

CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE, BENGALURU
Nisarga Bhawan, A-Block, 1st&2nd Floors
Thimmaiah Road, 7th D Main, Shivanagar
Bengaluru-560079
Mail id: zobangalore.cpcb@nic.in



COMPETITIVE BIDDING FOR

Supply, Installation and Commissioning of Noiseless/Silent Air compressor along with Air Purification System, SS Tubing, Pure Gas Handling Chamber and 19 inch Rack for Ring Test and Static Injection Facility

E-BIDDING DOCUMENT

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Name of Project **Part A:** Supply, Installation and Commissioning of Noiseless/Silent Air Compressor along with Air Purification System for Ring test & Static Injection Facility (Calibration lab) at CPCB, Regional Directorate, Bengaluru

Part B: Supply, Installation and Commissioning of SS tubing, Pure Gas Handling Chamber and 19 inch Rack for mounting ambient air quality analysers for Ring test & Static Injection Facility (Calibration lab) at CPCB, Regional Directorate, Bengaluru

TENDER NOTICE

Central Pollution Control Board (CPCB) Regional Directorate, Bengaluru invites single stage two bid systems (technical and financial) through e-submission of competitive bids as per the specification provided in **Annexure-1** and conforming to national standard, for

Part A: *Supply, Installation and Commissioning of Noiseless/Silent Air Compressor along with Air Purification System for Ring test & Static Injection Facility (Calibration lab) at CPCB, Regional Directorate, Bengaluru.*

Part B: *Supply, installation and commissioning of SS tubing, pure gas handling chamber and 19 inch rack for mounting ambient air quality analysers for the Ring test & Static injection facility (Calibration lab) at CPCB, Regional Directorate, Bengaluru.*

Manual bid shall not be accepted.

CRITICAL DATE SHEET

Date of Publishing of Tender	05 th January 2022
Bid Document Download start Date	05 th January 2022
Clarification -START Date	07 th January 2022, 02.00 P.M.
Clarification -END Date	17 th January 2022, 05.00 P.M.
Pre Bid Meeting	11 th January 2022, 03.00 P.M. (Through Google Meet)
Bid Submission START Date	18 th January 2022, 10.00 A.M.
Bid Submission END Date	14 th February 2022, 05.00 P.M.
Bid Opening Date	16 th February 2022, 11.00 A.M.
Bid Opening Venue	Central Pollution Control Board (Conference Hall) Regional Directorate, Nisarga Bhawan, A-Block, 1st&2nd Floors, Thimmaiah Road, 7th D Main, Shivanagar, Bengaluru-560079

Supply, installation and commissioning of Noiseless Air Compressor along with Air purification System, SS tubing, pure gas handling chamber and 19 inch rack for ring test and static injection facility



I. Bid Submission

1. The invitation for bid is open to all eligible suppliers, subject to the submission of certified and satisfying documentation in <https://eprocure.gov.in/eprocure/app> (Portal). All requisite qualifying requirements are to be furnished satisfactorily to establish eligibility of bidder.
2. Bidders may visit the website: <https://eprocure.gov.in/eprocure/app> directly for detailed terms and conditions of e-tender. Bidders willing to take part in the process of e-tendering are required to obtain Digital Signature Certificate (DSC) in the form of USB token from any authorized Certifying Authority (CA) under CCA, Government of India viz. NIC, and they are required to register the fact of possessing the DSC through the registration system available in the website.
3. Bidders may download a complete set of bidding documents from the website: <https://eprocure.gov.in/eprocure/app> with the help of e-token. This is the only mode of collection of tender document from CPP portal. The copy of tender is also available on CPCB website: www.cpcb.nic.in. Tenders are to be submitted online. Details of submission procedure are given below under 'Instructions to Bidders'.
4. There is no fee for bid document (Tender Fees) and Earnest Money Deposit (EMD) for this bidding. Instead the bid security declaration to be submitted in Bidder's letter head as provided in Annexure-5 should be uploaded in the specific folder marked for 'BSD' along with the bid. **Bid shall not be entertained without Bid Security Declaration.**
5. This bidding takes simultaneous bidding procedure in two level (Folder) bidding systems as
Level-1: Techno-Commercial Bid for Participation
Level-2: Financial Bid.
All the eligible and interested bidders are required to submit the Technical offer for the item tendered along with all supporting information simultaneously through online e-tender system. Technical offer will be opened and analysed first. Financial Bids (to be submitted in the Template provided with the Tender document) will be opened only for technically qualified bidders.
6. Bidders are requested to visit websites <https://cpcb.nic.in/Tenders.php> and <https://eprocure.gov.in/eprocure/app> from time to time regarding amendment in bidding, documents or extension of bid submission date, if any. Board will not publish any notice in newspapers for such amendment/extension.



7. Bidders shall submit their bids online for
Part A: *Supply, Installation and Commissioning of Noiseless Air Compressor along with Air Purification System for Ring Test & Static Injection Facility at CPCB, Regional Directorate, Bengaluru*
Part B: *“Supply, Installation and Commissioning of SS tubing, Pure Gas Handling Chamber and 19 inch Rack for mounting ambient air quality analysers for Ring Test & Static Injection Facility at CPCB, Regional Directorate, Bengaluru” as per Technical specifications, attached with this bid document.*
8. The eligible bidders can elect to participate in either **Part A** or **Part B** or **both** parts of the bid. The entire items in each part should be treated as single package. Therefore, the eligible bidders should quote for all the required items in the part of bid which they elect. Both parts of the bid shall be evaluated separately and qualification of bidders will be scrutinised independently for either parts.
9. CPCB will not be responsible for any cost(s) or expense(s) incurred by bidders in connection with the preparation or delivery of bids.
10. CPCB reserves the right to reject any or all the tenders without assigning any reason whatsoever.
11. In the event of date being declared as a holiday for CPCB Regional Directorate, Bengaluru Office, the date for submissions of bids and opening of bids will be the following working day at the specified time.
12. A Pre-bid meeting will be organised on **11th January 2022 03.00 P.M. IST** vide Google Meet to freeze the specifications. Bidders who wish to participate in Pre-Bid meeting shall provide a Gmail ID for registration with this office on or before the aforementioned time through zobangalore.cpcb@nic.in or WhatsApp at +918129169081. Any clarification on this bid document may be addressed to the Regional Director, CPCB Bengaluru within the stipulated time.
13. Any bidder desirous to see the readily done installation arrangement, may visit Ring Testing facility installed in Air Laboratory at CPCB, HO at Parivesh Bhawan, East Arjun Nagar, Delhi with prior appointment from concerned official on any working day. The eligible bidder may also visit the laboratory of CPCB Regional Directorate, Bengaluru with consent for better understanding of site and requirement suitability on any working day before the submission of bid.



14. The bidder should have at least three years experience in similar installation in any laboratory or industry. The bidder should furnish the information on all past supplies and satisfactory performance along with Techno-commercial bid in the form of experience certificate. Bidder or their authorized representative should have adequate financial and technical capability to execute the contract. The average annual turnover during last three years ending 31st March of the previous financial year in form of ITR should be submitted as supporting document.
15. Bidder who has downloaded the tender from the CPCB website www.cpcb.nic.in or Central Public Procurement Portal website <https://eprocure.gov.in/eprocure/app> shall not tamper/modify the tender form in any manner. In case, if the same is found to be tempered/modified in any manner, tender will be completely rejected and bidder is liable to be banned from doing business with CPCB.
16. For any Tender related assistance/tender questionnaire please contact: **Regional Director, Central Pollution Control Board, Regional Directorate(S), Nisarga Bhawan, A-Block, 1st&2nd Floors, Thimmaiah Road, 7th D Main, Shivanagar, Bengaluru-560079, mail id: zobangalore.cpcb@nic.in. Tel. no. +91 80 23233739**
17. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.
18. **Make in India Purchase Preference**
"Preference shall be given to Class I local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class I local supplier denoted in the bid document is 50%. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid (**as per Form-8 of Annexure-6 of this tender**), failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Cr, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 04.06.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 is not eligible to participate. In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause. "



II. Instruction to the bidders

1. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders to get registered on CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

2. REGISTRATION

- i. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “**Online bidder Enrolment**” on the CPP Portal which is free of charge.
- ii. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- iii. Bidders are advised to register their valid email address and mobile numbers during registration process. These would be used for any communication from the CPP Portal.
- iv. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate issued by any Certifying Authority recognized by CCA India (e.g. Sify/nCode/eMudhra etc.), with their profile.
- v. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- vi. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

3. SEARCHING FOR TENDER DOCUMENTS

- i. There are various search options built in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.



- ii. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- iii. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

4. PREPARATION OF BIDS

- i. Bidder should take into account any corrigendum published (if any) for the tender document before submitting their bids.
- ii. Please go through the tender notice and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers/ folders in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- iii. Bidder, in advance, should be equipped with the bid documents to be submitted as indicated in the tender document/ schedule and generally, they can be in PDF format. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- iv. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or 'Other Important Documents' area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

5. SUBMISSION OF BIDS

- i. Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.



- ii. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

6. TIMELINE AND SECURITY OF SUBMITTED BID

- i. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- ii. All the documents being submitted by the bidders would be encrypted using Public Key Infrastructure (PKI) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further, this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- iii. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- iv. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used for future reference.



III. GENERAL TERMS AND CONDITIONS

1. The rate quoted should be net i.e. inclusive of all taxes, freight charges, installation and commissioning, etc. No increase in rate shall be allowed. The rates should be quoted in figures as well as in words.
2. The Specifications given are generalised in nature and not exhaustive. However, the bidders should primarily adhere to the specifications given in Annexure-1. Any advance feature should be outlined in the format given in Annexure-2 to improve the competitiveness of the bidder.
3. The eligible bidders can elect to participate in either **Part A** or **Part B** or **both** parts of the bid. The entire items in each part should be treated as single package. Therefore, the eligible bidders should quote for all the required items in the part of bid which they elect. Qualification of bidders will be scrutinised independently and both parts of the bid shall be evaluated separately.
4. The installation, commissioning, leak check and performance testing of all specified items tendered herewith for ring test & static injection facility will be within the scope of supplier. Personnel deployed for installation & commissioning shall follow the safe workmanship practices and CPCB shall not be held responsible in such matter. The bidder should also provide detailed manual of equipment wherever available like air compressor, etc. The bidder should be competent enough to supply all tendered items. They should also produce enough documents to prove their good track records in the field of manufacturing/ supply of similar equipment to other parties.
5. The rate quoted should be valid for at least 120 days from date of opening of the Technical Bid. Rate quoted for a shorter period i.e. less than 120 days from the date of opening of bids may be rejected. However, the extension of the validity of the quotation beyond 120 days will be subjected to mutual agreement between competent Authority of CPCB and the successful bidder.
6. The **Technical bid** at a minimum should contain detailed specifications of items tendered, Brochure of product, List of clients using your similar equipment, etc. It should be noted that mere quoting of lowest rates will not entitle any bidder to get the order. All the terms and conditions such as specifications, validity, warranty period, post installation service provisions, taxes etc. will be used as parameter to shortlist/ evaluate



the successful bidders. **Annexure-2** and **Annexure-3** should be submitted in technical bid.


7. **Financial bid** should contain the unit price and summed up as cumulative price and inclusive of all Taxes/Octroi etc., in detail in figures as well as in words. All other supporting documents and salient features should be submitted in Technical bid folder only as the financial bid will only be opened for the bidder whose quotation will match with the specification attached as **Annexure-1** and preference may be given to the supplier who quotes with additional features (if any) and product performance at the other places where the similar system is installed by the bidder. Bidders are advised to use the format given in **Annexure-2**, **Annexure-3** and **Annexure-4** while bidding. **Annexure-4** should be submitted in financial bid.
8. Bid shall be opened as per the date and time given in Tender Critical Date Sheet.
9. The date and time for submission of quotations or opening of bids is normally fixed but may be extended by Competent Authority at his/her sole discretion.
10. The competent authority of CPCB reserves the right to accept or reject any or all the bids and placing the purchase order.
11. **Material supply:** All items of successful work order are required to be supplied, installed and commissioned within **8 weeks** of date of placing confirmed order by CPCB. However, in the event of incompleteness of work after 12 weeks from date of placing confirmed order, a penalty at the rate of 1% of the project cost per week (sealable at a maximum of 15% of the project cost) will be deducted from the successful bidder.
12. If the material is found to be sub-standard and not meeting the specification quoted, the supply order shall be cancelled without any prior information and or without any financial payment.
13. **Payment terms and conditions:** No advance payments will be made. All the payments will be made either through online transfer of amount to the bank account or through cheque only and in Indian currency (rupees) after satisfactory supply and installation of material and production of bills/invoice in duplicate along with CST/GST numbers.



The 97% of payments will be released after supply, installation and leak check and balance 3% will be released after satisfactory performance of installed equipment after completion of one year on submission of final invoice and proof of GST paid certificate. The one year period shall be reckoned from the date of satisfactory installation of complete items. Therefore, only 97% of the total quoted price by the successful bidder should be claimed after satisfactory supply and installation. The balance 3% retaining amount will have to be claimed by invoice or bills after completion of one year and performance certificate from the relevant CPCB end user.

14. **Post installation Service:** The competent servicing engineer of the supplier will have to make two visits after installation and commissioning free of charges within one year period, if any operational issue arises. The copy of visit/ service report will have to be submitted along with invoice/ bills of the material at the time of claiming retention amount. All the instruments and equipment should have at least one year warranty, except in the case of Air compressor which should possess a warranty of 3 years. The charges required for extending warranty up to 3 years in case of air compressors which fails to satisfy minimum warranty period shall be incorporated by respective bidders in their financial bid and the warranty period should be clearly specified in technical bid.
15. **Correspondences:** All the communication/ materials receipt should be in the name of **The Regional Director, Central Pollution Control Board, REGIONAL DIRECTORATE, Nisarga Bhawan, A-Block, 1st&2nd Floors, Thimmaiah Road, 7th D Main, Shivanagar, Bengaluru-560079.** All correspondences if any, should be made either through courier or registered/ speed post. Transition loss of any kind in sending the will be the responsibility of bidders.
16. In case of any technical clarification please contact;
Sh. Vivek K, Scientist D (Mob No: +919990300758/ Mail id: vivek.cpcb@gov.in)
Sh. Nikhil Y Kumar, JLA (Mob. No: +918129169081/ Mail id: nikhil.cpcb@gov.in)
17. Clarifications and dispute: All typographical errors are subject to corrections. In case of any dispute the decision of Chairman, Central Pollution Control Board will be final and binding on both the parties.

S. SURESH
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE (SOUTH)
MIN. OF ENV, FORESTS & CC, GOVT. OF INDIA
BENGALURU - 560 079. MOB : 9480672128


(S Suresh)
Regional Director



TECHNICAL SPECIFICATIONS - PART A

Scope of work: Supply, Installation and Commissioning of Noiseless/Silent Air Compressor along with Air Purification System for Ring test & Static Injection Facility (Calibration lab) at CPCB, Regional Directorate, Bengaluru

Item No. 1. Technical Specifications For "Noiseless/Silent Air Compressor"

1. **Equipment Name:** Scroll type, air cool and oil free Noiseless/Silent Air Compressor with Dryer
2. **Quantity required:** One (01)
3. **Description:** Pure Oil-free Air, Energy efficient, inbuilt low noise level (Maximum 65 dBA), Simple & Reliable.
4. **Capacity:** Minimum capacity for air compressor buffer tank should be 250 Litres.
5. **Working Pressure:** Working pressure should be 10 bar.
6. **Motor:** Air compressor should be driven by 5HP TEFC electric motor suitable for 230 or 440 volts, single or 3-phase, 50Hz, AC supply.
7. **Noise Level:** With sound insulated canopy to ensure sound levels of about 65 dBA.
8. **Air inlet filter:** High efficiency to eliminate dust and particles below 1 μ m.
9. **Automatic Regulation:** Provision of automatic stop when the required pressure is reached avoiding unnecessary energy cost.
10. **Others required feature:** Anti-vibration pad, earth protection, horizontal air receiver mounting, material/built of receiver tank be least corrosive, etc.
11. Entire installation, commissioning and performance testing will be within the scope of the supplier

Item No. 2. Technical Specifications For "Charcoal Filter"

1. **Equipment Name:** Activated Charcoal Filter
2. **Quantity Required:** One (01)
3. **Dimension:** Activated charcoal should be filled in two feet long and 3" (inches) outer diameter.
4. **Description:** i) Acrylic Cylinder, acrylic cover on both sides with threading arrangement for closing and opening. ii) Arrangement of nozzles on both sides of acrylic covers (in and outside) for connection of flexible pipe/ rubber pipe of internal diameter 9mm for compressed air should be made.
iii) The charcoal should be of superior quality to purify the compressed air.



Item No. 3. Technical Specifications For "Regeneration Drier"

1. **Equipment Name:** Electronic Regeneration Dryer
2. **Quantity Required:** One (01)
3. **Description:** 2 Stages, Solenoid valve alternatively operated on 230 V \pm 10 %, 50 Hz supply to remove the 100 % moisture in the compressed air.
4. Arrangement of nozzles of outer diameter 9mm on both sides of dryer (in and outside) for connection of compressed air and dry zero air should be made.

TECHNICAL SPECIFICATIONS - PART B

Scope of work: Supply, Installation and Commissioning of SS tubing, Pure Gas Handling Chamber and 19 inch rack for mounting ambient air quality analysers in Ring test & Static Injection Facility (Calibration lab) at CPCB, Regional Directorate, Bengaluru

Item No. 1. Technical Specifications For "Stainless Steel Tubing For Calibration Gas flow"

1. **Equipment Name:** Stainless Steel (SS) Pipes for Calibration Gas Flow
2. **Quantity Required:** As per actual measurements, after supply and fixing.
3. **Pipe Description:** One SS pipe of 6.3mm outer diameter on wall surface for flowing of various calibration gases such as SO₂, NO, CO and SS/copper pipe of 12 mm outer diameter for N₂, zero air with:
 - (i) **Colour Coding:** Colour coding/painting in laid SS tubes for individual gas identification.
 - (ii) **Control Valve:** Control valve on both sides of SS tube i.e. gas in and gas out sides.
 - (iii) **Pressure gauges:** Pressure gauges of the range of 0 to 150 bars at the out let / exit of the each calibration gases.

Note: The tenderer may like to see the existing system in Air Laboratory of CPCB Head Office at Delhi for better understanding, if so desire.

Item No. 2. Technical Specifications for Pure Gas Handling Chamber: Type Modular and Customised Fabrication

Quantity Required: 01 No

Item Description:

Chamber of size 1200mm \times 1200mm \times 800mm (H \times W \times D) feet close from all sides with laminated board of minimum 1" (1 inch) thickness, front side open with sliding acrylic door with handle and locking arrangement should be equipped with following items:

1. Double tube light fitting of 20 W = 1 No and Three Electrical Points (min) shall be provided.

Supply, installation and commissioning of Noiseless Air Compressor along with Air purification System, SS tubing, pure gas handling chamber and 19 inch rack for ring test and static injection facility



2. 9" exhaust fan with proper hood for exhausting the gases outside the chamber and room where it is to be installed.
3. Cylinder holding arrangement for holding 02 nos. gas cylinders.
4. Proper space shall be available inside the chamber for keeping 2 no. gas cylinders, 1 no. gas vacuum pump etc. The base of the chamber should be sturdy to bear the load of these system/accessories.
5. Optional accessories like Airflow monitor, Temperature Indicator, Extra Utility Line etc. shall be provided.
6. Noise level should be less than 70db at 1 metre from the fume hood.
7. The chamber shall be used for working with 100 % concentrated gases such as SO₂, NO₂ etc.
8. The chamber shall be placed on a concrete slab/platform of at least a height of 4 feet. The design drawing of pure gas handling chamber shall be mutually agreed.
9. The design of the chamber shall be of modular type to accommodate at earmarked location or fabricated at site suitable to the requirement.
10. The chamber dimensions specified shall be considered as basic requirement and any standard chamber size with 20% additional dimension shall also be considered provided that the same can be accommodated in the static injection room

Item No. 3. Technical Specifications For "Racks (19"-Inch) For Housing Analysers, Calibrators, MF Controller And Ozone Generator."

1. **Equipment Name:** Rack Cabinet
2. **Quantity Required:** 02 Nos
3. **Dimension:**
 - (i) The dimensions of the rack without doors, with Aluminium section and rear of 2 mm steel sheet, one removable roof plate, fitted with 4 filling eyebolts.
 - (ii) One gland plate three part, one pair of 480 mm (19") mounting angles depth adjustable in 25 mm pitch pattern fitted on two fixing angle approximately 150 mm unit from the front standard.
Width-800mm, Height-1400mm, Depth-800mm
4. **Description:** Suitable 19" rack cabinet to accommodate all analysers in one rack and Mass flow meters and other items in second rack, etc. The rack should be of reliable frame structure with strong extendibility.
5. Rack should be wheel mounted with locking arrangement for easy movement within the room.
6. The rack should be powder coated and all nuts and bolts should be cadmium coated. All the cut-outs should be blanked to ensure safe working environment.



APPLICATION FORM

(To be filled by the bidder and submitted in technical bid Folder after fully understanding the tendering requirement as per bid document)

1.	Name and full address of the Bidder including Telegraphic Address/Telex No. and Fax No.	:	
2.	Name and Designation of the Head of the Firm/supplier and his Telephone No.	:	
3.	Name, Designation, Address, Telephone & Fax Numbers of the Authorized Person who may be contacted during the process of the purchase concerned under this document	:	
4.	Whether the items are quoted for Part A/Part B/Both	:	
5.	Whether the items as per specifications given (Any change should be highlighted in Annexure-3)	:	
6.	Validity of Tender	:	
7.	If the tender documents are accepted in full (Yes or No)	:	
8.	Income Tax Clearance Certificate attached (Latest) (Yes or No) with PAN Number	:	

Place:

Date:

Legally Binding Signature with stamp



ANNEXURE-3

TECHNICAL BID FORM-PART A (To be submitted in Technical bid folder)

Item No.	Name	Quantity	Specifications	Deviation if any
1	Air Compressor 250 lit Capacity (Noise Less).	01	Scroll type, air cool and oil free Air Compressor with Dryer, Pure Oil-free Air, Energy efficient, inbuilt low noise level (Maximum 57 dBA, Simple & Reliable, Minimum capacity for air compressor buffer tank should be 250 Litres. Working pressure should be 10 bars. Air compressor should be driven by 5HP TEFC electric motor suitable for 230 or 440 volts, single or 3-phase, 50Hz, AC supply. With sound insulated canopy to ensure sound levels of about 57 dBA It should have high efficiency filter to eliminate dust and particles below 1 µm. Provision of automatic stop when the required pressure is reached avoiding unnecessary energy cost. Mandatory anti vibration pad, earth protection, horizontal air receiver mounting arrangements, material/built of receiver tank be least corrosive, etc.	
2	Charcoal Filter	01	Activated charcoal should be filled in two feet long and 3" (3inch) outer dia. Acrylic Cylinder, acrylic cover on both sides with threading arrangement for closing and opening. Arrangement of nozzles on both sides of acrylic covers (in and outside) for connection of flexible pipe/ rubber pipe of internal dia. 9mm for compressed air should be made. The charcoal should be of superior quality to purify the compressed air.	



CENTRAL POLLUTION CONTROL BOARD
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Item No.	Name	Quantity	Specifications	Deviation if any
3	Regeneration Dryer	01	Electronic regeneration dryer, 2 stages, solenoid valve alternatively operated on 230V±10%, 50 Hz supply to remove the 99.9% or 100% moisture in the compressed air. Arrangement of nozzles of outer dia. 9 mm on both sides of dryer (in and outside) for connection of compressed air and dry zero air should be made.	

TECHNICAL BID FORM-PART B (To be submitted in Technical bid folder)

Item No.	Name	Quantity	Specifications	Deviation if any
1.	Supplying and fixing of Stainless Steel pipes for Calibration gas flow	As per actual measurements, after supply and fixing.	Supplying and fixing SS pipes of 6.3 mm outer dia. on wall surface for flowing of various calibration gases such as SO ₂ , NO, CO, & copper pipe of 12 mm outer dia. for N ₂ , zero air with: <ul style="list-style-type: none">- Colour coding/painting in laid SS pipes for individual gas identification.- Control valve on both sides of SS pipe i.e. gas in and gas out sides- Pressure gauges of the range of 0 to 150 bar at the outlet / exit of the each calibration gases The total quantity of SS pipe and its associated accessories shall be calculated as per actual site requirement.	



Item No.	Name	Quantity	Specifications	Deviation if any
2.	Pure Gas Handling Chamber	01	<p>Chamber of size 1200mm × 1200mm × 800mm (H × W × D) close from all sides with laminated board of min. 1" (1 inch) thickness front side open with sliding of acrylic door with handle and locking arrangement should be equipped with following items:</p> <ol style="list-style-type: none">1. Double tube light fitting of 20 W = 1 No.2. 9" exhaust fan with proper hood for exhausting the gases outside the chamber and room where it is to be installed.3. Cylinder holding arrangement for holding 02 nos. gas cylinders.4. Inside proper space for keeping 1 no. gas cylinder, 1 no. gas vacuum pump etc. The base of the chamber should be sturdy to bear the load of these system/accessories.5. Optional accessories like Airflow monitor, Temperature Indicator, Extra Utility Line and Extra Electrical Point6. Noise level should be less than 70db at 1 metre from the fume hood7. The chamber shall be used for working with 100 % concentrated gases such as SO₂, NO₂ etc.8. The chamber shall be placed on a concrete slab/platform of at least a height of 4 feet. The design drawing of pure gas handling chamber shall be mutually agreed.9. The design of the chamber shall be of modular type to accommodate at earmarked location or fabricated at site suitable to the requirement.	



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Item No.	Name	Quantity	Specifications	Deviation if any
3.	19" (inch) rack for housing Analysers, calibrators, MFC Controller and Ozone Generator.	02	Suitable 19" rack cabinet to accommodate all analysers, zero air generators etc. The dimensions of the rack without doors, with Aluminium section and rear of 2 mm steel sheet, one removable roof plate, fitted with 4 filling eyebolts. Four gland plate three part, one pair of 480 mm (19") mounting angles depth adjustable in 25 mm pitch pattern fitted on two fixing angle approximately 150 mm unit from the front standard.	

Note: Separate technical specification brochure / leaflet must be uploaded for justification.

(Signature with Date & Stamp of the Bidder)



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ANNEXURE-4

FINANCIAL BID FORM

Details showing quantity, specification and other details offered
(To be filled by the bidder and must be earmarked as "Price Bid/ Financial bid")

Sl. No.	Name of the equipment	Quoted Unit Price (in Rs.)	Part	Total Quantity	Total Cost (In Rs.)	Total Taxes (In Rs.)	Insurance Charges, if any (in Rs.)	Freight Charges (In Rs.)	Installation Charges, if any (in Rs.)	Net Total Price (in Rs.)	
1.	Air Compressor 250 lit Capacity (Noise Less).		Part A								
2.	Charcoal Filter										
3.	Regeneration Dryer										
1.	Supplying and fixing of Stainless Steel pipes for Calibration gas flow		Part B								
2.	Pure Gas Handling Chamber										
3.	19" (inch) rack for housing Analysers, calibrators, MFC Controller and Ozone Generator.										
Total(in Rupees)											

NOTE: - If this sheet is not sufficient to accommodate the bid details, the additional row containing the same Performa may be used.

(Signature with Date & Stamp of the Bidder)

Supply, installation and commissioning of Noiseless Air Compressor along with Air purification System, SS tubing, pure gas handling chamber and 19 inch rack for ring test and static injection facility



ANNEXURE-5

FORMAT OF DECLARATION IN LIEU OF EMD/BID SECURITY
(To be submitted on the Bidder's Letter Head)

I/We(**Insert Name and Address of Bidder**) am/are submitting this declaration in lieu of Bid Security/Earnest Money Deposit for the Tender for(**Insert Title of the Tender**) (**Tender No.....**), thereby fully accepting that I/We will be suspended and shall not be eligible to participate in the Tenders invited by Central Pollution Control Board, Regional Directorate Bengaluru, for a period of two years from the date of such Suspension Orders, under the following circumstances:-

- a) If after the opening of Tender, I/We withdraw or modify my/our Tender during the period of validity specified in the Bid Documents (including extended validity, if any) or do not accept the correction of the Tender Price pursuant to any arithmetical errors.

- b) If after the award of work, I/We fail to furnish the required Performance Security or sign the Contract, within the time limits specified in the Departmental Tender Document.

**Signature of the Tenderer
with seal**



ANNEXURE-6

Form -8

CERTIFICATE FOR MINIMUM LOCAL CONTENT AS PER
 THE MAKE IN INDIA PURCHASE PREFERENCE POLICY

To

.....

.....

(Name and address of the Purchaser)

Dear Sirs,

Ref. Your Tender Document No....., dated

We....., who are proven and reputable manufacturers of..... (Name and description of the goods offered in the tender) hereby declare the goods offered by us / by our authorized agent have minimum local content of _____ %.

We confirm that the item offered meet the local content requirement for Class-I Local Supplier / Class-II Local Supplier as defined this tender under Make in India purchase preference policy.

We hereby confirm that the value addition under the above declared minimum content has been made in **India** at the following address:-

_____ (give address where minimum local content has been added)

We further confirm that the above declarations are true and best to our knowledge. We know that false declarations will be a breach of the Code of Integrity, for which we or our successors can be debarred for up to two years along with such other actions as, may be permissible under law.

Yours faithfully,

.....

[Signature with date, name and designation]

For and on behalf of Messrs.'

[Name & address of the manufacturers]

Note : 'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value, in percent.