

**Sl. No.**

**/ICB**

**TENDER NOTICE**

**No.C-47011/01-10/2014-15(Part-II)/ICB/Mat. Dt. 29.12.2014**

**CENTRAL POLLUTION CONTROL BOARD  
'PARIVESH BHAWAN'  
C.B.D. CUM OFFICE COMPLEX  
EAST ARJUN NAGAR  
DELHI - 110 032.**

**Website:[www.cpcb.nic.in](http://www.cpcb.nic.in)**

**e-mail:[cpcb@alpha.nic.in](mailto:cpcb@alpha.nic.in)**

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CENTRAL POLLUTION CONTROL BOARD  
(MINISTRY OF ENVIRONMENT AND FORESTS)  
'PARIVESH BAHWAN'  
C.B.D. CUM OFFICE COMPLEX  
EAST ARJUN NAGARR, DELHI-32.

TENDER NOTICE NO.C-47011/01-10/2014-15(Part-II)/ICB/MATERIALS  
DATED.29.12.2014

TENDER DOCUMENT FOR THE SUPPLY OF  
LABORATORY INSTRUMENT/EQUIPMENTS.

**Price of Tender Document**

- i) By Hand : Rs. 800.00 or US \$ 20.  
ii) By Post : Rs. 1000.00 or US \$ 25.
- Date of Sale of Tenders : 29.12.2014 to 22.01.2015 on all working days  
between 11.00 AM to 5.00 P.M.
- Last date & time for submission of Tenders : Up to 10.30 A.M. on 23.01.2015
- Opening of Tenders : 23.01.2015 at 11.00 A.M.

DELHI  
29.12.2014  
DELHI -110 032

(M. Varghese)  
Administrative Officer (M)

TELEPHONE : 22308202, 43102030 Extn.243 & 245  
FAX : 011-22308202, 22307078  
e. mail : [cpcb@alpha.nic.in](mailto:cpcb@alpha.nic.in)  
Website : [www.cpcb.nic.in](http://www.cpcb.nic.in)

**Central Pollution Control Board**  
**(Ministry of Environment Forests & Climate Change)**  
**"Parivesh Bhawan" East Arjun Nagar.**  
**Delhi – 110032. India**  
**Tel. Nos. 22308202, 43102030 – Extn.242, 243**

**TENDER NOTICE**

No.C-47011/01-10/2014-15(Part-II)/ICB/Materials.

Dated. 29.12.2014

Sealed tenders are invited from the manufacturer/supplier in India & abroad for the supply of various Laboratory Instruments/equipments.

02. The Tender Document along with detailed specifications of the instruments can be obtained from the office of Administrative Officer (Material), Central Pollution Control Board, Delhi.

03. The request for tender documents sent by post will be accepted up to 15.01.2015.

Sale of Tender Document	- From 29.12.2014 to 22.01.2015 on all working days between 11.00 AM to 5.00 PM
Cost of Tender Document	- By hand ₹-800.00 or US Dollar 20. By post ₹-1000.00 or US Dollar 25 (Tender fees only through Demand Draft/Pay order)
Last date & time for submission	- 23.01.2015 up to 10.30 AM
Opening date of Technical bids	- 23.01.2015 at 11.00 AM

Bidder's using downloaded tender forms must submit separate tender fee by Demand Draft along with technical bid drawn in favour of Central Pollution Control Board, Delhi. Details of tender document, terms & conditions and Technical Specification may kindly be seen at our website [www.cpcb.nic.in](http://www.cpcb.nic.in).

**MEMBER SECRETARY**  
**CPCB**

**CENTRAL POLLUTION CONTROL BOARD  
(Ministry of Environment and Forests)  
"Parivesh Bhavan" East Arjun Nagar,  
Delhi – 110 032, INDIA**

**DETAILS OF TENDER NOTICE**

No.C-47011/01-10/2014-15(Part-II)/ICB/Materials. Dated. 29.12.2014

**FOR SUPPLY OF LABORATORY INSTRUMENT/EQUIPMENTS**

Sealed Tenders are invited from Manufacturer/Suppliers in India and abroad for the supply of various Laboratory Instrument / equipments as listed below:

Echo Sounder 1, Gas Chromatograph 1, Multigas analyzer-1, Portable Calibrator-1, PUF Sampler (for sampling of ambient VOC, dioxins)-09, Stack Monitoring Kit-12, Velocity Meter-3, Water purification system-3, weighing Micro Balance (Capacity 220g, minimum display 0.001mg)-4, Weighing Micro Balance (capacity 200g, minimum display 0.01mg)-2

02. The Tender Documents along with detailed specifications of the instruments can be obtained in person on Production of authority letter of the Firm or by post from the office of the Administrative Officer (Material), Central Pollution Control Board or by the authorized representative with prescribed tender fee in the form of DD/Pay order drawn in favour of Central Pollution Control Board, Delhi

03. The Bid must be submitted in English, by the principal / their authorized suppliers.

04. The Earnest Money as indicated in Bid document must be submitted by the Bidder along with the Tender in the form of Demand Draft only drawn in favour of "CENTRAL POLLUTION CONTROL BOARD" payable at Delhi (India). It should be either in Indian Rupees or in bid currency (equivalent amount as per the exchange rate prevailing). The Indian agent/ representative should furnish an authorization letter from their foreign Principal supplier authorizing to deposit the EMD on their behalf.

05. The request for Competitive Bidding Documents sent by post will be accepted strictly upto 15.01.2015. CPCB will not be responsible for any delay in receipt of tender document sent by post. Request received by post after above mentioned date will not be entertained at any cost. Other details are as follows:

Sale of tender document	-	From 29.12.2014 to 22.01.2015 on all working days between 11.00 am to 5.00 pm.
Cost of tender document	-	By hand ₹-800.00 or US Dollar 20. By post ₹-1000.00 or US Dollar 25
Earnest Money along with Tenders	-	As indicated in the Tender Document
Last date & time for submission	-	Up to 10.30 AM on 23.01.2015
Date of opening of Technical Bids	-	At 11.00 A.M. on 23.01.2015

06. Bidders using downloaded tender forms must submit separate tender fee by Demand Draft along with technical bid drawn in favour of Central Pollution Control Board, Delhi

**( MEMBER SECRETARY )  
CPCB**

## **1.0 GENERAL TERMS AND CONDITIONS**

- 1.1 This document contains the following:
- i) Copy of the Competitive Bidding Notice
  - ii) General Terms and Conditions of Bid
  - iii) Terms and Conditions for Submission of Bid
  - iv) Payment Terms
  - v) Settlement of Dispute
  - vi) Application Form
  - vii) Undertaking
  - viii) Bid Form
  - ix) Schedule of Earnest Money to be deposited alongwith Tender
  - x) Quantity of Instruments and Locations of delivery and installation.
  - xi) Pre-contract integrity pact form
  - xii) Detailed specification of the instruments.
  - xiii) Check List.
- 1.2 The Tender Document is not transferable by the purchaser. The bid form in the tender Document at Annexure-II may be used for bidding. Documents /forms downloaded from the net can also be used. Bids made on photocopy etc. will not be considered. However, the additional sheets containing the same proforma may be used for each item. Each sheet including that provided by the Board with this document must be signed by the bidder. The price bid must be in the form provided herewith at Annexure-II.
- 1.3 The tender will not be accepted from the firm to whom the document is not issued by the Board and the bid downloaded from net without tender fee will not be accepted.
- 1.4 The Board takes no responsibility for delay or non receipt of Tender Document sent by post either way and also reserves the right to accept; or reject any or all the tenders in part or full without assigning any reason thereof.
- 1.5 No bid document will be sold after the last date of sale of Tender Document or between the extended period of opening date, if any.
- 1.6 The bidder is expected to examine all instructions, forms, terms and conditions and specifications mentioned in the bid document. Failure to furnish all information required by the bid documents or submission of a bid not substantially irresponsive to the bid document in every respect will be at the bidder's risk and may result in the rejection of it's bid.
- 1.7 This call of tenders does not bind the Central Board to place order. The Tenders submitted in response to this invitation be rejected without assigning any reason.

The bidder should be a manufacturer or their authorized Indian supplier. This tender notice, Tender forms, Schedule of requirement's , Specification etc are also available on CPCB's website [WWW.cpcb.nic.in](http://WWW.cpcb.nic.in) bidders using down loaded tender forms must submit a Separate tender fee by Demand Draft alongwith the technical part of the bid. The tender without requisite tender fee will be rejected.

- 1.8 The Board at its discretion may extend the last date of submission of tender and opening of tenders. The final authority for acceptance of a Tender will rest with the Chairman, Central Pollution Control Board who does not bind himself to accept the lowest tender and is vested with the authority to reject any or all of the tenders received without assigning any reason.
- 1.9 Documents, literature, diagrams/leaflets, samples etc., enclosed in the Tender shall become the property of the Central Board without any payment.
- 1.10 The items listed at Ser. Nos. 2,6,7,8,9 & 10 (Six items) in this tender document will be covered under comprehensive warranty period of thirty six months starting from the date of successful Commissioning of the instrument. Under this warranty upon the receipt of such notice supplier/agent shall within the period specified, repair/replaced the defective instrument or spare parts thereof at the ultimate destination. The supplier/agent shall take over the replaced parts/goods, in the event of any correction of defects or replacement of defective material. In such cases, the warranty for the corrected/replaced materials shall be extended till the left over period of warranty.
- 1.11 The Tender would be regarded as turned down, if no award of contract has been obtained till the expiry of the Tender validity. No separate communication will be made in this regard.
- 1.12 The items have to be supplied in standard packing.
- 1.13 If the last date for sale, submission and opening of Tenders falls on any Government declared holidays, the next working day at the same time will be considered last dates of the same.
- 1.14 The bid shall contain no interlineations, erasures or overwriting words except as necessary to correct errors made by the bidder, in such case, correction shall be initialed by the person or persons signing the bid.
- 1.15 Late and delayed tenders will not be considered and shall be returned unopened to the Bidder.
- 1.16 It is advised that the outside suppliers should send the Tender through Registered /Speed Post/Courier. However, the local supplier may drop their Tenders in Tender Box kept in Central Board for the purpose. In no case, Tender should be handed over to any employee of the Board.
- 1.17 Canvassing in any form will disqualify the Bid.
- 1.18 Request for the Tender Document for bidding through e-mail, Telephone, Money Order and Tele-fax shall not be entertained.
- 1.19 The Tender Notice No.C-47011/01-10/2014-15(part-II)/ICB/Materials alongwith the item code number. (The item code number is given in the specification sheet against each items) must invariably be quoted in the bid and for further correspondence in this regard will be entertained.
- 1.20 All the Tenders should be addressed to:  
**The Administrative Officer (M)**  
**CENTRAL POLLUTION CONTROL BOARD**  
**'PARIVESH BHAWAN'**  
**EAST ARJUN NAGAR, DELHI - 110032, INDIA**

## 2.0 **SUBMISSION OF BID**

- 2.1 The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser, shall be written in English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by English translation of its pertinent passages in such case, for the purpose of interpretation of the bid, English translation shall govern.
- 2.2 The bid must accompany Annexure-I with Techno Commercial part of Bid, tender fee incase of down loaded Document and Annexure-II & III along with 'Price' part of the Bid duly filled in and signed by the Bidder along with the seal of the Firm.
- 2.3 The Bidders are requested to quote the rates item-wise on CIF/FOR destination basis including total price of each instrument separately indicating the Govt. levies, and other expenditure item-wise. The concessional custom duty exemption certificate and other required documents will be provided for custom clearance.

For the authorized Indian suppliers, supplying foreign origin / manufactured items, they are allowed to quote in Indian Rupees on FOR destination basis. The Board will not enter into any Trade Agreement such as high See Sale Deed etc. The concessional custom duty and excise duty exemption certificate will be supplied. In that case, the normal custom duty applicable should borne by the supplier. The entire responsibility / charges upto destination should be borne by the supplier. Taxes, other levies, insurance, freight etc if any should be indicated separately. No C/D form will be issued against VAT / CST.

Bidder is expected to examine the bidding Documents carefully and are deemed to have received and read all documents. It shall be the responsibility of the bidder to request copies of any missing documents. Failure to do so will be at bidders risk.

- 2.4 It may be noted that mere quoting lowest rates will not entitle any firm to get the order. The quality of the item being offered, the past performance supply etc will also be taken in to consideration. Prior to award of purchase order the buyer can call any details, explanation, regarding technical & financial aspect.

- 2.5 IMPORTANT: -** BIDDER CAN QUOTE THE RATES FOR ALL THE INSTRUMENTS OR SOME OF THE INSTRUMENTS AGAINST ONE TENDER DOCUMENT. HOWEVER, SEPARATE PRICE BID AND TECHNICAL BID SHOULD BE SUBMITTED FOR EACH ITEM CLEARLY MENTIONING THE ITEM CODE NUMBER, ITEM NAME ON THE TOP OF THE ENVELOPES WITH SENDERS NAME AND ADDRESS. THE CENTRAL POLLUTION CONTROL BOARD RESERVES THE RIGHT TO ACCEPT THE TENDER IN FULL OR IN PART. THE BID FOR EACH ITEM SHOULD BE IN SEPARATE SHEETS/PAGES AND FOR THE SAKE OF IDENTITY, COMPILATION, INSTRUMENT/ITEM CODE NUMBER AND DESCRIPTION OF ITEM SHOULD BE WRITTEN ON THE TOP OF EACH BID. EMD SHOULD SUBMIT SEPARATELY AGAINST EACH ITEM. ITEMS-WISE TECHNICAL SPECIFICATION AND PRICE SHOULD BE IN SEPARATE SHEETS i.e. THERE SHOULD BE SEPARATE ENVELOPES FOR EACH ITEMS CONTAINING TECHNICAL, PRICE BID & ITEMS WISE EMD; INCASE, BIDDERS DESIRES TO QUOTE MORE THAN ONE ITEM. **Those tenders do not comply the above instructions will not be considered**

Please do not enclose the EMD alongwith the Envelop for price bid.

- 2.6 The Tender is to be submitted "single stage- three envelope system" i.e. the first sealed envelope will contain the earnest money deposit, second sealed envelope



will contain full information required to judge pre-qualification, complete details and specification of the instruments offered including the leaflets and catalogues, list of credentials with documentary evidence i.e., purchase/work order etc., Income Tax Clearance Certificate, PAN Number, VAT/Sales Tax Registration No., Affidavit for not being black listed, Commercial Terms & Conditions etc. It shall be marked "Pre-qualifications, technical and commercial Bid No.C-47011/01-10/ICB/2014-15(Part-II)/mat. due on 23.01.2015 for Instrument/Equipments. The third envelope will contain only price quoted by the bidder in the form given at Annexure -II of this document and shall be clearly marked "Price Bid No.C-47011/01-10/2014-15(Part-II)/ICB/Materials for Instrument / Equipments. All the above envelopes must be separately sealed and shall be kept in one envelope bearing the address of Central Pollution Control Board and super scribed with bold letter "TENDER FOR Instrument/Equipments - NOT TO OPEN BEFORE 23.01.2015 AT 11.00 A.M. The senders address should be mentioned in all envelopes. Item Code Number(s) should be mentioned invariably on all envelopes. Separate bids for separate item should be submitted. The combined bids will not be considered.

- 2.7 Technical & Commercial part of the tender will be opened on due date i.e. at 11.00 A.M. on 23.01.2015 in the office of the Central Board, in presence of the representative of the tenders who would like to present. Sealed Price part of technically and commercially acceptable tenders will be opened on a later day which will be communicated by the Board on the same day or on a later date.
- 2.8 The bidder shall furnish, as part of its bid, bid security for each instrument/equipment separately for the amount mentioned in schedule IV of this tender. Execution of Bid Security by the bidder's Bank on the basis of prevailing exchange rate shall be used for arriving at the amount of bid security in the Bid Currency.
  - a) The bid security shall be in the form of Demand Draft only in favour of "CENTRAL POLLUTION CONTROL BOARD" payable at DELHI. No Earnest Money shall be accepted in any form. It should be either in Indian Rupees or in bid currency. The Indian agent/representative should furnish an authorization letter from their foreign Principal suppliers to deposit the EMD on their behalf. The Earnest Money shall be forfeited if a bidder withdraws or amends the tender in any respect within the period of validity of his tender or fails to supply the instruments within the specified period in the tender document. Tender shall not entertained where a Tenderer has not furnished adequate earnest money in the prescribed and acceptable form. In case, the instrument supplied is found defective and not attended by the supplier / authorized agent, the Earnest Money deposited by the supplier /their authorized Indian agent will also be forfeited.
- 2.9 The Firm who seek exemption from depositing earnest money being small scale industry, being registered with NSIC, DGS&D and other Government agencies which entitles them for exemption must submit the valid Registration Certificate - cover the instrument offered by them along with the permissible value. The copy of Government Notification granting exemption from deposit of EMD must be submitted along with the Techno-commercial part of tender alongwith the bid. (EMD Exemption will be granted only to those items specified in the certificate of Registration).
- 2.10 Unsuccessful bidders bid security will be discharged/ returned without any interest in the same form after the concerned purchase is finalized or within four months whichever is earlier and that of successful bidders will be discharged without interest within one month of the successful installation and commissioning of the instrument and on furnishing the Performance Bank Guarantee.

- 2.11 The validity of Tender would be for a minimum period of 180 days from the date of opening of Tenders. A Bid valid for a shorter period may be rejected by the Board as non responsive. In case the validity is to be extended; the Board may solicit the Bidder's consent to an extension on the period of validity and the bid shall remain valid for the extended period mutually agreed for.
- 2.12 The rates should be quoted both in words and figures.
- 2.13 Arithmetical error will be rectified on the following basis: - If there is discrepancy between the unit price and total price that is obtained by the multiplying the Unit Price and quantity, the unit price shall prevail and the total price shall be corrected. If there is discrepancy between words and figures, the amount in words will prevail.
- 2.14 Tenders not in proper sealed cover or received through E-mail/ fax/telefax will not be entertained.
- 2.15 Conditional Tenders will be rejected without assigning any reason.
- 2.16 The Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person duly authorized to the Contract. The letter of authorization should bear the signatures of only the authorized person of the firm. All pages of the Bid, except for un-amended printed literature shall be initialed by the person or persons signing the bid.
- 2.17 To assist in the examination, evaluation and comparison of bids the buyer may, at its discretion, ask the Bidder for a clarification of its bid. However, no change in the price or substance of the bid shall be sought, offered, re-permitted.
- 2.18 Eventual suggestions for modification or subsidiary Tenders are principally not admissible.
- 2.19 The specifications are clearly mentioned in the document and the Bidder is requested to submit Bid only if their offer strictly comply to these specifications. Please note that no deviation in the required specification will be permitted. The bidding for the instruments having different specification will be on Bidder's risk as the Board will not entertain such Bids. BIDS CARRYING THE STATEMENT LIKE "SPECIFICATION AS PER TENDER DOCUMENT" SHALL NOT BE ENTERTAINED. THE PRODUCT SPECIFICATIONS SUPPORTED BY TECHNICAL LITERATURE AND LIST OF USERS, MUST BE ENCLOSED.
- 2.20 The placement of work order/purchase order will be according to technical evaluation of the tender and after consideration of its price worthiness.
- 2.21 The price to be given in the Tender are fixed prices, irrespective of rise in Materials prices and increase in taxes etc., till the delivery of the overall consignment. No request in regard to increase in the price of instruments or in taxes etc., will be entertained after the submission of the tender.
- 2.22 The Supplier should attach a blank copy of financial bid/Proforma Invoice of the Instrument quoted (without cost/price figures) alongwith the technical bid to assess the items included/components quoted in the bid.**
- 2.23 The nomenclature of the instruments and spares will be invariably same in Proforma Invoice, Invoice, Packing list and all other relevant papers incase the Bidder is awarded with the purchase order for supply against its offer.

- 2.24 With the submission of his Tender the Bidder accepts the conditions of the Tender.
- 2.25 If the instrument supplied is not in conformity with the specification other than asked for, it will have to be replaced at the risk and cost of the supplier. No Freight and other charges for export and re-shipment will be paid by the Board.
- 2.26 **The authorized Indian agent/Representative/ Indian supplier should have minimum two years continuous agency /partnership/joint venture/participation or collaboration with their principal foreign supplier. The documentary proof of such agency ship /authorization/MOU should submit alongwith the technical part. The bid of the firm does not contain the proof of such nomination/authorization as Indian agent will be rejected.**
- 2.27 The installation of the instruments is the entire responsibility of the supplier. It must be done either by the principal/supplier or their authorized agents within one month of the receipt of the instruments by the Board. The supplier or their authorized Agent should be in touch with the Material Section of the Board to know the exact day of receipt of stores supplied/discharged by them.
- 2.28 The list of instruments/equipment, their approximate quantity and point of delivery is given at Annexure -V and the detailed specification of the instrument are given in the tender document (**pages 26 to 55**). The quantity mentioned in the tender document may be increased or decreased at the discretion of the Competent Authority in the Central Board without assigning any reason.
- 2.29 Each and every folio of the Tender must be signed by the Bidder.
- 2.30 Bidder can quote the rates for all the instruments or some of the instruments. The Bid shall be considered only for those instruments for which the rates have been specifically quoted. The Board further reserves the right to accept the Tender for all the instruments or some of the instruments for which the Tenderer has quoted the Bid. The bidder should attach a separate list for the consumable/spares required for smooth operation of the instrument at least for three years (as optional items)and two copies of trouble shooting manuals, electric circuits etc. alongwith the bid. Combined EMD and consolidated bids will be rejected. (EMD, technical bid and commercial bid against each item quoted should be on separate sheets).
- 2.31. The bidder should provide a complete list of spares and consumables required for operation and maintenance of the instruments separately alongwith the price list.
- 2.32 Annual maintenance contract: The bidder should quote the charges for annual maintenance contract after the warranty period for the instrument listed in annexure-IV of this tender document at item Sl. Nos. 2,6,7,8,,9 & 10 ( 06 Items)
- 2.33 The instrument for which Tenders are invited will have to be supplied within 90 days from the date of L.C. opening in the case of foreign suppliers. A period of 30 days will be allowed from the date of purchase order in the case of Indian manufacturers/suppliers.
- 2.34 The after sales service is most important to be considered for comparison of the bids. Bid of those firms who do not have Indian Agents or sufficient infrastructure facilities to provide after sales service during warranty period will not be considered.
- 2.35 **Important:- The foreign bidders should quote the price in foreign currencies. The price quoted should be on CIF/FOR Destination basis.**

The Indian agent/their authorized representative should arrange the custom clearance from the customs. The Board will provide the concessional custom duty exemption certificate and other required documents.

The incidental expenses towards sending the instruments to the designated locations mentioned in Annexure-V such as arranging transport, insurance, labour, including charges to the custom clearing agent etc. to be borne by the supplier/their authorized Indian representative. The Indian agent/ their representatives should be responsible for the safety of the instruments during the transit from airports to the designated locations.

The agency commission will be paid in Indian Rupees. The charges on account of agency commission should be mentioned clearly in the bid Indian suppliers, the price should be quoted in Indian Rupees on FOR destination as per the installation points/locations mentioned at annexure-V. However, the authorized Indian supplier should have minimum two years of continues partnership/joint venture /participation or collaboration with their principal foreign supplier.

- 2.36 The foreign bidders must indicate the following information in their proforma invoice alongwith the Price Bid separately for each instrument/equipment.
- a) Country of Origin.
  - b) Port of Shipment.
  - c) Name & Address of beneficiaries Bank, Branch name with Account No., IBAN No. & SWIFT Code.
  - d) Minimum delivery period.
  - e) Whether transshipment/partner shipment is required or not.
  - f) Agency commission, if any payable to the Indian Agent, their Complete address, telephone & fax number.
- 2.37 The items have to be supplied in standard packing. The foreign supplier should use the minimum possible packets and should reduce the size of the packing in volume to avoid extra demurrage in the bonded warehouse in India, if any.
- Important - Bank charges: Three months time for shipment and further 21 days for negotiation will be given. All Bank charges inside the country (in India) will be buyers account and all Bank charges outside the country should be borne by the supplier / beneficiary's. The bidders may note this and quote the price of the instrument/ equipment accordingly. In the case of Foreign Suppliers, they will have to ensure shipment of the consignment as per the validity of the letter of credit established in this regard. In case of extension of supply date is sought, the bank charges should be borne by the Supplier/their authiosized Indian representatives.**
- 2.38 Foreign Principals/their authorized Indian Agent shall intimate the buyer regarding the date of shipment well in advance. A copy of the invoice documents, air way bill, packing list, certificate of country of origin may be forwarded to the purchaser by fax immediately after shipment of the consignment to clear from custom authorities so as to avoid demurrage charges.
- 2.39 At any time prior to the deadline for submission of bids the buyer may for any reason whether at it's own initiative or in response to a clarification requested by a prospective Bidder, modify the bidding documents by an amendment.
- 2.40 The Amendment if any, will be brought to the notice in writing or by fax to all concerned Bidders who have purchased the bidding documents and will be binding on them.

- 2.41 In order to afford prospective Bidder reasonable time in which to take the Amendment into account in preparing their bids, the purchaser may at its discretion, extend the deadline for the submission of bids.
- 2.42 The prices must be quoted item wise i.e. basic price, taxes, packing forwarding, handling installation and training charges etc. The charges must be quoted clearly and not in vague terms like "As Actual" "Approx" etc.
- 2.43 If according to the Bidder, the Tender Documents contain unclear points which could influence price calculations, the bidder has to inform the authority who is issuing the call of Tenders before submission of its Tender, either in writing or by fax, even if he has pointed out this earlier in any other form/reference.
- 2.44 The Packing, Forwarding, charges must be quoted according to the place of delivery as mentioned in the schedule at Annexure-V. The supplier shall be liable for any damage, theft or loss during transit. In the case of Indian suppliers, the instruments are to be dispatched to the respective places directly and to be installed there, by the supplier under intimation to, CPCB Office at Parivesh Bhawan, Delhi-32.
- 2.45 The delivery of stores shall be taken at the locations mentioned in "annexure-V" of this tender documents, Please note that Proforma Invoice must be separate for each instrument/item.
- 2.46 The warranty/guarantee of the instrument/equipment should be clearly mentioned in the Bid.
- 2.47 MOST IMPORTANT  
PLEASE NOTE THAT ANNEXURE-I OF THIS DOCUMENT MUST BE ENCLOSED WITH THE FIRST PART OF BID i.e."Envelop for EMD, TECHNICAL AND COMMERCIAL BID" AND ANNEXURE-II AND III WILL BE KEPT IN THE SECOND PART OF BID i.e. PRICE BID.
- 2.48. PLEASE NOTE THAT THERE IS NO NEED TO ENCLOSE THE ENTIRE TENDER DOCUMENT (SUPPLIED BY THE BOARD) WITH YOUR BID. ONLY ANNEXURE-I, II AND III NEED TO BE ENCLOSED AS PER INSTRUCTION STIPULATED IN PARA 2.6 AND OTHER RELEVANT PARAGRAPHS OF THIS BID.
- 2.49 Prior to placing purchase order, incase the buyer desires to inspect the stores/instrument-equipment including demonstration, the same should be arranged by the supplier or their authorized Indian agent in the premises of the Central Pollution Control Board on free of charges.

### **3.0 PAYMENT CONDITIONS**

- 3.1 **For Foreign Bidders:-** The foreign bidders should quote the price in foreign currency. Incase, they have components and services of Indian origin/agent, the same may be quoted in Indian Rupees.

100% payment will be released through irrevocable Letter of Credit in the name of foreign bidders for stores of foreign origin in the following manner.  
80% payment will be made on shipment of the instrument/Equipments 20% will be released on satisfactory commissioning of Instrument/Equipment and on furnishing Performance Bank Guarantee for 10% of the purchase order, valid for a period of 60 days beyond the warranty period.

For Indian bidders 100% payment will be released on satisfactory supply, installation & successful commissioning of the instrument and on furnishing

The Performance Security / Bank Guarantee be furnished by the principal supplier or their authorized Indian agent from any Nationalized Bank. No Proposal for advance payment will be allowed in any case. In the case of Indian suppliers advance payment, document and payment through bank will not be considered.

The defective, substandard and contrary to the specification of instruments supplied have to be replaced by the supplier at their cost and responsibility. In case of indigenous instrument/ equipment quoted by Indian firms/ representatives/ Indian agents of foreign supplier / manufacturers in rupee term, the payment will be made in Indian rupees directly after supply and satisfactory installation of the instrument.

- 3.2 Single bills against one order; as per supply order, mentioning item code and other details will be accepted.
- 3.3 The firm whosoever getting the award/purchase order should sign and submit a Pre-integrity pact with the buyer as per the format attached as Annexure – VI of this tender documents.

#### **4.0 SETTLEMENT OF DISPUTE, ARBITRATION**

- 4.1 All disputes or difference arising out of or in connection with the contract and supply of any item/equipment assigned under the same (whether during the progress of the works or after their completion, determination, abandonment or breach of the contract) shall be Settled in accordance with the arbitration and conciliation Act, 1996. The Arbitral Tribunal shall consists of three (3) arbitrators appointed by the Chairman, Central Pollution Control Board. The decision of the arbitrators shall be final. It will not be an objection to any such appointment that the arbitrators are the Government servants and had any interest in the Board or the contract entered into directly or indirectly. In all cases, the arbitrator shall state reasons in their decision/award in writing, if the amount of claim in dispute is Rupees one Lakh and above, subject as aforesaid the provision of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause. Arbitration proceedings shall be held at Delhi/New Delhi, India and the language of arbitration proceedings and that all documents and communication's between the parties shall be in English. The party invoking Arbitration clause shall bear the cost of arbitrator.
- 4.2 It is a term of the contract that the party invoking the arbitration shall specify the dispute or disputes to be referred to the arbitration under this clause together with the amount or amount claimed in respect of each such dispute.
- 4.3 It is also a term of the contract that if the supplier (s) do not make any demand for arbitration in respect of any claim (s) or dispute in writing within 90 days of submission of the final bill for payment, the claim of the supplier will be deemed to have been waived and absolutely barred and the Board will be discharged and released of all liabilities under the contract in respect of these claims.

#### **4.4 LAWS AND REGULATIONS**

The formation, validity and performance of this Contract shall be governed as to all matters by and under the laws and regulations of India and courts of Delhi shall have exclusive jurisdiction in all matters arising under this Contract.

The Supplier shall respect and abide by all laws and regulations of India and shall make its best effort to ensure that the personnel of the Supplier and their dependents, while staying in India, shall respect and abide by all laws and regulation of India.

The Supplier shall protect, absolve and indemnify the Board, and their representatives from any claim, loss or damage arising from any non compliance alleged or proved, without claiming them for payment.

#### **4.5 FORCE MAJEURE**

Vendor shall not be considered in default if delay in delivery occurs due to causes beyond his control such as acts of God, natural calamities, civil, wars, strikes, fire frost, floods, riots and acts of usurped power. Only those causes which have a duration of more than 7 calendar days shall be considered cause of force majeure. A notification to this effect duly certified by the Local Chamber of Commerce/Statutory Authorities shall be given by the Vendor to the buyer by registered letter. In the event of delay due to such cases a length of time equal to the period of force majeure or at the option of the buyer, the order may be cancelled. Such cancellation would be without any liability whatsoever on the part of buyer. In the event of such cancellation the vendor shall refund any amount advanced by the Purchaser and deliver back any material issued to him by the Purchaser and release facilities, if any, provided by the Purchaser.

#### **5.0 INJURY AND DAMAGE**

##### **5.1 Injury or Death of Persons**

The Supplier shall be liable for and shall indemnify the Board against any liability, loss claim or proceedings whatsoever arising under any statute or law in respect of personal injury death or any disability caused by the carrying out the Works unless due to any act or neglect of the Board, or of any person for whom the Board is responsible.

##### **5.2 Damage to Property**

The Supplier shall be liable for and indemnify the Board 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 any one occurrence in so far as such damage arises out of or in the course of or by reason of he carrying out of the Works and is due to any negligence, omission or default of the Supplier or any person for whom the supplier is responsible or any Manufacturers and subcontractors or person whom the Manufacturers and subcontractors are responsible.

#### **6.0 ROYALTY AND PATENTS**

6.1 The Supplier shall pay all royalties and licenses fees for the use of any patented item, whether it may be an invention, method, arrangement, article, process or appliance used in connection with the performance of the Contract. The supplier shall indemnify and save harmless the Board against any and all costs, damages and expenses of any nature or kind whatsoever which may arise out of or result

from a claim by any person, firm or corporation that the manufacture, purchase, use of sale of any of the inventions, methods, arrangements, articles processes or appliances used in connection with the performance of this Contract infringes any patent of such other rights. The Supplier shall, at the request of the Board, defend the Board against any suit brought to enforce any such claim at the Suppliers expense.

- 6.2 In case any such patented item used on or in conjunction with the Works is in suit held to constitute and infringement of its use enjoined, the supplier shall either secure for the Board the right to continue using the said item by suspension of the enjoinder, by procuring for the Board a license or otherwise, or will replace such items with a non-infringing item or modify it so that it becomes non-infringing or with the Board's approval remove the said enjoined item and refund to the Board the sums paid thereof.

## **7.0 EFFECTIVENESS**

This Contract shall come into force and effect on the date of the Letter of Award and shall be in force until the Works have been completed and all the payments have been made to the Supplier, except the obligation of the warranty period by the Supplier.



## Application Form

S. No. /ICB

(To be filled by the bidder)

1.	Name & 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 & address of the Principal supplier	:	
4.	i). In case the supplier is located out of Delhi; specify the Address/Authorized Distributor's or Agent's Address in Delhi, if any  ii). Name, Designation, Address Telephone & Fax Numbers of the Authorized Person who may be contacted during the process of the purchase concerned under this document (Applicable for all the suppliers)	:	
5.	Item Code Number (s) quoted for	:	
6.	Whether Earnest Money Deposited (Amount Rs./US\$/bid currency)	:	
6.	If yes, Demand Draft No., Date and Name of issuing Bank	:	
7.	Whether Tender fee Deposited (Amount Rs./US\$/bid currency)	:	
8.	If yes, Demand Draft No. Date and Name of issuing Bank	:	
9.	Validity of Tender	:	
10.	If the tender documents are accepted in full (yes or No)	:	
11.	Income Tax Clearance Certificate attached (Latest) (Yes or No) with PAN NUMBER	:	
Place: Date:			
Legally Binding Signature with stamp			

**BID FORM**

**ANNEXURE - II**

**No. /ICB**

Details showing quantity, specification and other details of the instruments offered (to be filled by the bidder and must be kept in "Price Bid" part of the Tender)

Sl. No and Item code Number of instruments as per our tender Document	Name of Instrument	The Specification offered by the Bidder	Difference in Specifications of tender document and that of Bid, if any	Quantity	Unit Price (in Rupees excluding rates at col. no. 7)	Taxes and other expenditures (Sales Tax/VAT, C.S.T, freight, cost of installation & training (in case of indigenous items)etc.	Total Amount in Rupees for indigenous items	Total Amount CIF/FOR Destination for imported items
1	2	3	4	5	6	7	8	9

NOTE:- If this sheet is not sufficient to accommodate the bid the additional sheets containing the same proforma but all such sheets including this one must be signed by the Bidder along with the seal. This Annexure must enclose in the Proforma Invoice price bid for item wise. Separate Bid form should be attached against each item, quoted for. Administrative Officer (Material)

**Signature with date & stamp of the bidder**

**Annexure – III**

**UNDERTAKING**

DATE \_\_\_\_\_  
TENDER NOTICE NO. \_\_\_\_\_

TO

THE CHAIRMAN  
CENTRAL POLLUTION CONTROL BOARD  
(MINISTRY OF ENVIRONMENT & FORESTS GOVERNMENT OF INDIA)  
C.B.D. CUM OFFICE COMPLEX  
EAST ARJUN NAGAR DELHI - 110 032.

Sir,

Having examined the conditions of Tender Document and specifications of the instruments, the receipt of which is hereby acknowledged. We, the undersigned, offer to supply, delivery and install the following:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 8.
- 9.
- 10.
- 11.
- 12.

(Please add additional pages, if required). The above supply, installation shall be in conformity with the specifications and conditions of supply.

We undertake if our bid is accepted to deliver the instruments quoted by us, we shall deliver and install within the period indicated by us in our offer.

We agree to abide by this bid for a period of 180 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before expiration of that period.

We are submitting a Demand Draft for Rs...../in bid Currency in favour of "Central Pollution Control Board", Delhi towards the Earnest Money.

This Bid, together with your written acceptance thereof in your notification of award shall constitute a bidding contract between us.

We understood that you are not bound to accept the lowest or any bid you may receive.

Dated this.....day of.....2014/2015

**Signature of authorized Person, Name with Stamp & full Address.**

**ANNEXURE -IV****SCHEDULE OF EARNEST MONEY**

<b>S. No.</b>	<b>Item Code</b>	<b>Instrument / Equipment</b>	<b>Quantity Requirement</b>	<b>EMD (Rs.)</b>
1.	<b>ICB-1</b>	ECHO Sounder	1 (One)	7,500=00
2.	<b>ICB-2</b>	Gas Chromatoraph	01 (One)	3,00,000=00
3.	<b>ICB-3</b>	Multigas Analyzer for indoor ambient Air Quality Monitoring	01 (one)	6,000=00
4.	<b>ICB-4</b>	Portable Calibrator	1 (One)	12,000=00
5.	<b>ICB-5</b>	PUF Sampler (for Sampling of Ambient VOC, Dioxins))	09 (nine)	54,000=00
6	<b>ICB-6</b>	Stack Monitoring Kit	12 (Twelve)	72,000=00
7	<b>ICB-7</b>	Velocity Meter (Water)	3 (three)	9,000=00
8.	<b>ICB-8</b>	Water Purification System(RO/bacteria free)	3(three)	63,000=00
9.	<b>ICB-9</b>	Weighing Micro Balance (capacity 220g, minimum display 0.001mg)	4 (four)	24,000=00
10	<b>ICB-10</b>	Weighing Micro Balance (capacity 200g, minimum display 0.01mg)	2 (Two)	9,000=00

**Annexure-V**

**Locations of Delivery and Installation of the Instruments /  
Equipments**

S. No.	Item Code	Instrument / Equipment	Quantity Requirement	Delieri Locations & Nos.
1.	ICB-1	ECHO Sounder	1 (One)	ZOK-01
2.	ICB-2	Gas Chromatoraph	01 (One)	ZOK-01
3.	ICB-3	Multigas Analyzer for indoor ambient Air Quality Monitoring	01 (one)	ZOB-01
4.	ICB-4	Portable Calibrator	1 (One)	ZOV-01
5.	ICB-5	PUF Sampler (for Sampling of Ambient VOC, Dioxins))	09 (nine)	AL-02, ZOK-01, ZOV-02, ZOB-04
6	ICB-6	Stack Monitoring Kit	12 (Twelve)	02 –Air Lab. 02 -GPCB 02 -MPCB 02 -TNPCB. 01.-ZOL 02 .-ZOV 01.-ZOS
7	ICB-7	Velocity Meter (Water)	3 (three)	ZOK-01, ZOBH-02
8.	ICB-8	Water Purification System(RO/bacteria free)	3(three)	ZOBH-01, ZOV-01, ZOB-01
9.	ICB-9	Weighing Micro Balance (capacity 220g, minimum display 0.001mg)	4 (four)	BL-01, ZOK-01, ZOV-01, ZOB-01
10	ICB-10	Weighing Micro Balance (capacity 200g, minimum display 0.01mg)	2 (Two)	BL-01, ZOB-01

**Abbreviations:**

AL	=	Air Laboratory, HQs Delhi	ZOK	=	Zonal Office – Kolkata
TOL	=	National Reference Trace Organics Laboratory; HQs Delhi	ZOV	=	Zonal Office – Vadodara
IL	=	Instrumentation Laboratory; HQs Delhi	ZOBH	=	Zonal Office – Bhopal
WL	=	Water & Wastewater Laboratory; HQs Delhi	ZOS	=	Zonal Office – Shillong
BL	=	Bio-Science Laboratory; HQs Delhi	ZOB	=	Zonal Office – Bangalore
ZOL	=	Zonal Office – Lucknow;	POA	=	Project Office – Agra
GPCB	=	Gujarat Pollution Control Board, GandhiNagar			
MPCB	=	Maharashtra Pollution Control Board, Mumbai			
TNPCB	=	Tamilnadu Pollution Control Board, Chennai			

**Delivery Locations of Instruments / Equipments at CPCB Laboratories**  
**Contact Person, Address, E-Mail and Tel. No.**

Laboratories	Contact Person	E-Mail ID	Tel. No.
<b>Headquarters Laboratories: (AL: Air Laboratory; BL: Bio-Science Laboratory; IL: Instrumentation Laboratory; TOL: Trace Organics Laboratory; WL: Water Laboratory)</b>			
Central Pollution Control Board (Ministry of Environment & Forests) Parivesh Bhawan East Arjun Nagar Delhi-110 032	Sh. M. Varghese, Administrative Officer (Material)	cpcb@nic.in	011-22308202 (Off) 9891718109 (Cell Phone)
<b><u>Zonal Office – Lucknow (ZOL)</u></b>			
Central Pollution Control Board PICUP Bhawan (Ground Floor) Vibhuti Khand Gomti Nagar Lucknow-226 010 Uttar Pradesh	Sh. P. K. Mishra Scientist `D` & Incharge Zonal Office	<a href="mailto:zlnpcb@gmail.com">zlnpcb@gmail.com</a>	0522-4087600 & 4087601 (Off)
<b><u>Zonal Office – Kolkata (ZOK)</u></b>			
Central Pollution Control Board 502, Southend Conclave 1582, Rajdanga Main Road Kolkata-700 107 West Bengal	Sh. R.C. Saxena, Incharge Zonal Office	zokolkata.cpcb@nic.in	033-24416632 (Direct) 033-2441 4289 / 4677 / 6003 / 6634
<b><u>Zonal Office – Vadodara (ZOV)</u></b>			
Central Pollution Control Board Parivesh Bhavan, OPP-VMC Ward Office No. 10 Subhanpura Vadodara-390 023 Gujarat	Sh. B. R. Naidu Scientist `E` & Incharge Zonal Office	brnaidu.cpcb@nic.in; westzonecpcb@yahoo.com	0265-2392603 0265-2392604 0265-239283132/33 (EPABX) 0265-2392985/86 (EPABX)
<b><u>Zonal Office – Bangalore (ZOB)</u></b>			
Central Pollution Control Board 1 <sup>st</sup> & 2 <sup>nd</sup> Floors, Nisarga Bhavana, Thimmaiah Main Road, 7 <sup>th</sup> D Cross Opp. Pushpanjali Theatre Shivanagar Bangalore-560 010, Karnataka	Sh. S. Suresh, Incharge Zonal Office	<a href="mailto:cpcbso@yahoo.com">cpcbso@yahoo.com</a> ; mano_cpcb@yahoo.co.in	080-23233827 (Off) 080-23233739 / 23233827 / 23233996
<b><u>Zonal Office – Bhopal (ZOBH)</u></b>			
Central Pollution Control Board 3 <sup>rd</sup> Floor, Sahkar Bhawan North T. T. Nagar Bhopal-462 003 Madhya Pradesh	Sh. R. S. Kori Scientist `E` & Incharge Zonal Office	cpcb.bhopal@gmail.com; rskori@yahoo.com	0755- 2775587 (O) 0755-2775385 / 86 (EPABX)

Laboratories	Contact Person	E-Mail ID	Tel. No.
<p><b><u>Zonal Office – Shillong (ZOS)</u></b></p> <p>Central Pollution Control Board  “Tumsir” Lumdiengob  Lower Motinagar  (Near Fire Brigae H.Q.)  Lumbyngngad  Shillong-793 014  Meghalaya</p>	<p>Sh. Z. Changson  Incharge Zonal  Office</p>	<p>zoshillong,cpcb@nic.in</p>	<p>0364-2520923 /  2522859 (Off)</p>
<p><b><u>Project Office – Agra (POA)</u></b></p> <p>Central Pollution Control Board  4, Dholpur House  Agra-282 601  Uttar Pradesh</p>	<p>Sh. V. K. Shukla  Scientist `C` &amp;  Incharge Project  Office</p>	<p><a href="mailto:cpcbagra@rediffmail.com">cpcbagra@rediffmail.com</a>  <a href="mailto:vk_sukla@rediffmail.com">vk_sukla@rediffmail.com</a></p>	<p>0562-2421548 (Off)</p>
<p><b><u>Gujarat Pollution Control Board, Gandhi Nagar</u></b></p> <p>Gujarat Pollution Control Board  Sector-10A, Gandhi Nagar-  382043. Gujarat</p>	<p>Member Secretary</p>	<p><a href="mailto:Ms-gpcb@gujarat.gov.in">Ms-gpcb@gujarat.gov.in</a></p>	<p>079-23232156,  23232152  Fax: 079-23222782</p>
<p><b><u>Maharashtra Pollution Control Board, Mumbai</u></b></p> <p>Kalpataru Point, 3<sup>rd</sup> and 4<sup>th</sup> floor,  Opp. Cine Planet, Sion Circle,  Road Number 8, Jay Bharat  Mata Nagar, Air Force Quarters,  Sion.  Mumbai, Maharashtra 400 022</p>	<p>Member Secretary</p>	<p><a href="mailto:ms@mpcb.gov.in">ms@mpcb.gov.in</a></p>	<p>022-24010706  Fax: 022-24023516,  24024068</p>
<p><b><u>Tamil Nadu Pollution Control Board, Chennai</u></b></p> <p>Tamil Nadu Pollution Control  Board Geetha Mahal, 1<sup>st</sup> floor, 5,  Perumal Koil Street,  Sivaganga, Tamil Nadu 630 561</p>	<p>Member Secretary</p>		<p>044-22353145  Fax- 044-22353155.</p>

**PRE CONTRACT INTEGRITY PACT**

**General**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on .....day of the month of .....2015, between, CPCB, An autonomous body acting through Shri ....., (Designation of the officer, Ministry/Department, Government of India) hereinafter called the "BUYER", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns of the First Part and M/s..... represented by Shri....., Chief Executive Officer (hereinafter called the "BIDDER / SELLER" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure (Name of the Stores/Equipment/Item) and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER CPCB work under the ageis of Environment & Forests, performing its functions as per the provisions of Water Act 1974, Air Act ,1981 and EPA Act, 1986.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**Commitments of the BUYER**

- 1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.



- 1.3 All the officials of the BUYER will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an inquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

### **Commitments of BIDDERS**

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
  - 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the Government.

- 3.3\* BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 3.4\* BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5\* The BIDDER further confirms and declares to the BUYER that the BIDDER is the original manufacture/integrator/authorized government sponsored export entity of the defence stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the BIDDER or any employee of the BIDDER or any person action on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the BUYER, or alternatively, if any relative of an officer of the BUYER has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filling of tender.

3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER.

#### **4. Previous Transgression**

4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.

4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

#### **5. Sanctions for Violations**

5.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following actions, wherever required:-

- (i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER (s) would continue.
- (ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason therefore.
- (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- (iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- (v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.

- (vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money (s) due to the BIDDER.
  - (vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the BUYER.
  - (viii) To recover all sums paid in violation of this Pact by BIDDER (s) to any middleman or agent or broker with a view to securing the contract.
  - (ix) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
  - (x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.2 The BUYER will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 5.3 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor (s) appointed for the purposes of this Pact.

6. **Fall Clause**

- 6.1 The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.

7. **Independent Monitors**

- 7.1 The BUYER has appointed Independent Monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission (Names and Addresses of the Monitors to be given).
- 7.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 7.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 7.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.
- 7.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.
- 7.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
- 7.7 The BUYER will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.
- 7.8 The Monitor will submit a written report to the designated Authority of BUYER/Secretary in the Department/ within 8 to 10 weeks from the date of reference or intimation to him by the BUYER / BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

8. **Facilitation of Investigation**

In case of any allegation of violation of any provisions of this Pact or payment of Commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

9. **Law and Place of Jurisdiction**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat/place of the BUYER.

10. **Other Legal Actions**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

11. **Validity**

11.1 The validity of this Integrity Pact shall be from date of its signing and extend upto 5 years or the complete execution of the contract to the satisfaction of both the BUYER and the BIDDER/Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

11.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

12. The parties hereby sign the Integrity Pact at .....on.....

BUYER

BIDDER

Name of the Officer.

CHIEF EXECUTIVE OFFICER

Designation

Deptt./MINISTRY/PSU

Witness

Witness

1.....

1.....

2.....

2.....

### TECHNICAL SPECIFICATIONS OF ECHO SOUNDER

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)

Code Number: ICB-01R

Equipment Name: Echo Sounder

Quantity: 1 (One) No.

S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
1.	Description	Portable Echo Sounder with all required cables, battery charger, accessories Echo Sounder for depth measurement at Deep water lakes, tributaries, coastal area	
2.	Display	TFT or LCD, Depth measure with backlighting	
3.	Type	Single beam, user selectable single and dual frequencies changeable through keyboard	
4.	Depth Range	Up to 300 meters	
5.	Data Recording	Chart recording & Computer compatible	
6.	Accuracy	± 0.1 %	
7.	Resolution	- 0.01	
8.	Data Output	Follow standard NMEA to interface with other devices.	
9.	Connection	Easily connected with PC or Laptop	
10.	Input Power	11 – 30 Volts DC 1.5 AMP	
11.	Depth Alarm	Shallow & Deep Water	
12.	Sound Velocity	User selected through Keypad/Keyboard	
13.	Accessories	Technical Manual and Instruction Manual	
		Parts Lists, Maintenance kit, Faulty finding guidance.	

## TECHNICAL SPECIFICATIONS OF GAS CHROMATOGRAPH

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)			
Code Number: ICB-02R			
Equipment Name: Gas Chromatograph			
Quantity: 1 (One) No.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
<b>1.0</b>	<b>INSTRUMENT COMPOSITION</b>		
	Gas Chromatograph	One set	
	Capillary Column with accessories	One set each of specified columns	
	ECD Detector	One set	
	FPD Detector	One set	
	GC Data Station	One set	
	Auto Sampler	One set	
<b>2.0</b>	<b>TECHNICAL SPECIFICATION</b>		
2.1	GC System	Computer controlled Data Workstation based computer compatible (GC). Built in Diagnostics and Comprehensive Self-Testing	
2.2	Oven temperature programming ramps	At least 6 ramps and seven plateau	
2.3	Heated zones	At least six including Oven, Two Injectors, Two Detectors and One Auxiliary	
2.4	Display	Functional keyboard with four line alphanumeric display	
		Display include temperature and pressure / flow parameters, type of carrier gas, carrier gas column pressure, flow rates, split flow, detector gas flow rates and all detector parameters including method and Auto sampler information.	
2.5	Memory protection	Power fail memory protection,	
2.6	Storage facility	Unlimited methods and automated sequences.	
2.7	Networking and data communication	LAN interface	



**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
2.8	Method editing facility	Non-active methods should have editing facility	
2.9	System leak check	Unattended and automated system leak simultaneous check	
2.10	Injector / Detector mounting	2 Injectors and 2 detectors simultaneous mounting and capable to hold 100 µm to 530 µm different diameter capillary to mega bore columns	
2.11	Purge system	Effective Gas Saver and Septum Purge System	
2.12	Injection facility	Automatic and Manual Injection both	
<b>3.0</b>	<b>COLUMN OVEN</b>	High performance, large capacity oven accommodating at least two capillary column	
	Volume	More than 10 Litres	
	Operating temperature	Maximum 4 °C above ambient to 450 °C	
	Temperature set point	± 1°C	
	Temperature Stability	± 0.01°C for 1°C ambient change	
	Ramp rate	Upto 120°C / minute	
	Heating time	Maximum 8 mins (50 – 400 °C)	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
	Cooling time	Maximum 5 mins (400 – 50 °C)	
	Facility for	Column bleed compensation	
	Vent temperature control	Microprocessor control in automatic sequence and fast	
4.0	<b>FLOW / PRESSURE CONTROLLER</b>		
4.1	Electronic Pneumatics Control (EPC) channels	Inlets, detectors, or auxiliary gases through Data Processor with Screen display of pressure / flow	
4.2	Pressure adjustment	0.01 psi increment	
4.3	Compensation (pressure/temp.)	Atmospheric pressure compensation for altitude and ambient temperature variations	
4.4	Pressure / flow programming ramps	Two or more	
4.5	EPC setting facility	Computer work station system	
4.6	EPC sensor	Inlets and detectors for all gases (carrier gas, make up gas and support gas in detectors, and carrier and split vent gas in inlets)	
4.7	Flow/pressure set points	On each inlet on detector parameter screen	
4.8	Flow sensor for control and storage of	Split ratio in split / splitless and PTV injector	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
<b>5.0</b>	<b>INJECTOR</b>	Two injectors mounting, one split / splitless injector one PTV (Programmable Temperature Vaporizer)	
5.1	Protection	Heater, Temperature Sensor and protection from overheating	
5.2	Capacity	To hold all types and all sizes of capillary columns and mega bore columns as well	
5.3	Purge adjustment	Efficient Septum Purge system, purge time adjustable	
5.4	Compatibility	Solid Phase Micro Extraction (SPME) system	
<b>6.0</b>	<b>SPLIT / SPLITLESS INJECTOR</b>	Forward inlet pressure programming with an optimized modular, uniform thermal profile for split / splitless injections	
6.1	Flow control	Electronic pressure / flow control	
6.2	Temperature control	Upto 400°C for split/splitless injector with 1°C increment	
6.3	Solvent / backflush facility	Solvent Rejection and backflush	
<b>7.0</b>	<b>PTV INJECTOR</b>		
	Injection volume	Large volume splitless injections	
	Pressure/flow control	Electronic pressure/flow control	
	Operating temperature	Upto 400 °C	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
	Programme ramps	Atleast 3 temperature programme ramps	
	Solvent Back flush facility	Solvent rejection and back flush	
<b>8.0</b>	<b>DETECTORS (COMPULSORY)</b>	Detector combination would be ECD-FPD	
	Temperature range	Upto 400 °C	
	Detector mounting	Two detectors should be mounted	
	Pressure control	EPC and electronic on/off facility for all detector gases	
	Auto zero & protection	Detector with makeup gas and automatic zeroing facility and overheat protection	
<b>8.1</b>	<b>ECD Detector</b>	Coaxial design based on Ni <sup>63</sup> Source	
	Linear Dynamic Range should be	Better than 10 <sup>4</sup>	
	Departure from linearity should be	Less than ±1% for the entire range	
	Operating temperature (maximum)	400 °C	
	Pressure / Flow control	Electronic pressure/flow control	
	Minimum Detection Limit (MDL)	Less than 10 fg/sec of Lindane	
	Makeup Gas	Argon / 5% Methane or Nitrogen	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
8.2	<b>FPD Detector</b>	Electronic pressure control, Wavelength version with detector of phosphorous & sulfur with filter change.	
	Temperature operating limit	Upto 400 °C	
	Dynamic range	Better than 10 <sup>6</sup>	
9.0	<b>AUTOSAMPLER</b>		
	No. of sample vial	Capable of accommodating minimum 100 nos. vials.	
	Syringe capacity	Upto six different syringe capacity	
	Washing solvent	Upto four different washing solvents in 4 ml vials	
	Injection port access	Access three injection ports without requiring an additional tower	
	Internal standard calibration	Automated internal standard calibration and "sandwich" technique	
	Programming	Completely programmable from Workstation software	
10.0	<b>COLUMNS</b>		
	Bonded phase, fused silica capillary column with (one each)  DB-1701 or equivalent 30 m x 0.25 mm ID having x 0.25 µm film thickness  Film - 14% cyanopropyl phenyl and 86% dimethyl polysiloxane co-polymer column		

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
		Ultra-1 : 25 m x 0.2 mm ID having 0.33 µm film thickness Film - 100% dimethyl polysiloxane	
		HP-5-MS 60 m x 0.25 mm ID with 0.25 µm film thickness ultra low bleed column Film - 5% di-phenyl and 95% dimethyl polysiloxane copolymer column	
		Ultra-2 : 25 m x 0.2 mm ID having 0.33 µm film thickness, Ultra low bleed column Film - 5% diphenyl and 95% dimethyl polysiloxane co-polymer column	
<b>11.0</b>	<b>DATA STATION</b>		
11.1	<b>Licensed Application Software</b>	With basic programming facility, Accurate and Reproducible Integration	
	Data acquisition	Atleast three simultaneous chromatograms and data acquisitions Reintegration Report Multilevel Calibration Baseline Correction Area Calculation Background Subtraction and Custom/tailored report format facility should be in-built	
	Memory Protection	Battery backup for memory protection	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
	Data export / import	Data Export/Transformation to data base software i.e., Excel and Access should be supplied with the system	
	Quality control	Software for Quality Control Protocols	
	Data display / handling	Software for data display, handling, data export/import and reporting	
11.2	<b>Computer System</b>		
	Make	Reputed brand such as HP/Compaq/Dell	
	Processor	Intel Core i7 3770 (3.4 GHz, 8MB cache, 4 cores)	
	RAM	4 GB DDR-III RAM 1066 MHz (upgradeable to 8 GB)	
	HDD	3.5", 500 GB 7200 RPM SATA HDD	
	Monitor	21" TFT-LCD Flat Colour (Digital)	
	DVD Writer	22 X DVD Multi-drive Internal	
	Ports	2 Serial, 1 parallel and 2 USB front 3 Rear USB2 Port, 1PS-2 Keyboard, 1PS-2 Mouse port, 1VGA 4 bays (2 external & internal) with LAN 1PS	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
	Key board	Latest multimedia (HP / Microsoft) Internet ready	
	Mouse	Optical mouse with pad	
	Ethernet	32/64 bit auto selectable Ethernet ports with autosensing, 2 <sup>nd</sup> NIC card on PCI, Autosensing is to cater to 100 / 1000 Mbps speeds automatically and not a boot ROM.	
	Graphics	Integrated Graphics Media Accelerator x 4500, support upto 800 MB video memory through DVMT	
	Sound	Integrated 5.1 Channel high definition audio subsystem and inbuilt stereo speakers	
	Printer	HP LaserJet Printer 1200 x 1200 dpi 12 PPM black	
11.3	<b>Softwares</b>	Pre-loaded Windows 7 Professional or latest version operating system with Licensed CD should be compatible with operational software.	
		MS Office Professional 2013 with media, manual and Licensed CD	
		Preloaded Norton Antivirus latest version of 3 years lifetime along with Licensed CD	
<b>12.0</b>	<b>ACCESSORIES</b>		
	Operation / maintenance manual	Operation and maintenance manual	



**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
	Application Notes	Application notes in (CD) for pesticides, PAHs, PCBs, PCPs, VOCs, THMs, Dioxins & Furans in environmental samples	
	Service manual	Service manual	
	N <sub>2</sub> Gas Regulator	N <sub>2</sub> gas complete stainless steel regulator (2 stage) with necessary tubing and connectors (1 No.)	
	Hydrogen gas regulator	H <sub>2</sub> gas complete stainless steel regulator with (2 stage) with necessary tubing and connectors (1 No.)	
	Zero air regulator	Zero air complete stainless steel regulator (2 stage) with necessary tubing and connectors (1 No.)	
	Tool kit	One set of required tools	
	Gas Cylinders	H <sub>2</sub> , N <sub>2</sub> and Zero Air with purifier and moisture trap	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
		High pressure stainless steel cylinder filled with high purity 99.999% gases. Gas capacity 7 m <sup>3</sup> , water capacity 47 liters. Cylinders should be ISI marked conformed to IS-7285 specifications, Flat bottoms fitted with valve cap, painted as specified under gas cylinder standards as per IS-3224 complete with neck ring and cylinder cap. Should be supplied with Hydraulic Certificate and certificate from Chief Controller of Explosives, Nagpur: Hydrogen - one Nitrogen - one Zero - one	
<b>13.0</b>	<b>SPARES &amp; CONSUMABLES</b>	Spares and consumables sufficient for two years trouble free operation should be included in the offer and supplied with each system  Column nut Washer Graphite / vespel ferrules different sizes Inlet Septa (self sealing for injectors) O ring Copper tubing with connectors	
	Column nut	2 Nos.	
	Washer	2 Nos.	
	Graphite / vespel ferrules different sizes	20 Nos. each	
	Inlet Septa (self sealing for injectors)	200 Nos.	
	O ring	20 Nos.	
	Copper tubing with connectors	50 mtrs.	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
	Micro syringes for manual injection (5 µl)	4 Nos.	
	Micro syringes for manual injection (10 µl)	4 Nos.	
	Copper tube cutter	1 No.	
	Auto sampler vials (2 ml)	500 Nos.	
	Auto sampler septa and caps	2000 Nos.	
	Auto sampler spare syringes	1.0 µl – 5 Nos. 5.0 µl – 5 Nos. - additional	
<b>14.0</b>	<b>WARRANTY</b>	Comprehensive warranty with spares for three years from the date of installation of the instrument should be covered. AMC amount for next two years also to be quoted after warranty.	
<b>15.0</b>	<b>OPERATION AND MAINTENANCE TRAINING</b>	The supplier has to impart on-site operation training at the time of installation followed by Complimentary (all expenditure inclusive) one week training to two scientists on application, Routine maintenance and software training at their application laboratory in India.	
<b>16.0</b>	<b>GENERAL CONDITIONS OF SUPPLY</b>	1. The instrument and all its sub units should operate on 230 ± 10 volts 50 Hz power supply.	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-02R**

**Equipment Name: Gas Chromatograph**

**Quantity: 1 (One) No.**

S. No.	Specifications	Requirement	<b>BIDDER'S RESPONSE:</b> (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
		2. All the operation and maintenance manuals, circuit diagrams, application notes and application softwares to be supplied should be in English language. 3. The supplier / manufacturer should have Indian agent to provide after sales service. 4. The main unit and all the sub units of the instrument should be serviced by the Indian representative of supplier. 5. The Bidder should be a manufacturer/authorized representative of a manufacturer, who must have designed, manufactured, tested and supplied two numbers of such equipment similar to the type specified in the past five years, which shall be in successful operation for atleast 2 years as on the date of bid opening. 6. The bidder should furnish the information on past supplies and their satisfactory performance. 7. Bidders shall invariably furnish documentary evidence (client's certificate – atleast two) in support of the satisfactory operation of the equipment as specified above. 8. Notwithstanding anything stated above the purchaser reserves the right to assess the capability and capacity of the bidder to perform the contract, should the circumstances warrant such an assessment in the overall interest of the purchaser.	

## TECHNICAL SPECIFICATIONS OF MULTI GAS ANALYSER FOR INDOOR AMBIENT AIR QUALITY MONITORING

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)			
Code Number: ICB-03R			
Equipment Name: Multi Gas Analyser for Indoor Ambient Air Quality Monitoring			
Quantity: 1 (One) No.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
1.0	Description	Multigas analyzer for ambient air quality monitoring shall capable of measuring SO <sub>2</sub> , NO, NO <sub>2</sub> , CO, NH <sub>3</sub> , O <sub>3</sub> , H <sub>2</sub> S, CH <sub>4</sub> present in the ambient air.	
		It shall have an inbuilt rechargeable Li ion battery operated air sampling pump enable to draw air samples from ambient air to the analyzer with built in flow indicator and flow controller.	
2.0	Flow Range	0.5 to 3 litre/min.	
3.0	Principal	Electro chemical sensors or Pellister sensor	
4.0	Range	CO 0-500 µg/m <sup>3</sup> H <sub>2</sub> S 0-2000 µg/m <sup>3</sup> , SO <sub>2</sub> 0-500 µg/m <sup>3</sup> , NH <sub>3</sub> 0-1000 µg/m <sup>3</sup> , NO 0-500 µg/m <sup>3</sup> , NO <sub>2</sub> 0-500 µg/m <sup>3</sup> and O <sub>3</sub> 0-500 µg/m <sup>3</sup> . CH <sub>4</sub> - 500-20000 ppb	
5.0	Calibration facility	Calibration facility for all gases with adjustment screw preferably Internal Calibration facility, Calibration of Zero and standard reference gas, calibration memory of 3 calibration levels gases standards, and calibration date, method storage & reactivation.	
6.0	Accuracy	5% of reading traceable to NIST calibration gas.	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-03R**

**Equipment Name: Multi Gas Analyser for Indoor Ambient Air Quality Monitoring**

**Quantity: 1 (One) No.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance</b>
7.0	Logging facility	Time and date, concentration data, temperature, gas cell pressure, system operating and diagnostic parameters, and data fit parameters	
8.0	Housing	High Impact Plastic weather proof body according to Indian field conditions.	
9.0	Portability	Handy, easy to carry and monitor the ambient air.	
10.0	Accessories	Battery charger, operation manual	

## TECHNICAL SPECIFICATIONS OF PORTABLE CALIBRATOR

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZO's)			
Code Number: ICB-04R			
Equipment Name: Portable Calibrator for Ambient Air Gases			
Quantity: 1 (One) No.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
1.0	Principle	Dilution air flow rate adjusted from 30 to 300 L / H and standard gas diffusion by temperature controlled permeation source from 20°C to 50°C ± 1%.	
2.0	Permeation Source	2 sources (1 or 2 gases among SO <sub>2</sub> , NO <sub>2</sub> , H <sub>2</sub> S, NH <sub>3</sub> or other).	
3.0	External Source	External inlet for connecting a third titrated gas from a cylinder at low pressure.	
4.0	Ventilating Source	Regulated by a proportional command circuit with temperature compensation.	
5.0	Operating Temperature	10°C to 50°C.	
6.0	Dilution air flow rate	Continuously adjustable by potentiometer or control panel (built in pump).	
		Visualised by 20 characters fluorescent display.	
7.0	Dilution air flow rate regulation	Built in mass flow meter (1% precision)	
8.0	Programming Commands	Keypad on control panel	
9.0	Power Supply	230 V ± 10 Volts; 50 Hz AC by internal switching.	
		12 V DC Ni/Cd Rechargeable Battery (NI-CAD)	
		External 12 V DC source power filter	
10.0	Internal Battery Autonomy	8 hours or more permitting continuous operation of the ventilation micro pump and temperature control of the permeation source.	
11.0	Switching to Internal Battery	Automatic	

### TECHNICAL SPECIFICATIONS OF PUF SAMPLER (FOR SAMPLING OF AMBIENT VOC, DIOXINS)

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)			
Code Number: ICB-05R			
Equipment Name: PUF Sampler [for sampling of Ambient SVOC (PAHs & PCBs), Dioxins]			
Quantity: 9 (Nine) Nos.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
1.0	Description	High Volume sampler for Ambient particulate and volatile / semi volatile organic sampling (VPAH, PCBs, Dioxin / Furan, VOCs etc.)	
2.0	Regulatory status	Should conform to USEPA Methods TO-4A, TO-9A and TO-13A	
4.0	Flow controller	Robust Motor speed control / Elapsed Time Indicator	
5.0	Flow rate	User selectable (upto 280 LPM)	
6.0	Elapsed time indicator	Up to 9999 hours with two decimals	
7.0	Motor Blower	Brush less motor Or 2 Stage Vacuum Motor Or Equivalent	
8.0	Timer	Mechanical / Electronic Programmable timer	
9.0	Power requirement	230 ± 10 V AC, 50 Hz	
10.0	Filter Media	10 cm diameter (4" Dia) circular filter attachment / mounting platform	
11.0	Calibration Unit	Calibration unit to calibrate the flow rate of the instrument	
12.0	PUF / XAD Holding Cartridges	10 Nos. Stainless steel Cartridges for PUF and 10 Nos. Removable glass cartridges with Stainless steel jacket for XAD.	
		Both types of cartridges should leak proof fitted to the system	



**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-05R**

**Equipment Name: PUF Sampler [for sampling of Ambient SVOC (PAHs & PCBs), Dioxins]**

**Quantity: 9 (Nine) Nos.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE:</b> <b>(Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
		Necessary number of gaskets and other accessories should be included in offer.	
13.0	Software support (Optional)	Built in software support for flow calibration, audit and leak check	
14.0	Instrument Housing	Entire assembly is housed in a weather proof metal carrying case / Anodized aluminum cabinet with SS fasteners.	
15.0	Operation Kit	Manufacturer's standard operation kit including all required items, fittings for start up / regular operation of instrument.	
16.0	Operational & Maintenance Manual	One Set.	
17.0	Calibration manual	One Set.	
18.0	Additional accessories, Spares and consumables	For two years trouble free operation / sampling at once a week over 52 weeks to be provided along with list of items including Glass fiber filters, PUF & XAD sampling at once a week over 52 weeks.	
		4" Dia PUF Block – 100 Nos.	
		4" Dia Glass holding cartridge – 10 Nos.	
		Micro quartz filter media 4" round for PUF – 2 Boxes containing 100 Nos. each.	

## TECHNICAL SPECIFICATIONS OF STACK MONITORING KIT

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)			
Code Number: ICB-06R			
Equipment Name: Stack Monitoring Kit			
Quantity: 12 (Twelve) Nos.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature/Published documents should be submitted to prove compliance.
1.0	<b>Stack Monitoring Kit</b>	Portable, compact, light weight, user friendly control module with multifunction electronic unit, digital electronic manometer, programmable start & stop facility for sampling pump, digital display for stack gas & dry gas meter, temperature, light weight sampling pump and impinger module design complying specifications recommended by USEPA	
		Facility for mounting thermocouple, pitot tube and probe together to keep all the component functional during sampling is mandatory	
2.0	<b>Stack Temperature Range</b>	(i) Ambient to 600°C (shall be quoted separately)	
		(ii) 500 °C to 1000 °C (shall be quoted separately)	
3.0	<b>Stack Velocity Range</b>	3 - 30 m/s	
4.0	<b>Particulate Sampling</b>	6 - 60 lpm collection on thimble type filter up to 0.3 micron rating	
5.0	<b>Gaseous Sampling</b>	0.6 - 6 lpm collection on a set of Borosilicate glass impingers containing selective reagents	
6.0	<b>Pitot Tube</b>	Modified S-type pitot tube fabricated from SS 304 or equivalent, Construction features should be as per USEPA method 1 to 4 & 17 or	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-06R**

**Equipment Name: Stack Monitoring Kit**

**Quantity: 12 (Twelve) Nos.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature/Published documents should be submitted to prove compliance.</b>
		CPCB document Emission Regulation (Dec. 1985) Part III	
7.0	<b>Sampling Probe</b>	Fabricated from SS 304 tube of suitable diameter (not less than 15 mm ID). Suppliers have to quote all sizes & length available. Required length of Pitot tube & Sampling probe will be decided by CPCB.	
8.0	<b>Nozzles</b>	A set of minimum 4 (four) fabricated from SS 304 or equivalent material with internal diameters suitable to cover the full range of stack velocities. Leading edge of nozzle should be sharp and tapered. Minimum internal diameter of the nozzle should not be less than 4 mm	
9.0	<b>Thimble Holder</b>	Thimble Filter holders fabricated from SS 304 suitable to hold cellulose / glass fiber or other thimbles.	
10.0	<b>Thermocouple</b>	Thermocouple sensor with digital display capable of measuring temperature from 0 to 600 °C covered with acid resistant casing and appropriate length (length same as that of pitot tube)	
		Separate suitable thermocouple with digital display capable of measuring temp. from 500 °C to 1000 °C covered with acid resistant casings and appropriate length (length same as that of pitot tube)	
11.0	<b>Stack gas Sampling module</b>	Should contain Timer, Temperature sensor, temperature displays, Rotameter, Vacuum gauge, Dry Gas meter, cold box and control panel	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-06R**

**Equipment Name: Stack Monitoring Kit**

**Quantity: 12 (Twelve) Nos.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature/Published documents should be submitted to prove compliance.</b>
	Timer	Stop watch; Range : 0 to 60 minutes ; Minimum resolution- one second with residual battery back up facility.	
	Temperature Sensor	At metering point (0 – 50 °C).	
	Temperature Display	With Toggle switches for display of ambient, Stack (Flue gas) and temperature at metering point.	
	Rotameter	Separate Rotameter for Particulate and Gas. 6 to 60 lpm Rotameter for particulates monitoring. 0.6 to 6 lpm Rotameter for gaseous monitoring.	
	Vacuum Gauge	Digital or Analog, Dual scale, Range 0 – 30 psi & 0 -1552 mm Hg.	
	Dry Gas meter	Inbuilt digital dry gas meter having resolution 1 L or more.	
	Cold Box	Cold box to hold atleast 6 – 8 impingers with provision to keep ice.	
	Impingers	4 Nos. of minimum 250 ml capacity borosilicate glass impingers to be supplied along with cold box.	
		4 Nos of 120 ml capacity borosilicate glass impingers to be supplied along with cold box with provision to keep ice.	
	Control Panel (Console)	Should have leak check facility with orifice or other type of control knob.	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-06R**

**Equipment Name: Stack Monitoring Kit**

**Quantity: 12 (Twelve) Nos.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature/Published documents should be submitted to prove compliance.)</b>	
<b>12.0</b>	<b>Stack Gas Velocity Module</b>	For velocity measurements the module should have provision for housing of Digital manometer and digital pyrometer		
	Digital Manometer	Capable to measure in the range 0 – 1300 mm of water		
	Digital Pyrometer	Suitable for measuring ranges 0 to 600 °C and 500 °C to 1000 °C		
<b>13.0</b>	<b>Vacuum Pump</b>	Compatible, portable, light weight, heavy duty pump		
		Capable to ensure 60 LPM effective gas flow		
		With single phase motor operating on 230 ± 10 V, 50 Hz AC		
<b>14.0</b>	<b>Sample Collection Tubes (Hose)</b>	Sample collection hose/conduits should have push fit system to prevent leakages. Hose should be flexible protected from outer shocks and aberrations. Length of the hoses should be user selectable. Two separate sizes (10 m and 30 m) shall be quoted		
<b>15.0</b>	<b>Calibration Certificates</b>	Third Party (Any Nationally or Internationally Accredited Calibration Laboratory). Calibration certificate for Manometer, Rotameters, Pitot tube, Nozzles, Thermocouple and Dry Gas meter etc with validity of atleast one year should be provided		
<b>16.0</b>	<b>Tools</b>	To be supplied with tool box comprising essential tools required for connecting various components and for routine maintenance		

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-06R**

**Equipment Name: Stack Monitoring Kit**

**Quantity: 12 (Twelve) Nos.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature/Published documents should be submitted to prove compliance.)</b>
<b>17.0</b>	<b>Spares &amp; Consumables</b>	To be supplied atleast for three years trouble free operation	
<b>18.0</b>	<b>Warranty</b>	Three years comprehensive warranty	

### TECHNICAL SPECIFICATIONS OF VELOCITY METER (WATER)

<b>Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs &amp; ZOs)</b>			
<b>Code Number:ICB-07R</b>			
<b>Equipment Name: Water Velocity Meter</b>			
<b>Quantity: 3 (Three) Nos.</b>			
S. No.	Specifications	Requirement	<b>BIDDER'S RESPONSE:</b> (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
1.0	Velocity Meter (Water)	Portable cup type water velocity meter / flow meter with cable and sinking weight confirming to IS 3910 specifications for measurement of velocity / flow of water & waste water in rivers, canals, drains, waste channels etc.	
2.0	Measurement	Water current flow speed.	
3.0	Display	Digital Meter / Indicator	
4.0	Flow Velocity	0.3 meter/second to 3.5 meter/second or better	
5.0	Operation Manual	Two sets with CD	
6.0	Instrument case & Accessories	Rugged wooden carrying case, instrument oil, cleaning cloth, screw drivers etc complete.	
7.0	Installation & Training	Onsite by trained personnel	
8.0	Warranty	Three years comprehensive warranty with free maintenance	

## TECHNICAL SPECIFICATIONS OF WATER PURIFICATION SYSTEM (RO/BACTERIA FREE)

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)			
Code Number : ICB-08 R			
Equipment Name : Water Purification System (RO/bacteria free)			
Quantity: 3 (Three) Nos.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
<b>1.0</b>	<b>Feed water Requirements:</b>		
	Quality	Potable (Tap) Water	
	Conductivity	< 2000 µS/cm (@ 25 °C)	
	pH	4 - 10	
	Calcium (as CaCO <sub>3</sub> )	< 300 ppm (when system water recovery More Than 50 %)	
	Total Chlorine level	Should work favourably for Total Chlorine greater than 2 PPM.	
	Feed water pressure	1 bar minimum, 2 bar maximum	
	Flow rate	> 5 l/min at 2 bar	
<b>2.0</b>	<b>General</b>		
2.1	Water connections		
	Solenoid valve feed	½ inch NPTM or ½ inch M-GAZ	
	System feed	½ inch tubing	
	Product	8 mm tubing	
	RO reject	1 <sup>1/2</sup> inch tubing	



**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number : ICB-08 R**

**Equipment Name : Water Purification System (RO/bacteria free)**

**Quantity: 3 (Three) Nos.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
2.2	Electrical requirements		
	Power Supply	230 ± 10V 50 Hz AC	
	Drain requirements	> 5 l/min (> 1.3 gal/min)	
2.3	System Performance		
	Product flow rate	Nominal flow rates more than 1 L/Min	
	Ion rejection	95 - 99 %	
	TOC	< 5 PPB preferably with inbuilt TOC monitor	
	Particles	> 99 % Removal	
	Microorganism	< 1 cfu/ml	
3.0	<b>Inlet Booster Pump (Optional)</b>	Inlet booster pump to increase pressure to > 2 bar to feed water purification system in case of low inlet pressure	
4.0	<b>Spares &amp; Consumables</b>	Two sets of spare cartridges used in the system to be provided along with the system	
		Pre cartridge to remove suspended matter, organic matter and color	
5.0	<b>Guarantee / Warranty</b>	Comprehensive Guarantee / Warranty should be valid for three years.	

**TECHNICAL SPECIFICATIONS OF WEIGHING MICRO BALANCE (CAPACITY 220 G, MINIMUM DISPLAY 0.001GM)**

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)			
Code Number: ICB-09 R			
Equipment Name: Weighing Micro Balance (capacity 220 g, minimum display 0.001gm)			
Quantity: 4 (Four) Nos.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
1.0	Readability	0.01 mg upto 60 grams. 0.1 mg upto 220 grams	
2.0	Weighing Range	Upto 220 grams	
3.0	Taring Facility	Entire range	
4.0	Repeatability	0.02 mg upto 60 grams, less than 0.1 mg upto 220 grams weighing	
5.0	Sensitivity Drift	3 ± ppm / k	
6.0	Display	LCD	
7.0	Calibration adjustment	Internal, fully automatic adjustment and by external weight	
8.0	Power Supply	Should operate on 230 ± 10 volts, 50 Hz, AC	
9.0	Standard weights for calibration (Optional)	Certified Calibrated weight of E2 or F1 Class traceable to National Physical Laboratory (NPL) / International Standards with original certificate for the entire range	
10.0	Other requirement	The instrument should be supplied with instruction / operation / maintenance manual and dust cover.	
11.0	Warranty	Three years comprehensive.	

## TECHNICAL SPECIFICATIONS OF WEIGHING MICRO BALANCE (CAPACITY 200 G MINIMUM DISPLAY 0.01 MG)

Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)			
Code Number: ICB-10 R			
Equipment Name: Weighing Micro Balance (capacity 200 g minimum display 0.01 mg)			
Quantity: 2 (Two) Nos.			
S. No.	Specifications	Requirement	BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)
1.0	Display	Backlit LCD display with touch screen operation	
2.0	Maximum Capacity	200 g or more	
3.0	Readability	0.01 mg	
4.0	Tarring Range	0 ~ 200 g or wider	
5.0	Repeatability	Less than 0.05 mg upto 200 gm	
6.0	Linearity	± 0.5 mg	
7.0	Adjustment with internal weights	Push button adjustment	
8.0	Temperature Sensitivity	± 2.5 ppm / °C	
9.0	Weighing Pan Size	∅ 75 mm or larger	
10.0	Free height above weighing pan	200 mm or more	
11.0	Instrument safety	Weighing cell with overload protection	
12.0	Accessories	Protective in-use cover, tweezers, standard tool kit, Instruction / Operation & maintenance manual	
13.0	Power	230 ± 10V, 50 Hz AC, Automatic shut-off	

**Procurement of instruments / equipment for Central Pollution Control Board Laboratories (HQs & ZOs)**

**Code Number: ICB-10 R**

**Equipment Name: Weighing Micro Balance (capacity 200 g minimum display 0.01 mg)**

**Quantity: 2 (Two) Nos.**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>BIDDER'S RESPONSE: (Bidder shall indicate "Complied" or "Non Complied" as applicable in each row. Technical Literature / published document should be submitted to prove compliance)</b>
14.0	Calibration	Internal, fully automatic adjustment and by external weight	
15.0	Calibration Weight (optional)	0.1 mg, 1 mg, 10 mg, 100 mg, 1 gm, 10 gm, 50 gm, 100 gm, 200 gm with original certificate for the entire range traceable to National Physical Laboratory (NPL) / International Standard	
16.0	Warranty / Guarantee	Comprehensive guarantee should be valid for three years.	

## CHECK LIST FOR THE BIDDER

1. Bid on original Tender form only.
2. Separate EMD against each item.
3. Earnest money or necessary documentary proof for exemption of earnest money with the part 1 of the bid.
4. Price bid must be Part II of the bid in the form provided at Annexure II of the tender document.
5. The Basic Price, Taxes, Packing, Forwarding, Handling, Transportation Insurance, Installation charges etc. must be quoted clearly. Do not use vague terms like "As Actual, Approximately etc".
6. Do not use the terms As per Specification of Tender Documents' in respect of instruments. There should be proper write up of production quoted for supported with printed leaflets literature.
7. In case of bidders desirous to quote more than one item, separate envelop should be submitted (technical & price bid) for individual item superscribing item code number and name.
8. **With technical bid, the bidder should provide a copy of the price bid format (giving details of the items, accessories, spares etc.) without specifying the price other than one mentioned in annexure-II of this tender document.**