally agreed between MPCB and the Bidder for the delivery of Equipment and Services mentioned in the RFP, which will be the maximum value payable to the Bidder for this Project. |

1. Tender Notice

RFP reference No:

Date:

Maharashtra Pollution Control Board (MPCB), Government of Maharashtra (GoM) invites sealed tenders from reputed experienced professional organizations for **“Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra”**. The prospective firms may download the technical and commercial bid from the e-tendering portal <https://mahatenders.gov.in> and submission of bid may be done as per details provided in RFP.

For complete details & formats of e-tender, the bidders can visit <https://mahatenders.gov.in> Tender Fee payment of **INR 20,000/-** (Excluding Taxes) (Non-Refundable) by payment gateway online /RTGS /NEFT /ECS. No brokers/intermediaries shall be entertained. MPCB reserves the right to reject any/all applications without assigning any reasons whatsoever.

Note:

1. The detailed timetable for the various activities to be performed in e-tendering process by the renderer for quoting their offer is given in this tender document under "TENDER SCHEDULE". Bidder should carefully note down the cut-off dates for carrying out each e-tendering process/activity.
2. Every effort is being made to keep the website up to date and running smoothly 24 x 7 by the service provider. However, MPCB takes no responsibility, and will not be liable for the website being temporarily unavailable due to any technical issue at any point of time. Therefore, bidders are encouraged to submit their proposals and complete the process at least 3 days prior to the deadline. The tenders must follow the timetable of e-tendering process and get their activities of e-tendering process done well in advance to avoid any inconvenience due to unforeseen technical problems, if any.
3. In any event MPCB will not be liable and responsible for any damages or expenses arising from any difficulty, error, imperfection, or inaccuracy with this website, including all associate service, or due to such unavailability of the website or any part thereof or any contents or any associate services.
4. MPCB will not be responsible for any incomplete activity of e-tendering process of the renderer due to technical error / failure of website and it cannot be challenged by way of appeal, arbitration and in the court of law.

2. Invitation for Bids

1. MPCB hereby invites Proposals from reputed, competent, and professional companies, who meet the minimum eligibility criteria as specified in this bidding document for the "Selection of Agency for Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra" as detailed in this RFP document.
2. The complete bidding document shall be published on <https://mahatenders.gov.in> for the purpose of downloading. The downloaded bidding document shall be considered valid for participation in the electronic bidding process (e-Procurement/ e-Tendering) subject to the submission of required tender/ bidding document fee through e-Tendering Online Payment Gateway mode only.
3. To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Class - II) as per Information Technology Act-2000 using which they can digitally sign and encrypt their electronic bids. Bidders can procure the same from any CCA approved certifying agency. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC.
4. Bidders are also advised to refer "Bidders Manual Kit" available in this document or at <https://mahatenders.gov.in> for further details about the e-tendering process.
5. Bidder is advised to study this RFP document carefully before submitting their proposals in response to the RFP Notice. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions, and implications.
6. Note-
 - a. Earnest Money Deposit: - can be paid through Online Payment mode or through Bank Guarantee as per details mentioned in the table given below.
 - b. All eligible/ interested Bidders are required to be enrolled on portal <https://mahatenders.gov.in> before downloading tender documents and participate in e-tender process for this Tender. Bidders are requested to contact the telephone numbers provided on maha-tenders portal in case of any doubts/ information/difficulty regarding online enrolment or e-tendering process.
 - c. Bidders should submit the document related to tender online.
 - d. Tender Fee of INR Rs 20,000/- should be credited in to MPCB fund account by online payment gateway, before submission of tender response otherwise Bidders cannot participate in tender process. Other instructions can be seen in the tender form. All or any one of the tenders may be rejected by competent authority.
 - e. The Electronic tendering system for MPCB will be available on the URL <https://mahatenders.gov.in>.
7. The summary of details regarding this invitation of bids are listed in the table below: -

| Sr. | Items | Description |
|-----|----------------------|---|
| 1 | RFP Reference Number | MPCB/JD(APC)/2023-24 |
| 2 | Name of the Project | Selection of Agency for providing Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in Maharashtra |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sr. | Items | Description |
|-----|---|---|
| 3 | RFP Document Download Start / End Date & Time | Start:1/03/2024@ 11:00 Hrs. End:21/03/2024@ 17:00 Hrs. |
| 4 | Last date to send in requests for clarifications | All the queries should be received on or before 11/03/2024 @ 13:00 Hrs., through email only with subject line as follows: “Queries – Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra” The Pre-Bid queries to be sent to the Email Id: - jdair@mpcb.gov.in |
| 5 | Date and Time pre bid Meeting | 11/03/2024 @ 13.00 hrs. at MPCB HQ/ by Video Conferencing (depending on prevailing situation) |
| 6 | Last date (deadline) for submission of bids | 21/03/2024@ 17:00 Hrs. |
| 7 | Tender Fee to be paid via Online Payment Gateway mode only. | INR 20,000/- (Ten Thousand INR) (Excluding Taxes) |
| 8 | Date Time and Place of opening of Technical Proposals | 26/03/2024 @ 11:30 Hrs. at MPCB HQ, Sion |
| 9 | Date Time and Place of opening of Financial Proposals | To be intimated later |
| 10 | Earnest Money Deposit (EMD) to be paid in form of Online Payment | INR 1,50,00,000 (Rs. One Crore Fifty Lakhs Only) |
| 11 | Performance Bank Guarantee (PBG) from Nationalized Bank | 10% of the contract value valid up to twenty-four (24) months post end of contract. PBG should be only from Nationalized banks. |
| 12 | Last date for signing contract | As intimated in work order of MPCB |
| 13 | Bid Validity Period | 120 days from the date of opening of commercial bid |
| 14 | Contract Period | 5 years from date of signing of contract |
| 15 | Contact Details Dr. V. M. Motghare, JD - APC Maharashtra Pollution Control Board, 3rd Floor, Kalpataru Point, Opp. PVR Cinema, Sion Circle, Sion, Mumbai-400 022 Tel: 022-2401 4701 / 2402 4068 Email ID: jdair@mpcb.gov.in | |

Note: Prospective Bidders may visit MPCB Office for any further information / clarification regarding this RFP on prior appointment during working hours till the date of technical bid submission

2.1 Tender Schedule

Please Note: All bid related activities (Process) like Tender Document Download, Bid Preparation, and Bid Submission will be governed by the time schedule given under Key Dates below:

| Sr. No. | Activity | To be performed by | Start | | Expiry | |
|---------|--------------------------------------|--------------------|-----------------------|-------|------------|-------|
| | | | Date | Time | Date | Time |
| 1 | Release of E-Tender | Department | 01/03/2024 | 11:00 | 21/03/2024 | 17:00 |
| 2 | E-Tender Download | Bidder | 01/03/2024 | 11:00 | 21/03/2024 | 11:30 |
| 3 | Queries from Bidders | Bidders | 01/03/2024 | 11:00 | 11/03/2024 | 11.00 |
| 4 | Pre-bid Meeting | Department | 11/03/2024 | 13:00 | 11/03/2024 | 14:00 |
| 5 | Bid Submission | Bidders | 01/03/2024 | 11:00 | 21/03/2024 | 17:00 |
| 6 | Technical Bid Opening (Envelope - A) | Department | 26/03/2024 | 11:30 | - | |
| 7 | Price Bid Opening (Envelope - B) | Department | To be intimated later | - | - | - |

Presentations from each of the Bidder will be scheduled on 04/03/2024 in the 2nd half at MPCB HQ, Sion. The detailed schedule and agenda for the same will be intimated in due course.

Dates mentioned here, are scheduled dates for Bid Opening Activities. Any changes in dates of opening of technical and commercial bids shall be notified in 'Press Notice / Corrigendum' section on the e-Tendering sub portal of the department before opening of the same.

3. Instructions to Bidders

3.1 Introduction of MPCB

Maharashtra Pollution Control Board (MPCB) is implementing various environmental legislations in the state of Maharashtra, mainly including Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981, Water (Cess) Act, 1977 and some of the provisions under Environmental (Protection) Act, 1986 and the rules framed there under like, Biomedical Waste (M&H) Rules, 1998, Hazardous Waste (M&H) Rules, 2000, Municipal Solid Waste Rules, 2000 etc. MPCB is functioning under the administrative control of Environment Department, Government of Maharashtra

Some of the important functions of MPCB are:

- To plan comprehensive program for the prevention, control or abatement of pollution and secure executions thereof,
- To collect and disseminate information relating to pollution and the prevention, control, or abatement thereof,
- To inspect sewage or trade effluent treatment and disposal facilities, and air pollution control systems and to review plans, specification or any other data relating to the treatment plants, disposal systems and air pollution control systems in connection with the consent granted,
- Supporting and encouraging the developments in the fields of pollution control, waste recycle reuse, eco-friendly practices etc.
- To educate and guide the entrepreneurs in improving environment by suggesting appropriate pollution control technologies and techniques
- Creation of public awareness about the clean and healthy environment and attending the public complaints regarding pollution

3.2 Background

MPCB has various existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located across Maharashtra. The Continuous Ambient Air Quality Monitoring Station (CAAQMS) of Maharashtra Pollution Control Board (MPCB) serves as a critical tool for monitoring and managing air quality across the state. Equipped with advanced sensors, the CAAQMS continuously measures various air pollutants such as particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, and ozone in real-time. This data provides valuable insights into the state of air quality, helping authorities to assess pollution levels, identify sources, and formulate effective strategies for mitigation and regulation. Additionally, the CAAQMS aids in issuing timely alerts and advisories to the public, especially during periods of poor air quality or pollution episodes. Through its comprehensive monitoring capabilities, the CAAQMS plays a crucial role in safeguarding public health, preserving the environment, and promoting sustainable development in Maharashtra.

MPCB therefore wishes to onboard an agency for providing Composite Comprehensive Annual Maintenance Contract: CCAMC (including operation, calibration, routine maintenance, repair, supply of spares and consumables, servicing, calibrated date transmission, replacement of prone to failure/end-of use accessories like UPS, batteries, computers, display units, air conditioners etc. /and replacement of non-performing analysers with new USEPA/TUV/MCERT approved) for these 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS)

3.3 Completeness of Response

1. The response to this RFP should be full and complete in all respects.
2. Failure to furnish all information required by the RFP document or submission of a proposal not substantially responsive to the RFP document in every respect will be at the Bidder's risk and may result in rejection of its Proposal and forfeiture of the EMD.

3.4 Proposal Preparation Costs

1. The bidder shall submit the bid at its cost and MPCB shall not be held responsible for any cost incurred by the bidder.
2. Submission of a bid does not entitle the bidder to claim any cost and rights over MPCB and MPCB shall be at liberty to cancel any or all bids without giving any notice.
3. All materials submitted by the bidder shall be the absolute property of MPCB and no copyright /patent etc. shall be entertained by MPCB.

3.5 Bidder Inquiries

1. Bidder shall E-Mail their queries, as per details in the format as prescribed in the [Clause 8.1 Format for Pre-Bid Queries](#)
2. The response to the queries will be published on <https://mahatenders.gov.in>. No telephonic / queries will be entertained thereafter.
3. This response of MPCB shall become integral part of RFP document. MPCB shall not make any warranty as to the accuracy and completeness of responses.

3.6 Amendment of RFP Document

1. All the amendments made in the document would be published on the e-Tendering Portal and shall be part of RFP.
2. The Bidders are advised to visit the aforementioned websites/portal on regular basis to check for necessary updates. The MPCB also reserves the right to amend the dates mentioned in this RFP.

3.7 Supplementary Information to the RFP

1. If MPCB deems it appropriate to revise any part of this RFP or to issue additional data to clarify an interpretation of provisions of this RFP, it may issue supplements to this RFP.
2. Any such corrigendum shall be deemed to be incorporated by this reference into this RFP.

3.8 MPCB's right to terminate the process

1. MPCB may terminate the RFP process or Project at any point of time and without assigning any reason.
2. MPCB reserves the right to amend/edit/add/delete any clause of this Bid Document.
3. This will be informed to all and will become part of the bid /RFP and information for the same would be published on the e-Tendering portal.

3.9 Earnest Money Deposit (EMD)

1. Bidders are required to submit an Earnest Money deposit (EMD) online for an amount of **INR 1,50,00,000 (Rs. One Crore Fifty Lakhs only)**. Please refer RFP for the payment of the same. Bids of the bidders who have not paid the EMD as stipulated in this RFP, will be rejected by MPCB as non-responsive. No exemptions to this clause will be allowed
2. Unsuccessful Bidders' EMD will be returned within 30 days from the date of finalization of the tender. EMD of successful bidder will be returned only after submission of Performance Bank

Guarantee.

3. No interest will be paid by MPCB on the EMD amount and EMD will be refunded to all Bidders (including the Successful Bidder(s)) without any accrued interest on it.
4. The Bid submitted without EMD or with EMD which does not conform to RFP clauses, mentioned in this document, will be summarily rejected.
5. The EMD may be forfeited:
 - a. If a Bidder withdraws his bid or increases his quoted prices during the period of bid validity or its extended period, if any.
 - b. In case of a Successful Bidder(s) if the Bidder fails to sign the contract in accordance with the terms and conditions.
 - c. If during the bid process, a bidder indulges in any such deliberate act as would jeopardise or unnecessarily delay the process of bid evaluation and finalisation.
 - d. If, during the bid process, any information is found false/fraudulent/mala fide, and then MPCB shall reject the bid and, if necessary, initiate action.
6. The decision of the MPCB regarding forfeiture of the EMD shall be final and binding upon bidders.

3.10 Authentication of Bid

1. Authorized person of the bidder who signs the bid shall obtain the Power of Attorney from the bidder, which shall be submitted with the Bid.
2. All pages of the bid and its annexures, etc. shall be signed and stamped by the person or persons signing the bid.

3.11 Language of Bids

1. This bid should be submitted in English language only.
2. If any supporting documents submitted are in any language other than English, then the translation of the same in English language is to be duly attested by the bidder and submit with the bid, and English translation shall be validated at MPCB's discretion.

3.12 Consortium and Sub-contracting

1. Consortium or joint ventures are not allowed. Furthermore, brokers, dealers and intermediaries are not permitted to submit any Bids on behalf of other entities.
2. Sub-contracting is allowed
 - a. The Bidder shall be permitted to appoint subcontractor so as to meet its obligations under the Contract with the MPCB, with prior intimation to the MPCB, provided they ensure that any person engaged by the selected bidder are not blacklisted by any Government organization or regulatory agencies or Government Undertaking as on date of intimation of the MPCB. Sub-contracting shall be allowed only for the "Supply, Design, Customization, Implementation & Hosting of Web application"
 - b. MPCB shall engage only such sub-contractor who satisfy the eligibility requirement in terms of applicable laws including the guidelines issued vide Order No. F/No.6/18/2019-PPD by Ministry of Finance, Department of Expenditure, Public Procurement Division dated 23 July 2020 and as amended from time to time.
 - c. No sub-contracting for resource deployment or AMC shall be allowed.

3.13 Bid Submission Instructions

1. Complete bidding process will be online (e-Tendering) in Two (02) envelope system. Submission of bids shall be in accordance with the instructions given in the Table below:

| Table: Documents Required | | | |
|---|----------------------|---|--------------------------|
| Sr. No. | Document Type | Documents to be uploaded | Online Submission |
| Tender Fee & EMD and Eligibility Details - Envelope –A | | | |
| 1. | Tender Fee | Online Payment of INR 20,000/- (Excluding Taxes) The payment receipt has to attached | Yes |
| 2. | EMD | Online Payment of INR 1,50,00,000 (INR One Crore Fifty Lakhs Only) | Yes |
| 3. | Technical Proposal | <p>The Pre-Qualification Proposal shall be prepared in accordance with the requirements specified in this RFP</p> <p>Pre-Qualification Proposal shall comprise of following</p> <ol style="list-style-type: none"> Checklist for Pre-Qualification Proposal Pre-Qualification documents Bidder and Bidding Firm Details Scanned and signed stamped copy of RFP and its corrigendum <p>The Technical Proposal shall be prepared in accordance with the requirements specified in this RFP.</p> <p>Separate folders to be created for Pre- Qualification Proposal and Technical Proposal. Technical Qualification proposals of those Bidders who qualify Pre-Qualification criteria shall be opened shall be opened and evaluated.</p> <p>The RFP and all the corrigenda (if any) shall be signed, stamped by authorized representative of the Bidder and submitted as a part of Technical Proposal</p> | Yes |
| Financial Bid– Envelope –B | | | |
| 4. | Financial Proposal | The Financial Proposal shall be prepared in accordance with the requirements specified in this RFP. Commercial Bid and BoQ both excel and PDF format. | Yes |

2. Key Points for bid submission

- MPCB shall not accept delivery of proposal in any manner other than that specified in this RFP. Proposal delivered in any other manner shall be treated as defective, invalid, and rejected. Non-submission of the required documents or submission of the documents in a different format/ content may lead to the rejections of the bid proposal submitted by the bidder.
- The bidder should ensure that all the required documents, as mentioned in this RFP/ bidding document, are submitted along with the bid and in the prescribed format only.
- The prices should be quoted in Indian Rupees only.
- The Bidder is expected to price all the items and services sought in the RFP and proposed

in the technical proposal. The Bid should be comprehensive and inclusive of all the services to be provided by the Bidder as per the scope of his work and must cover the entire Contract Period.

- e. MPCB may seek clarifications from the Bidder on the technical proposal. Any of the clarifications by the Bidder on the technical proposal should not have any commercial implications. The Financial Proposal submitted by the Bidder should be inclusive of all the items in the technical proposal and should incorporate all the clarifications provided by the Bidder on the technical proposal during the evaluation of the technical offer.
- f. Financial Proposal shall not contain any technical information. Similarly, technical proposal with any financial cost related information shall be summarily rejected and the bidder shall be disqualified from the tender process.
- g. It is required that the all the proposals submitted in response to this RFP should be unconditional in all respects, failing which MPCB reserves the right to reject the proposal.
- h. Proposals sent by fax/ post/ courier shall be rejected.
- i. It shall be the sole responsibility of the bidder to ensure that all the documents required for the Eligibility criteria and the Technical Evaluation of the bid are uploaded on the portal well within time and MPCB shall not entertain any re-presentation from any bidder, who fails to upload the requisite documents within the stipulated time and date on account of any technical issues related to low internet connectivity, size of the files to be uploaded etc. Therefore, the bidders are notified that they must read the instructions / information given on the homepage of the e-tender portal and must understand all the nuances of technology in advance.

3.14 Late Proposal

Proposals received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall not be opened in the e-Tendering system.

3.15 Modification and Withdrawal of Proposals

1. No Proposal shall be withdrawn in the interval between the deadline for submission of proposals and the expiration of the validity period specified by MPCB in the RFP.
2. Entire EMD shall be forfeited if any of the Bidders withdraw their proposal during the validity period.

3.16 Non-conforming Proposals

A Proposal may be construed as a non-conforming proposal and ineligible for consideration:

1. If it does not comply with the requirements of this RFP.
2. If the Proposal does not follow the format requested in this RFP or does not appear to address the particular requirements of the MPCB.

3.17 Acknowledgement of Understanding of Terms

By submitting a Proposal, each Bidder shall be deemed to acknowledge that he has carefully read all sections of this RFP, including all forms, schedules, annexure, corrigendum, and addendums (if any) hereto, and has fully informed itself as to all existing conditions and limitations.

3.18 Bid Opening and Evaluation Process

1. Total transparency shall be observed and ensured while opening the Proposals/Bids. All Bids shall be opened in the presence of Bidder's representatives who choose to attend the Bid

opening sessions on the specified date, time, and address.

2. MPCB reserves rights at all times to postpone or cancel a scheduled Bid opening.
3. The Bidder's representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for MPCB, the bids shall be opened at the same time and location on the next working day. In addition to that, if the representative of the Bidder remains absent, MPCB will continue process and open the bids of all bidders.
4. During Bid opening, preliminary scrutiny of the Bid documents shall be made to determine whether they are complete, whether required Bid Security has been furnished, whether the Documents have been properly signed, and whether the bids are generally in order. Bids not conforming to such preliminary requirements shall be prima facie rejected. MPCB has the right to reject the bid after due diligence is done.

3.19 Tender Evaluation Committee

1. MPCB shall form a Tender Evaluation Committee (hereinafter referred to as "TEC") to evaluate the bids.
2. The TEC shall evaluate the responses to the RFP and all supporting documents/ documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.
3. The decision of the TEC in the evaluation of responses to the RFP shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.
4. The TEC may ask for meetings with the bidders to seek clarifications on their proposals. The bidder shall submit requisite supporting documents/ certificates on the credentials. The committee may visit bidder's client site to validate the credentials/ citations claimed by the bidder.
5. The TEC reserves the right to reject any or all proposals entails the basis of any deviations.
6. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.
7. The TEC would submit its decision to the competent authority whose decision would be final and binding upon the bidders.

3.20 Evaluation Process

1. TEC shall review the proposal of the Bidders to determine whether the requirements as mentioned in the RFP are met. Incomplete or partial Proposals are liable for disqualification.
2. Bid Evaluation shall be conducted using Quality Cum Cost Based Selection (QCBS) methodology.
3. In the first stage, tender fees, EMD and pre-qualification proposal along with document checklist shall be opened and evaluated as per the criteria mentioned in the RFP.
4. In the second stage, Technical Qualification proposals of those Bidders who qualify Pre-Qualification criteria shall be opened and evaluated.
5. In the third stage, Financial Proposal of those Bidders, whose all pre-proposals (Prequalification and technical qualification) qualify, shall be opened
6. Bids not meeting the Minimum Eligibility Criteria will be summarily rejected.
7. Bids qualifying through the Minimum Eligibility Criteria will be further evaluated for their objective evaluation based on the Criteria mentioned in the RFP. A cut off for the technical score has been defined. The Technical scoring and evaluation for respective bidders will be worked out as elaborated in the RFP

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8. Financial Proposal of those Bidders who qualify in Eligibility Criteria, shall be opened. All bids shall be opened in the presence of Bidder's representatives who choose to attend the Bid opening sessions on the specified date, time, and address. The Financial / Price Bids, of those bidders who do not achieve the cut off / minimum technical qualification score, will not be opened.
9. Next, Weighted Technical and Price bid scores (only of those bidders who qualify as per the minimum Technical Score) will be added to arrive at a Composite score of each of the bidder. The Bidder with the highest Composite score will be declared as the Successful Bidder, subject to all supporting documentation being in order.
10. Evaluation and award of Contract shall be done as per provisions of Maharashtra State Government Rules and rules defined in this RFP.
11. Please note that TEC may seek inputs from their professional, external experts in the bid evaluation process.

3.21 Minimum Eligibility Criteria-Pre-Qualification Evaluation

Minimum Eligibility Criteria is a set of PASS / FAIL criteria. Not complying to even one of the listed criteria will render a bid to be unresponsive. The Bidders must comply to each of the criteria listed below and should submit sufficient documentary proof as mentioned in the table.

| S. N. | Minimum Eligibility Criteria-Pre-Qualification Criteria | Document to be submitted |
|-------------|--|--|
| PQ 1 | The bidder should be "A Company registered in India under the Companies Act 1956 or 2013 or a partnership firm under the Indian Partnership Act, 1932 or the Limited Liability Partnerships Act, 2008, (as amended from time to time) for last 5 years, engaged for Central Govt/ State Govt/ PSU/ ULBs/Public Sector in India." as on last date of bid submission date. | <ul style="list-style-type: none"> • Copy of Certificate of Incorporation / Partnership deed • Copy of valid PAN Card • Copy of valid GST Certificate with GST Number • Copy of Power of Attorney signed by legally authorized signatories as per Annexure 1 (Section 6.10) |
| PQ 2 | Average Annual Turnover: Minimum Average Annual Turnover (MAAT) for the last three (03) audited financial years (FY2020-FY 2021, 21-22, and FY 2022-23) of the bidder should not be less than INR 50.00 Crores | Copy of Annual Audited Financial Statements, Balance sheet and profit and loss statement, certified by a Chartered Accountant for the preceding Three years [FY2020-21, FY2021-22, FY2022-23] Note: Audited financial statement should match with certificate of chartered accountant Certificate from Statutory Auditor as per the format Annexure 1 (Section 6.3) |
| PQ 3 | Net-worth Criteria: | Duly filled Format for Financial years 2020-2021, 2021-2022 & 2022-2023 |

| S. N. | Minimum Eligibility Criteria-Pre-Qualification Criteria | Document to be submitted |
|-------------|--|---|
| | <p>The bidder should have a positive net worth for each of the last three audited financial years as on last date of bid submission date [FY2020-21, FY2021-22, FY2022-23]</p> <p><u>[Net Worth as defined in Companies Act 1956 / 2013 as amended from time to time.]</u></p> | <p>to be submitted on the letterhead of the Chartered Accountant</p> <p>Net worth Certificate duly certified by Chartered Accountant.</p> <p><u>Certificate from Statutory Auditor as per the format Annexure 1 (Section 6.3)</u></p> |
| PQ 4 | <p>Project Experience:</p> <p>The Bidder should have successfully undertaken Comprehensive Operations & Maintenance Contract (COMC) completed/ongoing “similar works” with any State/Central Govt PCB in India during the last 5 years as on last date of bid submission date for a minimum period of 30 months continuously of which 15 CAAQMS shall be of State Pollution Control Board.</p> <p>One (01) project worth at least INR. 40 Cr. OR Two (02) projects each costing not less than the amount equal to INR. 25 Cr. OR Three (03) projects each costing not less than the amount equal to INR. 20 Cr.</p> <p>Note: “Similar works” means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central Government / State Government /PCB in India.</p> | <p>For government clients: Purchase Order (PO)/ Work Order (WO)/ Letter of Award (LOA) / Contract Agreement And Work completion/Ongoing certificate on letterhead of clients indicating client name, the scope of work, Project start date and date of completion/date of go-live, cost of the project/ LoA price etc.</p> <p><u>Bidder to provide Project Citation as per Annexure 1 (Section 6.7)</u></p> |
| PQ 5 | <p>Certifications:</p> <p>The Bidder of OEM should have valid ISO 9001: 2015 certification/ SA 8000 as on last date of bid submission date</p> | <p>Copy of valid Certificate as of the date of bid submission. and <u>Bidder to provide an undertaking as per annexure 1 (section 6.4)</u></p> |
| PQ 6 | <p>The Bidder should be Manufacturer or Authorized Dealer of the Manufacturer</p> | <p>For Manufacturer: Self Declaration <u>Annexure 1 (Section 6.13.1)</u></p> |

| S. N. | Minimum Eligibility Criteria-Pre-Qualification Criteria | Document to be submitted |
|-------------|--|---|
| | | For Dealers: Manufacturer's Authorization Form (MAF) Annexure 1 (Section 6.13.2) |
| PQ 7 | Manpower Strength The Bidder should have at least 25 Service Engineers experienced in COMS of CAAQMS, with either permanent PF account or professional tax account on bidder's payroll as on bid submission date. | a) Attested copy of the Employee Provident Fund registration letter / certificate. b) Attested copy of the Labour License under the Contract Labour (Regulation & Abolition) Act. c) Attested copy of the Employee State Insurance registration letter / certificate. Bidder should provide above copies duly signed and stamped, in the format given in Annexure 1 (Section 6.11) |
| PQ 8 | Support Capability: The bidder shall have fully functioning office in Maharashtra or shall open office in Maharashtra within 15 days in case of award of contract. | Copy of existing office address proof like lease agreement/electricity bill in the name of the bidder In the absence of an existing office in Maharashtra, the bidder must submit an undertaking to setup office in Maharashtra, on letterhead of firm signed by authorized signatory as per the format provided in the RFP in Annexure 1 (Section 6.9) |
| PQ 9 | Blacklisting criteria: The bidder should not have been debarred by any Government (State / Central) / Semi Government / Corporation / PSU/tendering department in India in last 3 years for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices as specified in Rule 151 of GFR, as on date of bid submission. | Self-certification signed by the Authorized Signatory, on the company letter head as per format provided in this RFP in Annexure 1 (Section 6.8) |

Note: All documents provided by the bidder should be self-certified and valid.

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3.22 Technical Bid Evaluation – Scoring

The Bids qualifying through the Minimum Eligibility/Pre-Qualification Criteria will be graded as per the criteria mentioned in the table below.

| Sr. No. | Criteria | Evaluation Parameters | Max. Marks | Supporting Documents |
|--------------|--|--|------------|---|
| TE 1. | Financial Strength (10 Marks) | | | |
| TE 1.1 | The average annual turnover of for the last three (03) audited financial years as on last date of bid submission date. (F.Y 2020-21, 21-22, 22-23) | <p>Average Annual Turnover (Cr)</p> <p>1) ≥ 50 Cr and < 75 Cr : 06 marks</p> <p>2) ≥ 75 Cr and < 100 Cr : 08 marks</p> <p>3) ≥ 100 Cr: 10 marks</p> | 10 | <p>a) Audited Financial Statements (Balance Sheet and Profit & Loss Statements) from the Statutory Auditor/Chartered Accountant and</p> <p>b) Certificate duly signed by Statutory Auditor of the Bidder for total turnover as per the format Certificate from Statutory Auditor as per the format Annexure 1 (Section 6.3)</p> |
| TE 2. | Relevant Bidder Experience (50 Marks) | | | |
| TE 2.1 | <p>Project Experience:</p> <p>The Bidder should have successfully undertaken Comprehensive Operations & Maintenance Contract (COMC) completed/ongoing “similar works” with any Central / State Govt in India during the last 5 years as on last date of bid submission date.</p> <p>One (01) project worth at least INR. 40 Cr.</p> <p>OR</p> <p>Two (02) projects each costing not less than the amount equal to INR. 25</p> | <p>Project value of single assignment.</p> <p>1) One (01) project worth at least INR. 40 Cr.: 20 marks</p> <p>2) Two (02) projects each costing not less than the amount equal to INR. 25 Cr.: 15 marks</p> <p>3) Three (03) projects each costing not less than the amount equal to INR. 20 Cr.: 10 marks</p> | 20 | <p>a) Work Order/Copy of Agreement and Satisfaction Certificates for on-going projects/ Completion Certificate for completed projects from the Client in case of experience in defined “similar works”.</p> <p>Bidder to provide Project Citation as per Annexure 1 (Section 6.7)</p> |

| Sr. No. | Criteria | Evaluation Parameters | Max. Marks | Supporting Documents |
|---------|---|--|------------|---|
| | Cr. OR Three (03) projects each costing not less than the amount equal to INR. 20 Cr. Note: “Similar works” means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central / State Govt PCB in India. | | | |
| TE 2.2 | Similar Work Project Experience The bidder should have successfully executed “similar works” project for Central Govt/ State Govt in India during last 5 years as on last date of bid submission date. Note: “Similar works” means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central / State Govt in India. | No. of “similar works” projects completed in Central Government / State Government /PCB in India: 1) ≥ 01 and < 02 projects : 05 marks 2) ≥ 02 and < 03 projects : 07 marks 3) ≥ 03 projects: 10 marks | 10 | a) <i>Work Order/Copy of Agreement and Satisfaction Certificates for on-going projects/ Completion Certificate for completed projects from the Client in case of experience in defined “similar works”.</i> Bidder to provide Project Citation as per Annexure 1 (Section 6.7) |
| TE 2.3 | The Bidder should have experience of implementation of Similar Project across 5 locations with separate demarcated physical boundaries in single work in last 5 financial years as on last date of bid submission date. | No. of Projects 1. ≥ 1 and < 2 Projects: 3 marks 2. ≥ 2 Projects: 5marks | 5 | a) <i>Copy of work order along with completion/ continuity certificate from the client.</i> b) <i>Completed Annexure A: Project Experience, for each project.</i> |

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| Sr. No. | Criteria | | Evaluation Parameters | Max. Marks | Supporting Documents |
|--------------|--|---------------|--|------------|--|
| TE 2.4 | <p>Proposed Human Resource / Manpower and experience:</p> <p>The Bidder must have experience of providing manpower services which shall involve the supply of at least 25 manpower deployed in any Central Government / State Government / PCB in India as on last date of bid submission date.</p> <p>Note: “Similar works” means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central / State Govt. PCB in India.</p> | | <p>No. of Manpower deployed:</p> <p>1) 25>= and < 50: 03 marks 2) >=50: 05 marks</p> | 5 | a) Work Order/Copy of Agreement and Satisfaction Certificates for on-going projects/ Completion Certificate for completed projects from the Client in case of experience in defined “similar works”. |
| TE 2.5 | Certifications | | <p><i>The Bidder shall have valid as on last date of bid submission.</i> (5 marks each)</p> <p>i. ISO 9001:2015 ii. SA 8000</p> | 10 | a) Copy of valid certifications as on bid submission date |
| TE 3. | Key Professional Experience (20 Marks) | | | | |
| | Proposed Human Resource / Manpower and experience: | | | 20 | |
| | Resource Type | Resource Qty. | Education & Area of Expertise | | |
| TE 3.1 | Project Manager | 1 | Graduate/ Postgraduate in Environmental Science / Environmental Engineering / Mechanical Engineering / Electrical Engineering / Civil Engineering or PGDM/MBA with a professional experience of minimum 10 years | 2.5 | Detailed CV in World Bank Format duly attested by HR and authorized bid signatory |

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| Sr. No. | Criteria | | Evaluation Parameters | Max. Marks | Supporting Documents |
|--|---|---|--|------------|---|
| TE 3.2 | Regional Service Heads | 2 | Graduate/ Postgraduate in Environmental Science / Environmental Engineering / Mechanical Engineering / Electrical Engineering/ Civil Engineering or PGDM/MBA with aprofessional experience of minimum 6 years (2 marks each) | 4 | |
| TE 3.3 | CAAMQMS O&M Engineer | 15 | Postgraduate / Graduate in Engineering with professional experience in O&Mfor minimum 5 years. (0.5 marks each) | 7.5 | |
| TE 3.4 | Manager: Data Analytics | 2 | Postgraduate / Graduate in Engineering/Data Science with 10 years of relevant experience (1 mark each) | 2 | |
| TE 3.5 | Head: Scientific Coordination | 2 | Postgraduate / Graduate in Engineering/Data Science with 10 years of relevant experience (2 marks each) | 4 | |
| TE 4.0 Technical Presentation (20 Marks) | | | | | |
| TE 4.1 | Presentation by the bidders on their understanding of the business/ functional requirements of MPCBs and proposed solution and implementation approach. | For presentation in below categories: 1. Understanding of the project and the existing environment of CAAQMS stations, Web application integration, requirements & future requirements (04 marks) 2. Approach and Methodology for the Project (e.g., API integration with CPCB, MPCB, development of web application) (04 marks) 3. Project Plan and Proposed Project Management Methodologies for CAMC of 69 CAAQMS stations (04 marks) | | 20 | 1. Presentation delivered by the bidder should depict Bidder's understanding of the business /functional requirements of the MPCB, the proposed solution and implementation approach. 2. Bidder has to provide clear baselines/ timelines, defined resources, roles & responsibilities in MS-Project format in both soft and hard copies along with a write-up project |

| Sr. No. | Criteria | Evaluation Parameters | Max. Marks | Supporting Documents |
|---------|----------|--|------------|----------------------|
| | | 4. Proposed Technical Solution Offering: (Technical solution, Security solution, Risk Mitigation, report management, Alerts & notification, Tools) (04 marks) | | |
| | | 5. Bidder's strategy to manage CAMC of 69 CAAQMS stations and development and Comprehensive O&M of web application. (04 marks) | | |
| | | Total | 100 | |

3.23 Quality cum Cost based Selection Methodology for Evaluation of this RFP

The following methodology and weightages will be used for objective evaluation of each of the bids.

1. Technical Bid Evaluation

Based on the documentation submitted by each of the bids, the bids will be given a score out of Maximum 100. Each responsive Bid will be attributed a technical score denoted by symbol "S(t)". The technical score shall be out of 100 marks maximum.

If in MPCB's opinion, the Technical Bid does not meet the minimum technical specifications & service requirements or is otherwise materially deficient / inconsistent in any other aspect; the Bid shall be declared Technically Evaluated & Non-Responsive and shall not be considered for further evaluation.

After technical evaluation, MPCB will rank the bidders in descending order of their technical scores with the top ranked bidder having the highest technical score. If any bidder is found to be technically inadequate to the requirements of MPCB, i.e., if $S(t) < 70$, then that bidder's bid would be deemed non-responsive for further evaluation and would not be considered further in the bidding process.

If in case, after technical evaluation, only one bidder is found to be responsive & eligible, i.e., if the technical marks of only one bidder are more than or equal to 70, the Board will decide an acceptable price band and open Price Bid of the only eligible bidder. If the price bid of the bidder falls within the price band specified by the Board, the bidder will be declared as the SUCCESSFUL BIDDER.

2. Financial/Commercial Bid Evaluation

The price bids of only technically successful bidders whose technical Bids have been awarded 70 or more marks will be opened.

The evaluation will carry out if Price bids are complete and computationally correct.

Lowest Price bid denoted by symbol “P (m)” will be allotted a Price score of 100 marks. The Price score of all the bidders will be denoted by the symbol “S (p)”. The Price score of other bidders will be computed by measuring the respective weighted Price bids against the lowest bid i.e., P (m)

These Price scores will be computed as: $S(p) = 100 * (P(m) / P(b))$ where P(b) is the weighted Price bid of the bidder whose Price score is being calculated. The Price score shall be out of a maximum of 100 marks.

3. Computation of Composite score

The composite score is a weighted average of the Technical and Price Scores. The weightages of the Technical vis-à-vis the Price score are 0.70 of the technical score and 0.30 of the Price score. The composite score (S) will be derived using following formula:

$$S = (S(t) * 0.70) + (S(p) * 0.30).$$

Thus, the composite score shall be out of a maximum of 100 marks and will be computed up to TWO (2) decimal points.

The responsive bidders will be ranked in descending order according to the composite score as calculated based on the above formula.

The highest-ranking vendor as per the composite score will be selected. However, in order to ensure that MPCB gets best solution in technical terms, MPCB reserves the right to enter into negotiation with bidder having highest technical score and place order with this bidder at a suitable price.

In case the bidder with the highest composite score refuses to accept the price bid/negotiated price bid, then MPCB may negotiate with the next qualified bidder or may call for fresh RFP.

4. Award Criteria

Final choice of MPCB to award this project to a suitable bidder to execute this project shall be made on the basis of composite scoring arrived as per formula mentioned above.

The Bidder having the highest Composite Score will be termed as the Successful Bidder.

In case, two or more bidders have the same composite scores, the Bidder with the highest technical score will be declared as the successful bidder. In case, two or more bidders have the same composite scores & technical scores, MPCB will decide further criteria of evaluation, which will be binding on all bidders to accept without contest.

MPCB reserves the right to negotiate with the Successful Bidders as per CVC guidelines or any equivalent norms. If the negotiation becomes unsuccessful, then MPCB may negotiate with the next qualified bidder or may call for fresh RFP.

3.24 Bid Validity

1. The offer/proposals submitted by the Bidders shall be valid for minimum period of 120 days from the date of opening of the commercial bid.
2. In exceptional circumstances, prior to the expiration of the bid validity period, the department

may request bidders to extend the period of validity of their bids.

3. The request and the responses shall be made in writing. In event of such extension, department shall request Bidder for extension of bid validity and submit new bid security to cover the extended period of validity of their bids.
4. In event of such extension, Bidders shall submit new Bank Guarantee submitted as EMD to cover the extended period of validity of their bids.
5. A bidder may refuse the request without forfeiting its bid security. A bidder granting the request shall not be required or permitted to modify its bid.
6. If the date up to which the bid is to remain valid happens to be a holiday for the department, the bid shall automatically remain valid up to the next working day.

3.25 Price and Information

1. The bidder shall quote for this project as per the requirements of the RFP and in the format mentioned in this RFP.
2. All the prices will be in Indian Rupees.
3. The bidder should quote the fee considering all costs including the costs for insurance for the Contract Period, travel / stay, daily allowance, or any other allowances with respect to their staff deployed for the execution of this project before or after the award of the Contract. The bidders should study the Scope of Work as per RFP, to have understanding of all the associated costs of the project.
4. The prices, once offered, must remain fixed and must not be subject to change for any reason whatsoever within the period of the validity of the proposal and the contract. No revision of the fee shall be made on account of any variations in costs of labour and materials, currency exchange fluctuations with international currency or any other cost component affecting the total cost in fulfilling the obligations under the contract. A proposal submitted with an adjustable price quotation or conditional proposal may be rejected as non-responsive.
5. MPCB does not guarantee that entire quantity/number mentioned in the Commercial Format shall be procured by MPCB. The actual quantity/service count may differ. The payment shall be made for only stations whose CCAMC is sought based on unit cost quoted for the particular item on actual work is undertaken. **MPCB can vary the quantity and/or services of procurement by +/- 10% during** the tenure of the contract and the successful bidder will have to undertake the deliverables at the rates mentioned in the bid.
6. All costs incurred due to delay of any sort, which is attributable to the bidder, shall be borne by the bidder.

3.26 Payment Terms

The following payment terms will be offered to the Successful Bidders upon completing the necessary formalities and rendering deliverables as mentioned in Section 5 (Scope of Work). The payment shall be made under two different heads viz payment for CAMC of 69 stations and Payment for software application development and O&M

Monthly progress/status report must be provided by the successful bidder and the same should be attached with as part of invoice to MPCB for quarterly payment disbursement of CAMC.

Payment for CAMC of 69 stations

- 20% of Contract Value as advance against Advance Bank Guarantee of equivalent amount from nationalized Banks with applicable GST valid for 5 years and corresponding invoice along with applicable GST.

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

- Balance 80% of Contract Value with applicable GST in equal quarterly instalments

Payment for software application development and O&M

| Sr. No. | Deliverables/Key Milestones | Payment Terms |
|---------|---|---|
| 1 | Excluding maintenance and support, payment will be released after successful completion of UAT testing. | 15% of Part B.2 |
| 2 | Excluding maintenance and support, payment will be released after successful pilot rollout. | 15% of Part B.2 |
| 3 | Excluding maintenance and support, payment will be released after successful go live and sign-off of web portal. | 40% of Part B.2 |
| 4 | Excluding maintenance and support, payment will be released after successful completing at the end of 6 months from Successful go live and sign-off of web portal. | 30% of Part B.2 |
| 5 | Comprehensive Maintenance and Support (CAMC) charges will be released at the end of every quarter on satisfactory support. The CAMC period will start after Successful go live and sign-off of software applications. | Total CAMC cost of software will be divided in 4 quarters per year and to be paid at end of every quarter for 5 years |

- The maintenance reports/logs along with action taken should be submitted along with each invoice, all corresponding to the same period. Further, if a faulty part has been replaced for equipment, then the Standard warranty certificate must be attached with the invoice.
- Payments shall be made on quarterly basis on pro rata basis and shall be subject to penalty deductions with applicable GST, if applicable. The penalties applicable are mentioned in this RFP. Further, all payments shall be made subject to deduction of TDS (Tax Deduction at Source) at the rate applicable from time to time as per the Income-Tax Act, 1961 and any other applicable deductions/ taxes.
- All payments will be made vide a crossed cheque payable in Mumbai, within 30 days of submission of invoice, after applicable deductions.
- The decision of the MPCB pertaining to the quality and quantity of works / services performed by the successful bidder will be final and acceptable to the successful bidder besides being binding. It shall be the responsibility of the successful bidder to rectify the deficiencies so pointed out without any extra payment. In the event of default by successful bidder, MPCB reserves the right to get the concerned work / services fixed at its own level at the cost, risk and responsibility of the Service Provider after giving a notice in regard thereto in writing and expenditure so incurred by the Client will be recovered from the invoices of the Service Provider or from PBG, as it may deem fit.

3.27 Penalties / SLAs

Hardware SLAs

| Sr. No. | Service Level Objective | Measurement | Service Level | Penalty |
|---------|--|---|--------------------|--------------------------|
| 1. | 24*7 functioning of hardware items | Uptime calculation = (Uptime (in hours) for month / Total time (in hours) of month) *100 | 100% uptime | INR 1000/day/item |
| 2. | Attending to calls | As a percentage of total calls/month | 100% | INR 1000/instance |
| 3. | Resource Absence for each deployed resource | Total present days/total no of working days | 100% | INR 500/instance |

Software SLAs

| Sr. No. | Service Level Objective | Measurement | Service Level | Penalty |
|----------------------------|--|---|---|---|
| Availability | | | | |
| 1 | Availability / Uptime of services resources for Web application server functioning | Uptime calculation of Web application server ranging due to application issues = (Uptime (in hours) for month / Total time (in hours) of month) *100 | Availability / Uptime of the Web application server >=99.7%. Monitoring shall be on monthly basis. | Availability / Uptime will attract penalty as indicated below. <99.7% (5% of the total quarterly payment) |
| Support Performance | | | | |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sr. No. | Service Level Objective | Measurement | Service Level | Penalty |
|----------------------------------|--|----------------------------------|--|--|
| 2 | Resolution of Level 2 (Minor) Defects: Downloading file related, access & account related, etc. | Number of defects resolved | 95% of the reported Level 2 defects shall be resolved within 2 days * from the time of reporting the issue. | Delay of every subsequent hour will invite penalty of INR 50 for maximum of 48 hours from time of reporting the defect. Post that INR 100 for every subsequent hour's delay. |
| 3 | Resolution of Level 1 (Major) Defects: Database level, Errors over webpage(s), security threats, page not found, etc. | Number of defects resolved | 99% of the reported Level 1 defects shall be resolved within 1 day* from the time of reporting the issue. | Delay of every subsequent hour will invite penalty of INR 100 for maximum of 24 hours from time of reporting the defect. Post that INR 200 for every subsequent hour's delay. |
| Software Application Development | | | | |
| 4 | Software Application Development | As per Project plan and timeline | Complete adherence to project timeline | Delay in project deliverable as per Project timeline (section 5.10) will invite penalty of 0.5% per week of Total cost of Part B (Part B.1+ Part B.2+ Part B.3). Post that additional 0.5% of Total cost of Part B for every subsequent weekly delay. |

*1 Day comprises of 24 hours.

- In case of any critical hardware issue, a grace period of ten (10) continuous non-working days will be given to remedy the defects. The grace period of ten (10) continuous non-working days will be given only once in a quarter (3 Months). Beyond 10 days, non-performing days charges will be deducted proportionately from the bill.
- Failure due to power outage and other Force Majeure conditions shall not be considered for levy of penalty.
- Total penalty per year towards non-performance will be limited to 10% of the CoCAMC charges for the year as per the Contract. However, in case calculated penalty in a year exceeds 40% of the year charges, the Contractor shall be required to replace the defective analyser(s) or systems with new ones at his own cost, failing which the Board shall have the right to terminate the CAMC.

3.28 Signature

1. A representative of the bidder, who is authorized to commit the bidder to contractual obligations, must sign with the bidder's name and seal on all pages of the Bid, including the tender/bid document.
2. All obligations committed by such signatories must be fulfilled.

3.29 Conditions under which RFP is issued

1. This RFP is not an offer and is issued with no commitment. MPCB also reserves the right to disqualify any bidder should it be so necessary at any stage.
2. Timing and sequence of events resulting from this RFP shall ultimately be determined by MPCB.
3. No verbal conversations or agreements with any official, agent, or employee of MPCB shall affect or modify any terms of this RFP and any alleged verbal agreement or arrangement made by a bidder with any agency, official or employee of MPCB shall be superseded by the definitive agreement that results from this RFP process. Verbal communications by MPCB to bidders shall not be considered binding on it, nor shall any written materials provided by any person other than MPCB.
4. Neither the bidder nor any of the bidder's representatives shall have any claims whatsoever against MPCB or any of their respective officials, agents, or employees arising out of or relating to this RFP or these procedures (other than those arising under a definitive service agreement with the bidder in accordance with the terms thereof).
5. Until the Contract is awarded and during the validity of the Contract, bidders shall not, directly, or indirectly, solicit any employee of MPCB to leave the department or any other officials involved in this RFP process in order to accept employment with the bidder, or any person acting in collusion with the bidder, without prior written approval of MPCB.

3.30 Right to the content of Proposal

1. All proposals and accompanying documentation of the Technical Proposal will become the property of MPCB and will not be returned after opening of the Technical Proposals.
2. MPCB is not restricted in its rights, to use or disclose any or all of the information contained in the proposal and can do so without compensation to the bidders.
3. MPCB shall not be bound by any language in the proposal indicating the confidentiality of the proposal, or any other restriction on its use or disclosure.

3.31 Non-Conforming Proposal

A proposal may be construed as a non-conforming proposal and ineligible for consideration if:

1. It does not comply with the requirements of this RFP.
2. It does not follow the format requested in this RFP or does not appear to address the requirements as specified by the directorate.

3.32 Correction of errors

1. The bidder is advised to take adequate care while quoting the rates. No excuse for corrections in the quoted rate will be entertained afterwards.
2. The corrections or overwriting in bid document should be initialled by person signing the Bid form.

3.33 Corrections to Arithmetic errors

1. In case of discrepancies between Commercial Bid calculated by the bidder in numbers and words, the lower of the two will prevail and will be used to determine the Successful bidders as per criteria provided in RFP.
2. Bidders shall accept correction of arithmetical errors. Failure to accept the correction in accordance with the same, shall result in the rejection of the Bid.

3.34 Disqualification

The Bid from the bidders is liable to be disqualified in the following cases:

1. Bid not submitted in accordance with the bid document.
2. Technical Proposal contains details related to cost.
3. The bidder qualifies the bid with its own conditions.
4. During validity of the Bid, or its extended period, if any, the bidder increases his quoted prices.
5. Bid is received in incomplete form and / or received after due date and time.
6. Bid is not accompanied by all requisite supporting documents.
7. Information submitted in technical Bid is found to be misrepresented, incorrect or false, accidentally, unwittingly, or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period if any.
8. Non - fulfilment of any condition / term by bidder.

3.35 Acknowledgement of Understanding

By submitting the proposal, each bidder shall be deemed to acknowledge that he has carefully read all sections of this RFP, including all forms, scope of work, schedules, annexure, corrigendum, and addendums (if any) hereto, and has fully informed itself as to all existing conditions and limitations.

3.36 Site visit by Bidder

1. The bidder may visit the relevant Section(s) / Departments at MPCB at any time to be agreed with MPCB and obtain for itself on his own responsibility all information related to any specific process.
2. The visit may not be used to raise questions or seek clarification on the RFP. All such queries or clarifications must be submitted in writing.
3. The cost of such visits to the site(s) shall be at the bidder's own expense.

3.37 MPCB's Right to accept any Bid and to reject any or All Bids

MPCB reserves the right to accept or reject any Bid, and to annul the bidding process and reject any or all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for MPCB's action.

3.38 Letter of Intent / Letter of Award

1. Prior to the expiration of the period of bid validity, MPCB will notify the Successful Bidder(s) in writing or by fax or email, to be confirmed in writing by letter, that its bid has been accepted.
2. The Letter of Intent will constitute the formation of the contract. Upon the Successful Bidder's furnishing of Performance Bank Guarantee, MPCB will promptly notify each unsuccessful bidder(s).

3.39 Signing of Contract

MPCB shall notify the Successful Bidder that its bid has been accepted. The Successful Bidder shall enter into contract agreement with MPCB within the time frame mentioned in the Letter of acceptance to be issued to the Successful Bidder by MPCB.

3.40 Term of Contract Agreement

1. The term of this Contract shall be a period of the period of 5 years from the date of signing of contract.
2. In case MPCB is not satisfied with the performance of the selected agency, MPCB reserves the right to terminate the contract with such agency.

3.41 Failure to agree with the Terms & Conditions of the RFP / Contract

Failure of the Successful Bidder(s) to agree with the Terms & Conditions of the RFP / Contract shall constitute sufficient grounds for the annulment of the award, in which event MPCB may invite the next best bidder for negotiations or may call for fresh RFP.

3.42 Non-Disclosure Agreement (NDA)

The Successful Bidder(s) must sign the Non- Disclosure Agreement with MPCB. Format [Annexure-5](#) in this RFP.

3.43 Performance Bank Guarantee (PBG)

1. Performance Bank Guarantee is governed for supplies and services as follows:
 - a. The bidder shall carry out the supply and services in conformity with the requirements of the RFP, generally accepted professional and technically accepted norms relevant to such projects and to the satisfaction of MPCB.
 - b. The Earnest Money deposited at the time of bid submission would be given back to the Successful Bidder on payment of Performance Bank Guarantee in the form of a Bank Guarantee.
2. The selected bidder shall deposit the Performance Security as follows:
 - a. The Successful Bidder shall at his own expense, deposit with MPCB, and Performance Bank Guarantee from a Nationalised Bank, of value and validity as defined this tender document.
 - b. The Performance Bank Guarantee should be furnished within 15 Working Days from

the date of issue of Letter of Intent / Award.

- c. The Performance Bank Guarantee may be discharged/returned by MPCB upon being satisfied that there has been due performance of the obligations of the successful bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.
3. MPCB shall also be entitled to make recoveries from the Performance Bank Guarantee on the following grounds:
 - a. Any amount imposed as a fine by MPCB for irregularities Committed by the successful bidder.
 - b. Any amount which MPCB becomes liable to the Government /Third party on behalf of any default of the successful bidder or any of his/her/their agent/ employees or staff.
 - c. Any payment/fine made under the order/judgment of any court/consumer forum or law enforcing agency or any person working on his behalf.
 - d. Any other outstanding amount.
4. Once the amount under this clause is debited, the successful bidder shall reimburse the Performance Bank Guarantee to the extent the amount is debited within 15 days of such debit by MPCB failing which it will be treated as breach of agreement and may lead to termination of agreement with forfeiture of all amounts including interest free Performance Bank Guarantee in favour of MPCB.

3.44 Right to Vary the Scope of Work at the time of Award

1. MPCB reserves its right to make changes to the scope of the work at the time of execution of the resultant Agreement. **MPCB can vary the quantity and/or services of procurement by +/- 10% during the** tenure of the contract and the successful bidder will have to undertake the deliverables at the rates mentioned in the bid.
2. If any such change causes an increase or decrease in the total value of contract, or the time required for the Bidder's performance of any part of the work under the resultant Agreement, whether changed or not changed by the order, it shall be based on the unit prices quoted by the Bidder. Based on the revised scope, payment shall be calculated based on unit prices and MPCB shall be liable to pay only the revised amount, irrespective of the Total Cost mentioned in the Contract.
3. The decision of MPCB shall be final and binding upon the successful bidder.

3.45 Governing Laws

The contract shall be governed by the laws and procedures established by Govt. of India and Government of Maharashtra, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/processing.

4. GENERAL CONDITIONS OF CONTRACT

4.1 Interpretation

- i. Language: All Contract Documents, all correspondence, and communications to be given shall be in English and the Contract shall be construed and interpreted in accordance with that language.
- ii. If any of the Contract Documents, correspondence, or communications are prepared in any language other than English, the translation of such documents, correspondence, or communications shall prevail in matters of interpretation. The originating party, with respect to such documents, correspondence, and communications, shall bear the costs and risks of such translation.
- iii. Headings: The headings and marginal notes in the CC are included for easy reference and shall neither constitute a part of the Contract nor affect its interpretation.
- iv. Persons: Words importing persons or parties shall include firms, corporations, and government entities.
- v. Entire Agreement: The Contract constitutes the entire agreement between the MPCB and Bidder with respect to the subject matter of Contract and supersedes all communications, negotiations, and agreements (whether written or oral) of parties with respect to the subject matter of the Contract made prior to the date of Contract.
- vi. Amendment: No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party to the Contract.
- vii. Severability: If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable such prohibition, invalidity, or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

4.2 Relationship and limited authority

The Bidder shall not have, nor shall he represent himself as having, any authority to commit the Employer to any contract, agreement, or other legal commitments in the name of or binding on the Employer or to pledge or extend credit in the name of the Employer. The Bidder shall perform the scope and services hereunder as an independent Bidder and not as an employee, agent, partner, or joint venture partner of the Employer.

4.3 Obligations of bidder

4.3.1 General

Standard of Performance

The bidder shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisor to the MPCB.

4.3.2 Confidentiality

The Bidder and their Personnel shall not, during the term and within two years after the expiration of this Contract, disclose any proprietary or confidential information

relating to the Project, the services, this contract or the MPCB's business or operations without the prior written consent of the MPCB.

4.3.3 Disclosure

The Bidder shall agree that the MPCB has the right to fully disclose this contract and the identity of the Bidder, if such disclosure is required by legal authority or necessary to satisfy bidder(s) information requests in support of GoM approval process etc.

4.3.4 Indemnity

The successful bidder shall be liable for and indemnify MPCB against and insure and cause any Manufacturers and subcontractors to insure against any expense, liability, loss claim or proceedings in respect of any damage whatsoever to any real or personal property for anyone occurrence in so far as such damage arises out of or in the course of or by reason of the carrying out of the Works and is due to any negligence, omission or default of the Contractor or any person for whom the Contractor is responsible or any Manufacturers and subcontractors or person for whom the Manufacturers and subcontractors are responsible for a minimum value of INR 10 Crores (INR Ten Crores) at any given time. Copy of relevant insurance policy shall be submitted to MPCB after Award of the Contract.

Selected bidder will fill and provide indemnity bond post issuance of LOA/LOI
[Format for Indemnity Bond Annexure 1 Section \(6.12\)](#)

4.3.5 Liability of the Bidder

Subject to additional provision, if any, the Bidder's liability under this contract shall be as provided by the Applicable Law

4.3.6 Bidder's actions requiring owner's prior approval

The Bidder shall obtain the Owner's prior approval in writing before taking any of the following actions:

- i. Appointing or removing any member of the Personnel as are listed in their bid ("Bidder's Key Personnel") who has been assigned for the project exceptions being resignation, termination, or death of the personnel or if the personnel become incapacitated to work. Bidder may assign different personnel as listed in the bid of the same qualification and experience. Further, undertaking from the bidder or the bidder's employee is required regarding the employee who has been removed or left the company shall not during the term and within two years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the services, this contract or the Owner's business or operations without the prior written consent of the Owner.
- ii. Taking up a similar kind of project elsewhere during discharge of duties /obligations under this contract.

4.3.7 Patent Claim

1. In the event of any claim asserted by a third party of infringement of copyright, patent, trademark, or industrial design rights arising from the use of the Goods or any part thereof, the bidder shall expeditiously extinguish such claim.
2. If the Successful Bidder fails to comply and MPCB is required to pay compensation to a third party resulting from such Infringement, the Successful Bidder shall be responsible for

such compensation, including all expenses, court costs, lawyer fees etc.

3. MPCB shall give notice to the Successful Bidder(s) of any such claim and recover it from the bidder.

4.3.8 Reporting Obligations

The Bidder shall submit, to the Owner, the final project report along with the documents in the format as needed by the owner.

4.4 Termination Of the Contract

Termination for MPCB's Convenience: MPCB may at any time terminate the Contract for any reason by giving the Bidder a thirty days (30) notice of termination that refers to this Clause.

Upon receipt of the notice of termination under above Clause, the Bidder shall either as soon as reasonably practical or upon the date specified in the notice of termination cease all further work, except for such work as MPCB may specify in the notice of termination for the sole purpose of protecting that part of the "Selection of Agency for Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra" already executed, or any work required to leave the site in a clean and safe condition. In addition, the Bidder, subject to the payment specified in below Clause, shall deliver to

- i) The Authority the parts of the "Selection of Agency for Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra" executed by the Bidder up to the date of termination.
- ii) The extent legally possible, assign to the Authority all right, title, and benefit of the Bidder to the "Selection of Agency for Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra", as at the date of termination, and, as may be required by MPCB.

In the event of termination of the Contract under above Clause, the Authority shall pay to the Bidder the following amounts:

- a) The Contract Price properly attributable to the parts of the "Selection of Agency for Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra" successfully executed by the Bidder as of the date of termination.
- b) The cost of satisfying all other obligations, commitments, and claims that the Bidder may in good faith have undertaken with third parties in connection with the Contract and that are not covered by above Paragraphs.

Termination for Bidder's Default

- A. MPCB, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination of 30 days and its reasons therefore to the Bidder, referring to this Clause.

- a) If the Bidder becomes bankrupt or insolvent, has a receiving order issued against

- it, compounds with its creditors, or, if the Bidder members are corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation), a receiver is appointed over any part of its undertaking or assets, or if the Bidder takes or suffers any other analogous action in consequence of debt;
- b) If the Bidder assigns or transfers the Contract or any right or interest therein in violation of the provision of Tender Clause (Assignment and subletting).
 - c) If the Bidder, in the judgment of MPCB, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, including but not limited to willful misrepresentation of facts concerning ownership of Intellectual Property Rights in, or proper authorization and/or licenses from the owner to offer, the hardware, software, or materials provided under this Contract.
 - d) If the contractor fails to achieve mutually agreed deadline (as set in mutually agreed Project Execution Plan /Milestone/ Tender), Employer shall issue contract termination notice giving suitable time to contractors. In case, contractor does not improve its performance as per contract termination notice, employer will terminate the contract and encash performance securities.
 - e) If the Tenderer, before contract award, has committed a transgression through a violation of any of the terms or in any other form such as to put his reliability or credibility as Tenderer into question, the principal is entitled to disqualify the tenderer from the tender process or to terminate the contract, if already signed for such reason.
 - f) If the tenderer, after the Contract award has committed a transgression through a violation of any of the terms (Mandatory Clauses) or in any other form such as to put his reliability or credibility as Tenderer into question, the principal is entitled also to exclude the Tenderer / Contractor from future contract process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Tenderer / Contractor and the amount of damage. The exclusion will be imposed for a minimum of 6 months and a maximum of 3 years.

B. If the Bidder:

- a) has abandoned or repudiated the Contract.
- b) has without valid reason failed to commence work promptly or has suspended the progress of Contract performance for more than twenty-eight (28) days.
- c) persistently fails to execute the Contract in accordance with the contract or persistently neglects to carry out its obligations under the Contract without just cause.
- d) refuses or is unable to provide sufficient services, or resources to execute and complete the agreement in the manner specified in the Agreed project scope furnished at rates of progress that give reasonable assurance to the MPCB then, the MPCB may, without prejudice to any other rights it may possess under the Contract, give a notice to the Bidder stating the nature of the default and requiring the Bidder to remedy the same. If the Bidder fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the MPCP may terminate the Contract forthwith by giving a notice of termination to the Bidder that refers to this Clause.

Upon receipt of the notice of termination, the Bidder shall, either immediately or upon such date as is specified in the notice of termination:

- a) cease all further work, except for such work as MPCB may specify in the notice of termination for the sole purpose of protecting that part of the scope already executed or any work required to leave the site in a clean and safe condition.
- b) deliver to MPCB the parts of the facilities executed by the Bidder up to the date of termination. MPCB will not give any payment to the bidder for the equipment supplied and all the equipment supplied will be the property of MPCB in the event of termination due to bidder's default.
- c) To the extent legally possible, assign to MPCB all right, title and benefit of the Bidder to the machine & equipment's as of the date of termination.
- d) Deliver to MPCB all specifications, SOPs, manuals and other documents prepared by the Bidder as at the date of termination in connection with the machine.

4.5 Force Majeure

If at any time during the continuance of the Contract, the performance in whole or in part by either party or any obligations under the Contract shall be prevented or delayed by reason of any war, hostilities, act of public enemy, civil commotion, sabotage, fire, floods, explosions, epidemics, quarantine restrictions and Acts of God (hereinafter referred to as 'Events') and provided notice of the happening of any of the above mentioned Event duly certified by Indian Chamber of Commerce in case of Indian Parties or International Chamber of Commerce, Paris, France in case of foreign parties) is given by either party to the other within fifteen(15) days from the date of occurrence thereof, the EMPLOYER shall have the right by reason of such Event to terminate the Contract without however affecting the right to any claim for damages on the Bidder in respect of such non-performance or delay in performance. However, in the event of the EMPLOYER having agreed, the services under the Contract shall be resumed after such Event has come to end/ceases to exist.

Should one or both the parties be prevented from fulfilling their contractual obligations by a state of force majeure lasting continuously for a period of at least 6 months and the EMPLOYER not having terminated the Contract by that time, the two parties shall consult each other regarding the further implementation of the Contract with the provision that if no mutually satisfactory arrangement is arrived at within a period of 3 months from the expiry of 6 months referred to above, the Contract shall be deemed to have expired at the end of the 3 months referred to above. The above-mentioned expiry of the Contract will imply that both the parties have obligations to reach an agreement regarding the winding up and financial settlement of the Contract.

4.6 Fairness And Good Faith

i. Good Faith

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

ii. Operation of Contract

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

The parties recognize that it is impractical in this contract to provide for every contingency, which may arise during the life of this contract, and the parties hereby agree that it is their intention that this contract shall operate fairly as between them and without detriment to the interest of either of them.

Section II: Scope of Work

5. Scope of Work

Continuous Ambient Air Quality Monitoring Stations (CAAQMS) are essential for the Maharashtra Pollution Control Board (MPCB) to effectively monitor and manage air quality across the state. These stations play a crucial role in collecting real-time data on various air pollutants such as particulate matter (PM), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), and ozone (O₃). The data obtained from these stations helps the MPCB in assessing the level of air pollution, identifying pollution hotspots, and formulating appropriate regulatory measures to mitigate air pollution.

Continuous monitoring is particularly important because it provides a comprehensive understanding of air quality patterns over time, allowing for the detection of trends and deviations from regulatory standards. This real-time data is invaluable for making informed decisions regarding public health, environmental protection, and policy formulation.

However, ensuring the reliability and accuracy of CAAQMS requires regular maintenance and calibration. A comprehensive annual maintenance contract (CAMC) is essential to ensure that the monitoring systems operate optimally throughout the year. The AMC typically includes routine inspections, calibration checks, sensor replacements, software updates, and repairs as needed. By outsourcing the maintenance to qualified professionals, the MPCB wants to ensure that the CAAQMS function effectively and provide accurate data for decision-making purposes.

Moreover, an AMC helps in cost management by providing predictable expenses for maintenance and repairs, thereby avoiding unexpected breakdowns and associated downtime costs. It also ensures compliance with regulatory requirements and quality standards, as regular maintenance is necessary to uphold the accuracy and reliability of air quality data collected by the CAAQMS.

Therefore, Continuous Ambient Air Quality Monitoring Stations are indispensable for the Maharashtra Pollution Control Board to monitor air quality effectively and an annual maintenance contract is crucial to ensure the reliability, accuracy, and compliance of these monitoring systems, thereby supporting informed decision-making and proactive measures to mitigate air pollution in the state. The selected bidder shall provide composite comprehensive annual maintenance contract : CCAMC (including operation, calibration, routine maintenance, , repair, supply of spares and consumables, servicing, calibrated date transmission, replacement of prone to failure/end-of use accessories like ups, batteries, computers, display units, air conditioner etc. and replacement of non-performing analysers with new USEPA/TUV/MCERT approved) for 69 nos. of existing continuous ambient air quality monitoring stations(CAAQMS) located in the state of Maharashtra.

Need for Software Application Development:

The current data-sharing process at MPCB department involves multiple stations utilizing separate software deployed by various agencies. The objective is to streamline this fragmented approach by consolidating data onto a unified server. This entails the integration of existing stations' software into a common server, facilitating centralized access and management. Moreover, this initiative is designed to pave the way for seamless integration of future procured stations through API integration with the web application server. The consolidation aims to enhance efficiency, data coherence, and overall operational effectiveness within the Continuous Ambient Air Quality Monitoring system.

The scope of work involves the meticulous selection of an agency for the supply, commissioning, customization, and implementation of a dedicated Web Application Server for the existing Continuous Ambient Air Quality Monitoring Station (CAAQMS). A critical aspect is ensuring

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seamless API integration between the Web Application and the CAAQMS, underscoring the project's commitment to operational cohesion. Central to this initiative is the overarching goal of elevating the functionality, Scalability and efficiency of the air quality monitoring system. The selected agency is entrusted with delivering a comprehensive solution, encompassing precise attention to technical requirements and seamless compatibility with the current CAAQMS setup.

5.1 Brief Scope of Work

The broad deliverables for the Successful Bidder under this project are mentioned as below:

1. **Equipment Maintenance:** Perform regular maintenance checks on all components of the ambient air quality monitoring stations, including sensors, analysers, data loggers, and communication systems.
2. **Calibration Services:** Conduct periodic calibration of instruments to ensure accurate measurements and compliance with regulatory standards.
3. **Troubleshooting and Repairs/Replacements:** Provide prompt troubleshooting support and carry out necessary repairs/replacements to address any issues or malfunctions promptly.
4. **Software Development & O&M:** Web Application development with dashboards capturing essential KPIs, integration of existing systems
5. **Data Management:** Manage and analyse data collected by the monitoring stations, including real-time monitoring, data storage, retrieval, and reporting.
6. **Training and Support:** Offer training sessions for operators on equipment usage, maintenance procedures, and troubleshooting techniques, along with ongoing technical support
7. Provide on call manpower support and security for Five (05) years

5.2 Detailed Scope of Work

Following is the detailed list of activities / services to be undertaken / provided by the successful bidder.

i. Supply of Replaced spares/equipment at designated Locations

Packaging: The replacement spares/equipment should be delivered at specified offices in new and perfect condition and no damage or repair in transit. Necessary packing, if any, shall be provided by the supplier/tenderer at his own cost.

Conformity to Specifications: The product/parts supplied as replacements should be compatible with the existing equipment and preferable of same brand and make. Such compatibility shall be determined by testing the product/material. The decision of MPCB shall be final and binding in this regard.

In the event the material delivered is found to be not in accordance with the specifications or desired performance, the same will be rejected, and the tenderer will be responsible for replacement of the rejected material free of cost and / or reimbursing the Employer for resultant losses sustained on this account.

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Associated cost: All costs towards delivering of the equipment at each of the sites would be to the Successful Bidder's account and hence the Bidders are required to quote the prices inclusive all such cost heads. Such cost heads can be but not limited to transport, weather-proof packing, transit insurance, Insurance, Registration, local levies, etc.

ii. Supply of Spares

The Successful Bidder will supply and replace spares at respective locations.

iii. Comprehensive Annual Maintenance Contract (CAMC)

The CAMC shall have the following terms and conditions:

Period: The successful Bidder will provide CAMC services for a period of Five (05) year from the date of signing of contract

Shifts and Timing: Successful bidder has to deploy resources 24 x 7 for operation and maintenance activities so that MPCB's system's uptime is maintained.

Emergency Situations: During emergency situation, the Successful Bidder will be required to render services as mentioned in RFP till such time until the situation is normalized. No extra payment will be made to the Successful Bidder on account of such emergency services.

Comprehensive Maintenance Schedule: The Successful Bidder will prepare comprehensive AMC schedule for equipment detailing the Preventive Maintenance Schedule on discussion with the MPCB which shall be strictly complied during the contract period.

Maintenance tools and mechanics: The Successful Bidder will deploy trained and skilled engineers as per project requirement stated in the RFP on site to conduct all maintenance activities. All necessary tools to conduct routine maintenance activities at site will be provisioned for, at respective site defined in RFP.

Preventive maintenance: The Successful Bidder will carry out preventive maintenance basis discussion with the MPCB. The preventive maintenance shall be carried out in a required sequence for which, trained personnel shall be appointed who are fully conversant with operation and maintenance of the systems.

Spares / Accessories / Consumables:

- a) All spares, accessories, filter paper, etc. shall be covered under CAMC.
- b) All the spare parts supplied shall be original and from the same OEM.
- c) Adequate essential parts / spares will be maintained in stock to render satisfactory services without any interruption, throughout the project period
- d) In case any spare part is end of sale / end of support, bidder at its own cost shall replace the part with equivalent or better specs and compatible with the delivered machine

- e) Successful bidder should provide replacement/ warranty and guarantee on all parts/spares.

Replacement of non-performing and non-repairable analyzers:

Bidders shall submit unit price for each analyzer delivered at site along with taxes and duties for non-repairable analysers required to be replaced, valid for entire period of the contract. MPCB will reimburse the cost (price with taxes and duties) to the contractor after successful installation and commissioning: subject to a maximum of 10% of the number of analyzers in each category installed during the entire Contract Period of Five Years.

The cost of new analyzers shall be the differential cost: after deducting the estimated value of non-repairable analyzers as assessed by the Bidder. Non-repairable analysers will be given to the Contractor.

Maintenance and Attendance Logs: The successful Bidder will keep log of Maintenance logs. All such logs should be made available for inspection whenever called for.

Safety and Security: It is the utmost responsibility of the Successful Bidder to ensure adherence to Safety Norms in all aspects of the works especially while the equipment is onsite and while carrying repairs/maintenance activities. Any damage, repair, liability, loss of reputation, both to men and material shall be entirely responsibility of the Bidder. MPCB will not be responsible for any human accident or hazard if occurred to the person of the Successful Bidder while carrying out the work and will indemnify MPCB against any such untoward incidences / accidents.

Reporting: The Successful Bidder shall submit the computerized summary of the details of CAMC every month to the Nodal Officer. Other review and reporting parameters and frequency will be mutually decided between MPCB and the Successful Bidder and will be adhered to by the Successful Bidder.

All Inclusive CAMC: The Bidders should carefully read the CAMC scope mentioned above and quote a price inclusive of all such and other incidental costs as may be envisaged. No extra charges, other than those quoted for CAMC will be paid to the Successful Bidder.

Warranty and On-site: The warranty will be provided on comprehensive basis. The repairs will be done on site. In case of major repairs, where the equipment needs to be carried off-site to the Service Centre, the Successful Bidder will provide stand-by equipment of similar capacity and capability.

iv. Scope Of Services of Software Application Development:

- a) **Development of software application:** The selected bidder has to develop a web application integrating the existing stand-alone software applications.
- b) **Data Acquisition and Integration:** The software must be capable of collecting real-time data from a network of sensors deployed across different geographical locations. It should support integration with various types of sensors measuring parameters such as particulate matter, and meteorological variables
- c) **Data Quality Assurance:** Ensuring data accuracy and reliability is critical. The software

should include algorithms and protocols for data validation, calibration, and quality control to identify and rectify anomalies or sensor malfunctions.

- d) **Real-time Monitoring and Visualization:** The system should provide real-time monitoring of air quality parameters through intuitive dashboards and graphical interfaces. Users should be able to visualize data trends, pollutant concentrations, and air quality indices for different locations on a map or in tabular form.
- e) **Alerting and Notifications:** The software should support customizable alerting mechanisms based on predefined thresholds for pollutant concentrations. It should notify relevant stakeholders via email or push notifications in case of exceedances or deteriorating air quality conditions, enabling timely action and response.
- f) **Historical Data Analysis:** In addition to real-time monitoring, the application should offer tools for analyzing historical data trends over different time scales (hours, days, months, years). This shall help in identifying seasonal patterns, long-term trends, and potential sources of pollution.
- g) **Data Management and Archiving:** The system should have robust data management capabilities, including data storage, archival, and retrieval. It should comply with data privacy regulations and standards to ensure the security and confidentiality of sensitive environmental data.
- h) **Predictive Modelling and Forecasting:** Advanced features like predictive modeling and forecasting can enhance the system's capabilities by providing insights into future air quality trends and potential scenarios. Machine learning algorithms can be employed to develop predictive models based on historical data and meteorological forecasts.
- i) **Integration with Decision Support Systems:** Seamless integration with decision support systems to enables MPCB to make informed decisions and formulate evidence-based policies for air quality management and pollution control measures.
- j) **Scalability and Flexibility:** The software architecture should be scalable and flexible to accommodate future expansions, upgrades, and integration with emerging technologies. It should support interoperability with other environmental monitoring systems and standards to facilitate data exchange and collaboration.
- k) **User Training and Support:** Comprehensive user training, technical support, and documentation are essential for ensuring effective utilization of the software by stakeholders of MPCB

v. **Data Management and Quality Checks**

Data shall be collected and validated according to USEPA standards/ National Ambient Air Quality Standards using the methodologies included in 40 Code of Federal Regulations. All analyzers shall have current US EPA reference or equivalent method designation and shall be of the latest design.

Successful bidder shall submit a Standard Operating Procedure for the air quality monitoring station to the Board before award of contract. This Standard Operating Procedure shall be approved by the Board prior to award.

The Standard Operating Procedure shall contain the following:

- a) Operating procedures for all analyzers and meteorological sensors Calibration procedures

- b) Calibration schedule
- c) Maintenance procedures
- d) Maintenance schedule
- e) Data validation procedures
- f) Data reporting as per attachment X1 to X5
- g) Data obtained from these calibration checks and copies of associated
- h) Quality Assurance and calibration documentation shall be submitted to the Board along with the Air Quality Data.

Upon 3 days' notice from the Board once per year, Successful Bidder shall agree to submit to an audit of calibrations, conducted, using preapproved US EPA methodologies, by a third party. Third party audit may be arranged by the Owner (MPCB) by the agency decided by them, at their cost and bidder shall provide all necessary facilities to carryout required audit. The results of these audits shall be made immediately available to both the Seller and Buyer.

vi. Compliances

1. The Bidder's cloud service offerings shall always remain Empanelled / complied with the MEITY guidelines & standards.
2. The Bidder's shall be responsible for the costs associated with implementing, assessing, documenting and maintaining such Empanelment/Compliances.
3. The Bidder's shall always remain adhered to the prevailing guidelines issued by NCIIPC (National Critical Information Infrastructure Protection Center), RBI, CERT-In, MoP (Ministry of Power), MeitY and any further guidelines issued by Directorate of Information Technology (Government of Maharashtra) etc. from time to time.

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.
- d) Calibration databases need to be formed, stored and transmitted to central.
- 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. General Guidelines for manpower

Working Hours: The site for CAAQMS operation should be manned by the at least one Instrumentation/Software Engineer at each site (refer 5.4 Station locations) of the Successful Bidder. In addition, the Successful Bidder would arrange for a security of the site and equipment's through appointment for security agency (providing at-least

one security guards) throughout the day and Night, if applicable.

Insurance: Successful Bidder would bear the cost of insuring the equipment (Comprehensive) and facilities against any theft, fire and other applicable provisions during tenure of contract period including O&M with a copy to MPCB of an appropriate amount. Board shall reimburse the same to the successful bidder on submission documentary proof. However, insurance during commissioning shall be borne by the bidder.

5.3 Technical Requirements

- Be able to operate in Windows or UNIX or LINUX operating system.
- Support fail-over and load balancing to facilitate future scalability.
- Support all industry standard web browsers latest versions (e.g., Internet Explorer, Mozilla, Chrome etc.)
- Support industry standards communication protocol and data formats latest versions such as HTTP, HTTPS, SSL, XML and HTML for query and retrieval purposes.
- The pages should be printer friendly i.e., all the pages shall be displayed and printed upon demand by user
- The website shall be accessible through mobile and other handheld devices like iPad; tablets etc. and the pages shall adjust suitably as per the device without having to transcode for specific devices.
- To run independent of IP Address
- To be IPv6 compliant
- Should support web services APIs, BLOB Storage, custom code solutions, REST, WSRP
- Email gateway Integration
- Should integrate with any other website products through open standards such as HTML, XML, RSS, web services, and WSRP
- To have the flexibility to be linked to any existing/ future applications

5.4 Station Locations

Locations Details with Details of Analysers/Other Equipment

| Sl.No. | Municipal Corporations | Location of Station | Region | Area wise (Residential / Commercial / Industrial / traffic dominant area) | Qty |
|--------|--------------------------------|--------------------------|----------|---|-----|
| 1 | Akola Municipal Corporation | Akola | Akola | Residential | 1 |
| 2 | Amravati Municipal Corporation | Amravati Shivaji College | Amravati | Residential | 1 |
| 3 | Amravati Municipal Corporation | Amravati MPCB Premises | Amravati | Residential | 1 |

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| Sl.No. | Municipal Corporations | Location of Station | Region | Area wise (Residential / Commercial / Industrial / traffic dominant area) | Qty |
|--------|---|----------------------------|------------|---|-----|
| 4 | Aurangabad Municipal Corporation | Aurangabad Devgiri College | Aurangabad | Commercial | 1 |
| 5 | Aurangabad Municipal Corporation | Aurangabad MPCB Bhavan | Aurangabad | Commercial | 1 |
| 6 | Jalna Municipal Corporation | Jalna | Jalna | commercial | 1 |
| 7 | Latur Municipal Corporation | Latur | Latur | Commercial | 1 |
| 8 | Nanded-Waghala Municipal Corporation (NWCMC). | Nanded | Nanded | Residential | 1 |
| 9 | Parbhani City Municipal Corporation | Parbhani | Parbhani | Commercial | 1 |
| 10 | Aurangabad Municipal Corporation | Aurangabad Walunj | Aurangabad | Industrial | 1 |
| 11 | Chandrapur Municipal Corporation | Chandrapur Old MIDC | Chandrapur | Industrial | 1 |
| 12 | Kulgaon Badlapur Municipal Council | Badlapur | MMR | Residential | 1 |
| 13 | Bhiwandi-Nizampur Municipal Corporation. | Bhiwandi | MMR | Residential | 1 |
| 14 | ULHASNAGAR MUNICIPAL CORPORATION | Ulhasnagar | MMR | Traffic Dominant Area | 1 |
| 15 | KDMC | Dombivali Pimpleshwar | MMR | Industrial | 1 |

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| Sl.No. | Municipal Corporations | Location of Station | Region | Area wise (Residential / Commercial / Industrial / traffic dominant area) | Qty |
|--------|----------------------------------|-----------------------------|----------------------|---|-----|
| 16 | Kolhapur Municipal Corporation | Kolhapur Shivaji University | Kolhapur | Commercial/Traffic dominant area | 1 |
| 17 | Kolhapur Municipal Corporation | Sinchan Bahwan Kolhapur | Kolhapur | Commercial/Traffic dominant area | 1 |
| 18 | MCGM | Bandra | Greater Mumbai (MMR) | Commercial | 1 |
| 19 | MCGM | BKC | Greater Mumbai (MMR) | Commercial | 1 |
| 20 | MCGM | Chembur | Greater Mumbai (MMR) | Residential | 1 |
| 21 | MCGM | Malad | Greater Mumbai (MMR) | Commercial/Traffic dominant area | 1 |
| 22 | Nagpur Municipal Corporation | Nagpur Town hall | Nagpur | Traffic Dominant Area | 1 |
| 23 | Nagpur Municipal Corporation | Nagpur VINIT | Nagpur | Commercial | 1 |
| 24 | Nagpur Municipal Corporation | Nagpur LIT | Nagpur | Residential | 1 |
| 25 | Nagpur Municipal Corporation | Nagpur civil lines | Nagpur | Commercial | 1 |
| 26 | Ahmednagar Municipal Corporation | Ahmednagar | Ahmednagar | Commercial/Traffic dominant area | 1 |
| 27 | Nashik municipal Corporation | AIMA Ambad Nashik | Nashik | Industrial | 1 |
| 28 | Dhule municipal Corporation | Dhule | Nashik | Traffic Dominant Area | 1 |
| 29 | Nashik municipal Corporation | Guru Gobind Singh Nashik | Nashik | Commercial | 1 |

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| Sl.No. | Municipal Corporations | Location of Station | Region | Area wise (Residential / Commercial / Industrial / traffic dominant area) | Qty |
|--------|--------------------------------|-------------------------|---------|---|-----|
| 30 | Jalgaon Municipal Corporation | Jalgaon | Jalgaon | Residential | 1 |
| 31 | Malegaon municipal Corporation | Malegaon | Nashik | Traffic Dominant Area | 1 |
| 32 | Nashik municipal Corporation | Nashik Panchavati | Nashik | Traffic Dominant Area | 1 |
| 33 | Nashik municipal Corporation | Nashik KTHM | Nashik | Industrial | 1 |
| 34 | NMMC | Belapur | MMR | Traffic Dominant Area | 1 |
| 35 | NMMC | Koprigaon Vashi | MMR | Commercial | 1 |
| 36 | NMMC | Sanpada | MMR | Residential | 1 |
| 37 | Panvel Municipal Corporation | Taloja | MMR | Industrial | 1 |
| 38 | PCMC | Jagtap Dairy Pune | Pimpri | Traffic Dominant Area | 1 |
| 39 | PCMC | Dange Chowk Pune | Pimpri | Traffic Dominant Area | 1 |
| 40 | Solapur Municipal Corporation | Solapur Jule Chowk | Solapur | Commercial | 1 |
| 41 | Pune Municipal Corporation | Katraj Dairy | Pune | Traffic Dominant Area | 1 |
| 42 | PCMC | Pune Pimpri Rose Garden | Pimpri | Traffic Dominant Area | 1 |
| 43 | Pune Municipal Corporation | Pune University | Pune | Commercial | 1 |
| 44 | Sangali Municipal Corporation | Sangali | Sangali | Commercial | 1 |
| 45 | Solapur Municipal Corporation | Solapur Saat Rasta | Solapur | Commercial/Traffic dominant area | 1 |
| 46 | Panvel Municipal Corporation | Kalamboli | MMR | Commercial/Traffic dominant area | 1 |

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| Sl.No. | Municipal Corporations | Location of Station | Region | Area wise (Residential / Commercial / Industrial / traffic dominant area) | Qty |
|--------|---|---------------------|----------------------|---|-----|
| 47 | Mahad Municipal Council | Mahad | Mahad | Industrial | 1 |
| 48 | Mira-Bhayandar Municipal Corporation (MBMC) | Mira Bhayander | MMR | Traffic Dominant Area | 1 |
| 49 | TMC | Tarapur | MMR | Industrial | 1 |
| 50 | TMC | Thane CTP | MMR | Residential | 1 |
| 51 | TMC | Thane Upvan | MMR | Residential | 1 |
| 52 | Vasai-Virar City Municipal Corporation | Virar | MMR | Traffic Dominant Area | 1 |
| 53 | MCGM | Colaba | Greater Mumbai (MMR) | Residential | 1 |
| 54 | MCGM | Worli | Greater Mumbai (MMR) | Traffic Dominant Area | 1 |
| 55 | MCGM | Sion | Greater Mumbai (MMR) | Traffic Dominant Area | 1 |
| 56 | MCGM | Ville Parle | Greater Mumbai (MMR) | Commercial | 1 |
| 57 | MCGM | IIT Powai | Greater Mumbai (MMR) | Residential (Inside IIT Powai Campus) | 1 |
| 58 | MCGM | Borivali | Greater Mumbai (MMR) | Residential (Inside Sanjay Gandhi National Park) | 1 |
| 59 | MCGM | Kandivali | Greater Mumbai (MMR) | Industrial | 1 |
| 60 | MCGM | Mulund | Greater Mumbai (MMR) | Industrial | 1 |

| Sl.No. | Municipal Corporations | Location of Station | Region | Area wise (Residential / Commercial / Industrial / traffic dominant area) | Qty |
|--------|--|-------------------------|----------------------|---|-----|
| 61 | MCGM | Kurla | Greater Mumbai (MMR) | Commercial | 1 |
| 62 | MCGM | Airport | Greater Mumbai (MMR) | Commercial | 1 |
| 63 | NMMC | Nerul | MMR | Industrial | 1 |
| 64 | NMMC | Mahape | MMR | Traffic Dominant Area | 1 |
| 65 | Vasai-Virar City Municipal Corporation | Vasai | MMR | Traffic Dominant Area | 1 |
| 66 | KDMC | Kalyan | MMR | Traffic Dominant Area | 1 |
| 67 | Pune Municipal Corporation | Pune | Pune | Commercial | 1 |
| 68 | Solapur Municipal Corporation | Solapur | Solapur | Commercial | 1 |
| 69 | Chandrapur Municipal Corporation | Chandrapur Udyog Bhawan | Chandrapur | Industrial | 1 |

5.5 MPCB Responsibilities

As the Project Sponsor, Maharashtra Pollution Control Board will have following responsibilities towards the project

1. Appointing Nodal Officer/s for coordinating all the activities with the Successful Bidder and / or external agencies, as the case may be
2. Provide required approvals for various works
3. Review the work done by the successful bidder
4. Make arrangements for electricity, lease-line, Broadband/ telephone connection at the site.
5. Validation of services and processing of invoice

5.6 Selected Bidder's Responsibilities

1. Operation and Maintenance of all the commissioned equipment's and amenities as handed over by the Board under the Contract including services during forced and planned outages and overhauls.

2. The selected bidder shall take over the Continuous Ambient Air Quality Monitoring Stations (including all equipment's) As is Where is and as is What is Basis for O&M after execution of indemnity bond as per bid document and after submitting Security Deposit/Bank Guarantee.
3. The selected bidder shall provide to the Board a monthly summary of all operation and Maintenance activities performed by the contractor during each month.
4. The selected bidder shall provide daily data i.e. min, max and average values of Ozone, SO₂, NO, NO₂, NO_x, CO, VOCs (benzene, Ethyl benzene, O-Xylene, M-P-Xylene, Toluene) and RSPM (2.5), PM₁₀ and Meteorological parameters (Temperature, Rh, VWS, WS, WD, Solar radiation, ATmp) pertaining to the station should be connected to respective Regional Office, Head Office of MPCB as well as CPCB, Delhi at free of cost.
5. The selected bidder shall ensure that the CAAQM station is in operation for a minimum of 85% of the days in a year and should not be inoperable for more than 5 days at a stretch.
6. During the CAMC period of five years the firm should undertake free maintenance and repair service of the entire CAAQM stations (Analysers, Weather Instruments UPS, data logger and data acquisition system, Display System...etc) including supply of all operational spares, and consumables at single point responsibility for the trouble-free running of the stations for a total period of five years from the date of starting of the operation and Maintenance contract.
7. The selected bidder shall ensure periodic re-calibration of all the equipment as required and maintain the Protocol for Calibration as per MPCB/CPCB Guidelines.
8. The maximum response time for maintenance complaint from any of the Station specified in the schedule of requirements (i.e., time required for supplies, maintenance engineers to report to the site after a request call/mail/fax is made or letter is written) shall not exceed Three working days.
9. During CAMC period, the Contractor would also depute their Well-Trained Experts i.e. Engineers (24 X 7) to each site to attend to the maintenance and servicing of the CAAQMS to ensure quality assurance/ control over the data generated etc. and for checking and for preventive maintenance of the equipment. The contractor shall provide well-trained security guard (24 X 7) at each site to protect the CAAQMS shelter, analysers & Display Board. The CAMC may be on regular basis to ensure at least 90% up time of the equipment. In case an item is not usable beyond the stipulated maximum down time the firm will be required to arrange for an immediate replacement of the same till it is repaired. Failures will attract penalty and the amount of penalty will be recovered from outstanding payment of Composite Comprehensive Annual Maintenance period as the case may be. If an installed analyser is beyond repair, the analyser shall be replaced with a new analyser meeting the specifications conforming to USEPA/TUV/MCERT approved guidelines.
10. Down time due to defect occurring after 22 hours (10:00 PM) will be considered as commenced from 8:00 AM of next day. However, in the interest of the continuous operation of the system, the selected bidder should rectify faults after normal working hours or on even holidays.

11. Down time of the station due to following reasons is not attributable to Contractor:

- a. Work arising due to damages to the equipment due to fire, accident, breakage and damage due to pests, flood etc. Under Force Majeure and relocation of the station. For such repairs Firm will charge extra for repairs and spares, which will be estimated separately.
- b. Non availability of stabilized power supply due to shut down or failure of the Grid and for the reasons attributable under Force Majeure. (These are in MPCB's Scope).

12. **Operation and Maintenance Obligations:** In implementing its obligations to operate and maintain the Facility under this Contract, the Contractor shall:

- a. Undertake comprehensive maintenance including i.e., schedule and breakdown maintenance & repair at site and keep Board Informed regarding status of equipment and forward daily data as per format specified in the RFP
- b. Obtain permission from MPCB, if any and inform the OEM for any assistance for which equipment is required to be sent to OEM's works for repairing. Contractor shall arrange substitute equipment(s) to keep CAAQM station operational.
- c. Take reasonable action to assure that the Personnel deployed at Continuous Air Monitoring Station are provided with necessary infrastructure and tools and tackles.
- d. Keep the Air Monitoring Stations clean, well maintained and in good working condition.
- e. Security: It is the duty of the Contractor to secure the movable, immovable and other properties of the MPCB at the Air Monitoring Station. The Contractor shall indemnify the loss caused to the property of the Owner.
- f. Scheduled Maintenance: Unless MPCB and Contractor mutually agree otherwise, the later shall perform all required Scheduled Maintenance for all equipment, auxiliaries etc., in accordance with the generally accepted practices.
- g. Unscheduled Maintenance: Perform all Unscheduled Maintenances and repairs for all equipment, auxiliaries etc. within 2 working days of the occurrence of the event. The contractor shall provide the Owner with detailed written information on nature of the repair or replacement to be carried out, estimated down time and other necessary details as required.
- h. The Contractor shall source all spares required for maintenance & repairs of the installed equipment from OEM of the equipment or OEM of the parts.

13. The Contractor shall not: Make any modifications as to the Air Monitoring Stations, other than in an Emergency, without the prior written approval of MPCB, or Dispose of any assets, settle lawsuits or engage in transactions relating thereto on the Owner's behalf without the prior written approval of MPCB.
14. The Contractor shall purchase spare parts, materials, supplies and other consumable items, and maintain an inventory thereof, for the Air Monitoring Station. All such inventories shall be the property of the MPCB.
15. The Contractor shall review all applicable Laws and initiate and maintain such precautions, procedures and operating plans relating to operation of the Air Monitoring Stations as are necessary to comply therewith or assist the Owner in complying therewith as the case may be.

16. The Contractor shall operate the equipment as per the laid-out standards in the operating manual of the equipment and provide data for ambient air to MPCB on daily basis in the suggested format.
17. Establish and maintain a daily and monthly reporting system to provide storage and ready retrieval of operation and maintenance data including such information necessary to verify calculations. The monthly reporting shall contain variances from targets. And provide access to the Owner to the Air Monitoring Stations and its data at all reasonable times.
18. The Contractor shall ensure accuracy of the data provided as per standards.
19. The contractor shall ensure periodic re-calibration of all the equipment as per instructions and maintain —Protocol of Manual Calibration as per CPCB guidelines.
20. Submit status of Equipments every month including details of spares replaced and calibration details. Backup data shall be maintained and submitted in hard copy/ in every quarter. The data captured rate should be as follows:

Table: Data Display & Supply Frequencies and requirement

| Description of Data Submission | | | | |
|---|-----------|---|--|--|
| Data Supply | Daily | Data hourly average values of 15 min for all Gaseous pollutants & Meteorological data and hourly for PM | 90% or above Daily data (between 6 am to 6 pm or as agreed Upon time Duration | Submission of daily data after logical checks (Through software) in the form of soft and hard copy |
| | Weekly | Report for all pollutants & meteorological data | 90% or above weekly data | Submission of data On monthly basis (Soft & hard copy) |
| | Monthly | Report for all pollutants & meteorological data | 85% or above monthly data | Submission of data on monthly basis (Soft & hard copy) |
| | Quarterly | Report for all pollutants & meteorological data | 80% or above Quarterly data | Submission of data on Quarterly basis (Soft & hard copy) |
| | Annually | Report for all pollutants & meteorological data | 75% or above annual data | Submission of data on annual basis (soft & hard copy) |
| 90% of Data will be treated for 100% payment and less than that will be on pro-rata basis. At penalties shall be applied (refer penalties clause) | | | | |

21. The contractor shall bear monthly charges for both electricity, Lease Line & Broadband/Telephone bills.

22. The contractor shall be responsible for appropriate insurance coverage with respect to Medical, Travel, Accident of the Station Operator and third-party liability.
23. The Contractor shall use the equipment exclusively for the performance/ execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment's shall be utilized for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purposes including legal / penal consequences.
24. MPCB is and shall remain the exclusive Owner of the Equipment's free from all encumbrances, charges or liens of any kind, whatsoever. The equipment's shall at all times be open to inspection and checking by Engineer in-Charge/ MPCB shall always be free at all time to take possession of the equipment's in whatever form the equipment's may be, if in its opinion, the equipment's are likely to be endangered, misutilized or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds itself and undertakes to comply with the direction or demand of MPCB to return the equipment's without any demur or reservation.
25. Relocation of Station: During contract period, if Board intend to shift CAAQM station from one location of the city to another location, due to some reason; functional or otherwise, the contractor shall shift the CAAQM station for which cost of shifting including dismantling, loading and Transportation, reinstallation at new location and construction of foundation including cost of arranging insurance will be made by the Board at a mutual agreed cost.

5.7 Data Reporting

The Data should be provided in the format provided by MPCB, as appended in Annexure 6. The Data's provided in the tender is the property of the MPCB; hence Bidder is not allowed to submit or share this data with any other and shall take all necessary steps to maintain confidentiality of the data, failing which MPCB may take legal action under the prevailing laws.

5.8 Training

- The agency shall provide the following training:
- A detailed technical as well as functional demonstration to the MPCB team at various levels to central office.
- A user manual should be provided in editable format (MS Word) as well as a colored hard-bound copy with clear pictures showing website layouts for content managers.
- The bidder shall provide Web application training and handholding to new users or refresher training to old users.
- Training material/kits to be used in trainings should be arranged by the bidder during training provision.
- Training delivery will be conducted at offices/sites as per the convenience of MPCB. This will happen in logically made groups of attendees and will be finalized by the agency in consultation with the MPCB.
- All the cost for all training (above stated and future trainings) will be borne by bidder only.

5.9 Hosting

Web Application hosting shall be done on cloud. The bidder shall provide details for computing, storage, security, network infrastructure based on scope of work defined and should explain the same to MPCB department officials. The vendor shall procure the Cloud through government empaneled CSPs/MSPs as per DIT GR. All the data on the cloud shall be owned by MPCB. All the data created/captured under this project shall also be the property of the MPCB. The Bidder shall be responsible for end-to-end implementation and shall quote and provide/supply any items not included in the bill of material but required for commissioning of the website/application and the network and meet the requirements of the RFP/Contract. MPCB shall not pay for any of the equipment not quoted in the bid but are required for successful completion of the project. However, the same must be supplied by the Bidder without any additional fees.

5.10 Project Period & Deliverables

Broad phases of Project along with their respective timelines are mentioned herewith. The successful Bidders have to comply with these timelines. Failure to adhere to the timelines will attract penalties.

| Sr. No. | Project Description | Deliverables | Project Timelines |
|---------|---|---|-------------------|
| 1. | Date of Signing of Contract | - | T |
| 2. | CAMC for 69 Nos. of existing (CAAQMS) Period | Daily/ Monthly/Quarterly Status Reports as mentioned in RFP or as instructed by MPCB from time to time | T+0 |
| 3. | Project Initiation and Solution Design | <ul style="list-style-type: none"> ▪ Capturing the requirements of the project for the development/ of new web-based application server for MPCB, System Requirement Study, SRS and Solution Design & Analysis. ▪ Documentation- Preparation of SRS, FRS and all other supporting Design Documents, training plan etc. ▪ Preparation of cloud requirements for server hosting. | T+3 weeks |
| 4. | Development and API integration, Implementation of the Server at MPCB | <ul style="list-style-type: none"> ▪ Development / customization/ configuration and implementation of the web-based application server. ▪ Software testing, modification and deployment of the support software applications. | T+ 6 weeks |
| 5. | Data Entry, digitization, and conversion of the records and migration of the data | <ul style="list-style-type: none"> ▪ Data migration and Acceptance methodology Plan ▪ Data Digitization Plan | T+ 8 weeks |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sr. No. | Project Description | Deliverables | Project Timelines |
|---------|---|---|--|
| | available in the existing databases | <ul style="list-style-type: none"> Data Conversion Plan Digitized and verified data for modules | |
| 6. | Acceptance, UAT and Testing | <ul style="list-style-type: none"> Quality Assurance Plan Testing Strategy including Test types, plans and Test cases Reports including various Test performed, Test results and resolution reports for the issues identified during the testing | T+ 10 weeks |
| 7. | Audit | <ul style="list-style-type: none"> Audit of the Website/portal after incorporating issues after Pilot (comprising of Functional testing of website, security audit of the website including Vulnerability Assessment & Penetration Testing (VA & PT) test) from government empanelled agencies. Successful sign off from government empanelled agency like STQC/CERT-In. | T+ 13 weeks |
| 8. | Pilot Rollout | <ul style="list-style-type: none"> Pilot Rollout will be carried out for all functionalities mentioned in the scope Pilot web-based application Server should be deployed as test Server on IP address or domain name. | T+ 14 weeks |
| 9. | Training and sign off | <ul style="list-style-type: none"> Training to MPCB staff as per training plan submitted by bidder. Sign off by MPCB officials post successful training. | T+ 15 weeks |
| 10. | Final Go-Live and Successful Sign off | <ul style="list-style-type: none"> Successful Go-Live and implementation of Server over cloud Sign off by MPCB officials | T+ 16 weeks |
| 11. | Operation and maintenance of web application server | <ul style="list-style-type: none"> Operational and Maintenance support for Server | Will start post Go-Live, and successful sign off till end of contract period |

5.11 Final Handover: At the end of Five (05) years of Contract period:

On expiry/closure/termination of the Contract Agreement, station shall be handed over to MPCB in working condition to the satisfaction of the MPCB. All the spares procured by the Contractor and unused as on date shall be the property of Contractor. In addition, the contractor shall provide consumables equivalent to three months' consumption of expiry/closure/termination of the Contract Agreement without any extra financial implication.

The bidder may be requested to give handover to the other party/new SI or bidder as per the MPCB's discretion.

Annexures

| Document No. | Description |
|-------------------|--|
| Annexure 1 | Documents for Eligibility Criteria including checklist |
| Annexure 2 | Documents for Financial Proposal |
| Annexure 3 | Other Documents/Formats |
| Annexure 4 | Draft Conditions of Contract |

6. Annexure -1: Documents for Eligibility Criteria

1.A) Pre-Qualification Checklist:

| S. N. | Minimum Eligibility Criteria- Pre-Qualification Criteria | Document to be submitted | Document submitted (Yes/ No) | Page no. |
|--------------|--|---|---------------------------------|----------|
| Doc 1 | Tender Fee | <ul style="list-style-type: none"> Copy of tender fee payment receipt | | |
| Doc 2 | EMD | <ul style="list-style-type: none"> Copy of Online EMD Payment acknowledgement from Maharashtra eTender portal | | |
| Doc 3 | Bid Submission Letter | Bidder to provide details as per format provided in annexure 1 Section (6.1) | | |
| Doc 4 | Bidder details | Bidder to provide details as per Format for Bidder Details Annexure 1 section (6.2) | | |
| PQ 1 | The bidder should be "A Company registered in India under the Companies Act 1956 or 2013 or a partnership firm under the Indian Partnership Act, 1932 or the Limited Liability Partnerships Act, 2008, (as amended from time to time) for last 5 years, engaged for Central Govt/ State Govt/ PSU/ ULBs/Public Sector in India." as on bid due date. | <ul style="list-style-type: none"> Copy of Certificate of Incorporation / Partnership deed Copy of valid PAN Card Copy of valid GST Certificate with GST Number Copy of Power of Attorney signed by legally authorized signatories as per Annexure 1 (Section 6.10) | | |
| PQ 2 | Average Annual Turnover: Minimum Average Annual Turnover (MAAT) for the last three (03) audited financial years (FY2020-FY 2021, 21-22, and FY 2022-23) of the bidder should not be less than INR 50.00 Crores | <p>Copy of Annual Audited Financial Statements, Balance sheet and profit and loss statement, certified by a Chartered Accountant for the preceding Three years [FY2020-21, FY2021-22, FY2022-23]</p> <p>Note: Audited financial statement should match with</p> | | |

| S. N. | Minimum Eligibility Criteria- Pre-Qualification Criteria | Document to be submitted | Document submitted (Yes/ No) | Page no. |
|-------------|--|--|---------------------------------|----------|
| | | certificate of chartered accountant Certificate from Statutory Auditor as per the format Annexure 1 (Section 6.3) | | |
| PQ 3 | Net-worth Criteria: The bidder should have a positive net worth for each of the last three audited financial years. [FY2020-21, FY2021-22, FY2022-23] <u>[Net Worth as defined in Companies Act 1956 / 2013 as amended from time to time.]</u> | Duly filled Format for Financial years 2020-2021, 2021-2022 & 2022-2023 to be submitted on the letterhead of the Chartered Accountant Net worth Certificate duly certified by Chartered Accountant. Certificate from Statutory Auditor as per the format Annexure 1 (Section 6.3) | | |
| PQ 4 | Project Experience: The Bidder should have successfully undertaken Comprehensive Operations & Maintenance Contract (COMC) completed/ongoing "similar works" with any State/Central Govt PCB in India during the last 5 years as on bid submission date. One (01) project worth at least INR. 40 Cr. OR Two (02) projects each costing not less than the amount equal to INR. 25 Cr. OR Three (03) projects each costing not less than the amount equal to INR. 20 Cr. Note: | For government clients: Purchase Order (PO)/ Work Order (WO)/ Letter of Award (LOA) / Contract Agreement And Work completion/Ongoing certificate on letterhead of clients indicating client name, the scope of work, Project start date and date of completion/date of go-live, cost of the project/ LoA price etc. Bidder to provide Project Citation as per Annexure 1 (Section 6.7) | | |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| S. N. | Minimum Eligibility Criteria- Pre-Qualification Criteria | Document to be submitted | Document submitted (Yes/ No) | Page no. |
|-------------|---|--|---------------------------------|----------|
| | "Similar works" means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central Govt/ State Govt/ PCB in India. | | | |
| PQ 5 | Certifications: The Bidder of OEM should have valid ISO 9001: 2015 certification/ SA 8000 | Copy of valid Certificate as of the date of bid submission. and <u>Bidder to provide an undertaking as per annexure 1 (section 6.4)</u> | | |
| PQ 6 | Manpower Strength The Bidder should have at least 50 Service Engineers experienced in COMS of CAAQMS, with either permanent PF account or professional tax account on bidder's payroll as on bid submission date. | a) Attested copy of the Employee Provident Fund registration letter / certificate. b) Attested copy of the Labour License under the Contract Labour (Regulation & Abolition) Act. c) Attested copy of the Employee State Insurance registration letter / certificate. Bidder should provide above copies duly signed and stamped, in the format given in <u>Annexure 1 (Section 6.11)</u> | | |
| PQ 7 | Support Capability: The bidder shall have fully functioning office in Maharashtra or shall open office in Maharashtra within 15 days in case of award of contract. | Copy of existing office address proof like lease agreement/electricity bill in the name of the bidder In the absence of an existing office in Maharashtra, the bidder must submit an undertaking to setup office in Maharashtra, on letterhead of | | |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| S. N. | Minimum Eligibility Criteria- Pre-Qualification Criteria | Document to be submitted | Document submitted (Yes/ No) | Page no. |
|-------|--|--|---------------------------------|----------|
| | | firm signed by authorized signatory as per the format provided in the RFP in Annexure 1 (Section 6.9) | | |
| PQ 9 | Blacklisting criteria: The bidder should not have been debarred by any Government (State / Central) / Semi Government / Corporation / PSU/tendering department in India in last 3 years for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices as specified in Rule 151 of GFR, as on date of bid submission. | Self-certification signed by the Authorized Signatory, on the company letter head as per format provided in this RFP in Annexure 1 (Section 6.8) | | |

1.B) Technical Proposal Checklist:

| Sr. No. | Criteria | Evaluation Parameters | Max. Marks | Supporting Documents | Document submitted (Yes/ No) | Page No. |
|--------------|--|---|------------|--|------------------------------|----------|
| TE 1. | Financial Strength (10 Marks) | | | | | |
| TE 1.1 | The average annual turnover of for the last three (03) audited financial years (F.Y 2020-21, 21-22, 22-23) | <p>Average Annual Turnover (Cr)</p> <p>1) ≥ 15 Cr and < 20 Cr : 06 marks</p> <p>2) ≥ 20 Cr and < 25 Cr : 08 marks</p> <p>3) ≥ 25 Cr: 10 marks</p> | 10 | <p>a) Audited Financial Statements (Balance Sheet and Profit & Loss Statements) from the Statutory Auditor/ Chartered Accountant and</p> <p>b) Certificate duly signed by Statutory Auditor of the Bidder for total turnover as per the format Certificate from Statutory Auditor as per the format Annexure 1 (Section 6.3)</p> | | |
| TE 2. | Relevant Bidder Experience (50 Marks) | | | | | |
| TE 2.1 | <p>Project Experience:</p> <p>The Bidder should have successfully undertaken Comprehensive Operations & Maintenance Contract (COMC) completed/ongoing "similar works" with any State/Central Govt PCB in India during the last 5 years as on bid submission date.</p> <p>One (01) project worth at least INR. 40 Cr. OR Two (02) projects each costing not less than the amount equal to INR. 25 Cr. OR</p> | <p>Project value of single assignment.</p> <p>1) One (01) project worth at least INR. 40 Cr.: 20 marks</p> <p>2) Two (02) projects each costing not less than the amount equal to INR. 25 Cr.: 15 marks</p> <p>3) Three (03) projects each costing not less than the amount equal to INR. 20 Cr.: 10 marks</p> | 20 | <p>a) Work Order/Copy of Agreement and Satisfaction Certificates for on-going projects/ Completion Certificate for completed projects from the Client in case of experience in defined "similar works".</p> <p>Bidder to provide Project Citation as per Annexure 1 (Section 6.7)</p> | | |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sr. No. | Criteria | Evaluation Parameters | Max. Marks | Supporting Documents | Document submitted (Yes/ No) | Page No. |
|---------|---|---|------------|--|------------------------------|----------|
| | <p>Three (03) projects each costing not less than the amount equal to INR. 20 Cr.</p> <p>Note: “Similar works” means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central Govt/ State Govt PCB in India.</p> | | | | | |
| TE 2.2 | <p>Similar Work Project Experience The bidder should have successfully executed “similar works” project for Central Govt/ State Govt PCB in India during last 5 years as on date of bid submission</p> <p>Note: “Similar works” means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central Govt/ State Govt PCB in India.</p> | <p>No. of “similar works” projects completed in Central Govt/ State Govt/ PCB in India:</p> <p>1) ≥ 01 and < 02 projects : 05 marks</p> <p>2) ≥ 02 and < 03 projects : 07 marks</p> <p>3) ≥ 03 projects: 10 marks</p> | 10 | <p>a) <i>Work Order/Copy of Agreement and Satisfaction Certificates for on-going projects/ Completion Certificate for completed projects from the Client in case of experience in defined “similar works”.</i></p> <p>Bidder to provide Project Citation as per Annexure 1 (Section 6.7)</p> | | |
| TE 2.3 | <p>The Bidder should have experience of implementation of Similar Project across 5 locations with separate demarcated physical boundaries in single work in last 5 financial years as on last date of bid submission</p> | <p>No. of Projects:</p> <p>1. ≥ 1 and < 2 Projects: 3 marks</p> <p>2. ≥ 2 Projects: 5marks</p> | 5 | <p>a) <i>Copy of work order along with completion/ continuity certificate from the client.</i></p> <p>b) <i>Completed Annexure A: Project Experience, for each project.</i></p> | | |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sr. No. | Criteria | Evaluation Parameters | Max. Marks | Supporting Documents | Document submitted (Yes/ No) | Page No. |
|---|--|---|--|---|--|----------|
| TE 2.4 | <p>Proposed Human Resource / Manpower and experience:</p> <p>The Bidder must have experience of providing manpower services which shall involve the supply of at least 50 manpower deployed in any State Government / Central Government / PCB Govt in India as on date of submission of bid.</p> <p>Note: “Similar works” means successful comprehensive operation and maintenance of UPS/batteries/ computers/ display units/ AC units for CAAQMS for any Central Govt/ State Govt PCB in India.</p> | <p>No. of Manpower deployed:</p> <p>1) 50>= and < 100: 3 marks 2) >=100 and 5 marks</p> | 5 | a) <i>Work Order/Copy of Agreement and Satisfaction Certificates for on-going projects/ Completion Certificate for completed projects from the Client in case of experience in defined “similar works”.</i> | | |
| TE 2.5 | Certifications | <p><i>The Bidder shall have valid as on last date of bid submission. (5 marks each)</i></p> <p>i. ISO 9001:2015 ii. SA 8000</p> | 10 | a) <i>Copy of valid certifications as on bid submission date</i> | | |
| TE 3. Key Professional Experience (20 Marks) | | | | | | |
| | Proposed Human Resource / Manpower and experience: | | 20 | | | |
| | Resource Type | Resource Qty. | Education & Area of Expertise | | | |
| TE 3.1 | Project Manager | 1 | Graduate/ Postgraduate in Environmental Science / Environmental Engineering / Mechanical Engineering / Electrical Engineering / Civil Engineering or PGDM/MBA with a professional experience of minimum 10 years | 2.5 | <i>Detailed CV in World Bank Format duly attested by HR and authorized bid signatory</i> | |
| TE 3.2 | Regional Service Heads | 2 | Graduate/ Postgraduate in Environmental Science / Environmental Engineering | 4 | | |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sr. No. | Criteria | Evaluation Parameters | Max. Marks | Supporting Documents | Document submitted (Yes/ No) | Page No. |
|-------------|---|--|------------|---|------------------------------|----------|
| | | / Mechanical Engineering / Electrical Engineering / Civil Engineering or PGDM/MBA with a professional experience of minimum 6 years (2 marks each) | | | | |
| TE 3.3 | CAAMQMS O&M Engineer | 15 | 7.5 | | | |
| TE 3.4 | Manager: Data Analytics | 2 | 2 | | | |
| TE 3.5 | Head: Scientific Coordination | 2 | 4 | | | |
| TE 4 | Technical Presentation (20 Marks) | | | | | |
| TE 4.1 | Presentation by the bidders on their understanding of the business/ functional requirements of MPCBs and proposed solution and implementation approach. | For presentation in below categories: <ol style="list-style-type: none"> 1. <i>Comprehensiveness of the project plan – 4 Marks</i> 2. <i>Activities, sequencing, dependencies among activities –4 Marks</i> 3. <i>Resource planning, allocation and loading – 4 Marks</i> 4. <i>Maintenance Status Reporting mechanism – 4 Marks</i> 5. Risk Management, Mitigation Plan – 4 Marks | 20 | <ol style="list-style-type: none"> 1. Presentation delivered by the bidder should depict Bidder's understanding of the business /functional requirements of the MPCB, the proposed solution and implementation approach. 2. Bidder has to provide clear baselines/ timelines, defined resources, roles & responsibilities in MS-Project format in both soft and hard copies along with a write-up project | | |
| | | Total | 100 | | | |

*** Bidders are to consider this document as a Checklist and Index. The same should be included as a part of Technical Bid**

6.1 Format for Bid Submission Covering Letter

(To be submitted on the letterhead of the bidder)

{Place, Date}

To,

Member Secretary

Maharashtra Pollution Control Board,

Kalpataru Point, 3rd floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

Subject: Bid Submission Cover Letter for- Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

RFP Reference No: MPCB/

Dear Sir,

We, the undersigned bidders, having read and examined in detail all the bidding documents for <<Name of the RFP>>, do hereby propose to provide our services as specified in the RFP.

We attach hereto our responses to the requirements and commercial proposals as required by the RFP. We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered to MPCB, Govt. of Maharashtra is true, accurate, verifiable, and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its shortlisting process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so.

We agree for unconditional acceptance of all the terms and conditions set out in the RFP document and also agree to abide by this tender response for a period of bid validity as defined in this RFP. We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee bond in the form prescribed the RFP. We also herewith express our willingness to subject to MPCB's conditionality regarding manpower recruitments (required for the project), change of hands of management and declaring upfront the source of funding for the project.

We agree that you are not bound to accept any tender response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/ services specified in the tender response.

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this _____ Day of _____ 2024

Thanking you,
Yours faithfully

(Signature of the Authorized Signatory of the Bidder)
(In the capacity of)

(Name)

Duly authorized to sign the Tender Response for and on behalf of:

(Name and Address of Company) Seal/Stamp of bidder

6.2 Format for Bidder Details

<< To be printed on Bidder's Company's Letter Head, Signed by Authorized Signatory >>

TO WHOMSOEVER IT MAY CONCERN

Bidder Information (Sole Bidder)

| Sr. | Particulars | Information |
|-----|---|-------------|
| 1. | Name of the Bidder | |
| 2. | Address of the Bidder | |
| 3. | Telephone Nos. | |
| 4. | Fax | |
| 5. | E-mail | |
| 6. | Website (If available) | |
| 7. | Year of Establishment | |
| 8. | Date of registration | |
| 9. | ROC Reference No, if applicable (With supporting document) | |
| 10. | PAN No:(with supporting document) | |
| 11. | GST Number (with supporting document) | |

Thanking you,

(Name and Designation of the Authorized signatory of the Bidder)

Name:

Designation:

Seal:

Date:

Place:

Business Address:

6.3 Format for Turnover details and Net-worth

(To be submitted on the letterhead of the Chartered Accountant/Statutory auditor)

{Place, Date}

To,

Member Secretary

Maharashtra Pollution Control Board,

Kalpataru Point, 3rd floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

Subject: Turnover and Networth details for Request for Proposal _ _ _ _ _

RFP Reference No: MPCB/

Dear Sir,

We,, certify that we have verified the relevant financial statements and other records of (Name of Company), having its Indian registered office at..... The financials for the past three years have been summarized below:

| Sr. | Financial Year | Turnover (In INR) (In Cr) | Net worth (In INR) (In Cr) |
|-----|-------------------|---|----------------------------|
| 1 | FY 2020-21 | | |
| 2 | FY 2021-22 | | |
| 3 | FY 2022-23 | | |
| | Total | (Average Annual turnover) = (FY 2020-21 + FY 2021-22 + FY 2022-23)/3 | |

The Average Annual Turnover of (Name of the Firm) is INR <Insert Value> (Rupees <Insert Value in Words> during the three Financial Years.

It is further certified that based on our review of financial statements together with the book of accounts, records and documents for the aforesaid financial years, the above-mentioned figures are true and correct to the best of our knowledge and as per information and explanations provided to our satisfaction by the (Name of the Firm).

Thanking you,

(Signature, Name and Designation of the Authorized signatory of the Bidder)

(Signature and Name of the Chartered Accountant with Seal)

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

6.4 Format for Undertaking for Supplying Replacement Products/Spare Parts under Comprehensive Annual Maintenance

<To be printed on the letterhead of the Bidder>

Date:

Place:

To,
Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle,
Sion (E), Mumbai – 400 022

Subject: Undertaking for Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra.

RFP Ref <RFP reference No.>

Dear Sir,

We, _____ [Name of the Bidder/Organization], hereby undertake to supply replacement products/spare parts for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra during the comprehensive annual maintenance period. The replacements shall either be from the same Original Equipment Manufacturer (OEM) or compatible alternatives. Furthermore, we guarantee that all supplied replacements shall not have reached their end of life throughout the entire contract period.

This undertaking signifies our commitment to ensuring uninterrupted maintenance services and the availability of necessary components to uphold the operational efficiency of the equipment/system under contract. We assure compliance with all contractual obligations regarding the quality, compatibility, and timely delivery of replacement products/spare parts.

Yours faithfully,

For and on behalf of M/s _____ (Name of the Bidder/Organization)

Signature :

Name :

Designation :

Address :

Date :

Company Seal

Thanking you,

(Signature, Name and Designation of the Authorized signatory of the Bidder)

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

6.5 Manufacturer's Declaration about 100% compliance to Minimum Technical Specifications

<This declaration must be on the letterhead of the Manufacturer, must be signed by a person of relevant competent authority, and must be included by the Bidder in its bid as specified in the Instructions to Bidders. The same should be accompanied by the compliance statement to the minimum required technical specifications, duly filled, and supported by relevant certifications and printed on Manufacturer's Letterhead>

Date:

Place:

To,

Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle,
Sion (E), Mumbai – 400 022

Sub: Declaration of compliance to Minimum Technical Specifications of your Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra.

Dear Sir,

WHEREAS <Name and address of the Manufacturer> who are official producers of <Name of the product and product code> do hereby solemnly declare that

We have read and understood the minimum technical specifications mentioned in this RFP and our feature-wise compliance status for the product proposed <Name of the product and product code> is correct for every specification mentioned therein. Pls find the compliance statement attached herewith duly filled, signed, and stamped.

We understand that if any of the points in this declaration is found to be incorrect, the bid will be declared as non-responsive and will not be considered for further evaluation.

Name

In the capacity of

Signed

Duly authorized to sign the authorization for and on behalf of: _____

Dated:

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

6.6 Minimum Technical Specifications

<To be printed on Letterhead of the OEM and should be supported by relevant certifications as mentioned against various specifications.>

Bidder to provide valid documents compliant to technical details of Ambient Air Quality Monitoring Analysers as per Annexure-7 [Technical Details of Ambient Air Quality Monitoring Analysers \(Gas\)](#)

.

6.7 Format for Project Citation (Bidder)

| | |
|---|--|
| Project Title: (Attach separate sheet for each Order) | |
| Order date | |
| Name of Client | |
| Address | |
| Type of Client (Government (State or Central) or Semi Government or Corporation or PSU or ULB) | |
| Brief Description of Work: | |
| | |
| Work Start Date | |
| Work Completion Date | |
| Referrals (Client side): Provide one referral only. | |
| Name | |
| Designation | |
| Role in the Project: | |
| Contact Number | |
| Email id | |

Note:

- The Bidder is required to use above formats for all the projects referenced by the bidder.*
- “Completion Certificate from Client” OR “Work Order/Purchase Order” shall be provided as supporting document for each project.*

(Name and Designation of the Authorized signatory of the Bidder)

Name:

Designation:

Seal:

Date:

Place:

Business Address:

6.8 Format for Undertaking of “Non-Blacklisting”

(To be submitted on the letterhead of the Bidder)

{Place, Date}

To,

Member Secretary

Maharashtra Pollution Control Board,

Kalpataru Point, 3rd floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

Subject: Undertaking of Non-Blacklisting for

RFP Reference No: MPCB/

We, the undersigned, hereby declare that We are not under a declaration of blacklisted/ banned/ debarred by any Central Govt/ State Govt/ PSU/ ULBs/Public Sector in India for any reason as in last three (03) years on last date of submission of the Bid or convicted of economic offence in India for any reason as on last date of submission of the Bid.

We hereby declare that

1. We have examined and have no reservations to the Bidding Documents, including Addenda issued, if any, in accordance with Instructions to Bidders.
2. Our bid shall be valid for a period of 120 days from the date of commercial bid opening in accordance with the Bidding Documents and it shall remain binding upon us and maybe accepted at any time before the expiration of that period.
3. If our bid is accepted, we commit to submit a performance security in accordance with the Bidding Documents.

We hereby also declare that

1. We are not convicted for any of the following offenses under the Prevention of Corruption Act, 1988; Or We have not been convicted under any Indian Penal Code or any law in force, for creating public injury to person or property or risk to public health as a part of execution of public procurement contract ; We have not been blacklisted/banned/debarred by any Government (State/Central) / Semi Government/ Corporation / PSU/ ULB in India in last 3 years;
2. We have not violated the code of integrity in last 3 years.
3. Our Security Deposit or EMD or performance security deposit or any other deposit was not withheld (fully or partly) by any State/Central / Semi Government/ Corporation / PSU/ ULB in India any during any procurement process or contract execution undertaken in last 3 years.
4. We have not withdrawn our bids post submission of the same. (Maximum incidents are limited to 3)
5. If Owner / Partner / Director / Trustee of the organization is Owner / Partner / Director / Trustee of any other organization: We hereby declare that Our Owner / Partner / Director / Trustee are not Owner / Partner / Director / Trustee of any other organization which is presently blacklisted / Banned / Suspended by the Government / Semi-Government / PSUs, and any other

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

organization to which the provisions of GoM GR dated 01.12.2016 are applicable.

6. We declare that we comply with all clauses mentioned under section 5.8.5 of Government of Maharashtra Government Resolution dated 01.12.2016.
7. We accept that in case of any irregularity, lapses, non-compliances, MPCBs decision shall be final and binding on us.
8. We accept all the terms and conditions of this bidding document and undertake to abide by them, including the condition that you are not bound to accept highest ranked bid / lowest bid or any other bid that you may receive.
9. We also accept that, if it is found that any of the information provided by us is proved wrong/ falsified/ deviated/ incorrect/ concealed from facts, our bid will be summarily rejected along with the blacklisting of our firm and forfeiture of our EMD/ PBG, as the case may be.

Yours sincerely, Authorized Signatory (Authorized person shall attach a copy of Authorization for signing on behalf of Bidding Company)

Full Name and Designation

(To be submitted on non-judicial stamp paper of appropriate value).

Signature of Notary (with official seal)

Name:

Designation:

Seal:

Business Address:

6.9 Format Letter of Undertaking for Office in Maharashtra

< (To be submitted on the Letter of lead bidder) >

{Place, Date}

To,

Member Secretary

Maharashtra Pollution Control Board,

Kalpataru Point, 3rd floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

Subject: Undertaking of for Office in Maharashtra

RFP Reference No: MPCB/

Sir,

We, _____, (name of the Bidder) who are an established and reputed firm, having offices at____(address) do hereby undertake to establish a fully functioning office within the jurisdiction of State of Maharashtra within 15 days of award of work for the tender referenced above. We also undertake to assure the authority that the said office in Maharashtra shall remain fully functional and operational in the duration of the contract with the Maharashtra Pollution Control Board, Mumbai.

It is understood that failure to comply with this undertaking in any manner whatsoever, Maharashtra Pollution Control Board, Mumbai shall have the right to reject my / our bid and forfeit the submitted Earnest Money Deposit (EMD), and if the bid has resulted in a contract, the contract is liable to be terminated without prejudice to any other right or remedy (including blacklisting) available to Maharashtra Pollution Control Board, Mumbai

Yours Sincerely,

Signature of Notary (with official seal)

Name:

Designation:

Seal:

Business Address:

6.10 Power of Attorney

Know by all men by these presents, We _____ (Name of the Bidder and address of their registered office) do hereby constitute, appoint and authorize Mr. / Ms _____ (name and residential address of Power of attorney holder) who is presently employed with us and holding the position of _____ as our Attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our Proposal for the **“Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra”** including signing and submission of all documents and providing information / responses to the MPCB, representing us in all matters before MPCB, and generally dealing with the MPCB in all matters in connection with our Proposal for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said Attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us.

For _____

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Accepted,

_____ (Signature)

(Name, Title and Address of the Attorney)

Note:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- **The Power of Attorney shall be provided on stamp paper of appropriate value**
- The Power of Attorney should be supported by a duly authorized resolution of the Board of Directors of the Bidder authorizing the person who is issuing this power of attorney on behalf of the Bidder.

6.11 Format for HR Department Declaration

<< To be printed on Bidder Company's Letter Head and Signed by Authorized Signatory/HR Head)

{Place, Date}

To,

Member Secretary

Maharashtra Pollution Control Board,

Kalpataru Point, 3rd floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

Subject: HR Department Declaration -

RFP Reference No: MPCB/

With reference to the subject RFP, we hereby declare that we have the requisite number of employees for each category of resources with minimum qualification sought for in the RFP, working on our payroll or associated with us through proper binding agreement

We also accept that, if it is found that any of the information provided by us is proved wrong/ falsified/ deviated/ incorrect/ concealed from facts, our bid will be summarily rejected along with the blacklisting of our firm and forfeiture of our EMD/ PBG, as the case may be.

Further the details of employees may be noted below (for all the type of resources sought for in the RFP):

| Sl. No. | Position proposed for | Employee Name | Employee ID | Employee Contact Details | No. of Years with firm | Total No. of relevant exp. |
|---------|-----------------------|---------------|-------------|--------------------------|------------------------|----------------------------|
| 1. | Team Lead | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

Yours sincerely,

Authorized Signatory/ HR Head

(Authorized person shall attach a copy of Authorization for signing on behalf of Bidding Company)

Full Name and Designation

<To be filled in by the selected bidder post issuance of LOA/LOI on stamp paper of requisite value>

6.12 Format for Indemnity Bond for Handing Over Air Monitoring Stations Including All Equipment to the CAMC Contractor

This Indemnity Bond is made this Day of 20..... By.....a Company registered under the Companies Act, 1956/Partnership firm / Proprietary concern having its registered office at(hereinafter called as “Contractor” or “obligator” which expression shall include its successors and permitted assigns) in favour of MAHARASHTRA POLLUTION CONTROL BOARD with Office at Mumbai, which term shall include permitted assigns and successors, (hereinafter called “MPCB” which expression shall include its successors and assigns).

Whereas MPCB has awarded to the Contractor, a contract for CCAMC of Continuous Ambient Air Monitoring Stations (CAAQMS located at -----, vide its Letter of Intent /Award Letter /Contract No..... dated (Hereinafter called the “Contract”), in the terms of which Contractor shall be responsible for the equipment’s to be handed over to it by MPCB for the purpose of performance of the Contract (hereinafter called the “equipment’s”).

Now, therefore this Indemnity Bond witnessed as follows:

1. That in consideration of various equipment’s as mentioned in the Contract, valued at INR. ----- (Rupees.....) to be handed over to the Contractor for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep MPCB indemnified, for the full value of the Equipment. The Contractor hereby acknowledges receipt of the Equipment’s as per details in the Schedule appended hereto.
2. That the Contractor is obliged and shall remain absolutely responsible for the safe custody of the equipment’s at Continuous Ambient Air Monitoring Stations (CAAQMS) belonging to MPCB against all risks whatsoever till the equipment’s are duly used in accordance with all terms of the Contract. The Contractor undertakes to keep MPCB harmless against any loss or damage that may be caused to the Equipment.
3. The Contractor undertakes that the Equipment shall be used exclusively for the performance/ execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment’s shall be utilized for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purposes and CAMC of Continuous Ambient Air Quality Monitoring Stations for MPCB including legal / penal consequences.
4. That MPCB is and shall remain the exclusive Owner of the Equipment free from all encumbrances, charges, or liens of any kind, whatsoever. The equipment’s shall at all times be open to inspection and checking by Project-in-Charge MPCB shall always be free at all times to take possession of the equipment’s in whatever form the equipment’s may be. If in its opinion, the equipment’s are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any act of omission or commission on the part of the Contractor; he finds itself and undertakes to comply with the direction or demand of MPCB to return the equipment’s without any demur or reservation.

5. That this Indemnity Bond is irrevocable. If at any time any loss or damage occurs to the equipment's or the same or any part thereof is misutilised in any manner whatsoever then the Contractor hereby agrees that the decision of the Project-in-Charge of MPCB as to assessment of loss or damage to the equipment's shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and / or damaged equipment's at its own or remedy that may be available to MPCB against the Contractor under the Contract and under this Indemnity Bond.
6. Now the condition of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this bond to the satisfaction of MPCB, then the above bond shall be void, but otherwise, it shall remain in full force and virtue.

In witness whereof, the Contractor has here unto set its hand through its authorized representative under the common seal of the company, the day month and year first above mentioned.

6.13 Manufacturer's Authorization Form (MAF)

6.13.1 MAF for Authorized Supplier of OEM

<To be printed on the letterhead of the OEM and duly signed and sealed from the Authorized Signatory of the OEM>

Date:

Place:

To,
Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle,
Sion (E), Mumbai – 400 022

Subject: Manufacturer's Authorization Form (MAF) for Authorized Supplier of OEM for Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

RFP Ref <RFP reference No.>

Dear Sir,

We, who are established and reputed developers / producers of _____ having development facilities at (address of factory / facility) do hereby authorize M/s _____ (Name and address of Bidder) to submit a Bid and sign the contract with you against the above Bid Invitation.

| Sr. | Name of OEM / Dealer | Name of other components | Name of Make (OEM) | Model | Version | Planned End of Sale | Planned End of Support and spare parts availability | Remark |
|-----|----------------------|--------------------------|--------------------|-------|---------|---------------------|---|--------|
| 1. | | | | | | | | |
| 2. | | | | | | | | |
| 3. | | | | | | | | |

- We hereby agree to the following with regards to the solution, products and services offered by us through the above firm against this Bid Invitation.
 - We extend full on-site guarantee and warranty
 - OEM Warranty for the offered product(s), is for minimum __ Years from the date of this letter.
 - We have read and understood the said RFP and the functional and technical requirements and the offered product(s), as mentioned above, is complying with the respective requirements.
 - Confirm that the offered product(s) is not likely to be declared as

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

- End-of-sale will not be within next 12 months for machines and attachments from the date of this letter
- End of sale for attachment not within next 60 months
- End-of-Support within next five years from the date of this letter
- Confirm that the support including spare parts for the quoted products shall be available for the period of the Project.
- We will provide any or all of the materials, notifications, and information
 - Such Products as MPCB may opt to purchase from OEM, provided, that this option shall not relieve OEM of any warranty obligations under the Contract; and
 - in the event of termination of production of such Products:
 - advance notification to MPCB of the pending termination, in sufficient time to permit MPCB to procure needed requirements; and
 - Following such termination, furnishing at no cost to MPCB, operations manuals, standards, and specifications of the Products, if requested.
- We duly authorize the bidder <Bidder name> to act on our behalf in fulfilling all technical support and maintenance obligations required by the contract.
- We, as OEM of _____< product>_____, agree to provide onsite delivery and support to <Bidder name> and shall physically visit as and when required & certify installation of attachments and maintenance of parts as per standards and best practices at all locations and submit our satisfactory report, which is one of the mandatory requirements for Bidder to proceed with further activities.

We also confirm that we have an existing registered service / support Centre in Maharashtra at

OR

We also conform we shall establish registered service / support Centre in Maharashtra within 15 days of award of contract to the Bidder __<Name of the Lead Bidder>__.

Yours faithfully,

For and on behalf of M/s _____ (Name of the manufacturer / OEM)

Signature :

Name :

Designation :

Address :

Date :

Company Seal

Thanking you,

(Signature, Name and Designation of the Authorized signatory of the Bidder)

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

6.13.2 MAF for Original Equipment Manufacturer

<To be printed on the letterhead of the OEM and duly signed and sealed from the Authorized Signatory of the OEM>
The OEM shall also give details about its facilities on their letterhead, duly signing and sealing it

Date:

Place:

To,
Member Secretary
Maharashtra Pollution Control Board
Kalpataru Point, 3rd floor,
Opp. Cine Planet Cinema, Sion Circle,
Sion (E), Mumbai – 400 022

Subject: Manufacturer's Authorization Form (MAF) for Original Equipment Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

RFP Ref <RFP reference No.>

Dear Sir,

We, who are established and reputed developers / producers of _____
having development facilities at (address of factory / facility). We hereby appoint and authorize Mr./Ms. _____ (Name and address of individual) holding the position of _____ to submit Bid on our behalf and sign the contract with you against the above Bid Invitation. Further, the following details may be noted pertaining to our product.

| Sr. | Name of OEM | Name of components | Name of Make (OEM) | Model | Version | Planned End of Sale | Planned End of Support and spare parts availability | Remark |
|-----|-------------|--------------------|--------------------|-------|---------|---------------------|---|--------|
| 1. | | | | | | | | |
| 2. | | | | | | | | |
| 3. | | | | | | | | |

- We hereby agree to the following with regards to the solution, products and services offered by us against this Bid Invitation.
 - We extend full on-site guarantee and warranty
 - OEM Warranty for the offered product(s), is for minimum __ Years from the date of this letter.
 - We have read and understood the said RFP and the functional and technical requirements and the offered product(s), as mentioned above, is complying with the respective requirements.
 - Confirm that the offered product(s) is not likely to be declared as

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

- End-of-sale will not be within next 12 months for machines and attachments from the date of this letter
- End of sale for attachment not within next 60 months
- End-of-Support within next five years from the date of this letter
- Confirm that the support including spare parts for the quoted products shall be available for the period of the Project.
- We will provide any or all of the materials, notifications, and information
 - Such Products as MPCB may opt to purchase from OEM, provided, that this option shall not relieve OEM of any warranty obligations under the Contract, and in the event of termination of production of such Products:
 - advance notification to MPCB of the pending termination, in sufficient time to permit MPCB to procure needed requirements; and
 - Following such termination, furnishing at no cost to MPCB, operations manuals, standards, and specifications of the Products, if requested.
- We duly acknowledge to fulfil all technical support and maintenance obligations required by the contract.
- We, as OEM of ____ < product> ____, agree to provide onsite delivery and support to MPCB and shall physically visit as and when required & certify installation of attachments and maintenance of parts as per standards and best practices at all locations and submit our satisfactory report, which is one of the mandatory requirements for Bidder to proceed with further activities.

We also confirm that we have an existing registered service / support Centre in Maharashtra at

OR

We also conform we shall establish registered service / support Centre in Maharashtra within 15 days of award of contract to the ____ <Name of the Bidder> ____.

Yours faithfully,

For and on behalf of M/s _____ (Name of the manufacturer / OEM)

Signature :

Name :

Designation :

Address :

Date :

Company Seal

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

7. Annexure-2: Documents for Financial Proposal

| Format No. | Description | Submitted (Yes/No) |
|-------------------|--------------------------------|---------------------------|
| Format 1 | Commercial bid covering Letter | |
| Format 2 | Commercial bid | |

7.1 Commercial Proposal Cover Letter

(To be submitted on the letterhead of the bidder)

{Place, Date}

To,

Member Secretary

Maharashtra Pollution Control Board,

Kalpataru Point, 3rd floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

Tel:

Mail id:

Subject: Commercial Proposal Cover Letter for- Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

RFP Reference No:

Dear Sir,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of **Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra** do hereby propose to provide Services as specified in the bidding documents.

1. Price and Validity: All the prices mentioned in our Bid are in accordance with the terms as specified in the bidding documents. All the prices and other terms and conditions of this Bid are valid for a period of 120 days from the date of opening of commercial bid
2. The prices we have offered, will remain fixed and subject to price escalation mention in the RFP during the period of Contract.
3. Taxes: We are an entity registered in India and do hereby confirm that our bid price is exclusive of all applicable taxes (i.e., GST). All relevant/ applicable taxes would be considered for reimbursement on actuals as per MPCB's discretion and prevailing Government laws
4. Deviations: We hereby declare that all terms and conditions mentioned in the RFP (all volumes, annexures, and corrigendum's) are acceptable to us without any deviations and all the services shall be performed strictly in accordance with the bid documents
5. Unit Rates: We have indicated in the relevant Annexures enclosed, the unit rates for the purpose of an account of payment as well as for price adjustment, in case of any increase / decrease from the scope of work under the contract.
6. Bid Price: We declare that our Bid Prices, exclusive of all applicable taxes, duties, and GST are for the entire scope of the work and requirements as specified in the Bid documents.

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7. Contract Performance Bank Guarantee: We hereby declare that in case the Contract / Order is awarded to us, we shall submit the Contract Performance Bank Guarantee in the form prescribed in the RFP.
8. We hereby declare that our Bid is made in good faith, without collusion or fraud and the information contained in the Bid is true and correct to the best of our knowledge and belief. We also understand that if our bid is conditional in any way, it shall be summarily rejected.
9. We understand that our Bid is binding on us and that you are not bound to accept a bid you receive.
10. We confirm that no technical information or deviations are attached here with this Commercial offer.

Yours faithfully,

(Name and Designation of the Authorized signatory of the Bidder)

Name:

Designation:

Seal:

Date:

Place:

Business Address:

7.2 Format for Commercial Bid

7.2.1 Part A: Comprehensive Annual Maintenance cost for 69 stations

| Sr. No. | Year of operation and maintenance | Unit Price of 1 station (In INR) | Total Amount of 69 stations (In INR) | GST (18%) | Total Amount (Incl. Taxes) (In INR) |
|---------|---|----------------------------------|--------------------------------------|-----------|-------------------------------------|
| | | A | B = A * 69 | C = B*18% | D = C + B |
| 1 | First Year | | | | |
| 2 | Second Year | | | | |
| 3 | Third Year | | | | |
| 4 | Fourth Year | | | | |
| 5 | Fifth Year | | | | |
| | Total (Part A) amount for all 69 stations (In INR): | | | | |

7.2.2 Part B: Software Application Development

a) Part B.1 Software Application Development Costs

| Sr. No. | Parameter | Basic Amount (IN INR) | GST (18%) | Total Amount (In INR) (Incl. 18%) |
|---------|---|-----------------------|-----------|-----------------------------------|
| 1 | Supply, Design, Customization & Implementation Cost of Software Application Development | | | |
| | Total (Part B.1) (In INR) | | | |

b) Part B.2 Cloud Hosting for 5 years

| Sr. No. | Parameter | Basic Amount (IN INR) | | | | | Total Amount (In INR) |
|---------|---|-----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
| | | 1 st Year | 2 nd Year | 3 rd Year | 4 th Year | 5 th Year | |
| 1 | Cloud Hosting for 5 years | | | | | | |
| | GST (18%) | | | | | | |
| | Total (Part B.2) (In INR) (Incl. 18% GST) | | | | | | |

c) Part B.3 O&M for Software Application Development

| Sr. No. | Parameter | Basic Amount (IN INR) | | | | | Total Amount (IN INR) |
|---------|---|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| | | 1 st Year | 2 nd Year | 3 rd Year | 4 th Year | 5 th Year | |
| 1 | Comprehensive Operations & Maintenance for Software Application Development including cloud hosting for 5 years | | | | | | |
| | GST (18%) | | | | | | |
| | Total (Part B.3) (In INR) (Incl. 18% GST) | | | | | | |

d) Sub-total of Part B

| Particulars (Part B.1+ Part B.2 + Part B.3) | Total Cost (in INR) |
|---|------------------------|
| 1. Part B.1 Software Application Development Costs | |
| 2. Part B.2 Cloud Hosting for 5 years | |
| 3. Part B.3 O&M for Software Application Development | |
| Sub-total Total Cost (Inclusive of all Taxes) (In Figure) (In INR) | |
| Sub-total Total Cost (Inclusive of all Taxes) (In Words) (In INR) | |

7.2.3 Grand Total Cost of the Bid

| Particulars (Part A + Part B) | Total Cost (in INR) |
|---|------------------------|
| Grand Total Cost (Inclusive of all Taxes) (In Figure) (In INR) | |
| Grand Total Cost (Inclusive of all Taxes) (In Words) (In INR) | |

Note: (for all items in price bid)

1. The rates quoted by the bidder shall be deemed final. CAMC cost will be paid on pro-rata basis.
2. Bidders / OEM shall ensure availability of spares, parts for procurement for entire 5 yrs. contract period. Undertaking from OEM in this regard shall be mandatory. In case spares parts is end of sale, bidder at its own cost, shall supply equivalent or better and compatible spares parts.
3. The Bidder shall provision for all costs required for the entire duration of the contract. MPCB shall not be liable to pay any additional costs, apart from that mentioned in the table above.

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- 4. The rate quoted by bidder shall include all costs associated with fulfilling the project deliverables, Out of Pocket Expenses including Travelling, Lodging, Food, insurance, etc. MPCB shall not pay any additional cost to bidder.*
- 5. Incidental Charges consisting of security, Electricity, Phones/ internet, Manpower, AMCs material including all spares & all consumables (including for Operation & maintenance and other*
- 6. All costs shall remain valid for the entire duration of the contract.*
- 7. All GST shall be paid at prevailing rates, subject to change from time to time as per Govt. notifications and amendments.*
- 8. Actual technical requirement may vary depending on the chosen technology stack and the specifics of the end-user application. Bidders are advised to carefully understand the project scope, ensuring flexibility and scalability.*

BIDDERS ARE REQUESTED TO SUBMIT ONLINE COMMERCIAL BID FORMAT

A COPY OF COMMERCIAL BID PRINTED ON LETTERHEAD TO BE UPLOADED AS PART OF ENVELOPE B

8. Annexure-3: Other Documents/Formats

| | |
|------------|----------------------------|
| Document 1 | Format for Pre-Bid Queries |
| Document 2 | Performance Bank Guarantee |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

8.1 Format for Pre-Bid Queries

<< To be printed on Bidder Company's Letter Head and Signed by Authorized Signatory)

To,

Member Secretary

Maharashtra Pollution Control Board,
Kalpataru Point, 3rd floor, Opp. PVR Cinema,
Sion Circle, Sion, Mumbai-400 022

Dear Sir,

Subject: Pre-bid queries for- Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

RFP Reference No: MPCB/

With reference to the subject RFP, please find below pre-bid clarifications request.

Clarification Requested by:

| | |
|----------------|--|
| Name | |
| Designation | |
| Company | |
| Address | |
| Contact Number | |
| e-mail ID | |
| Date | |

Clarifications Requested:

| Sr. | RFP Document Reference(s) (Clause No.) | Pg. No. | Content of RFP requiring Clarification(s) | Points of clarification |
|-----|--|---------|--|----------------------------|
| | | | | |

Note: Bidders are requested to provide the queries in MS Excel format

Thanking you,

(Name and Designation of the Authorized signatory of the Bidder)

Name:

Designation:

Seal:

Date:

Place:

Business Address:

8.2 Format for Bank Guarantee

<< To be executed on Stamp Paper as mandated by the Bank issuing the PBG>>>

1. Performance Bank Guarantee (PBG)

Ref: _____

Date: _____

Bank Guarantee No.: _____

No. _____

Date: _____

To,

Member Secretary

Maharashtra Pollution Control Board,
Kalpataru Point, 3rd floor, Opp. PVR Cinema,
Sion Circle, Sion, Mumbai-400 022

Tel: _____

Mail id: _____

Against Contract covering "Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra" (hereinafter called the said 'Contract') entered into between the Maharashtra Pollution Control Board - (hereinafter called MPCB) and _____ (hereinafter called the Bidder) this is to certify that at the request of the Bidder we _____ Bank Ltd., are holding in trust in favor of MPCB, the amount of _____ (write the sum here in words) to indemnify and keep indemnified MPCB against any loss or damage that may be caused to or suffered by MPCB by reason of any breach by the Bidder of any of the terms and conditions of the said contract and/or in the performance thereof. We agree that the decision of MPCB, whether any breach of any of the terms and conditions of the said contract and/or in the performance thereof has been committed by the Bidder and the amount of loss or damage that has been caused or suffered by MPCB shall be final and binding on us and the amount of the said loss or damage shall be paid by us forthwith on demand and without demur to MPCB.

We _____ Bank Ltd, further agree that the guarantee herein contained shall remain in full force and effect during the period that shall be taken for satisfactory performance and fulfillment in all respects of the said contract by the Bidder i.e. till _____ hereinafter called the said date and that if any claim accrues or arises against us _____ Bank Ltd, by virtue of this guarantee before the said date, the same _____ shall _____ be _____ enforceable _____ against _____ us _____ Bank Ltd, notwithstanding the fact that the same is enforced within six months after the said date, provided that notice of any such claim has been given to us _____ Bank Ltd, by MPCB before the said date.

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

Payment under this letter of guarantee shall be made promptly upon our receipt of notice to that effect from MPCB.

The Performance Bank Guarantee shall be valid from the date of acceptance of the Letter of Intent and shall continue till Ninety (90) days after the completion of all contractual liabilities including warranty obligations and defect liability period as per CVC guidelines. It is fully understood that this guarantee is effective from the date of the said contract and that we _____ Bank Ltd, undertake not to revoke this guarantee during its currency without the consent in writing of MPCB.

We undertake to pay to MPCB any money so demanded notwithstanding any dispute or disputes raised by the Bidder in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present bond being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Bidder shall have no claim against us for making such payment.

The provisions relating to Sanctions for Violations specified in the Integrity Pact, entered into by the Bidder with MPCB shall be applicable for forfeiture of Performance Bank guarantee in case of a decision by MPCB to forfeiture the same without assigning any reason for imposing sanction for violation for the Pact.

We _____ Bank Ltd, further agree that MPCB shall have the fullest liberty, without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the Bidder from time to time or to postpone for any time from time to time any of the powers exercisable by MPCB against the said Bidder and to forebear or enforce any of the terms and conditions relating to the said contract and we, _____ Bank Ltd., shall not be released from our liability under this guarantee by reason of any such variation or extension being granted to the said Bidder or for any forbearance by MPCB to the said Bidder or for any forbearance and or omission on the part of MPCB or any other matter or thing whatsoever, which under the law relating to sureties, shall, but for this provision have the effect of so releasing us from our liability under this guarantee.

This guarantee shall not be discharged due to the change in the constitution of the Bank or the Bidder.

Date _____
Place _____ Signature _____
Witness _____ Printed name _____
(Bank's common seal)

Section III- Other Information

9. Annexure-4: Draft Conditions of Contract

This AGREEMENT is made at _____, Maharashtra, on this ____ day of, ____ 2023,

BETWEEN

<<Insert Designation of Authorized Signatory>> Maharashtra Pollution Control Board, Government of Maharashtra, having its office at Kalpataru Point, 3rd Floor, opposite PVR Cinema, Sion Circle, Sion, Mumbai -400022, Maharashtra India hereinafter referred to as 'MPCB' or "First Part" which expression shall, unless the context otherwise requires, include its permitted successors and assigns

And

<<***>>, a Company incorporated under the *Companies Act, 1956*, having its registered office at <<***>> (hereinafter referred to as "*Party*" or "*Second Part*" which expression shall, unless the context otherwise requires, include its permitted successors and assigns).

Each of the parties mentioned above are collectively referred to as the '*Parties*' and individually as a '*Party*'

Whereas:

Whereas MPCB has envisaged Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra (Hereinafter referred to as the "said Project").

And whereas MPCB has published the RFP to seek services of a reputed Agency for Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra.

And whereas M/s. ----- has submitted its proposal for Selection of Agency for Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) located in the state of Maharashtra.

And whereas MPCB and M/s. ----- have decided to enter into this Agreement on the terms and conditions stipulated hereinafter.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH and the parties hereto hereby mutually agree as follows: -

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

The Agreement shall consist of this Contract Form and the following documents, and the exhibits, drawings, specifications, and other documents referred to therein (hereinafter the 'Contract Documents'), all of which by this reference are incorporated herein and made part hereof:

1. Notification of Award / Work Order
2. RFP / Tender Form
3. Scope of Work as given in the RFP / Tender Document.
4. Project & Payment schedule as given in the RFP / Tender Document.
5. Terms & Conditions of Contract as given in the RFP / Tender Document.
6. Service Level Agreement (SLA) as given in the RFP / Tender Document.
7. Technical proposal of Tenderer.
8. Financial Proposal

This Agreement sets forth the entire contract and agreement between the parties pertaining to "Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra" and supersedes any and all earlier verbal or written agreements. This agreement shall prevail over all other Contract Documents. In the event of any discrepancy or inconsistency within the contract documents, then the documents shall prevail in the order listed above.

In consideration of the payments to be made by the Corporation to the Agency as hereinafter mentioned, the Agency hereby covenants with MPCB to maintain and operate the entire proposed solution and to remedy defects therein in conformity in all respects with the provisions of the Contract. The Contract Price or such other sum as may become payable under the provisions of the agreement shall be at the times and in the manner prescribed in the Agreement.

Any notice under this agreement shall be in the form of letter, fax. Notices to either party will be given at such address/addresses as such party shall specify from time to time by written notice to the other. In the absence of such notice to the contrary, notice to MPCB shall be properly addressed to:

To,
Member Secretary
Maharashtra Pollution Control Board,
Kalpataru Point, 3rd floor, Opp. PVR Cinema,
Sion Circle, Sion, Mumbai-400 022

and notice to the Agency shall be properly addressed to:

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

A notice shall be effective when delivered or on the notice's effective date, whichever is later.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, and delivered

By -----

Member Secretary

For and on behalf of MPCB

Signed, sealed, and delivered

By -----

For and on behalf of the "Agency",

Witnesses:

(1)

(2)

NOW THEREFORE, in consideration of the mutual covenants, promises, assurances, representations and provisions set forth herein, the Parties hereto agree as follows:

<< Scope of Work, Solution Overview, Project & Payment Schedule, Terms & Conditions as specified above in the RFP document>>

Note:

- a) The stamp duty payable for the contract shall be borne by the successful bidder.
- b) The above Draft Master Service Agreement is only indicative description of the contract agreement. However, the actual contract agreement shall be finalized and notified by MPCB after final selection of the Agency

10. Annexure-5: Non-Disclosure Agreement (NDA) with MPCB

This Non-Disclosure Agreement ("Non-Disc") is made and entered into day ____ month ____ year ____ effective date) by and between MPCB and _____ designated _____ bidder ("Company").

Whereas MPCB and Company have entered into an Agreement ("Agreement") for Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra effective from _____.

and

Whereas each party desires to disclose to the other party certain information in oral or written form, which is proprietary and confidential to the disclosing party, ("CONFIDENTIAL INFORMATION").

NOW, THEREFORE, in consideration of the foregoing and the covenants and agreements contained herein, the parties agree as follows:

1. Definitions. As used herein:

- a. The term "Confidential Information" shall include, without limitation, all information and materials, furnished by either Party to the other in connection with citizen/users/persons/customers data, products and/or services, including information transmitted in writing, orally, visually, (e.g. video terminal display) or on magnetic or optical media, and including all proprietary information, customer & prospect lists, trade secrets, trade names or proposed trade names, methods and procedures of operation, commercial or marketing plans, licensed document know-how, ideas, concepts, designs, drawings, flow charts, diagrams, quality manuals, checklists, guidelines, processes, formulae, source code materials, specifications, programs, software packages, codes and other intellectual property relating to the disclosing party's data, computer database, products and/or services. Results of any tests, sample surveys, analytics, data mining exercises or usages etc. carried out by the receiving party in connection with MPCB's Information including citizen/users/persons/customers personal or sensitive personal information as defined under any law for the time being in force shall also be considered Confidential Information.
- b. The term, "Owner/Purchaser/Client /Department" shall include the officers, employees, agents, consultants, contractors and representatives of MPCB.
- c. The term, "Company" shall include the directors, officers, employees, agents, consultants, contractors and representatives of _____ (Contractor), including its applicable affiliates and subsidiary companies.

2. Protection of Confidential Information. With respect to any Confidential Information disclosed to it or to which it has access, Company affirms that it shall:

- a. Use the Confidential Information as necessary only in connection with Project and in accordance with the terms and conditions contained herein.
- b. Maintain the Confidential Information in strict confidence and take all reasonable steps to enforce the confidentiality obligations imposed hereunder, but in no event take less

care with the Confidential

- c. Information that the parties take to protect the confidentiality of its own proprietary and confidential information and that of its clients.
 - d. Not to make or retain copy of any commercial or marketing plans, citizen/users/person's/customers database, Proposals developed by or originating from MPCB or any of the prospective clients of MPCB except as necessary, under prior written intimation from MPCB, in connection with the Project, and ensure that any such copy is immediately returned to MPCB even without express demand from MPCB to do so.
 - e. Not disclose or in any way assist or permit the disclosure of any Confidential Information to any other person or entity without the express written consent of the other party; and
 - f. Return to the other party, or destroy, at MPCB's discretion, any and all Confidential Information disclosed in a printed form or other permanent record, or in any other tangible form (including without limitation, all copies, notes, extracts, analyses, studies, summaries, records and reproductions thereof) immediately upon the earlier to occur of expiration or termination of either party's engagement in the Project, or (ii) the request of the other party therefore.
 - g. Not to discuss with any member of the public, media, press, any or any other person about the nature of arrangement entered between MPCB and Company or the nature of services to be provided by the Company to MPCB.
3. Onus - Company shall have the burden of proving that any disclosure or use inconsistent with the terms and conditions hereof falls within any of the following exceptions:
Exceptions: These restrictions as enumerated in section 1 of this Agreement shall not apply to any Confidential Information:
- (i.) Which is independently developed by the Company or lawfully received from another source free of restriction and without breach of this Agreement; or
 - (ii.) After it has become generally available to the public without breach of this Agreement by the Company; or
 - (iii.) Which at the time of disclosure to Company was known to such party free of restriction and evidenced by documentation in such party's possession; or
 - (iv.) Which MPCB agrees in writing is free of such restrictions.
 - (v.) Which is received from a third party not subject to the obligation of confidentiality with respect to such Information.
4. Remedies - Company acknowledges that (a) any actual or threatened disclosure or use of the Confidential Information by Company would be a breach of this agreement and may cause immediate and irreparable harm to MPCB; (b) Company affirms that damages from such disclosure or use by it may be impossible to measure accurately; and (c) injury sustained by MPCB may be impossible to calculate and remedy fully. Therefore, Company acknowledges that in the event of such a breach, MPCB shall be entitled to specific performance by the Company of the Company's obligations contained in this Agreement. In addition, the Company shall indemnify MPCB of the actual and liquidated damages which may be demanded by MPCB. Moreover, MPCB shall be entitled to recover all costs (including reasonable attorneys' fees) which it or they may incur in connection with defending its interests and enforcement of legal rights arising due to a breach of this agreement by the Company.
5. Need to Know- Company shall restrict disclosure of such Confidential Information to its employees and/or consultants with a need to know (and advise such employees of the

obligations assumed herein), shall use the Confidential Information only for the purposes set forth in the Agreement, and shall not disclose such Confidential Information to any affiliates, subsidiaries, associates and/or third party without prior written approval of the disclosing party.

6. Intellectual Property Rights Protection - No license to a party, under any trademark, patent, copyright, design right, mask work protection right, or any other intellectual property right is either granted or implied by the conveying of Confidential Information to such party.
7. No Conflict - The parties represent and warrant that the performance of its obligations hereunder does not and shall not conflict with any other agreement or obligation of the respective parties to which they are a party or by which the respective parties are bound.
8. Authority - The parties represent and warrant that they have all necessary authority and power to enter into this Agreement and perform their obligations hereunder.
9. Dispute Resolution - If any difference or dispute arises between MPCB and the Company in connection with the validity, interpretation, implementation or alleged breach of any provision of this Agreement, any such dispute shall be referred to Arbitration Authority.
 - (i.) The arbitration proceedings shall be conducted in accordance with the (Indian) Arbitration & Conciliation Act, 1996 & amendments thereof.
 - (ii.) The place of arbitration shall be Mumbai
 - (iii.) The arbitrator's award shall be substantiated in writing and binding on the parties.
 - (iv.) The proceedings of arbitration shall be conducted in the English language.
 - (v.) The arbitration proceedings shall be completed within a period of 180 days from the date of reference of the dispute to arbitration.
10. Governing Law - This Agreement shall be interpreted in accordance with and governed by the substantive and procedural laws of India and the parties hereby consent to the exclusive jurisdiction of Courts and/or Forums situated in Mumbai, India only.
11. Entire Agreement. This Agreement constitutes the entire understanding and agreement of the parties and supersedes all previous or contemporaneous agreement or communications, both oral and written, representations and understandings among the parties with respect to the subject matter hereof.
12. Amendments - No amendment, modification and/or discharge of this Agreement shall be valid or binding on the parties unless made in writing and signed on behalf of each of the parties by their respective duly authorized officers or representatives.
13. Binding Agreement - This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.
14. Severability - It is the intent of the parties that in case any one or more of the provisions contained in this Agreement shall be held to be invalid or unenforceable in any respect, such provision shall be modified to the extent necessary to render it, as modified, valid and enforceable under applicable laws, and such invalidity or unenforceability shall not affect the other provisions of this Agreement.
15. Waiver - If either party should waive any breach of any provision of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same

or any other provision hereof.

16. Survival - Both parties agree that all of their obligations undertaken herein with respect to Confidential Information received pursuant to this Agreement shall survive till perpetuity even after any expiration or termination of this Agreement.
17. Non-solicitation - During the term of this Agreement and thereafter for a further period of two (2) years Company shall not solicit or attempt to solicit MPCB's employees and/or consultants, for the purpose of hiring/contract or to proceed to conduct operations/business similar to MPCB with any employee and/or consultant of MPCB who has knowledge of the Confidential Information, without the prior written consent of MPCB. This section will survive irrespective of the fact whether there exists a commercial relationship between Company and MPCB.
18. Term - Subject to aforesaid section 17, this Agreement shall remain valid up to 3 years from the "effective date".

IN WITNESS HEREOF, and intending to be legally bound, the parties have executed this Agreement to make it effective from the date and year first written above.

SIGNED AND DELIVERED)
by the within-named Purchaser)
by the hand of its authorized)
representative _____)
Member secretary, MPCB in the)
presence of _____)
MPCB _____)
by the within named Company)
_____)
by the hand of its authorized)
representative Shri/Smt _____)
_____)
in the presence of _____)

11. Annexure-6: Daily Reporting Format

11.1 For Meteorological Parameters

(To be submitted daily at 6 AM from the previous day 6 AM)

Location:

Date:

| Hrs. | WIND SPEED | WIND DIRECTION | HUMIDITY | TEMPERATURE | SOLAR RADIATION | RAINFALL | REMARKS |
|---------|---------------|-------------------|----------|-------------|--------------------|----------|---------|
| 06-07 | | | | | | | |
| 07-08 | | | | | | | |
| 08-09 | | | | | | | |
| 09-10 | | | | | | | |
| 10-11 | | | | | | | |
| 11-12 | | | | | | | |
| 12-13 | | | | | | | |
| 13-14 | | | | | | | |
| 14-15 | | | | | | | |
| 15-16 | | | | | | | |
| 16-17 | | | | | | | |
| 17-18 | | | | | | | |
| 18-19 | | | | | | | |
| 19-20 | | | | | | | |
| 20-21 | | | | | | | |
| 21-22 | | | | | | | |
| 22-23 | | | | | | | |
| 23-24 | | | | | | | |
| 00-01 | | | | | | | |
| 01-02 | | | | | | | |
| 02-03 | | | | | | | |
| 03-04 | | | | | | | |
| 04-05 | | | | | | | |
| 05-06 | | | | | | | |
| Min. | | | | | | | |
| Max. | | | | | | | |
| Average | | | | | | | |

11.2 For Main Pollutants

(To be submitted daily at 6 AM from the previous day 6 AM)

AMBIENT AIR QUALITY DATA

Location:

Date:

| Hrs. | SO2 | NO | NO2 | NOX | NH3 | CO | O3 | PM 2.5 | PM 10 | Benzene | Toluene | Xylene | Remarks |
|-----------|-----|----|-----|-----|-----|----|----|--------|-------|---------|---------|--------|---------|
| 06-07 | | | | | | | | | | | | | |
| 07-08 | | | | | | | | | | | | | |
| 08-09 | | | | | | | | | | | | | |
| 09-10 | | | | | | | | | | | | | |
| 10-11 | | | | | | | | | | | | | |
| 11-12 | | | | | | | | | | | | | |
| 12-13 | | | | | | | | | | | | | |
| 13-14 | | | | | | | | | | | | | |
| 14-15 | | | | | | | | | | | | | |
| 15-16 | | | | | | | | | | | | | |
| 16-17 | | | | | | | | | | | | | |
| 17-18 | | | | | | | | | | | | | |
| 18-19 | | | | | | | | | | | | | |
| 19-20 | | | | | | | | | | | | | |
| 20-21 | | | | | | | | | | | | | |
| 21-22 | | | | | | | | | | | | | |
| 22-23 | | | | | | | | | | | | | |
| 23-24 | | | | | | | | | | | | | |
| 00-01 | | | | | | | | | | | | | |
| 01-02 | | | | | | | | | | | | | |
| 02-03 | | | | | | | | | | | | | |
| 03-04 | | | | | | | | | | | | | |
| 04-05 | | | | | | | | | | | | | |
| 05-06 | | | | | | | | | | | | | |
| Standards | | | | | | | | | | | | | |
| Min. | | | | | | | | | | | | | |
| Max. | | | | | | | | | | | | | |
| Average | | | | | | | | | | | | | |

12. Annexure-7: Technical Details of Ambient Air Quality Monitoring Analysers (Gas)

A. AMBIENT SULPHUR DIOXIDE (SO₂) ANALYSER

1. Principle: UV Fluorescence
2. Measurement: SO₂ in Ambient Air
3. Display: Digital
4. Ranges: Auto ranging 0 - 200 ppb
5. Lower Detectable Limit: 1 ppb
6. Noise Level: 0.5 ppb
7. Zero Drift: < 1 ppb/24 compensation Hrs. with automatic zero
8. Span Drift: < 1 ppb in 24 hrs.
9. Linearity: $\pm 1\%$ of full scale
10. Response Time: 120 sec or less
11. Analog Output: 0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA
12. Digital Output: Multiple drop
13. Calibration

B. AMBIENT OXIDES OF NITROGEN (NO-NO₂-NO_x) ANALYSER

1. Principle: Chemiluminescence
2. Measurement: NO-NO₂- NO_x in Ambient Air
3. Display: Digital
4. Ranges: Auto ranging 0-2000 ppb
5. Lower Detectable Limit: 1 ppb
6. Noise Level: 0.5 ppb
7. Zero Drift: < 1 ppb/24 Hrs.
8. Span Drift: < 2% in 15 days of full scale
9. Linearity: $\pm 1\%$ of full scale
10. Response Time: 120 sec or less
11. Calibration:
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

C. AMBIENT AMMONIA ANALYSER (NH₃)

1. Principle Chemiluminescence (NH₃ conversion to NO by oxidation. NO₂ also converted to NO. The difference obtained by measuring NO in output of two sample stream as equal to NH₃)
2. Measurement NH₃ in Ambient Air
3. Display Digital
4. Ranges Auto ranging 0-1000 ppb
5. Lower Detectable Limit 1 ppb
6. Noise Level 0.2% of reading
7. Zero Drift < 2% in 15 days of full scale
8. Span Drift < 2% in 15 days of full scale
9. NH₃/NO converter Quartz at approx. 10000 C
10. Linearity $\pm 1\%$ of full scale
11. Response time < 30 Sec
12. Rise / fall Time (95% of the final value) < 30 Sec
13. Calibration
14. Analog Output 0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA and Digi output
15. Digital Output Multi drop, Ethernet

D. AMBIENT CARBON MONOXIDE (CO) ANALYSER

1. Principle: Non-Dispersive Infra-Red (NDIR) with Gas Filter Correlation/ Cross Flow Modulation Method
2. Measurement: CO in Ambient Air
3. Display: Digital
4. Ranges: Auto ranging 0 - 100 ppm.
5. Lower Detectable Limit: 0.1 ppm
6. Noise Level: 0.05 ppm with time constant \pm 30 seconds
7. Zero Drift: < 0.2 ppm/7 days
8. Span Drift: < 1% full scale in 24 hrs.
9. Linearity: Continuous + 1%
10. Response Time: 50 seconds or less
11. Calibration
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

E. AMBIENT OZONE (O3) ANALYSER

4. Principle: UV Photometric / Chemiluminescence
5. Measurement: O3 in Ambient Air
6. Display: Digital
7. Range: Auto ranging 0 - 500 ppb
8. Lower Detectable Limit: 1.0 ppb
9. Noise level: \pm 0.5 ppb
10. Zero Drift: < ½% per month
11. Span Drift: < 1% per month
12. Linearity: Continuous + 1%
13. Response Time: 30 seconds or less
14. Calibration: With built in Zero and span generator
15. Analog Output: 0 – 1 V, 0 – 10 V, 2 – 20 mA / 4 – 20 mA
16. Digital Output: Multiple drop RS 232 port, USB port /TCP/IP, Ethernet

F. AMBIENT BTEX ANALYSER

1. Principal: Based on gas Chromatographic separation and Photo Ionization Detector (PID)
2. Measurement: Benzene, Toluene, Ethylbenzene, m.p-Xylene and o-Xylene.
3. Display: Digital Range: 0 - 100 ppb (0.32 – 325 μ g/m³)
4. Lower detectable limit: 0.2 ppb (0.65 μ g/m³) for 15 min cycle for Benzene
5. Temperature Range: 5 - 35oC or more
6. Repeatability: Retention Time:
7. Typical Cycle Time: Total Cycle Time should not exceed 15min i.e.
8. Sample Collection Time -15 min approx.
9. Analytical Time- 15 min approx.
10. Sample Volume: 1 litre for 15 min cycle.
11. Desorption tube: Carbo trap
12. Pre concentration: Carbo pack
13. Calibration: The Analyzer should be capable to calibrate through Multi Calibration System.
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

G. 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.

1. Principle: β -ray attenuation
2. Particle Size Cut Off: 0 - 10 Microns
3. Measuring Range: 0 – 1000 $\mu\text{g}/\text{m}^3$
4. Resolution: 1% of the measurement range
5. Lower Detection Limit: < 4.8 $\mu\text{g}/\text{m}^3$ (1 hour)
6. Detector: Plastic Scintillator / GM Counter / Silicon Semiconductor base
7. Air Flow Rate: 16.7 Litres / minute
8. Filter Material: Glass Fiber Filter
9. Display: LED / LCD
10. Sampling Head: Dynamic heated sampling head for measurement of PM10, with adjustable temperature 20 – 70 $^{\circ}\text{C}$
11. Calibration: Reference membrane facility should be provided for calibration of analyser.
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

H. CONTINUOUS PM2.5 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 PM2.5.

1. Principle: β -ray attenuation
2. Particle Size Cut Off: 0 – 2.5 Microns
3. Measuring Range: 0 – 1000 $\mu\text{g}/\text{m}^3$
4. Resolution: 1% of the measurement range
5. Lower Detection Limit: < 4.8 $\mu\text{g}/\text{m}^3$ (1 hour)
6. Detector: Plastic Scintillator / GM Counter / Silicon-Semiconductor base
7. Air Flow Rate: 16.7 litres / minute
8. Filter Material: Glass Fiber Filter
9. Display: LED / LCD
10. Sampling Head: Dynamic heated sampling head 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 analyser.
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

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

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

J. 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, CO, NH₃ and BTEX analyser.
 - (ii.) Auto calibration (user selectable).
 - (iii.) Generate zero air of 99.9% purity (High Performance Zero Air Generator 168 to be provided).
 - (iv.) Gas Phase Titration (GPT) with O₃ generator having 100% converter efficiency for conversion of NO₂ to NO.
 - (v.) Calibration using permeation tubes for which at least two chambers-based Permeation system has to be provided.
 - (vi.) 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 OC and 50 OC.
2. System should be DAS compatible for remote calibration from MPCB Server.
3. The system should also have facility for multipoint calibration of Ozone analyzer.

13. Annexure-8: Station Locations for CAMC and Instrument details

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|---|---------------------|------------|---|--|-----------------------------|-----------------------|-----|
| 1 | Mira-Bhayandar Municipal Corporation (MBMC) | Mira Bhayander | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA): - UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 2 | Ahmednagar Municipal Corporation | Ahmednagar | Ahmednagar | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA): - UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--------------------------------|--------------------------|----------|---|---|-----------------------------|-----------------------|-----|
| 3 | Akola Municipal Corporation | Akola | Akola | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 4 | Amravati Municipal Corporation | Amravati Shivaji College | Amravati | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|----------------------------------|----------------------------|------------|---|---|-----------------------------|-----------------------|-----|
| 5 | Amravati Municipal Corporation | Amravati MPCB Premises | Amravati | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 6 | Aurangabad Municipal Corporation | Aurangabad Devgiri College | Aurangabad | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|----------------------------------|------------------------|------------|---|---|-----------------------------|-----------------------|-----|
| 7 | Aurangabad Municipal Corporation | Aurangabad MPCB Bhavan | Aurangabad | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 8 | Aurangabad Municipal Corporation | Aurangabad Walunj | Aurangabad | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--|---------------------|------------|---|---|-----------------------------|-----------------------|-----|
| 9 | Bhiwandi-Nizampur Municipal Corporation. | Bhiwandi | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 10 | Chandrapur Municipal Corporation | Chandrapur Old MIDC | Chandrapur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|----------------------------------|-------------------------|------------|---|---|-----------------------------|--|-----|
| 11 | Chandrapur Municipal Corporation | Chandrapur Udyog Bhawan | Chandrapur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Environment SA, France | Ecotech Monitoring Solutions India Pvt. Ltd. | 1 |
| 12 | Dhule Municipal Corporation | Dhule | Nashik | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Gauge Method SO2 (ENVEA):- UV Fluorescence NOX & NH3 (ENVEA):- Chemiluminescence CO:- Gas Filter Correlation O3 (ENVEA):- UV photometric Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Gauge, Solar Radiation sensors. | Environment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-------------------------------|---------------------|---------|---|---|-----------------------------|-----------------------|-----|
| 13 | Jalgaon Municipal Corporation | Jalgaon | Jalgaon | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 14 | Jalna Municipal Corporation | Jalna | Jalna | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|---------------------------------------|-----------------------|--------|---|---|-------------------------------------|-----------------------------------|-----|
| 15 | Kalyan Dombivli Municipal Corporation | Dombivli Pimples hwar | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 16 | Kalyan Dombivli Municipal Corporation | Kalyan | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorscenece, NOX & NH3(Teledyne):- Chemiluminance, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrol s Teldyne/ Metone /Synspec | Chemitro ls Industrie s Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--------------------------------|-----------------------------|----------|---|---|-----------------------------|-----------------------|-----|
| 17 | Kolhapur Municipal Corporation | Kolhapur Shivaji University | Kolhapur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 18 | Kolhapur Municipal Corporation | Sinchan Bahwan Kolhapur | Kolhapur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|------------------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 19 | Kulgaon Badlapur Municipal Council | Badlapur | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 20 | Latur Municipal Corporation | Latur | Latur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--------------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 21 | Mahad Municipal Council | Mahad | Mahad | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 22 | Malegaon municipal Corporation | Malegaon | Nashik | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|---|---------------------|----------------------|---|---|-----------------------------|-----------------------|-----|
| 23 | Municipal Corporation on Greater Mumbai | Bandra | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 24 | Municipal Corporation on Greater Mumbai | BKC | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|---|---------------------|----------------------|---|---|-----------------------------|-----------------------|-----|
| 25 | Municipal Corporation on Greater Mumbai | Chembur | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 26 | Municipal Corporation on Greater Mumbai | Malad | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--------------------------------------|---------------------|----------------------|---|--|-----------------------------------|---------------------------------|-----|
| 27 | Municipal Corporation Greater Mumbai | Colaba | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |
| 28 | Municipal Corporation Greater Mumbai | Worli | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |
| 29 | Municipal Corporation Greater Mumbai | Sion | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--------------------------------------|---------------------|----------------------|---|---|----------------------------------|---------------------------------|-----|
| | | | | | (Metone): - All in one sensor. | | | |
| 30 | Municipal Corporation Greater Mumbai | Ville Parle | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone/Synspec | Chemitrols Industries Pvt. Ltd. | 1 |
| 31 | Municipal Corporation Greater Mumbai | IIT Powai | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone/Synspec | Chemitrols Industries Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--------------------------------------|---------------------|----------------------|---|--|-----------------------------------|---------------------------------|-----|
| 32 | Municipal Corporation Greater Mumbai | Borivali | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |
| 33 | Municipal Corporation Greater Mumbai | Kandivali | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |
| 34 | Municipal Corporation Greater Mumbai | Mulund | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--------------------------------------|---------------------|----------------------|---|---|------------------------------------|----------------------------------|-----|
| | | | | | (Metone): - All in one sensor. | | | |
| 35 | Municipal Corporation Greater Mumbai | Kurla | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtronics Teldyne/Metone/Synspec | Chemtronics Industries Pvt. Ltd. | 1 |
| 36 | Municipal Corporation Greater Mumbai | Airport | Greater Mumbai (MMR) | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtronics Teldyne/Metone/Synspec | Chemtronics Industries Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|------------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 37 | Nagpur Municipal Corporation | Nagpur Town hall | Nagpur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 38 | Nagpur Municipal Corporation | Nagpur VINIT | Nagpur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|------------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 39 | Nagpur Municipal Corporation | Nagpur LIT | Nagpur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 40 | Nagpur Municipal Corporation | Nagpur civil lines | Nagpur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|---|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 41 | Nanded-Waghala Municipal Corporation (NWCMC). | Nanded | Nanded | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 42 | Nashik municipal Corporation | Aima Ambad Nashik | Nashik | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|------------------------------|--------------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 43 | Nashik municipal Corporation | Guru Gobind Singh Nashik | Nashik | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 44 | Nashik municipal Corporation | Nashik Panchav ati | Nashik | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-----------------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 45 | Nashik municipal Corporation | Nashik KTHM | Nashik | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 46 | Navi Mumbai Municipal Corporation | Belapur | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-----------------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 47 | Navi Mumbai Municipal Corporation | Kopriga on Vashi | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 48 | Navi Mumbai Municipal Corporation | Sanpada | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-----------------------------------|---------------------|--------|---|---|-----------------------------------|---------------------------------|-----|
| 49 | Navi Mumbai Municipal Corporation | Nerul | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |
| 50 | Navi Mumbai Municipal Corporation | Mahape | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|------------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 51 | Panvel Municipal Corporation | Taloja | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 52 | Panvel Municipal Corporation | Kalambo li | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--|---------------------|----------|---|---|-----------------------------|-----------------------|-----|
| 53 | Parbhani City Municipal Corporation | Parbhani | Parbhani | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 54 | Pimpri Chinchwad Municipal corporation | Jagtap Dairy Pune | Pimpri | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--|-------------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 55 | Pimpri Chinchwad Municipal corporation | Dange Chowk Pune | Pimpri | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 56 | Pimpri Chinchwad Municipal corporation | Pune Pimpri Rose Garden | Pimpri | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|----------------------------|---------------------|--------|---|---|-------------------------------------|----------------------------------|-----|
| 57 | Pune Municipal Corporation | Katraj Dairy | Pune | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 58 | Pune Municipal Corporation | Pune University | Pune | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Chemtrol s Teldyne/ Metone /Synspec | Chemitro ls Industries Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-------------------------------|---------------------|---------|---|---|-----------------------------|-----------------------|-----|
| 59 | Pune Municipal Corporation | Pune | Pune | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Environment SA, France | Envea India Pvt. Ltd. | 1 |
| 60 | Sangali Municipal Corporation | Sangali | Sangali | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Gauge Method SO2 (ENVEA):- UV Fluorescence NOX & NH3 (ENVEA):- Chemiluminescence CO:- Gas Filter Correlation O3 (ENVEA):- UV photometric Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Gauge, Solar Radiation sensors. | Environment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-------------------------------|---------------------|---------|---|---|-------------------------------------|----------------------------------|-----|
| 61 | Solapur Municipal Corporation | Solapur Jule Chowk | Solapur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 62 | Solapur Municipal Corporation | Solapur Saat Rasta | Solapur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Chemtrol s Teldyne/ Metone /Synspec | Chemitro ls Industries Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-------------------------------|---------------------|---------|---|---|-----------------------------|-----------------------|-----|
| 63 | Solapur Municipal Corporation | Solapur | Solapur | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Environment SA, France | Envea India Pvt. Ltd. | 1 |
| 64 | Thane Municipal Corporation | Tarapur | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Gauge Method SO2 (ENVEA):- UV Fluorescence NOX & NH3 (ENVEA):- Chemiluminescence CO:- Gas Filter Correlation O3 (ENVEA):- UV photometric Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Gauge, Solar Radiation sensors. | Environment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|-----------------------------|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 65 | Thane Municipal Corporation | Thane CTP | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 66 | Thane Municipal Corporation | Thane Upvan | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

Request for Proposal for Selection of Agency for Development and Maintenance of Web based server and Composite Comprehensive Annual Maintenance Contract (CAMC) for 69 Nos. of Existing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) Located in the State of Maharashtra

| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--|---------------------|--------|---|---|-----------------------------|-----------------------|-----|
| 67 | ULHASNAGAR MUNICIPAL CORPORATION | Ulhasnagar | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |
| 68 | Vasai-Virar City Municipal Corporation | Virar | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5 (ENVEA): - Beta Guage Method SO2 (ENVEA):- UV Fluorscenece NOX & NH3 (ENVEA):- Chemiluminance CO:- Gas Filter Correlation O3 (ENVEA):- UV photomatic Btex (ENVEA):- Gas chromatography Weather parameter (LSI): - Wind speed - Wind direction, Temperature - Humidity, Rain Guage, Solar Radiation sensors. | Environ ment SA, France | Envea India Pvt. Ltd. | 1 |

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| Sl. No. | Municipal Corporations | Location of Station | Region | Parameters | Device information w.r.t. methodology as per NAAQS | Analyze r/ Instruments make | O&M By | Qty |
|---------|--|---------------------|--------|---|---|-----------------------------------|---------------------------------|-----|
| 69 | Vasai-Virar City Municipal Corporation | Vasai | MMR | PM10, 2.5, SO2, NOX, NH3, CO, O3, Btex & Weather Parameters | PM10, PM 2.5(Metone): - Beta Attenuation Method, So2(Teledyne):- UV Fluorescence, NOX & NH3(Teledyne):- Chemiluminescence, CO(Teledyne):- Gas Filter Correlation, O3(Teledyne):- UV Absorption, Btex (Synspec):- Gas chromatography, Weather parameter (Metone): - All in one sensor. | Chemtrols Teldyne/Metone /Synspec | Chemitrols Industries Pvt. Ltd. | 1 |

14. Annexure-9: Declaration of Data Security

(To be submitted on the Letterhead of the bidder's company)

To,

Member Secretary

Maharashtra Pollution Control Board,
Kalpataru Point, 3rd floor, Opp. PVR Cinema,
Sion Circle, Sion, Mumbai-400 022

Dear Sir,

We..... Who are established and reputable bidder having office at..... Do hereby certify that MPCB shall have absolute right on the digital data and output products processed / produced by us. We shall be responsible for security / safe custody of data during processing.

We also certify that the data will not be taken out of the MPCB's premises on any media. The original input data supplied to us by MPCB, and output products processed / produced from input data will not be passed on to any other System Integrator or individual other than the authorized person of MPCB. We shall abide by all security and general instructions issued by MPCB from time to time.

We also agree that any data from our computer system will be deleted in the presence of MPCB official after completion of the project task.

Thanking you,

Yours Faithfully,

Signature of Authorized Signatory (with official seal)

Name:

Designation:

Address:

Telephone & Fax: E-mail address:

Seal of the Organization

15. Annexure 10: Technical Specification

(For Cloud Hosting of Web Application Software)

I. General Requirements:

| Sr. No. | Description |
|---------|---|
| 1. | Cloud service provider must ensure that all compute, storage, network, database and other resources are hosted within India region only. Cloud service provider also ensures that MPCB's data must reside only in India region. |
| 2. | Cloud service provider should offer cloud services in high availability and redundant manner to avoid single point of failure at any point of time. CSP should ensure primary and secondary datacenters/ multi availability sites are designed to provide low latency connectivity and isolated from failure. |
| 3. | CSP should provide auto scaling support for all compute instances (without any manual intervention) during peak demand as well as normal workloads to maintain stable performance of applications |
| 4. | CSP should provide the minimum of 99.7 % Monthly SLA |
| 5. | CSP should have capability to provide server, where customer can get the option to leverage its existing Microsoft and Oracle software license to deploy. No other customer should share the same license and MPCB's security & operations should not be compromised. |
| 6. | Cloud Service Provider shall not take any action(s) that would cause an infringement of the Software licensing and warranties or otherwise be considered a violation of the applicable licensing and warranty terms and conditions. |
| 7. | The Cloud Service Provider must have connectivity of leading ISPs viz. BSNL/MTNL, Airtel, Vodafone, Jio, Idea, RCOM, Tata Teleservices, RailTel, etc. |
| 8. | The Cloud Service Provider must have followed certification for their proposed facilities: <ol style="list-style-type: none"> 1. SOC1 2. SOC2 3. ISO 27001 |
| 9. | CSP have capability to Provision the Compute Instance on the fly through Console within 15 minutes. |
| 10. | CSP should have on their public facing website the rates for the cloud services. They should also offer a working calculator on their websites to prepare an estimate of their offerings |
| 11. | CSP should be able to provide a dashboard live-status of cloud services' health across global data center and outage details (if any) with RCA. This will provide confirmation that there is any problem due to unavailability of cloud service or a network issue |
| 12. | CSP should be able to offer a cloud native service for caching static content (CDN). |

II. Compute requirements:

| Sr. No. | Specification |
|---------|---|
| 1 | Compute service should provide auto-scalable, redundant, dynamic computing capabilities. |
| 2 | Compute service should have support for operating systems such as, Red Hat Enterprise Linux, SuSE Enterprise Linux, Windows Server, etc. |
| 3 | Compute service should include instance types as per application and database instance requirements such as compute optimized, memory optimized, storage optimized, IO optimized etc. |
| 4 | Compute service must allow resizing of compute resources (vCPU, Memory, Storage, Network, IOPS etc.) at any point of time. |
| 5 | Compute service should provide local storage for compute instances in case of temporary use. |
| 6 | Compute service should allow MPCB's authorized users to procure and provision computing services or virtual machine instances online with multi factor authentication via the SSL through a web browser |
| 7 | CSP should provide self-service provisioning of multiple instances concurrently. |
| 8 | CSP should provide ability to logically group instances for applications that require low network latency and/or high network throughput. |
| 9 | CSP should make sure that compute instances designed in such way to avoid any outage or downtime when CSP performing any maintenance activity. |
| 10 | CSP should ensure that if at any point, compute instance fails it should automatically restart on healthy physical host. |
| 11 | Compute service should provide health status, Event and notifications of instances such as a reboot, stop/start, or retirement/terminate. |
| 12 | Compute instances must provide anti-virus protection. |
| 13 | CSP shall ensure that compute instances receive OS patching, health checking, Systematic Attack Detection and backup function. |
| 14 | Proposed Virtual Machines should have power and performance not less than existing CPU power and performance allocated for application and database. |
| 15 | Bidder should ensure that physical core to vCPU ratio is not more than 1:2 for all proposed servers as well as additional servers required during contract period. |
| 16 | Bidder should also make available necessary tools for measuring vCPU performance. Benchmark/Rating of proposed vCPU's must higher than existing CPU's. |
| 17 | CSP must provide virtual machines only on Server Class hardware for the Cloud Provisioning of MPCB's requirements. |
| 18 | CSP should provide sufficient swap space for servers other than proposed storage mentioned in Price Bid. |

III. Storage requirements:

| Sr. No. | Specification |
|---------|---|
| 1 | CSP should provide ability to provision storage dynamically in different options like SSD, provisioned IOPS, File storage, cold storage etc. |
| 2 | CSP should provide ability to provision storage dynamically on- demand size, IOPS and throughput optimized storage without any downtime on the fly on a hot disk. |
| 3 | CSP should provide persistent block level storage volumes for compute instances. |
| 4 | CSP should support solid-state drive (SSD) backed storage media that offer single digit millisecond latencies. |
| 5 | Cloud service should support the needs of I/O-intensive workloads, particularly database workloads that are sensitive to storage performance and consistency in random access I/O throughput. |
| 6 | Cloud service should support encryption of data on volumes as per industry standards. |
| 7 | Cloud service should support point-in-time snapshots. These snapshots should be incremental in nature. |
| 8 | CSP should offer secure, durable, highly scalable object storage for storing and retrieving any amount of data from the web. |
| 9 | CSP should support an extremely low-cost storage service that provides durable storage with security features for data archiving and backup. |
| 10 | Cloud service should support encryption for data at rest encrypt data in object storage. |
| 11 | Cloud service should be able to send notifications when certain events happen at the object level (addition/deletion). |
| 12 | CSP should offer a simple scalable file storage service to use with compute instances in the cloud. |

IV. Managed Database Services:

| Sr. No. | Specification |
|---------|---|
| 1 | Cloud provider should offer a service that makes it easy to set up, operate, and scale a relational database in the cloud. |
| 2 | CSP should support managed database services |
| 3 | Cloud service should support replication of a primary database to a standby replica in a separate physical data center. |
| 4 | CSP also ensure automated backups/snapshots and point in time recovery, retention period up from 5 mins up to 90 days. |
| 5 | Cloud service should support the needs of database workloads that are sensitive to storage performance and consistency in random access I/O throughput. |
| 6 | CSP Should supports existing MPCB owned database licenses to host database in the cloud. |

| Sr. No. | Specification |
|---------|--|
| 7 | Cloud service should support creating a DB snapshot and restoring a DB instance from a snapshot. Cloud service should also support copying snapshots for disaster recovery purposes. |
| 8 | Cloud Service should support enhanced availability and durability for database instances for production workloads. |
| 9 | Cloud service should support restoring a DB instance to a specific date and time. |
| 10 | Cloud service should allow monitoring of performance and health of a database or a DB instance. |
| 11 | Managed database service should have capability to export data in full or differential fashion. The exported data should be accessible / downloadable to on premise environment. The exported/downloaded can be used to restore database in cloud or on premise. |

V. Network requirement

The below mandatory Network requirements are applicable for MPCB cloud deployment

| Sr. No. | Description |
|---------|---|
| 1 | Cloud platform network should provide creation of one or more subnets within private network with a single Classless Inter-Domain Routing (CIDR). Cloud Platform network should be robust, scalable and secured as per the enterprise industry standard |
| 2 | Cloud platform network should be provided creation of DMZ for Web facing applications and can provide public and private IP. |
| 3 | Cloud platform network should have low latency, low jitter, all protocol required to run application (TCP, UDP etc.), Network access list and Prevent IP Spoofing features |
| 4 | CSP should support IPv4 or IPv6 protocols and should provide the Public IP as per MPCB requirement |
| 5 | Cloud platform network should have Network load balancer and application load balancer enabled for smooth network and application functions with sufficient number of Transaction Per second. |
| 6 | Cloud platform network solution should be horizontally scalable and redundant (active –active, active passive and clustering). |
| 7 | Cloud platform network solution should have access from http, https, cli and have own management console and dashboards for network monitoring and configuration. |
| 8 | Cloud platform network solution should have minimum 40 % of network resources shall free all the time. Platform should have dashboard for network Problem identification and monitoring network issues. Platform should be easy to configurable with fewer efforts, policy based and online configuration impact analysis. |

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| Sr. No. | Description |
|----------------|---|
| 9 | Cloud platform network should have on demand network enhancement, maintain confidentiality and integrity of data in transit, Protect MPCB data from unauthorized (access, authentication, disclosure, modification or monitoring) |
| 10 | CSP should provide the customer service portal for call logging, view licenses, support Agreement, update download. |
| 11 | Bidder must demonstrate that all the points covered Under Network Solution |