

BIDDING DOCUMENT

TENDER NOTICE No.: 24 / 2016 - 2017 / IGIMS / BME / CBWTF



**Supply, Installation & Commissioning of
On-Line Continuous Stack Emission Monitoring System
at C.B.W.T.F. operational at I.G.I.M.S. – Patna.**

TENDER NOTICE No.: 24 / 2016 - 2017 / IGIMS / BME / CBWTF

Issued to:

Cost of Document: Rs. 1, 000/- (Rs. One Thousand Only)

Paid By: Cash: Receipt No.:

Demand Draft: No.:

Issuing Bank:

(Authorized Signatory)

**INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,
SHEIKHPURA, PATNA - 800014.**

INDEX

Sl. No.	Description	Page No.
01.	CHECK LIST	04
02.	ELIGIBILITY CRITERIA	07
03.	INSTRUCTION TO BIDDER	10
04.	CONDITION OF THE CONTRACT	20
05.	SCHEDULE OF THE REQUIREMENT	27
06.	SPECIFICATION AND ALLIED TECHNICAL DETAILS	36

IMPORTANT DATES

Last date for purchase of Bidding Document	Can be downloaded from institute website.
Last date for submission of Bidding Document	14 / 04 / 2017 up to 3:30 P.M. by registered/speed post/ Courier only
Date of opening of the Technical bid	15 / 04 / 2017 at 11:30 P.M. in the Conference Hall of the Institute.
Date of demonstration of Equipment	To be informed to the qualified Bidders qualifying after opening of technical bids, if required.

**INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES,
SHEIKHPURA, PATNA -800014 (Bihar, India)**

Sl. No. OF TENDER: _____

FILE NO. : Tender No.: _____

Tender form issued in favour of:

Dear Sir,

1. I/We hereby submit our tender for the

2. I/WE are enclosing herewith the Demand Draft No..... dated..... for **Rs.**
/- drawn in favour of **Director I.G.I.M.S. - Patna (payable at Patna)** towards **EMD / Bid Security.**

(TENDERS NOT ACCOMPANIED WITH EMD / BIDSECURITY ALONGWITH THE TECHNO-COMMERCIAL BID SHALL BE SUMMARILY REJECTED).
3. I/We have gone through all terms and conditions of the tender documents before submitting the same.
4. I/We hereby agree to all the terms and conditions, stipulated by the I.G.I.M.S. - Patna in connection including delivery, warranty, penalty etc. Quotations for each group are being submitted under separate covers, and sheets and shall be considered on their face value.
5. I/We have noted that overwritten entries shall be deleted unless duly cut & rewritten and initialed.
6. Tenders are duly signed and stamped.(No thumb impression should be affixed)
7. I/We undertake to sign the contract/agreement, if required, within 15 (Fifteen days) from the date of issue of the letter of acceptance, failing which our/my security money deposited may be forfeited and our/my name may be removed from the list of suppliers

Yours faithfully,

(Signature of Bidder with full name and address)

CHECK LIST FOR TERMS AND CONDITIONS

A.: To be filled by the bidder and submitted along with the Technical Bid.

Sl. No.	Terms & Conditions as per Bidding Document	Page No.	Remarks
1.	<p>Status of Bidder:</p> <ul style="list-style-type: none"> • Manufacturer or Authorized Agent of the Manufacturer • Whether Public Undertaking, Public Ltd., Private Ltd. Company or Proprietary Firm <p>(Please attach Notary certified MANUFACTURER'S AUTHORISATION FORM as per FORMAT placed at Annexure – III)</p>		
2.	Power of Attorney as per Annexure - V in favour of person to sign, submit and negotiate the bid.		
3.	Certificate towards market standing of minimum 03 years in the area of supply, installation and commissioning of equipments / Instruments used in Bio-Medical Waste Management.		
4.	Certificate for sole ownership / partnership		
5.	Statements of turnover per year for last three successive years duly certified by the Chartered Accountants.		
6.	User List (List of Govt. / Semi Govt., Reputed Pvt. Hospital) where quoted model of the items has been supplied and installed.		
7.	Supply order copy (Minimum three nos. or more) issued by Govt./Semi Govt./Reputed Pvt. Institutions/organization for the quoted items.		
8.	Performance certificate of the same supplied machine (of quoted make and Model) issued by Head of the depts. or Institution after a minimum period of six months of installation		
9..	Prerequisite (if any) for installation of the Machine, if any, to be provided by the Institute.		
10.	Whether rates quoted are inclusive of all taxes or not.		
11.	Whether rates are quoted as per format mentioned in the Bidding Document or not.		
12.	Affidavit to the effect that the bidder is not blacklisted by any Govt. agency or have no pending case either Civil or Criminal against them.		
13.	Affidavit , to the effect that the bidder is not supplying the quoted item(s) to any other Govt. / Pvt. Organizations / Institutions / Hospitals at the rate lower than the rate quoted against this tender.		
14.	Quality Assurance Certificate like ISI, ISO-9002, IP/BP, CE, FDA (US) or any other (please specify)		
15.	Bid Security amount deposited is enclosed or not. If yes, please mention the details.		
16.	Original Technical Catalogue of the quoted model		
17.	Certificate , to the effect that bidder will maintain the quoted item(s) during Warranty period of three years including all spares, accessories, consumables etc.,		

	(Please mention the name of the item / items with price, which are not supplied by the bidder free of cost with frequency of replacement)		
18.	Certificate , to the effect that bidder have quoted their rates for Comprehensive Annual Maintenance Contract inclusive of labour, spares, consumables, accessories etc. on per year basis for a further period of seven years after expiry of warranty period of three years in the price bid . (Please mention the name of the item / items with price, which are not supplied by the bidder free of cost with frequency of replacement during Comprehensive Annual Maintenance Contract period in the technical bid)		
19.	Acceptance of all terms / conditions towards after sales / services as mentioned in the bidding document. (Clause No. – 13 of “Instruction to Bidder” & Clauses No.: 3, 4 and 5 of “Condition of Contract”)		
20.	Compliance Statement with relation to the technical specification as mentioned in the bidding document duly supported by the original catalogue.		
21.	Compliance Statement with relation to the terms & conditions as mentioned in the document.		
22.	PAN and copies of Income Tax Returns for the last three years.		
23.	Duly attested copy of sales tax registration certificate.		

B: To be filled by the Bidder and submitted along with Price Bid

Sl. No.	Terms & Conditions as per Bidding Document	Page No.	Remarks
1.	Item wise price for the item(s) as mentioned in the Bidding Document and as per format attached as Annexure – I(a) or I (b)		
2.	Rate for Comprehensive Annual Maintenance Contract as per terms & conditions mentioned in the Bidding Document and as per format attached as Annexure - II		

Note: If the above-mentioned details are not mentioned and required documents are not attached at appropriate places, the offer of the bidder(s) shall be summarily rejected. Hence, bidder(s) are advised to go through the bidding document carefully and be prepared with all the required documents to avoid rejection of offer.

(Name of the Bidder with signature & seal)

ELIGIBILITY CRITERIA

ELIGIBILITY CRITERIA

01. Manufacturers or their authorized dealers/Indian subsidiaries / direct importers having a place of business in any of the States of India are eligible to participate in this tender.
02. The bidder and manufacturer of the equipment offered should be in the business of the supply and installation of same / similar equipment for the last three calendar years.
03.
 - (a) The manufacturer should have completed atleast two nos. installations of the quoted items (or similar equipment meeting major specification parameter) in Govt. / Pvt. Institutions / Hospitals in India. The installations mentioned by the manufacturer in their offer must be functional and performance certificate for the same issued by the user concerned also be attached with the offer.
 - (b) The bids quoted as the authorized representative of the manufacturer meeting the above criteria 03(a) should have also supplied and installed at least two nos. installations of the quoted items (or similar equipment meeting major specification parameter) in Govt. / Pvt. Institutions / Hospitals in India in last five years from the last date of submission of tender. The installations mentioned by the authorized representative in their offer must be functional and performance certificate for the same issued by the user concerned also be attached with the offer.
04. The Bidder should be public undertaking / Autonomous Body /Public Ltd. / Pvt Ltd. Company or proprietary firm and should be in bio-medical waste management equipments business since last three years in India. The Bidder having manufacturing facility in their name in India for the majority of the items offered by them shall be given preference. .
05. The Bidder (manufacturer or their authorized agent) should have had average annual financial turnover of **Rs. 25 Lakhs** during the last three years ends 31st march 2016.
06. Bidders who have the capability to attend repairs of the equipments within the time mentioned in this bidding document and who are willing to provide stand by equipment or replace the faulty equipment if the repair/down time extends beyond 72 hours from the time of reporting of the fault within the next 48 hours (total down time should not exceed 5 days in one instance). The bidders who have the capability to ensure the uptime mentioned in this document (Documentary proof shall be submitted on the after sales facilities and expertise of the bidder.)
07. Bidders who are not offering the equipment of a firm / company that has been blacklisted by Indira Gandhi Institute of Medical Sciences – Patna or blacklisted/debarred by any other State / Central Government's organization.
- 08.. Firm / company who have withdrawn after participating in any of the previous tenders of Indira Gandhi Institute of Medical Sciences – Patna are not eligible to participate in this tender.

Note:

- Notwithstanding anything stated above, the Institute reserves the right to assess the Bidder's capability and capacity to perform the contract satisfactory before deciding on award of contract, should circumstances warrant such an assessment in the overall interest of the purchaser.
- The Institute reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser of technical acceptability as per the tender specification, before the opening of the price tender.

INSTRUCTION TO BIDDER

GENERAL INSTRUCTIONS TO BIDDERS

1. **Tendering System**

The tenders/Bids are to be submitted in two Parts i.e. **Part - I & Part II.**

PART - I titled as TECHNICAL BID shall contain the complete technical specifications and details on the competency of the bidder and also the commercial bid package with terms and conditions of supply, warranty, after sales service etc. (Except Price Bid Form). Apart from the documents and signed copy of the purchased tender document, the necessary enclosures should be submitted in this technical bid. In short, the technical bid should contain all the necessary documents to prove the technical competency and capability of the bidders for supplying and installing a trouble free equipment meeting the quality standards and technical specification and the ability of the bidders for providing efficient after sales service to the satisfaction of the Tender Inviting Authority and the user institution.

PART - II titled as PRICE BID shall contain only the 'Price Bid Form' duly filled in the prescribed Performa (Annexure - I) and Comprehensive Annual Maintenance Contract offer in prescribed format (Annexure – II). Price Bid not submitted in the prescribed performa will not be considered for evaluation and summarily rejected.

2. The tender offers, duly filled, shall be submitted in two separate sealed covers separately for **technical and price bids** respectively. Such covers shall be super scribed as “**Tender No..... (here mention the tender no as specified) TECHNICAL BID for supply of (here mention the name of the equipment)**” or “**Tender No..... (here mention the tender no as specified) PRICE BID for supply of(here mention the name of the equipment)**” as the case may be. Both the sealed covers shall be enclosed in another sealed (third) bigger cover which should also be super scribed as “**Tender No..... (here mention the tender no as specified) TENDER for supply of (here mention the name of the equipment)**””
3. Quantity of items may increase or decrease. Director, I.G.I.M.S. - Patna reserves the rights to purchase different sub items/ components of items from different bidders.
4. The Bidding Documents along with terms and conditions, technical specification can be obtained from the office of the Store Officer, I.G.I.M.S. – Patna on payment of **Rs.1, 000/- (Rs. One Thousand only, Non - Refundable)** either by cash or demand draft favoring Director, I.G.I.M.S. - Patna payable at Patna
5. The “**Bidding Document**” can also be downloaded from **institute website www.igims.org**. In case, downloaded bidding document is used, bidder(s) have to submit the cost of the Tender Document along with the completed documents in the form of Demand Draft in favour of Director, I.G.I.M.S. – Patna payable at Patna towards cost of the “**Tender documents**”. Firm is required to attach separate D.D. for the same in a separate envelope super scribed with “**Cost of Bidding Document**”. If the cost of tender document is not submitted by the bidder(s), his offer shall be outright rejected and returned.
6. Bidding document can be downloaded from Institute Website www.igims.org.
7. Last date for submission of bidding document 14 / 04 / 2017 up to 3:30 P.M. by registered post / speed post/ Courier only. Bidder(s) are requested to send the bid well in advance so as to ensure that bid reaches in time. Institute will not be responsible for any postal delay. **Bids received after due date and time shall be summarily rejected.**
8. **Earnest Money Deposit (EMD):**
 - a. **Earnest Money @ 2%** of the cost of equipment is required to be submitted along with tender by D.D./ Bank Guarantee from any scheduled Indian Bank (valid up to one year from the date of technical bids opening) along with the tender favoring Director, I.G.I.M.S. – Patna (payable at Patna). No interest is payable on EMD/ Bid security.
 - b. Bidder may quote more than one/several models. In such a situation EMD will be payable on the basis of highest priced model.

- c. EMD of the unsuccessful bidders will be returned to them at the earliest after expiry of final bid validity and latest on or before the 30th day after the award of the contract without any interest.
 - d. EMD must be submitted in separate sealed envelope and endorsement of the same with DD number, date and its validity period be made with technical bids stating that the same has been complied with price bid. If same is later found not enclosed tender will be cancelled for the party.
 - e. **Non- submission of sufficient EMD** along with the Technical Bid shall be one of the primary reasons for rejection of the offer in the first round.
 - f. Cheque, Cash payment, Money Order, Fixed deposit etc will not be accepted as EMD.
 - g. Public Sector Units within the State or State micro, small and medium enterprises registered with Govt. of Bihar are exempted from remittance of EMD subject to submission of valid documents.
 - h. The EMD shall be in one of the following forms:
 - i. A demand draft in favour of Director, I.G.I.M.S. – Patna (payable at Patna);
OR
 - ii. A Bank Guarantee issued by a nationalized / scheduled bank located in India, in the form prescribed in the tender document as **Annexure – IV** (valid up to one year from the date of technical bids opening). Bank Guarantee in any other format will not be acceptable and render the bid non-responsive.
 - i. The successful Bidder's EMD will be discharged upon the Bidders signing the contract and furnishing the performance security. The EMD of the successful Bidder can be adjusted towards the security deposit payable.
9. Bidder(s) should mention the DGS & D registration, if registered, and attach photocopy of DGS & D registration certificate Photocopy of Income tax & sales tax clearance certificate should be enclosed.
10. For Imported Goods, Indian Agency Commission must be declared in financial bid.
11. The Bidder's shall have to submit the following documents (Certified by Notary) in technical bid: -
- a. User List (List of Govt. / Semi Govt., Reputed Pvt. Hospital) where quoted model of the items has been supplied and installed.
 - b. Supply order (Minimum five nos. or more issued by Govt./Semi Govt./Reputed Pvt. Institutions/organization for the quoted items.(same model)
 - c. Performance certificate of the same supplied machine (of quoted make and Model) issued by **Head of the deptt. or Institution** after a minimum period of six months of installation.
 - d. Prerequisite (if any) for installation of the Machine if any to be provided by the Institute.
 - e. If the manufacturing company and/or its Indian agent (for Foreign manufactured) have authorized some agency for participation in this tender for a limited period than in that case they (Manufactured/ Indian agent) shall have to submit an undertaking duly notarized by Public notary that if their tender is selected they shall be solely responsible for compliance of all the terms and conditions mentioned in the bilateral agreement for purchase and subsequent supply order even if their authorized agent is changed. Any tender offer without such certificate duly certified by public notary shall be rejected in technical scrutiny itself.
 - f. Bidder must submit a compliance checklist along with the technical bid itself.
 - g. Any tender offer without submission of above mentioned document (i.e. a to e) shall be rejected during technical scrutiny.
 - h. If any new System/ Latest model machine is a launched in the market and seller has not installed such quoted models they should submit an undertaking that he has not installed such models previously (Notarized by Public Notary). They may submit supply order / performance certificate of previous model, which was recently installed by them.

12. Installation & site plan:-

Requirement regarding site/location etc for installation of equipment, if any, should be mentioned in the tender. Time required for installation of system after delivery must be mentioned. In case of delay in installation institute will have right to charge liquidated damage.

Specify the following points for installation of the System: -

- a. Total power consumption along with break up of main System and Accessories.

- b. Whether the System needs uninterrupted power supply where ever applicable.
- c. Maximum tolerated transfer time in case of interruption of power supply.
- d. Whether the System needs any humidity control device.
- e. Whether the System needs any separate power line/isolation Transformer.
- f. Does the System need the electrical shielding?
- g. Does it require special civil works for installation?
- h. Whether Air conditioner is an essential requirement for the system.
- i. Does it require any special civil works for Installation?

13. After Sales Service Conditions:

- a. The Institute is in the pursuit of ensuring excellent after sales service for every user in respect of the equipments supplied under this contract. The after sales terms and conditions will be strictly enforced and those Bidders who are willing to support the Institute in its endeavor to provide trouble free operation/performance of the equipments for the prescribed period need only participate in the tender.
- b. The after sales service shall be performed during the warranty period and also during the Comprehensive Maintenance Period (CMC)/ Annual Maintenance Contract, if awarded. The detailed terms and conditions for after sales service mentioned hereunder.

c. Guarantee/Warranty Terms:

- i. The successful Bidder has to warrant that the Goods supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
- ii. The successful Bidder further have to warrant that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Tender Inviting Authority's specifications) or from any act or omission of the successful Bidder, that may develop under normal use of the supplied goods.
- iii. All the equipments including the accessories supplied as per the technical specification as mentioned in the bidding document should carry comprehensive warranty (including all spares, accessories and consumables) for a period mentioned in this document in the first instance. During this period, the successful Bidder shall replace all defective parts / accessories / consumables and attend to all repairs/break downs and undertake stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the successful Bidder during the period of comprehensive warranty. The items which are not covered under warranty should be clearly mentioned along with rate of the items.
- iv. On expiration of the comprehensive warranty period, the successful Bidder shall be willing to provide after sales support for an additional period prescribed in this document.
- v. The prospective Bidder, who are manufacturers, shall submit an undertaking from the Original Equipment Manufacturers (OEM) that they are willing to provide spare parts for the period of warranty as mentioned and also during the additional CMC/AMC period, if awarded. The OEM shall also assure continuity of service to their product, in the event of change in dealership or the Bidders – their existing dealers - couldn't provide service during the warranty / CAMC period. The undertaking from OEM is an essential document forming part of the Technical Bid, without which the tenders will be rejected summarily in the first round itself.
- vi. After sales service centre in Patna (Bihar) preferably or at least in East India should be available as part of the pre-qualification and the Bidder shall provide proof of their capability to undertake such maintenance/repair within the stipulated time.
- vii. The successful Bidder shall provide preventive maintenance as per the frequency mentioned in this document during the warranty period. The Bidder shall attend any number of break down/repair calls as and when informed by the institute authority.
- viii. Upon receipt of such notice for repair/breakdown from the institute, the successful Bidder shall, within the period as specified in this document, and with all reasonable speed, repair or replace the defective goods or parts thereof, without cost to the Tender Inviting Authority.
- ix. If the successful Bidder, having been notified, fails to rectify the defect(s) within the period specified mentioned in this document, the Tender Inviting Authority may proceed to take such remedial action as may be deemed necessary, at the successful Bidder's risk and cost and without prejudice to any other rights which the Tender Inviting Authority may have against the successful Bidder under the contract.
- x. Failure to attend the repairs in time or failure to attend the stipulated preventive maintenance visit or failure to replace the defective equipments or to provide stand by equipment if the fault/down time

exceeds the stipulated period or to ensure the stipulated up-time in an year shall lead to forfeiture of the performance security and/or may lead to blacklisting/debarring of the defaulting Bidder.

- xi. The equipment which requires quality assurance test shall be done at free of cost immediately after installation, during the comprehensive warranty period, during the CMC / AMC period, by the demand of User and also when major spares are replaced.
- xii. Any mandatory approval required for installation shall be obtained by the successful Bidder in liaison with the respective authorities.
- xiii. The Bidder shall submit the parameters which require calibration and the frequency of calibration required.
- xiv. The Bidder shall undertake on-site calibration of the equipment every year as part of the after sales service during the period of comprehensive warranty, CMC/AMC or on demand from the user.
- xv. The Bidder shall also have to submit whether periodic replacements of consumable items are required for proper functioning of their quoted machine/Equipment? If yes they should submit the list of such consumables along with price list and frequency of replacement per year, if the same is not replaced free of cost during warranty / guarantee period.
- xvi. The offered warranty includes:
 - Visits to the user institutions at frequencies prescribed as part of preventive maintenance.
 - Testing & calibration as per technical/service/operation manual of the manufacturer or as per the period specified or as per the demand of the user.
 - Quality Assurance tests (if applicable).
 - The cost of labour for all repairs/ and all spares required for replacement during repairs all kinds of accessories, Probes, all types of sensors and transducers, Electrodes, Detectors, battery, battery for UPS, other vaccumatic parts etc wherever applicable and also the accessories and other devices supplied along with the equipments like stabilizer, UPS, AC, Computer, Compressor, Monitor, etc, which forms part of the equipment system, without which it cannot perform satisfactorily.
 - The exclusion of warranty of any vital equipment parts will be compared with offers of other Bidders during evaluation of the bids and this may be taken into consideration in deciding the successful Bidder on the basis of expert advice.
 - The Bidder shall provide up-time warranty of complete equipment as mentioned in this document, the uptime being calculated on 24 (hrs) X 7 (days) basis failing Warranty period will be extended for every additional day of down time equal to one week.
 - All software updates, if any required, should be provided free of cost during Warranty period.

d. Comprehensive Annual Maintenance Contract:

- The decision to enter into CMC or AMC will be determined on the basis of cost and complexity of the equipment by the Tender Inviting Authority, at its discretion, prior to the expiration of warranty period.
- The Comprehensive Maintenance Contract (CMC) is otherwise an extended warranty. All the terms and conditions agreed by the successful Bidder for executing the comprehensive warranty of the equipment shall be extended during the period of CMC, only difference being the payment of CMC charges is absent during the period of comprehensive warranty.
- The cost of CMC, accessories and spares, reagents and consumables as in case may be quoted along with taxes applicable, if any. The taxes to be paid extra, to be specifically indicated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
- Failure/refusal on the part of the successful tender supplying/installing the equipments to enter into CMC with the Tender Inviting Authority, at the end of the Comprehensive Warranty Period, if the Institute, as the case may be, desires so, shall lead to forfeiture of performance security and may also result in the blacklisting/debarring of the Bidder.
- The successful Bidder shall also indicate the rates for the CMC in price bid form and such rates are binding on the successful tenders after the expiration of the warranty period. The yearly rates for CMC shall remain the one and the same as quoted in the price bid form for the extended years.

- Cost of CMC (excluding taxes, if any) will be considered for Ranking/Evaluation purpose.
- The payment of the agreed CMC charges will be made as per frequency for payment after satisfactory completion of said period, on receipt of service report/ break down report from the user.
- The Bidder shall also have to submit whether periodic replacement of consumable items are required for proper functioning of their quoted machine/Equipment? If yes they should submit the list of such consumables along with price list and frequency of replacement per year if the same is not included in quoted Comprehensive Annual Maintenance Contract charges per year.

14. Time Limits prescribed

Sl. No	Activity	Time Limit
a.	Delivery period & Installation	04 weeks from date of issuance of Supply Order
b.	Comprehensive Warranty Period	3 years from the date of successful installation.
c.	CMC period	7 years
d.	Frequency of visits to all User Institution concerned during Warranty/CMC	One visit every three months (4 visits in a year) for periodic/preventive maintenance and any time for attending repairs/break down calls.
e.	Frequency of payment of CMC charges	Every six months after completion of the Period.
f.	Maximum time to attend any Repair call	Within 48 hours.
g.	Uptime in a year during warranty as well as during CAMC period.	95% of 365 days.

15. Firm have to provide a minimum **UPTIME GUARANTEE** of 95% (95% of 365 Days) per year during the warranty period as well as during the Comprehensive Annual Maintenance Contract.
16. **In case of supply, installation and commissioning of On-Line Continuous Emission Monitoring System, while calculating the total unit price of the item / system to be procured, expenditure to be incurred in maintenance of the quoted item / system including all spare parts for a total period of seven years after expiry of the warranty period of three years shall also be taken into consideration. Accordingly, it is mandatory for the bidders to submit the rate for Comprehensive Annual Maintenance Contract (with spares) for a minimum period of seven years after the expiry of warranty period of three years. However, in case of supply, installation and commissioning of Chimney, only basic unit cost will be considered.**
17. Supplier will submit undertaking for ensuring uninterrupted supply of spares during the total life span of the equipments.
18. Indian agency commission and Installation charge if any will be paid in Indian rupees after successful installation and demonstration of the equipments.
19. Principal's Invoice of the quoted items must be submitted with the quotations.
20. Proof of the official Indian agent certificate of the firm must be attached. (Notary Certified Photocopy)
21. In order to fully and optimally utilize the equipment, training to Para Medical Staffs and Doctors should be provided. In continuation to this training, separate maintenance training for the machine and the sub systems should also be given to the "Equipment Maintenance Engineer" and "Equipment Maintenance Technicians". All the financial commitments in this regard shall be met by the bidder(s).
22. Bidder(s) have to submit an affidavit to the effect that they have not supplied the offered item(s) to any Govt., semi Govt. / Pvt. Organization, Institution, Nursing Home etc. at the price lower than the price offered to I.G.I.M.S. – Patna.
23. All the claims regarding meeting the specifications shall be duly supported by appropriate, latest technical catalogues/brochures from the manufacturer. Simply stating that the equipment(s) meets the specifications is not sufficient and any such quotations will be summarily rejected. Computer printed documents or Photostat copy or laser printouts will not be accepted as technical catalogues / brochures.
24. Bidder might be required to demonstrate the system at the discretion of the institute.

25. Notification of Award/Letter of Intent (LOI)

- a. Before expiry of the tender validity period, the Institute will notify the successful Bidder(s) in writing, by registered / speed post or by fax or by email (to be confirmed by registered / speed post immediately afterwards) that its tender for equipment(s), which have been selected by the Institute, has been accepted, also briefly indicating there in the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. This notification is undertaken by issuing a Letter of Intent (LOI) by the Institute.
- b. The successful bidder, upon receipt of the LOI, shall furnish the required performance security and submit an agreement in the prescribed format within ten days, failing which the EMD will be forfeited and the award will be cancelled.
- c. The Notification of Award shall constitute the conclusion of the Contract.

26. Signing of Contract

The successful bidder shall execute an agreement for ensuring satisfactory supply, installation, commissioning and the after sales service/support during the warranty period and during the Comprehensive Annual Maintenance Contract.

27. The Director reserves the right to accept or reject any or all tenders without assigning reasons.
28. The Director reserves the right to modify, add or delete any terms & conditions of the contract as and when required.

29. Amendment of tender documents:

- a. At any time prior to the dead line for submission of Tender, the Institute may, for any reason, modify the tender document by amendment.
 - b. The amendment shall be notified in newspaper and on institute website www.igims.org and such amendments shall be binding on them thereafter.
 - c. The Institute shall not be responsible for failure to inform the prospective bidders. Purchasers of tender documents are requested to browse the website of the Institute for information/general notices/amendments to tender document etc on a day to day basis till the tender is concluded.
30. The Dispute, if any, will be subject to Jurisdiction at Patna (Bihar).


**Director,
I.G.I.M.S.- Patna**

CONDITIONS OF THE CONTRACT

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01. Duty Free Clearance, Transportation, Forwarding & Handling Charges:

Clearance charges at point of Entry / Air Port and on ward transportation charges with Insurance upto I.G.I.M.S. - Patna will be borne by supplier's Indian Agent for which this Institute will not pay the charges.

02. Demurrage, Taxes & Octroi:

No demurrage charges will be paid by the Institute in case of delay on the part of supplier. However, this Institute will provide all necessary documents required for clearance / transportation of the goods and for exemption of the taxes/octroi for which supplier/Indian agent will have to intimate/furnish his requisition of document required, if any, well in advance. Octroi will be payable by supplier / Indian agent, if required.

03. Warranty Period:

- a. The "**Complete System**" shall remain under warranty period of **three years** from the date of satisfactory installation. The Complete System should include the basic unit and allied supporting components like UPS, Computer System, Printer, De-ionizer, Dehumidifier etc to be supplied by the bidder along with basic unit.
- b. During warranty period of three years, bidder shall provide at least **four maintenance visits per year** at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval, a proportionate deduction in the form of penalty on pro-rata basis will be recovered from the bidder from the Bank Guarantee amount. In case the Bank Guarantee is not adequate, Institute shall have right to recover the losses / penalty from other sources as well.
- c. Bidder shall also attend all breakdown calls within 48 hours of the receipt of the information from institute through fax/e-mail/mobile/sms etc.
- d. During warranty period, **bidder** shall maintain and keep **95% uptime** per year of the "**Complete System**" as per calculation given below:-

$$\begin{aligned} 1 \text{ Year} &= 365 \text{ days} \\ \mathbf{95\% \text{ of } 365 \text{ days}} &= \mathbf{347 \text{ Days per annum}} \end{aligned}$$

- e. The bidder shall compensate the uptime less than the specified above for **every additional day** of down time over and above 18 days stipulated above, warranty period will get extended by one week as penalty at no extra cost i.e. the extended penalty period will be equal to one week for every additional day of down time.
- f. During warranty period, **bidder** will make the "**Complete System**" in satisfactory working condition. In case, any spare parts, accessories, PCB, consumables etc. needs replacement due to normal wear and tear, **bidder** will supply and install the same for which no additional payment is to be made. If any spares / accessories / consumables etc. are not replaced by the bidder during warranty period, bidder should mention it clearly with name of the items with frequency of replacement and its rate with a validity to cover warranty period.
- g. In case, the **bidder** is not able to provide services (and the items / accessories is not functioning as the reason thereof) due to natural calamity (act of God), Political unrest, Riot and fire at the user site, then in such a situation the warranty period will be extended by the period for which the item / accessories could not be operated because of supplier not been able to provide services.
- h. During warranty period, in case of any alleged damage due to accident / human error, a committee under the Chairmanship of Director, I.G.I.M.S. – Patna with one member from the bidder and one member from the Institute will decide the authenticity of the claim. The decision of the committee shall be final and binding on both the parties.

04. After Sales Services:

- a. After expiry of the warrantee/Guarantee period of the equipment, the Indian agent will have to undertake the Comprehensive Annual Maintenance contract (with spare parts, accessories, consumables etc.) of the Complete System for the further life span of equipment. The life span of the equipment shall not be less than ten years. In special circumstances the total life span of the Equipment/ items may be reduced by the Institute.
- b. The Complete System should include the basic unit and allied supporting components like UPS, Stabilizer, Computer System, Printer, De-ionizer, Dehumidifier etc to be supplied by the bidder along with basic unit.

- c. During Comprehensive Annual Maintenance Contract, bidder shall provide at least **four maintenance visits per year** at regular interval for usual maintenance and supervision. If bidder fails to provide these maintenance visits at regular interval per year, a proportionate deduction in the form of penalty at the rate of 25% of contract amount per year will be deducted.
- d. Bidder shall also attend all breakdown calls within 48 hours of the receipt of the information from institute through fax/e-mail/mobile/sms etc.
- e. During Comprehensive Annual Maintenance Contract, **bidder** shall maintain and keep **95% uptime** per year of the **“Complete System”** as per calculation given below:-.

$$1 \text{ Year} = 365 \text{ days}$$

$$95\% \text{ of } 365 \text{ days} = 347 \text{ Days per annum}$$

- f. The bidder shall compensate the uptime less than the specified above for **every additional day** of down time over and above 18 days stipulated above, warranty period will get extended by one week as penalty at no extra cost i.e. the extended penalty period will be equal to one week for every additional day of down time.
- g. During Comprehensive Annual Maintenance Contract, **bidder** will make the **“Complete System”** in satisfactory working condition. In case, any spare parts, accessories, PCB, all type of consumables etc. needs replacement due to normal wear and tear, **bidder** will supply and install the same for which no additional payment is to be made. **If any spares / consumables / accessories etc. are not covered under Comprehensive Annual Maintenance Contract charges, it should be clearly mentioned with frequency of replacement and with rate. The validity of rate of such items should also be mentioned clearly. What will be the rate of escalation on the quoted rate after expiry of the validity of rate of such item must be mentioned.**
- h. The payment of Comprehensive Annual Maintenance Contract will be made on half yearly basis after submission of satisfactory functioning report of the Complete System by the officials authorized by the Institute.
- i. In case, the **bidder** is not able to provide services (and the items / accessories is not functioning as the reason thereof) due to natural calamity (act of God), Political unrest, Riot and fire at the user site, then in such a situation the Comprehensive Annual Maintenance Contract will be extended by the period for which the item / accessories could not be operated because of supplier not been able to provide services.
- j. During Comprehensive Annual Maintenance Contract, in case of any alleged damage due to accident / human error, a committee under the Chairmanship of Director, I.G.I.M.S. – Patna with one member from the bidder and one member from the Institute will decide the authenticity of the claim. The decision of the committee shall be final and binding on both the parties.

05. **Performance Security**

- a. There will be a performance security deposit amounting to 10 % of the total value of the equipment excluding taxes, which shall be submitted by the successful bidder within 10 days from the date of issuance of “Letter of Intent”.
- b. The contract duly signed and returned to the Institute shall be accompanied by a demand Draft or Bank Guarantee in the prescribed format.
- c. Upon receipt of such contract and the performance security, the Institute shall issue the Supply Orders containing the terms and conditions for the execution of the order.
- d. Failure of the successful bidder in providing performance security as mentioned above and / or in returning contract copy duly signed in time shall make the bidder liable for forfeiture of its EMD.
- e. The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:
 - i. It shall be in any one of the forms namely Account Payee Demand Draft or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in this document endorsed in favour of the Institute.
 - ii. Institute will release the Performance Security without any interest to the successful bidder on completion of the successful bidder’s all contractual obligations including the warranty obligations & after receipt of certificates confirming that all the contractual obligations have been successfully complied with.
- a. An undertaking of the principal regarding continuity of after sales and services (CAMC) @ the agreement rate even in case of changes of Indian agent during the life span of the equipment must be enclosed in the technical bid. Further, it will be the responsibility of the manufacturer Indian agent to get counter signature on the agreement to be executed with them by the principal.

06. Delivery period/Liquidated Damage: -

Goods should be delivered within two months after receipt of irrevocable and confirmed Letter of Credit. If the delivery is not affected by due date, the Director, I.G.I.M.S. - Patna shall have the right to charge liquidated damage on supplier/his Indian agent as under: -

- i. 1st extension for a month or a part thereof @ 2% per month of C.I.F. value.
- ii. 2nd extension for an additional month or a part thereof @ 3% per month of C.I.F. value subject to maximum Limit of 20% of the order items. All expenses incurred for extension of L.C. will be borne by supplier/his Indian agent.
- iii. Cancellation.- If delivery is not done even after 2nd extension Institute shall have the right of cancellation of Supply order at its discretion..

07. Payment: -

The payment will be made in as per following scheduled:

- a. 90% payment will be released against delivery and successful installation of the equipment / instruments.
- b. Balance 10% will be released after expiry of warranty period or on submission of Bank Guarantee of equal amount with a validity to cover the warranty period.

08. Validity of Price:-

Minimum up to one year from date of tender submission and it should be extendable.

- 09. Part Supply:** No part supply/ wrong supply or short supply will be accepted by the Institute. The Director IGIMS, Patna will be the final authority and will have the right to reject full or any part of supply, which is contradictory to the terms and conditions agreed at the time of placement of order. In case of rejection of any supplied items due to nonconformity in quantity and/or quality, Institute will have right to charge liquidated damages, as it deems fit.

10. Packing & Marking:-

Goods must be securely and adequately packed and protected in order to prevent damage, otherwise all losses and /or damage resulting from inadequate packing and/or inadequate protection or inadequate marking shall be borne by seller/seller's Principal abroad.

- 11.** Supplier may have to provide required manpower for running the equipments at mutually agreed remuneration (Which shall not be more than remuneration payable for the particular category of staff at IGIMS) at the sole discretion of the Institute, till institute is able to arrange its own staff for the purpose.

12. Insurance: -

Insurance up to Patna will be borne/arranged by principal supplier/his Indian Agent.

13. Installation & site plan:

Requirement regarding site/location for installation of equipment, if any, should be mentioned in the tender. Time required for installation of system after delivery must be mentioned. In case of delay in installation institute will have right to charge liquidated damage.

Specify the following points for installation of the System: -

- a. Total power consumption along with break up of main System and Accessories.
- b. Whether the System needs uninterrupted power supply.
- c. Maximum tolerated transfer time in case of interruption of power supply.
- d. Whether the System needs any humidity control device.
- e. Whether the System needs any separate power line/isolation Transformer.
- f. Does the System need the electrical shielding?
- g. Whether Air Conditioner is required for the System.
- h. Does it require special civil works for installation?

- 14.** The bidder should also quote for supply of "Un-Interrupted Power Supply" (UPS) with a battery back up of at least 30 minutes, "Constant Voltage Transformer (CVT)" of reputed manufacturer of required capacity along with Spike Suppressor or "Servo Voltage Stabilizer" as per requirement of the System. Bidder may quote the prices for all the above items (UPS/CVT/SERVO VOLTAGE STABILIZER) and the decision will be taken during technical evaluation of the item whether UPS is suitable or CVT / Servo Voltage Stabilizer will serve the purpose.

15. **Responsibility:-**

The principal as well as its agent will be severally and jointly responsible for ensuring the minimum life span of 10 years for the equipment. Both the said principal abroad and his Indian agent will have the full responsibility for the proper functioning of the equipment/instruments within the warranty period and thereafter during the life span of the equipment

16. The bidder is required to submit compliance sheet, which should reflect details of clause-by-clause compliance of technical specifications as well as general terms & conditions failing which their offer shall be rejected.

17. In order to fully and optimally utilize the equipment, training to paramedical staff and Doctors should be provided. In continuation to this training a separate maintenance training for the machine and the sub system should also be given to the Equipment Maintenance Engineer and Maintenance Technicians of the Institute. All the financial commitment in this regard shall be met by the firm/Principal.

18. **Penalties for non-performance**

The penalties to be imposed, at any stage, under this tender are;

- a. imposition of liquidated damages,
- b. forfeiture of EMD/performance security,
- c. termination of the contract,
- d. Blacklisting/debarring of the bidder.

19. **Termination of Contract**

a. Termination for default:- The Institute, without prejudice to any other contractual rights and remedies available to it (the Institute), may, by written notice of default sent to the successful bidder, terminate the contract in whole or in part, if the successful Bidder fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Institute.

b. In the event of the Institute terminates the contract in whole or in part, the Institute may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the successful bidder shall be liable to the Institute for the extra expenditure, if any, incurred by the Institute for arranging such procurement.

c. Unless otherwise instructed by the Institute, the successful bidder shall continue to perform the contract to the extent not terminated.

d. Termination for insolvency: If the successful bidder becomes bankrupt or otherwise insolvent, the Institute reserves the right to terminate the contract at any time, by serving written notice to the successful bidder without any compensation, whatsoever, to the successful Bidder, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Institute.

e. Termination for convenience: - The Institute reserves the right to terminate the contract, in whole or in part for its (Institute) convenience, by serving written notice on the successful bidder at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Institute. The notice shall also indicate inter alia, the extent to which the successful bidder's performance under the contract is terminated, and the date with effect from which such termination will become effective.

20. **Fall Clause:**

The prices charged for the equipment supplies under the contract by successful bidder shall in no event exceed the lowest price at which the successful bidder sells the equipments of identical description to any other persons during the period of contract. If any time, during the contract, the bidder reduces the sales price chargeable under the contract, he shall forth with notify such reduction to the Institute and the price payable under the contract of the equipments supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

21. **Applicable Law & Jurisdiction of Courts**

- a. The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.
- b. All disputes arising out of this tender will be subject to the jurisdiction of courts of law in Patna (Bihar, India).


**Director,
IGIMS - Patna**

Schedule of the Requirement.

SCHEDULE OF THE REQUIREMENT.

Sl. No.	Name of the equipment	Qty.
1.	On-Line Continuous Emission Monitoring System for CBWTF operational at IGIMS – Patna.	1 Set

ANNEXURES

Annexure - I

**PRICE SCHEDULED FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN
LOCATED WITHIN INDIA.**

1	2	3	4	5						6	
scheduled	Brief description of goods Make: Model:	Country of origin	Qty. nos.	Price per unit (Rs.)							Total unit price (At Consignee Site) Basis Rs. 4x5(g)
				Ex-factory/ex-warehouse /ex-showroom/off-the shelf	Excise duty(if any) % and value.	Sales tax/ vat(if any % and value.	Packin g and forward ing charge	Inland transportation , insurance for a period including 3 months delivery, loading/ unloading and incidental cost till consignee site.	Incidental services (including installation and commissioning, supervision, demonstration and training) at the consignee site.	Unit price (at consignee site basis(g)	
				(a)	(b)	(C)	(d)	(e)	(f)	a + b + c + d+ e + f	

Total quoted price in Rs.

In Words...

Note:

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warrantee shall be quoted separately as per price scheduled.

Place:

Date:

Name:

Business Address;-

Signature of Bidder;-

Seal of the Bidder;-

Annexure - II

COMPREHINSIVE ANNUAL MAINTENANCE CONTRACT PRICES SCHEDULE

S. No.	Item Description	1 st Yr.	2 nd Yr.	3 rd Yr.	4 th Yr.	5 th Yr.	6 th Yr.	7 th Yr.	Total Comprehensive Annual Maintenance Contract over a period of seven years after expiry of warranty period of three years from the date of successful installation. (a + b + c + d + e + f + g + h + i)
a	b	c	d	e	f	g	h	i	j
1.	Name of the Equipment: Make: Model: Qty.:								
2.	Name of the Equipment: Make: Model: Qty.:								

Scope of Contract (details as mentioned in the Clause No. – 13 of “Instruction to Bidder” & Clauses No.: 3, 4 and 5 of “Condition of Contract”).

- a) The rate of Comprehensive Annual Maintenance Contract as mentioned above should cover the Complete System. Complete System should include the basic unit and allied supporting components like UPS, Stabilizer, Computer System, Printer, De-ionizer, Dehumidifier etc to be supplied by the bidder along with basic unit.
- b) **Preventive maintenance visit:** Four Maintenance visits at regular interval for usual maintenance & supervision failing which 25% of the contract amount per visit would be deducted as penalty.
- c) **Break down maintenance visit:** As & when required
- d) **Response Time:** within 48 Hours.
- e) **Uptime Guarantee:** 95% of 365 days
- f) **The above-mentioned charges should includes labour charges for maintenance and breakdown visits per year, spares, accessories and all type of consumables required for the maintenance of the supplied items. If any spares / consumables / accessories etc. are not covered under above-mentioned charges; it should be clearly mentioned with frequency of replacement and with rate. The validity of rate of such items should also be mentioned clearly. What will be the rate of escalation on the quoted rate after expiry of the validity of rate of such item must be mentioned.**
- g) Payment of Comprehensive Annual Maintenance Contract would be made on half yearly basis after completion of work and satisfactory working report. In no case, advance payment is to be considered.

Seal and Signature of the bidder

ANNEXURE - III
MANUFACTURER'S AUTHORISATION FORM
(To be submitted by authorized dealers/representatives/importers)

No.

Dated:

To:

The Director
Indira Gandhi Institute of Medical Sciences,
Sheikhpura,
Patna – 800 014 (Bihar, India)

Dear Sir,

Tender No :
Equipment Name :

1. We (name of the OEM) are the original manufacturers of the above equipment having registered office at (full address with telephone number/fax number & email ID and website), having factories at _____ and _____ , do hereby authorize M/s. _____ (Name and address of bidder) to submit tenders, and subsequently negotiate and sign the contract with you against the above tender no..
2. No company or firm or individual other than M/s. _____ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific tender.
3. We also hereby undertake to provide full guarantee/warrantee /Comprehensive Annual Maintenance Contract as agreed by the bidder in the event the bidder is changed as the dealers or the bidder fails to provide satisfactory after sales and service during such period of Comprehensive Warranty / Comprehensive Annual Maintenance Contract and to supply all the spares/ accessories / consumables etc. during the said period.
4. We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments tendered within the stipulated time.

(Name)
for and on behalf of M/s. _____

Date: _____ (Name of manufacturers)

Place:

Note: This letter of authority should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.

ANNEXURE - IV

BANK GUARANTEE FORM

To

**The Director
Indira Gandhi Institute of Medical Sciences,
Sheikhpura,
Patna – 800 014 (Bihar, India)**

WHEREAS _____ (Name and address of the supplier) (Hereinafter called “the supplier”) has undertaken, in pursuance of contract no _____ dated _____ (herein after called “the contract”) to supply The Director, Indira Gandhi Institute of Medical Sciences, (address) with _____ (description of goods and supplies).

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total amount of _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We undertake to pay you any money so demanded notwithstanding any dispute or disputes raised by the supplier(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under these presents being absolute and unequivocal.

We agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

No action, event, or condition that by any applicable law should operate to discharge us from liability, hereunder shall have any effect and we hereby waive any right we may have to apply such law, so that in all respects our liability hereunder shall be irrevocable and except as stated herein, unconditional in all respects.

This guarantee will not be discharged due to the change in the constitution of the Bank or the Supplier(s).

We, _____ (indicate the name of bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent, in writing, of The Director, Indira Gandhi Institute of Medical Sciences, Patna (Bihar). This Guarantee will remain in force up to (Date). Unless a claim or a demand in writing is made against the bank in terms of this guarantee on or before the expiry of (Date) all your rights in the said guarantee shall be forfeited and we shall be relieved and discharged from all the liability there under irrespective of whether the original guarantee is received by us or not.

(Signature with date of the authorized officer of the Bank)

.....

Name and designation of the officer

.....

.....

Seal, name & address of the Bank and address of the Branch

ANNEXURE - V

**POWER OF ATTORNEY
(On a Stamp Paper of relevant value)**

I/ We.....(name and address of the registered office)
do hereby constitute, appoint and authorise Sri/Smt -----
.....(name and address) who is presently employed with us and holding the
position of as our attorney, to act and sign on my/our
behalf to participate in the tender no..... for
..... (Equipment name).

I/ We hereby also undertake that I/we will be responsible for all action of
Sri/Smt..... undertaken by him/her during the tender process and
thereafter on award of the contract. His / her signature is attested below

Dated this the ___ day of 201_ For_____

(Name, Designation and Address)

Accepted

(Signature) (Name, Title and Address of the Attorney)

Date : _____

SPECIFICATION AND ALLIED TECHNICAL DETAILS

**Scope of Work & Technical Specifications of the
On-Line Continuous Emission Monitoring System**

Scope of Work:

- a. To supply, install and commission **On-Line Continuous Stack Emission Monitoring System (CSEMS) with Bio-Medical Waste Incinerator installed at CBWTF, I.G.I.M.S. – Patna.**
- b. **To connect and upload the online emission monitoring data at IGIMS – Patna, SPCBs / PCCs and CPCB Server.**
- c. To ensure regular maintenance and operation of the online system with temper proof mechanism having facilities for online calibration.
- d. To maintain the emission standard as prescribed in Bio-Medical Waste (Management & Handling) Rule – 1998 and 2016.

Technical Specification:


- Stack Gas Monitoring System should include Inbuilt Modular PC with display, Panel with Electronics Components, Sensor Assemblies for various parameters (i.e. CO, CO₂, Primary Temperature, Secondary Temperature, O₂, NO_x, H₂S, SO₂, He, CH₄, Suspended Particulate etc.), Gas Sampling Unit with Tubes and cables, Software for PC Interface, necessary Arrangement for Pollution Control Board Server Access and Linkage, all hardware including anchor bolts and fasteners etc. for REAL TIME MONITORING. And Remote Calibration Facility as per CPCB norms / guidelines.
- Sampling shall be done at preset interval ranging from 2 minutes to 15 minutes. Local visual and buzzer alarm shall be activated if the gas sample Level increase from pre-set value.
- All monitored values shall be corrected to 11% Oxygen on dry basis.
- Combustion Gas Analyzer to be used for measuring CO₂, CO and O₂.
- Temperature readings shall be updated after approx. 1 min. The readings should be uploaded on CPCB and SPCB portal from minimum 1 minute resolution.
- Online data viewing should be available from dedicated server.
- Facility of Online Calibration should be available.
- Ranges of Sensors to be offered should include CO, CO₂, O₂, NO_x, H₂S, SO₂, He, CH₄, Suspended Particulate and temperature.
- Printing facility should be available.
- The flue gas monitoring system should be installed as per the guidelines issued by CPCB.
- The complete system should be supported with UPS of required capacity with a battery back up of 30 minutes.
- Manufacturer should be ISO certified company and quoted item should be CE certified.

Scope of Supply:

System with the specifications listed above to be quoted separately for following types:

Type – A	On-Line Continuous Stack Emission Monitoring System (CSEMS) for monitoring of CO, CO₂, Primary temperature, Secondary temperature and Suspended Particulate Matters.
Type – B	On-Line Continuous Stack Emission Monitoring System (CSEMS) for monitoring of CO, CO₂, O₂, Primary temperature, Secondary temperature, Suspended Particulate Matters, Nitrogen Oxides NO and NO₂.
Type - C	Waste management Software (with GPS, On-Line QR Code, Bag Scanning and Weight Registering, Monthly Report Generation with data storage on SERVER and printing facility) compatible with Type – A and Type – B System.

Remarks: It will be the responsibility of the selected bidder to supply and install the system as per standard and guidelines framed by CPCB / SPCB for stack emission.


**Director,
IGIMS - Patna**
