



# M. P. Pollution Control Board

Paryawaran Parisar, E-5 Sector, Arera Colony, Bhopal -16 (M.P.)

Phone: (0755) 2466191, Fax: (0755) 2463742, Email:pur\_mppcb@rediffmail.com Web:[www.mppcb.nic.in](http://www.mppcb.nic.in)

## TENDER NOTICE

### TENDER NO. MPPCB/Pur./08/2019-20

#### Supply, Installation, Commissioning and Operation & Maintenance services of Real Time Water Quality Monitoring Station/Systems (RTWQMS) and Data Connectivity

1. The Member Secretary, M. P. Pollution Control Board invites E-Tenders on portal at <http://www.mptenders.gov.in> from reputed, experienced and eligible manufacturers/firms/agencies in two cover system (Technical and financial) for the following work:
2. **Name of Work:** Supply, Installation, Commissioning and Operation & Maintenance services of Real Time Water Quality Monitoring Station/Systems (RTWQMS) and Data Connectivity at 10 locations of Rivers of Madhya Pradesh.
3. Tender documents may be downloaded from Government of Madhya Pradesh E-Procurement portal at <http://www.mptenders.gov.in> as per the schedule given in Critical Date Sheet as under:

#### CRITICAL DATE SHEET

Description	Date	Time
Date of Publishing and Bid Document Download date	19.02.2020	03:00 PM
Bid Submission Start Date	27.02.2020	01:00 PM
Bid Submission End Date	18.03.2020	03:00 PM
Technical Bid Opening Date	19.03.2020	03:00 PM
Financial Bid Opening Date	Will be intimated after Technical Evaluation	

4. The Tender Cost of Rs. 1500.00 (Rupees One Thousand Five Hundred only) and Earnest Money Deposit (EMD) of an amount of Rs. 4,00,000.00 (Rupees Four Lakh only) shall be submitted online on or before the last date of submission of tenders. No tender shall be considered without requisite tender fee and earnest money.
5. The Tender documents will not be available in physical form. The detailed terms & conditions are available in tender document. For detailed tender document and any amendment (if required) regarding the said tender shall be available on Board's Web site [www.mppcb.mp.gov.in](http://www.mppcb.mp.gov.in) and [www.mptenders.gov.in](http://www.mptenders.gov.in).

**Director (Environment)**



# M. P. Pollution Control Board

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## TENDER NO. MPPCB/Pur./08/2019-20

### Supply, Installation, Commissioning and Operation & Maintenance services of Real Time Water Quality Monitoring Station/Systems (RTWQMS) and Data Connectivity

**Sub.:** Sealed tenders for supply, installation, commissioning, operation maintenance, services of Real Time Water Quality Monitoring Station/System and its data display at 10 locations of Rivers of Madhya Pradesh as specified in Annexure-“A”.

M. P. Pollution Control Board desires to procure supply, installation, commissioning, operation maintenance, services of Real Time Water Quality Monitoring System and its data display at 10 locations of Rivers of Madhya Pradesh as per annexure-A . Sealed tenders are invited from the reputed manufacturers [approved by BIS/ISO] or their authorized representatives, specially authorized for this tender, who are capable of supply, installation, commissioning, operation maintenance, services of Real Time Water Quality Monitoring Station/System and its data display which are shown on the tender notice. The terms and conditions are as follows:

- (1) **Procedure for Submission of the Tender:** Each bidder shall submit his offer in two covers. First Cover shall contain scanned copies of proof for submitting Tender Cost and Earnest Money (EMD) online in the portal along with all qualification documents such as compliance of technical specification, terms & conditions, company profile, copy of GST registration number, PAN number and authorization certificate from manufacturer for submission of offer for this tender, if offer is submitted by authorized representative. The Second Cover shall contain financial offer (BoQ). The tender shall be submitted online in two covers as per following details:
  - (a) **First Cover (Technical Bid)** should contain scanned copy of proof for submitting Tender Cost and Earnest Money (EMD) online in the portal along with all qualification documents such as compliance of technical specification, terms & conditions, company profile, copy of GST registration number, PAN number and authorization certificate from manufacturer for submission of offer for this tender, if offer is submitted by authorized representative. The First Cover shall be opened on 19.03.2020 at 3:00 pm. The first cover must contain self verified scanned copies of the following documents:
    - (i) Detailed compliance of technical specifications in annexure –2 along with Make & Model, functioning procedure and other relevant literature such as leaflet/brochure of the RTWQMS.
    - (ii) Tender Acceptance Form as per annexure-5 along with all documents mentioned.
    - (iii) Company Profile, which includes documents such as copies of documents defining constitution, legal status, Power of Attorney of firm/ resolution of Board of Directors of company, certified published annual reports for the last three continuous years showing the turn over and financial results of the Bidder duly certified by Chartered Accountant.



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- (iv) If the offer is submitted by authorized representative, he should submit authorization letter from the manufacturer (as per annexure-8) for submitting offer for this tender, otherwise tender offer of the firm shall not be considered and liable for rejection.
  - (v) Documentary Proof (Atleast three Purchase Orders and Performance Certificate) to show that the Bidder has supplied the quoted instruments during the past three years to any Govt. Ministries/Departments/PSUs/Scientific Institutes of National repute.
  - (vi) The bidder shall have to submit the copy of GST registration number.
  - (vii) Income tax no. [PAN]
  - (viii) An undertaking shall be submitted by the bidder, regarding whether they are not black listed in any Govt. organization / institutions.
  - (ix) The details of service station in Madhya Pradesh and India should be furnished with other details.
  - (x) The bidder shall also provide Bank Name, Account Name, Account Number, Account Type, Branch IFSC Code for safer & easier payment transaction through RTGS/NEFT.
- (b) Second Cover (Financial Bid):** Offers received in due time shall be evaluated technically by a committee constituted by the Competent Authority, M. P. Pollution Control Board and as per the recommendation of committee, depending upon the credentials submitted in second cover, suitability of equipment with respect to offered specifications, application and performance, the financial offer shall be opened. The date of opening of financial bids (Third Cover) will be informed later. Financial Bid shall comprise of following documents:
- (i) Financial offer in BoQ of the tender document.
  - (ii) Copies of at least two recent supply orders of the similar instrument/equipment indicating detailed price schedule in order to examine reasonability of the quoted rates in the present bid.

## (2) **SPECIAL CONDITIONS:**

- (i) Prices should be quoted for supply, installation, commissioning, operation & maintenance, services of on-line Real Time Water Quality Monitoring System (RTWQMS) and its data display including the cost of minor civil works, internet connection, electrical fittings and cabling and their monthly /yearly billing charges such as internet usage, insurance, electricity, water and other miscellaneous charges etc.
- (ii) The technical specifications of the RTWQMS are given on page no. 28 to 34. The technical specifications of the offered RTWQMS should be furnished in annexure –1.
- (iii) The equipment/system offered should necessarily contain a guarantee/warranty for its trouble free performance for a period of 3 (Three) years from the date of installation.



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- (iv) The offer should clearly mention make, name of the manufacturer, detailed specifications, detailed literature about the equipment/circuit diagram/drawing of the mechanism and any other information relevant to the equipment. For any printing error / mistake in final bid will be the responsibility of the tenderer and no correspondence will be entertained by the Board in future.
- (v) The tenderer should furnish details of supplies made by him to important institutions, along with performance certificate, during last one year [Users' list]. The tenderer must submit Client list along with the previous purchase order copies of similar item [s] supplied to any Central /State Pollution Control Boards / any CSIR Laboratories/Institutions.
- (vi) The firm / manufacturer submitting the offer shall only quote for one most suitable model of the offered equipment whose specification matches the Board's specifications. No alternate offers shall be considered and, if submitted, the offer shall be rejected.
- (vii) Scanned copy of proof for submitting tender cost and Earnest Money (EMD) online in the portal shall be furnished in First Cover. Offers without earnest money and tender fee shall not be considered and the relevant Covers (Second) will not be opened and their offer shall be treated as rejected.
- (viii) The tenderer shall have to submit the copy of GST tax registration and Income Tax registration [PAN] in second cover, otherwise the offer shall be liable for rejection.
- (ix) An undertaking shall be submitted by the tenderer that they are not black listed in any Govt. organization / institutions in Second Cover.
- (x) The tenderer shall provide exclusive company profile including necessary certificates / license for manufacture the product from DGTD / SSI/SIA etc.
- (xi) The specifications are clearly mentioned in the document and the Tenderer is requested to submit Bid only if their offer strictly comply with 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 Tenderer's risk as the Board will not entertain such Bid.
- (xii) Integrity Pact : The bidders have to sign a Integrity Pact as per the format given in Form-7 and submit it alongwith the Technical Bid. Bidders are advised to read the Integrity Pact carefully, fill in the required details, sign and affix the seal and submit alongwith the technical bid. The bids which does not contain the Integrity Pact will be summarily rejected.

### **(3) OTHER CONDITIONS:**

- (i) The Board reserves its rights to reject any or all the tenders without assigning any reason there for.
- (ii) Tender found incomplete shall be rejected forthwith.
- (iii) The indigenous equipment, for which an order has been placed, after acceptance of the tender, shall have to be delivered, installed & demonstrated to the consignee mentioned in



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the supply order within 60 days from the date of issue of supply order. In case of late supply of the material, 2% per month penalty shall be charged up to one month, there after supply order shall be treated as cancelled and earnest money shall be forfeited and the supply order shall be issued to the second lowest firm. The maximum penalty for late supply shall not exceed 10% of the total ordered value. In case of unavoidable delay in supply a prior permission shall be obtained for extension in delivery period.

- (iv) The time limit for the supply of imported equipment shall be 90 days, which can be relaxed for additional 15 days by the Member Secretary. After scheduled time limit, 2% per month penalty or maximum penalty up to 10% of the total ordered value should be levied.
- (v) If the tenderer is not a manufacturer himself, should have a facility for repairing and maintenance of the instrument. The details of service centers in Madhya Pradesh and India should be furnished along with other details.
- (vi) It shall be the responsibility of the tenderer to deliver the material to the consignee in sound condition without any damage. Any damage or loss during transit shall be on the account of the tenderer.
- (vii) The tenders shall be valid for a period of 360 days from the date of opening of First Cover.
- (viii) The prices should include all taxes like GST tax, excise tax or any other tax.
- (ix) The approved firm / manufacturer shall have to submit 5 % security deposit of the ordered value in the form of Bank Guarantee for a period of one year, only after that work order for supply, installation, commissioning, operation maintenance, services of on-line Continuous Water Quality Monitoring System and its data display will be issued.
- (x) In case the approved tenderer fails to effect supply, within the specified period as per work order, the earnest money and security deposit is liable to be forfeited.
- (xi) The consignee or any other officer authorized by the Board shall have the right to reject any or all the items of the supply, if they do not confirm to specifications mentioned in the supply order. The rejected items shall be lifted by the tenderer at their own cost. The consignee will not be responsible for the custody and safety of such items.
- (xii) The Board reserves its rights to affect any reasonable increase or decrease in the quantity or number of items at the time of issue of supply order in the interest of the Board.
- (xiii) All the clearance including the obtaining NMI [Not manufactured in India] certificate, custom clearance and custom duty will be the responsibility of the tenderer. This office will open the letter of credit [L/C] as may be required and will only sign the documents wherever required.
- (xiv) In case, if any supplier quote their rates in Indian Rupees for imported equipment and do not require custom duty exemption certificate from the Board, then the supplier has to submit import document like bill of entry, custom duty paid and NMI [Not manufactured in India] certificate from the manufacturer.
- (xv) The tenderer is expected to examine all instructions, forms, terms and conditions and



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specifications mentioned in the bid document. Failure to furnish all information required by the bid documents of submission of a bid not substantially irresponsive to the bid document in every respect will be at the tenderer's risk and may result in the rejection of its bid.

(xvi) The terms of payment shall be as under:

[A] **Indigenous Items:** 100% of the cost of material would only be paid after receipt, satisfactory installation and demonstration of the equipments / material at site.

[B] **Imported equipments:** The letter of credit will be opened for total ordered value, but 50% of the cost will be released on receipt of shipment documents such as Air Way Bill, Commercial Invoice, Packing List etc. of the material and balance 50% payment shall be released only after receipt, satisfactory installation & demonstration of the equipments / receipt of material at site.

(xvii) Conditional offers will not be accepted and liable for rejection.

(xviii) Cost of O&M of RTWQMS after 3 years of warranty for Five (5) years including insurance expandable up to next five years.

(xix) O&M cost (including insurance) for five years expandable up to next three years.

(xx) In case of human error regarding labeling of Envelop, the committee constituted for the opening of Envelope shall take appropriate decision.

(xxi) In case of any dispute the decision of Competent Authority, M. P. Pollution Control Board shall be final & binding.

(xxii) In order to comply the instructions of Department of Commerce & Industries, Govt. of M.P., and minimum 30% of the quantity of the items shall be reserved for the manufacturers / entrepreneurs from Scheduled castes/ scheduled tribes based at Madhya Pradesh.

***NOTE: The tenders shall be liable for rejection in breach of any of the special or other general conditions of the tender document and no correspondence in this regard shall be entertained in future.***

**Director (Environment)**



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## **TENDER AND CONTRACT FOR SUPPLY, INSTALLATION, COMMISSIONING, OPERATION & MAINTENANCE, SERVICE OF REAL TIME WATER QUALITY MONITORING SYSTEM AND DATA CONNECTIVITY**

### **GENERAL RULE AND DIRECTIONS FOR THE GUIDANCE OF SUPPLIERS**

- a. All suppliers proposed to be obtained by contract will be notified in a form of invitation to tender posted in public places/News Paper.
- b. The tender form will State the supplies to be made, as well as the date for submitting and opening tenders and the time allowed for supply, also the amount of earnest money to be deposited with the tender.
- c. In the event of tender being submitted by a firm it must be signed separately by each member thereof or in the absence of any partner, it must be signed on its behalf by a person holding a power of attorney authorizing him to do so, such power of attorney should be produces with the tender and it must disclose that the firm is duly registered under the partnership Act.
- d. Any person who submits a tender shall fill up usual printed form stating at what rate he is willing to undertake supply of each items. Tender which propose any alteration in the work/supply specified in the said form of invitation to tender, or time allowed for carrying out work/supply will be liable for rejection.
- e. The tender committee will open tenders in the presence of any tenderer who may be present at the time and will enter the amount of several tenders in a comparative statement in a suitable form. Receipts for earnest money will be given to all tenderers except those whose tenders are rejected and whose earnest money is refunded on the day that the tenders are opened.
- f. The officer competent to dispose of the tenders shall have the right of rejecting all or any of the tenders.
- g. Site Locations may be visited by any tenderer before tendering by making contact with concerned Regional Office, M.P. Pollution Control Board during office Hours.



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## CONDITIONS OF CONTRACT

1. If the Tenderer shall be hindered in the supply of the materials so as to necessitate an extension of the time allowed in this tender he shall apply in writing well in advance or immediately after the cause occur to the Competent Authority, M.P. Pollution Control Board, who shall if in his opinion (which shall be final) reasonable grounds be shown therefore authorize such extension for a period not exceeding in 15 days. Any further extension shall be subject to the previous sanction of the competent authority.
2. The supplier shall give notice to the consignee officer of his intention of making delivery of materials and on the materials being approved a receipt shall be granted by him to the Consignee Officer or his assistant, and no material will be considered for payment until so approved.
3. Supply, installation, commissioning, operation maintenance, services of on-line Continuous Water Quality Monitoring System and its data display supplier shall be furnished with a certificate by the Consignee Regional Officer of M.P. Pollution Control Board.
4. The material shall be of the best description and in strict accordance with the specification and the supplier shall receive payments for such service only as are approved and passed by the Regional Officer /Consignee Officer.
5. In the event of materials being considered by the Consignee Officer to be inferior to that described in the specification the supplier shall on demand in writing forth with remove the same at his own charge and cost and in the event of his neglecting to do so within such period as may be named by the Consignee officer that officer may have such rejected material removed at the contractor's risk and expense incurred being liable to be deducted from any sum due or which may become due to the supplier.
6. Receipts for payment made on account of a Supply & Service when executed by a firm must also be signed by authorized signatory.
7. Under no circumstances whatever shall the contractor be entitled to any compensation from Board on any account.
8. The supplier shall supply at it own expense all tools, plant & implements required for the due fulfillment of his contract and the materials shall remain at his risk till the contract gets completed.
9. No materials shall be brought to site or delivered on Sunday/holiday without the written permission of the Consignee Officer.
10. The supplier shall not sublet this contract without the written permission of the Competent Authority , M.P. Pollution Control Board. In the event of the contractor subletting his contract without such permission, he shall be considered to have thereby committed a breach of the contract, and shall forfeit his earnest money and shall have no claim, for any compensation for any loss that may occur from the materials he may have collected or engagements entered into.



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11. The decision of the competent authority M.P. Pollution Control Board, shall be final, conclusive & binding on all parties to the contract upon all questions relating to the meaning of specification and instructions herein before mentioned and as to quality of materials or as to any way arising out of, or relating to the contract specifications, instruction orders of these conditions or otherwise concerning the supplies whether arising the progress of after the completion or abatement thereof.
12. On the breach of any term of condition of this contract by the supplier, the said competent Authority shall be entitled to forfeit the earnest money, security deposit and the balance thereof that may at that time be remaining and to realize and retain the same as damages and compensation for the said breach but without prejudice to the right of the said Board to recover any further sums as damages from any sums due or which may be come due to the contractor by M.P. Pollution Control Board, or otherwise howsoever.
13. The bidder or its associates as an O & M partner in India, (any authorized agency in India) should have well trained O & M personnel on its regular rolls as per following details and on award of LOI bidder shall submit the name of Technicians (Diploma holder in electronics/instrumentation) and Data Processor for central data management and RTWQMS station respectively. Their resume, PF slip as a proof of their regular employment with the bidder. All personnel should be on pay roll of the O & M partner.
14. The O&M partner shall furnish an undertaking regarding carrying out satisfactory O &M of RTWQMS covered in this document as per terms & conditions of the document on behalf of the bidder. This information is to be provided as per Attachment.
15. The Contractor shall 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 the carrying out of the Works and is due to any negligence, omission or default of the Contractor or any person for whom the Contractor is responsible or any Manufacturers and subcontractors or person for whom the Manufacturers and subcontractors are responsible.



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Annexure-A

## TENDER NO. MPPCB/Pur./08/2019-20 (RTWQMS)

S.No	Name of Locations (Any of Ten )
1	Amarkantak from origin point
2	Amarkantak at Kapildhara
3	At Dindori U/s before mixing City domestic waste .
4	At Dindori D/s after mixing City domestic waste.
5	Mandla, Near Shamshanghat
6	Mandla, Near Rd/br.
7	Jabalpur, Jamtara, Near Railway Bridge
8	Jabalpur, Lalpur, Near water supply intake point
9	Jabalpur At Tilwaraghat
10	Jabalpur, Panchwatighat, before mixing
11	Jabalpur, Sarswastighat after mixing Bawanganga river
12	Barmanghat, 100 mds of mainghat
13	At Sandhiya Ghat near intake well Pipriya
14	Near Shahganj Rest House
15	Bandra Bhan Ghat Opp. Site, Hoshangabad
16	Hoshangabad, Near Korighat
17	Hoshagabad, Near Sethanighat
18	Hoshangabad, d/s after mixing SPM nalla
19	At Nemavar W/S. Ujjain
20	Indore, Near Punasa dam
21	At Omkareshwar d/s
22	Barwaha near Mortakka Bridge
23	At Mandleshwar near w/s. Jallod intake
24	At Mandleshwar D/s
25	At Maheswar D/s
26	At Khalghat
27	At Dharampuri (before mixing domestic nalla )
28	At Dharampuri d/s.
29	At Rajghat Badwani,
30	At Koteswar, Nisarpur, Dhar
31	At Kakrana, interstate boundry, Alirajpur



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Annexure – 1

Tender No. MPPCB/Pur./08/2019-20

**SUPPLY, INSTALLATION, COMMISSIONING, OPERATION & MAINTENANCE, SERVICE OF  
REAL TIME WATER QUALITY MONITORING SYSTEM AND DATA CONNECTIVITY  
TENDER SPECIFICATIONS VS OFFERED SPECIFICATIONS**

Sl. No.	Tender Specifications	Offered Specifications	Documentary evidence/ leaflet Enclosed

Signature of Tenderer -----  
Name -----  
Business Address -----

Place: -----  
Date : -----



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Annexure – 2

Tender No. MPPCB/Pur./08/2019-20

## SUPPLY, INSTALLATION, COMMISSIONING, OPERATION & MAINTENANCE, SERVICE OF REAL TIME WATER QUALITY MONITORING SYSTEM AND DATA CONNECTIVITY

### BID PRICE BREAKUP FOR O&M OF RTWQMS FOR FIVE YEARS

Sl. No.	Year of O&M	Service charges for O&M in Rs.		Cost of (Incidental charges consisting of security , Electricity, Phones/ internet, Insurance, Manpower, AMCs material including spares & consumables for Operation & maintenance and other in Rs.		Total Charges for the year in Rs.	
0.	Warranty Period						
1.	1 <sup>st</sup> year						
2.	2 <sup>nd</sup> year						
3.	3 <sup>rd</sup> year						
4.	4 <sup>th</sup> year						
5.	5 <sup>th</sup> year						
<b>TOTAL</b>							

#### NOTE:

- GST/Service tax shall be payable only on the service portion of O & M cost only (excluding supply of spares for maintenance & overhauling).
- Cost of material including spares & consumables for operation & maintenance shall be inclusive of all taxes & duties.
- The above ceiling O&M cost also include incidental charges (Security, Electricity, Data Connectivity, Stations Supervisor, Insurance) and services along with manpower at Central Server Stations of respective SPCB-Head Office as well as CPCB-Delhi.
- Health of the Stations should be sound for the entire period (05 years) so that the contract can be further renewed on mutual agreement.
- All the statutory taxes & duties as applicable in the State of India i.e. Duties and Taxes, as applicable will be paid as actual by the Vendor for simplification. However, these taxes will be reimbursed by the Board on production/submission of original bills.



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Annexure – 3

Tender No. MPPCB/Pur./08/2019-20

## SUPPLY, INSTALLATION, COMMISSIONING, OPERATION & MAINTENANCE, SERVICE OF REAL TIME WATER QUALITY MONITORING SYSTEM AND DATA CONNECTIVITY

### PRICE SCHEDULE FOR GOODS IMPORTED

1	2	3	4	5	6	7
Sl. No.	Description	Country of origin	Quantity	Unit Price CIF New Delhi	Total CIF price per item	Unit Price of Inland delivery to final destination and unit price of other incidental services.

Note: In case of discrepancy between unit and total price, the unit price shall prevail.

Place: .....

Date: .....

Signature of the Tenderer .....

Name .....

Business Address .....



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Annexure – 4

Tender No. MPPCB/Pur./08/2019-20

## SUPPLY, INSTALLATION, COMMISSIONING, OPERATION & MAINTENANCE, SERVICE OF REAL TIME WATER QUALITY MONITORING SYSTEM AND DATA CONNECTIVITY

### PRICE SCHEDULE FOR GOODS INDIGENOUS

Sl. No.	Name of equipment with make & model	Unit Price in Rupees	VAT/CST or Any other Tax/duty	Unit Price including all taxes up To final destination

Note: In case of discrepancy between unit and total price, the unit price shall prevail.

Signature of the Tenderer .....

Name .....

Business Address.....

Place: .....

Date: .....



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## **Pre-Qualification for the Bidders for the Project:**

**The Tenderer/Bidders shall need to qualify the following criteria to Bid for the mentioned job.**

1. The Bidder should have a registered company /Office in India with at least 3 years of running track record of the organization.
2. The bidder should have experience of supply, installation commissioning, operation and maintenance and data transfer of at least 3 nos. Continuous water quality monitoring System i.e. for River/ETP/STP etc. to reputed organization via Server or Cloud. Documentary Proof is required to be submitted.
3. The Average financial turnover of the bidder during the last three years should be at least 3.00 Crores or above from the date of opening of the tender. The bidder has to provide duly certified balance sheet from the Chartered Accountant.
4. The Bidders should have supplied the system to measure all the required parameters asked in the tender online to at least 10 Locations in India and all the systems supplied should have been installed, commissioned and should be in running condition.
5. Proof in terms of Purchase Order and Satisfactory letter from the client shall be submitted by the bidder.
6. The Bidder must provide a material availability certificate mentioning that they should supply the material within 15 days from the date of issue of work order.
7. The bidder must note that all the accessories Consumables, Installation, commissioning service and operation related work except Sim card, power supply shall be in the bidder's scope.
8. Successful tender would bear the cost of insuring the equipment and facilities against any theft fire, natural calamity and deployed main power insurance during contract period.
9. If any break down in RTWQMS occurs it will have to be rectified without any delay for this bidder should have CWQMS/Sensors in spare.
10. After installation of RTWQMS if the situation arises Supplier will have to undertake the shifting of the instrument from the location of installation to another location within Madhya Pradesh.
11. The bidder shall take responsibility of shifting and de-attachment of RTWQMS before monsoon and installation after monsoon within Madhya Pradesh during warranty period.



# M. P. Pollution Control Board

Paryawaran Parisar, E-5 Sector, Arera Colony, Bhopal -16 (M.P.)

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## Scope of Work

This project is planned for the Procurement of Real Time Water Quality Monitoring system using standalone water quality monitoring stations/ system powered with GSM / GPRS modem/Cloud or other advanced technology to be installed or any other available communication modes deployed to transmit the data at the scheduled interval of hourly average basis to a central server located at 10 different locations of Rivers in Madhya Pradesh. The desired parameters required to be monitored and displayed are pH, Temperature, Dissolved Oxygen (DO), Bio-chemical Oxygen demand (BOD) with categorization of water quality as per CPCB norms.

- (i) The true / validated data from all the desired locations shall only be transmitted to the Central Server at MPPCB and concerned Regional Offices.
- (ii) Central Server shall possess the capability to receive, analyze and archive the data received from the Remote stations.
- (iii) The trained data analyst (to be provided by the bidder) shall be available round the clock to qualify / analyse the received data from all the 10 stations for contract period. Proper training shall be imparted to persons assigned by MPPCB.
- (iv) The qualified / analyzed data shall than be displayed on local displays (LED's of size 8X12 feet minimum) installed at each location on the ghats or other location as decided by Board Madhya Pradesh shall remain in the scope of the bidder.
- (v) All 10 Stations shall be manned/monitor for 24 × 7 remains in the scope of the bidder during the contract period to ensure seamless Real Time Water Quality Monitoring Data from the Water Quality Monitoring Stations. Bidder has to provide security on permanent basis to take care of the RTWQMS during the project.
- (vi) Complete supply, installation and commissioning shall be in the bidder's scope. All manpower and tools etc., software required shall be in the bidder's scope.
- (vii) Laying of all cables for installation and commissioning of Real Time Water Quality Monitoring Station shall be in bidder's scope of work.
- (viii) Vendor will supply indigenous material within 60 days from the date of awarding the Work order to the vendor and imported material within 90 days from the date of opening of L/C. Installation and commissioning activity shall be completed within the 30 Days from the date of receiving 100% material.
- (ix) The full insurance of the offered RTWQMS shall be in the bidder scope during the warranty period /O&M contract.

**DETAILS OF PROJECT STRUCTURE:** Successful Tenderer would be awarded the project/work under a Supply and Service Agreement, which would entail:

1. Supply, installation and Commissioning of Ten Sets of RTWQMS Equipment at the defined locations at Madhya Pradesh.
2. Operation and Maintenance of the RTWQMS for five years after one year warranty from



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the date of its commissioning.

3. Daily reporting of data pertaining to Water Quality to MPPCB. MPPCB would make payment for RTWQMS as per schedule of requirement, for Supply, Installation and Commissioning of the system. MPPCB would procure all the RTWQMS equipment on its name. MPPCB will make regular payments for the O&M and supply of Data at the end of each Month. The tenderers therefore need to quote For supply, installation, commissioning, operation maintenance and services of Real Time Water Quality Monitoring Systems for period of Contract.
4. MPPCB would provide land for installation of RTWQMS free of cost, in the identified city/location to the Successful Bidder. Along with the land, MPPCB would provide letter/ documents for telephone and electricity connections at the proposed location. Bidder would bear the initial installation cost for these facilities and the monthly recurring cost pertaining to their usage (monthly telephone, electricity and Internet bill) would also be borne by the Successful Bidder.
5. One no. of LED Moving Message Display Board at each station is to be supplied, installed and maintained. MPPCB would identify location for installation of these display boards. The successful bidder shall also arrange telephone and electricity connections at the identified location and all the documents required for the connection shall be provided by the board. The Successful Bidder would bear the initial installation cost for these facilities and the monthly/recurring cost pertaining to their usage (monthly telephone, electricity and Internet bill) would also be borne by the Bidder. All other installation requirement for Display System is to be arranged by the successful bidder and cost for same should be included in bid price.

## **SCOPE OF SERVICES**

### **The Scope of Works under the package shall include:**

- (i) The supply is including packing, transportation, insurance, custom clearance, port clearance and handling, inland transportation, inland transit insurance and delivery to site, installation, testing and commissioning of equipment and provision of training of MPPCB officials.
- (ii) Operation & Maintenance of water quality Monitoring Stations for a period of Five year from the date of commissioning of the station after warranty period (1+5), which can be extended up to three (3) years at the mutually agreed rates and terms and conditions.
- (iii) Data & Report of data pertaining to RTWQMS to MPPCB.
- (iv) On line transfer of data to MPPCB/CPCB.

## **MINIMUM TECHNICAL SPECIFICATIONS**

The minimum technical specification requirements for the RTWQMS to be installed are given in (Technical Specifications) of tender document. However, the actual technical proposal can have higher or better technical performance parameters and the minimum



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specifications proposed should not be taken as a constraint on the upper side. The technical specifications given in tender documents are descriptive and Selection Committee can consider technical proposals having similar specifications.

## **DATA MANAGEMENT AND QUALITY CHECKS**

Data shall be collected and validated according to APHA & Other BIS standards and MoEFCC/CPCB protocol.

Successful tenderer shall submit a Standard Operating Procedure for the water quality monitoring station to the Board before award of contract. This Standard Operating Procedure shall be approved by the Board prior to award. The Standard Operating Procedure shall contain the following:

- Operating procedures for all Analyzers
- Calibration procedures
- Calibration schedule Maintenance procedures
- Maintenance schedule
- Data validation procedures
- Data reporting as per attachment

Data obtained from these calibration checks and copies of associated Quality Assurance and calibration documentation, shall be submitted to the Board along with the water Quality Data.

Inventory of spares and consumables to be maintained and recorded from time to time and a buffer stock for any eventuality to be maintained.

## **GENERAL GUIDELINES**

**Working Hours:** The site for RTWQMS operation should be manned by the employees of the Successful Tenderer for 24 hours a day. In addition the Successful Tenderer would arrange for a security of the site and equipments.

**Insurance:** Successful Tenderer would bear the cost of insuring the equipment (Comprehensive) and facilities against any theft, fire natural calamity like flood and other applicable provisions during tenure of contract period including O&M with a copy to MPPCB of an appropriate amount.

## **Operation & Maintenance of water quality Monitoring Stations**

The Contractor's responsibilities shall include without limitations the following works to be carried out on the water Quality Monitoring Stations installed under this Contract during the Operation & Maintenance of the stations:



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- a) Operation and Maintenance of all the commissioned equipments and amenities as supplied by the Manufacturer under the Contract including services during forced and planned outages and overhauls.
- b) The Contractor shall take over the entire water Quality Monitoring Station (including all equipment) for O&M after execution of Indemnity Bond as per format placed at Attachments of tender document.
- c) The Contractor shall provide to the owner a monthly summary of all operation and maintenance activities performed by the contractor during each month.
- d) Operation and Maintenance Obligations: In implementing its obligations to operate and maintain the facility under this Contract, the Contractor shall:
  - i) Undertake comprehensive maintenance including i.e. schedule and breakdown maintenance & repair at site and keep Board Informed regarding status of equipments and forward daily data as per Attachments.
  - ii) Obtain permission from the owner and inform the O&M for any assistance for which equipment is required to be sent to the works. Contractor shall arrange substitute equipment to keep CWQMS station operational.
  - iii) Take reasonable action to assure that the Personnel deployed at water Quality Monitoring Stations and any subcontractors and agents are provided with a work place in compliance with applicable Law.
  - iv) Keep the water Quality Monitoring Stations clean, well maintained and in good working condition.
  - v) Security: It is the duty of the Contractor to secure the movable, immovable and other properties of the Owner at the water Quality Monitoring Station. The Contractor shall indemnify the loss caused to the Owner on account of any damage, loss or theft caused to the property of the Owner.
  - vi) Scheduled Maintenance: Unless Owner and Contractor mutually agree otherwise, perform all required Scheduled maintenance for all equipment, auxiliaries etc., in accordance with the O&M specifications.
  - vii) Unscheduled maintenance: Perform all unscheduled maintenance and repair for all equipment auxiliaries' etc. within (24) hours of the occurrence of the event requiring Unscheduled Maintenance, the operator shall provide the Owner with detailed written information on nature of the repair or replacement to be carried out, estimated down time and other necessary details as required.
  - viii) The Contractor shall source all the spares required for maintenance & repair of the installed equipment from O&M only.
- e) The Operator shall not:
  - i) Make any modifications as to the Water Quality Monitoring Stations, other than in an Emergency, without the prior written approval of the Owner, or



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- ii) Dispose off any assets, settle law-suits or engage in transactions relating thereto on the Owner's behalf without the prior written approval of the Owner.
  
- f) The Contractor shall purchase spare parts, materials, supplies and other consumable items, and maintain an inventory thereof, for the Water Quality Monitoring Stations. All such material supplied and other items shall be the property of the Contractor However all the spares shall be sourced from OEM's only.
  
- g) The Contractor shall review all applicable Laws and initiate and maintain such prosecution, procedures and operating plans relating to operation of the Water Quality Monitoring Stations as are necessary to comply therewith or assist the owner in complying therewith as the case may be.
  
- h) The Contractor shall operate the equipment as per the laid out standards in the operating manual of the equipment and providing data for water to MPPCB on daily basis in the suggested format. The daily monthly and yearly Reporting Formats should be maintained.
  
- i) The CWQMS has to be in operation for a minimum of 85% of the days in a year, 24 hours a day, and should not be inoperable for more than 7 days at a stretch except adverse natural conditions.
  
- j) Provide data collected through operation of the equipments on daily basis in suggested output formats given in the tender document.
  
- k) Establish and maintain a daily and monthly and yearly reporting system to provide storage and ready retrieval of operation and maintenance data including such information necessary to verify calculations. The monthly reporting shall contain variances from targets.
  
- l) Provide access to the owner to the Water Quality Monitoring Stations and its data at all reasonable times and as and when required.
  
- m) Provide the operational data required to all competent authorities including, Government of India or concerned State Governments.
  
- n) On line transfer of data to MPPCB/CPCB web site.
  
- o) The Contractor shall ensure accuracy of the data provided as per standards.
  
- p) The contractor shall ensure periodic re-calibration of all the equipments and maintain protocol calibration.

Owner shall arrange for the following and Contractor shall guide and assist the Owner:

- a) The Owner shall pay O&M charges to the Contractor as mentioned as payment condition in work order after submission of validated data.



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- b) Owner shall pay all fees including GST Tax, etc., imposed upon Owner by the Applicable Law.
- c) The Owner shall identify and hand over the site for erection & commissioning of Water Quality Monitoring Stations free from all encumbrances.
- d) The Owner shall make the arrangement for electricity & telephone connection at the site. However monthly charges for both electricity and phone bill shall be borne by the Contractor.
- e) The valid data capture rate should be minimum 85%. The full payment shall only be made if validated data is 85% and all the calibration protocol maintenance scheduled and spare parts/ consumable replacement document are maintained and verified by the owner/ board. The contractor has to maintain records / Receipts/ bills paid available as and when required

**Handing Over of Station:** On expiry/closure/termination of the Contract Agreement, stations shall be handed over to Board in working condition to the satisfaction of Board. Few or all the spares procured by the Contractor and unused as on date of handing over may be purchased by the Owner at his discretion provided Contractor is able to provide reasonability of the costs of such spares. In addition the Contractor shall provide consumables equivalent to three months consumption on expiry/closure/termination of the Contract Agreement without any extra financial implication.

## **Penalties:**

During O&M period, in case of any Analyser/ system failure, penalty will be charged by MPPCB @ Rs.1,000/- (one thousand) per day per Analyzer after a grace period of seven (7) continuous non-working days. The grace period of seven (7) continuous non- working days shall be given only once per quarter (3 months).

For a failure of Data display:

Board/panel, a penalty will be charged by MPPCB @ Rs. 1,000/- (one thousand) per day after a grace period of five (5) continuous non-working days. The grace period of Five (5) continuous non-working days shall be given only once per quarter (3 months).

Failure due to power outage and other Force Major conditions shall not be considered for levy of penalty.

Total penalty per year during O&M period on account of above conditions shall be limited to 30% of total O&M charges for one year. Failing which defective/ malfunctioning analyser / system has to be replaced.

In case penalty in the year exceeds 30% as above, the Contractor shall be required to replace the defective analyzer (s) or systems with new ones at his own cost, failing which the MPPCB shall have the right to terminate the O&M contract.

## **SCHEDULE**



# **M. P. Pollution Control Board**

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Contractor shall complete all activities covered in the scope of work up to installation & commissioning of Water Quality Monitoring Stations within 120 days from date of opening of Letter of Credit.

The Contractor shall carry out Operation & Maintenance of Water Quality Monitoring Stations for a period of five year from the date of commissioning of the station, which can be extended up to further three (3) years at the mutually agreed rates and terms and conditions.

The operation and maintenance contract shall be executed by the concerned Authorized Officer of Madhya Pradesh Pollution control board having jurisdiction or the area under his control. The term and condition shall be governed as per the tender document.

After successful tendering all remaining contract/agreement & other paper work will be done as per standard format adopted by Board as in other tendering procedure.



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ATTACHMENT

Tender No. MPPCB/Pur./08/2019-20

**SUPPLY, INSTALLATION, COMMISSIONING, OPERATION & MAINTENANCE, SERVICE OF  
REAL TIME WATER QUALITY MONITORING SYSTEM AND DATA CONNECTIVITY  
DAILY REPORTING FORMAT FOR ALL LOCATIONS**

**DAILY WATER QUALITY DATA**

Location :

Hrs.	Water Parameter				
	pH	DO	BOD	Temp.	Remark
00-01					
01-02					
02-03					
03-04					
04-05					
05-06					
06-07					
07-08					
08-09					
09-10					
11-12					
12-13					
13-14					
14-15					
15-16					
16-17					
17-18					
18-19					
19-20					
20-21					
21-22					
22-23					
23-24					
Standards					
Min.					
Max.					
Average					



# M. P. Pollution Control Board

Paryawaran Parisar, E-5 Sector, Arera Colony, Bhopal -16 (M.P.)

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ATTACHMENT

Tender No. MPPCB/Pur./08/2019-20

**SUPPLY, INSTALLATION, COMMISSIONING, OPERATION & MAINTENANCE, SERVICE OF  
REAL TIME WATER QUALITY MONITORING SYSTEM AND DATA CONNECTIVITY  
MONTHLY REPORTING FORMAT FOR ALL LOCATIONS**

**MONTHLY WATER QUALITY DATA**

Location :

Month:

Hrs.	Water Parameter				
	pH	DO	BOD	Temp.	Remark
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Standards					
Min.					
Max.					
Average					



# M. P. Pollution Control Board

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Attachment

## INDEMNITY BOND FOR HANDING OVER CONTINUOUS WATER QUALITY MONITORING STATIONS INCLUDING ALL EQUIPMENT TO THE O&M CONTRACTOR

This Indemnity Bond is made this ..... Day of 2020.....  
By.....a Company registered under the Companies Act, 1956/Partnership firm / Proprietary concern having its registered office at .....  
( hereinafter called as “Contractor” or “obligator” which expression shall include its successors and permitted assigns) in favour of M. P. Pollution Control Board with Office at ..... (M.P.) which term shall include permitted assigns and successors, (hereinafter called “MPPCB” which expression shall include its successors and assigns).

Whereas MPPCB has awarded to the Contractor, a contract for O&M of the one no. of Continuous Water Quality Monitoring Stations (CWQMS) located at -----, vide its Letter of Indent / Award Letter / Contract No..... dated ..... (hereinafter called the “Contract”), in the terms of which Contractor shall be responsible for the Equipments to be handed over to it by MPPCB for the purpose of performance of the Contract (hereinafter called the “Equipments”).

Now, therefore this Indemnity Bond witnessed as follows:

1. That in consideration of various Equipments as mentioned in the Contract, valued at Rs.----- (Rupees.....) to be handed over to the Contractor for the purpose of performance of the Contract, the Contractor hereby undertakes to indemnify and shall keep MPPCB indemnified, for the full value of the Equipment. The Contractor hereby acknowledges receipt of the Equipments as per details in the Schedule appended hereto.
2. That the Contractor is obliged and shall remain absolutely responsible for the safe custody of the Equipments at Continuous Water Quality Monitoring Stations (CWQMS) belonging to MPPCB against all risks whatsoever till the Equipments are duly used in accordance with all terms of the Contract. The Contractor undertakes to keep MPPCB harmless against any loss or damage that may be caused to the Equipment.
3. The Contractor undertakes that the Equipments shall be used exclusively for the performance/ execution of the Contract strictly in accordance with its terms and conditions and no part of the Equipments shall be utilized for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purposes including legal / penal consequences.
4. That MPPCB is and shall remain the exclusive Owner of the Equipment free from all encumbrances, charges or liens of any kind, whatsoever. The Equipments shall at all times be open to inspection and checking by Project-in-Charge MPPCB shall always be



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free at all time to take possession of the Equipments in whatever form the equipments may be. If in its opinion, the equipments are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any act of omission or commission on the part of the Contractor; he finds itself and undertakes to comply with the direction or demand of MPPCB to return the Equipments without any demur or reservation.

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

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

## SCHEDULE NO. 1

Particulars of the Equipments handed over	Quantity	Value of the Equipment	Signature of Authorised Person

For and on behalf of  
M/s.....

### Witness I

1. Signature
2. Name
3. Address

Name  
**Signature**  
**Designation**  
**Authorized representative**



# M. P. Pollution Control Board

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## Witness II

1. Signature

2. Name

3. Address

(Common Seal)

(In case of Company)

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## Validation of data

Data that is delivered to the Employer by the Service Provider as part of this contract will be subjected to a data validation process. The data validation process, handled under a separate contract, will use the Service Provider's – audit self(calibration) process to qualify the data for purchase in addition to inspecting the data for artifacts and irregularities.

## Data Collection

Data will be collected from 10 locations which will comprise 10 fixed stations for measurement of hourly data for 24 hours.

## Data Collection and Delivery

All hourly and 24 hourly water quality data from all locations will be delivered initially to the Service Provider's the Employer dedicated's Data Center on server real time basis. Such server shall be set up and maintained by the Service Provider at his cost throughout the duration of the contract,. The data will immediately on receipt be transferred from the Service to the Provide Employer's server housed in the same Data Center on real time basis. The Service Provider shall provide the data as text files, one file for each transmission and the data will be placed in a directory as indicated by the Employer /Data Qualification Consultant.

## Data Collection

The fixed stations will measure water quality parameters once per hour  $\pm 5$  five minutes and transfer all log data within 5 minutes of measurement.

## Data Storage

The Service Provider shall store all real-time data collected during the duration of the contract. This storage shall be 100% online. This means that any data values can be called up instantaneously through the duration of the contract. In the event of any contingency, the Service Provider will provide access on the Employer's downloading any part or the entire database maintained i

## Quality Assurance and Control through Sensor Calibration

The Service Provider is required to perform regular calibration and adjustment of instruments using traceable standards as available.



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## Calibration Frequency

- (i) All instruments shall be calibrated at frequencies no longer than once every seven days. If the instruments are not calibrated within the seven days since the previous calibration, then any data delivered will not be taken up for validation and hence the same shall not qualify for payment. However, after the calibration is done and the same is witness by the Official of MPPCB, data will then be considered for validation/payment.

## Traceable Standards

The Service Provider will use portable meters for calibration of the sensors and the calibration be traceable to NIST standards. In case of two consecutive calibrations the "drift" found more is than double of the accuracy ranges indicated in the table of specification the Service Provider will require to replace the instrument.

## Calibration Results

Upon completing field calibration, the station parameters will be set to match the calibration results.

## Documentation

The results of the sensor calibration will be documented and made available in real-time on Employer's Data. The Center calibration entry must include the date, time, station, sensor initial reading, sensor adjustment through calibration, sensor final reading, comments on general station/sensor observations, and names of person(s) present during the calibration.

## Completeness of Data Requirement for Payment

The Service Provider shall maintain the equipments and sensors are in good working order throughout the period of contract. Data supplied for any hour shall be considered for validation and payment provided following conditions are satisfied:

- (a) Measurements must be received from at least 85% of the total locations , and
- (b) The measurements received from each such location shall not be less than 85% of the measurements specified for it.



# M. P. Pollution Control Board

E – 5, Paryavaran Parisar, Arera Colony, Bhopal

Phone: (0755) 2466191, Fax: (0755) 2463742, Email: pur\_mppcb15@rediffmail.com Web: [www.mppcb.nic.in](http://www.mppcb.nic.in)

## TECHNICAL SPECIFICATIONS OF RTWQMS

The Remote Station for Real Time Water Quality Monitoring Station will include an advanced data acquisition terminal. The data acquisition system shall be appropriate for unattended, remote operation for continuous measurement of all parameters and with an onboard GPRS system & data storage memory of 4GB minimum as integral part.

The CWQMS shall comprise of the following:

S.No.	Particulars
1.	Data logger and transmission system with build in display, software, cables, high speed 100Mb/s Ethernet interface for integration into larger networks, easy data transfer via USB-stick, process interface to SCADA via relay outputs, 4-20mA, SDI12, Modbus RTU/TCP, Profibus DP, integration of third party sensors via 4-20mA inputs, SDI-12, MODBUS RTU/TCP easily extendable with additional analog and digital I/Os utilizing eight available extension slots, GSM/GPRS modem as integral part (must have minimum 3G modem and tested in India) should have the capability to be operated as controller or just a terminal, Internal integrated data logger with minimum data memory for up to 5,00,000 data sets. The system should start automatically after the power is reset to the system (in case of power failure), system should have service mode for cleaning (ultrasonic/compressed air), controller should store the sensor configurations and calibrations, controller should have logbook to record the data.
2.	GSM/GPRS as integral unit of data logger terminal module
3.	Sensor package to include all multi-parametric or individual sensors indicated in specifications (sensors to be provided individually or collectively)
4.	Voltage regulator to get stabilized power supply & UPS in case of power failure
5.	Enclosures

### Parameters to be measured and display Specifications:

S.No.	PARAMETER	* Range	Accuracy(the greater of *)	Resolution*
1	pH	1 to 14 pH	± 0.2 pH	≤ 0.01 units of pH
2	BOD	1.0 to 50 mg/L (in River)	± 10%	≤ 1 mg/L
3	Dissolved Oxygen	0.0 to 20 mg/L	± 10%	≤ 0.01 mg/L
4.	Temperature	5 to 45 °C	± 2 °C	≤ 1 °C
5.	Categorization of water quality as per CPCB Norms	A, B, C, D, E		

\*Available information has been given above. However, the same will be finalized based on the inputs of the bidders.



# M. P. Pollution Control Board

E – 5, Paryavaran Parisar, Arera Colony, Bhopal

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## **Sensor Specifications:**

### **Specifications for BOD and COD Sensors:**

- Measurement Principle: Measurement of full wave lengths spectra (UV-VIS Spectrometry) from 200 – 720 nm
- The Sensor should not use any reagents and should be easy to use and operate without any running costs
- Multiparameter probe ideal for monitoring of BOD/COD/DO in water
- The Sensor should have optimized referencing for excellent zero point and long term stability.
- The Sensor should provide compensation of interferences by evaluation of the whole measured spectrum. - Direct in-situ measurement in water.
- The sensor should be preferably with efficient integrated ultrasonic cleaning facility. If the ultrasonic cleaning can't be provided then the bidder should include the air-pressure cleaning system to ensure long maintenance intervals for this sensor. Air supply for the same will need to be accounted for by bidder.
- The Material of Construction should be Titanium or better to sustain the sensor in highly corrosive wastewater environment. - The sensor should be completely reagent free for operation.

### **Specifications for pH Sensor:**

- Measuring Range: pH – 4.00- 12.00
- Signal Output –Digital
- Sensor Check function should be available in the pH sensor
- Power Consumption: less than 0.5 Watt
- Temperature Sensor should be integrated in the pH sensor
- Temp Compensation: -5 to +50 Deg C - Transient Voltage Protection should be integrated in the sensor
- Sensor body: Stainless Steel or better
- protection type : IP 68 for both Sensor and Cable
- Sensor Cable Length: 07 meter

### **Spectrometry based Sensor for DO**

- Measuring Principle: Optical
- Measurement Range: 0.00 -20.00 mg/l DO or : 0-200% Saturation
- Resolution: 0.01 ml or 0.1%
- Response time: T90 Equivalent of less than 60 Secs
- Signal Output –Digital
- Power Consumption: less than 1 Watt
- Temp Compensation: -5 to +50 Deg C
- Max Pressure for Sensor: 10 Bar
- Input Power: Powered by the Controller



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- Transient Voltage Protection should be integrated in the sensor
- Material of Construction should be Titanium or equivalent
- Protection type : IP 68 for both Sensor and Cable
- Sensor Cable Length: 07 Meters

## DATA ACQUISITION

Display	Easily readable display in bright sunlight. Display will allow viewing data from each sensor, as well as data from the charging system with display as per specification given below.
Keyboard/Mouse	To facilitate viewing of data as well as data downloads.
Sensor Inputs	Accommodate all sensors prescribed as well as additional inputs to be used for expansion of more sensors.
Programming	Ethernet, USB, WIFI, 3G Modem, Modbus RTU or upgraded
Local Data Retrieval	USB portable flash drive and PC download. Unit shall allow local data retrieval (download) without use of a PC or other external device other than the portable storage media.
System Data Storage	All parameters, hourly average basis, for one year, Non-volatile memory of minimum 4GB has to integral part or upgraded
Telemetry	GSM/GPRS compatible with Indian Telecom system and available at each station as terminal integral unit or upgraded
Network Connection	WIFI 300Mb/s, Ethernet LAN, via modem or upgraded
Integrated GPRS	On-board GPRS to provide precise location and elevation of the station. This information will be recorded by the data collection platform with transmitting the parameters or upgraded
Operating Temperature	0 to 60°C
Operating Humidity	5 to 95% non-condensing
Power Input	12 VDC Nominal
Data Validation, Event Detection	Validated data and event detection software must be Performed at datalog terminal and must be integral part of terminal module at each station.
Software	Data transmission through the GPRS network or upgraded
and data Transmissions Tampering Alarms	System shall send alarm based on missing data, power supply malfunction, and door alarms.

## LED MOVING MESSAGE DISPLAY BOARD

S.N.	Specification	Requirement
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1.	Size of display System	8 feet X 12 feet (Rates may be quoted on per square feet basis)
2.	Visibility range	200 Meters (Day Time)
3.	Nos. of display Line	4
4.	Display of colour elements	Multi Color (Red, Green and Blue)
5.	Minimum life span of the system	10 years
6.	Smallest Character Size	260 mm x 190 mm (approx.)
7.	Operating and Non Operating Temperature	0 – 50 ° C
8.	Humidity Tolerance Range	0 – 100%
9.	Languages supported by the display	English & Hindi
10.	Color Gradient	Cluster LED based
11.	Display Characters	The display should be in at least four columns such as Serial No., Parameters, Concentration Limit, Standard Limits with AQI Index. The display of above variable data should be supported with moving messages / slogans to be changed from time to time.
12.	Input Power requirement	Cluster LED based
13.	Display Mounting	Display Mounting Weather proof casing to cope up with local condition. The system should be uni-pole or di-pole mounted including ceiling and erection work to withstand extreme weather conditions.
14.	Computer System	Software compatible with latest version.
15.	General	The display system should be capable to transfer the data from computer to Display Board through Modem System or other relevant technology. The system should also have the facility to display the environment message, environmental picture through video camera / VCR / CD Player etc. for public awareness.
16.	The rate should be quoted on per square feet basis inclusive of all necessary accessories including internet /electricity bill charges.	
17.	Supplier shall supply the upgraded software to use this Board's display the data from various installed RTWQMS/CAAQMS data through Central Server from MPPCB, Bhopal (ESC and Board's website) and also capable to displaying data from local installation of RTWQMS/CAAQMS over internet, converting the data in to displayable format for the display board and transmitting the data to multiple display board over through internet. UPS of 2 KVA with 4 Hrs. backup , leased line internet connection with atleast 2 MBPS, electric power supply and rain guard/canopy for display board should be supplied with the Boards. Bidder should have previous experience of similar nature with any Pollution Control Board or Govt. Institutions/Agencies.	

## **OVERALL REQUIREMENTS & FEATURES OF RTWQMS**

1. All instruments must be operated according to the plug & measure principle. All



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- measurement systems shall consist of standardized latest technology products are ready for use without the need for complex initial procedures on site.
2. All instruments should be pre-calibrated.
  3. All instruments must have auto-diagnosis procedures are used to ensure best possible operation.
  4. No interference on analysis with chemical and physical basics of measuring sample.
  5. Signal output must be analog, digital and must be compatible to data acquisition system.
  6. Signal output analog and digital function can be used for necessary basic controls.
  7. Automatic data validation in system is pre-requisite to remove outliers, false alarms and give user friendly diagnostics to handle concerns.
  8. Must have flexible design to measure very low to high effluent / influent characteristics.
  9. Onboard event detection and validation software on system for decision making and to have optimum process controls.
  10. Automatic Compensation to parameter cross sensitivities & matrix change.
  11. COD and BOD must have independent program for calibration, analysis and validation. Parameter calculation for one to another parameter such as COD to BOD to TOC is not recommended due to accuracy issues.
  12. Validation & accuracy checks of system must have provision to perform with reference to known standards such as KHP (Potassium Phthalate etc) and Formazin standards and shall remain the bidder's scope.
  13. Calibration shall be performed by the bidder on weekly basis and when and as required.

**Enclosures:** The enclosure at each fixed RTWQMS shall accommodate data logger, HMI, sensor cards, voltage regulator, transmitter unit etc. the enclosure shall provide protection from dust, humidity, precipitations, sunlight and environmental pollution. The material for the enclosure shall be of steel plate or resistant plastic, of protection IP 65 with safety lock of good quality. The enclosure shall be customized for cable entry openings.

The sensors shall be capable of working in river water, polluted (effluent/sewer etc) water.

## OVERVIEW AND SPECIFICATION FOR CENTRAL RECEIVING STATION:

The **Central Receiving Station** will have servers and software will be established at the Head Quarter, Environment Surveillance Centre (ESC), M.P. Pollution Control Board, Bhopal (M.P.)

The Central Receiving Station shall comprise of the following:

S.No.	Particulars	Physical unit
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1.	Data collection and Data base server w/ most recent WINDOWS Server Edition, Virus/Firewall Software (Server 1)	One
2.	Data Collection Software with SQL Database (Post Gre SQL, SQL Server, or similar) to be installed on Server 1	One
3.	UPS for Computer Systems	One
4.	Computer Server Rack	One
5.	Network Router with Hardware with Firewall	One
6.	Network Switch (HUB)	One
7.	Color Laser Printer with 10 sets of high capacity toner cartridge	One
8.	55" LED Monitor of reputed make such as Samsung, LG, Sony etc.	One

## Specification of Software for Central Receiving Station:

The bidder will provide software to communicate between the Central Receiving Station and the remote stations. The bidder will provide a database management system. The bidder will provide time series analysis software for the quality control of posted water quality measurements.

### Software Management:

- Software capable for requesting, downloading, editing, processing and representation and management of data.
- The software integrates the entire data request commands made to the stations in real time data or data saved in the memory.

### Data Analysis

- Data enquiry over several days
- Daily statistics enquiry
- Strip charts of the daily statistics.]
- **Visualization of Data**
- Enquiry of data in table form
- Enquiry of data in graph form

### Communication and Data Presentation/Display

The controller should be interfaced with a GSM/GPRS communication modem to seamlessly transmit the data from remote place to a central location over a pre-defined interval.

The communication to the system should be two way for ability to view settings and make changes to the configuration over the air, as and when required.

The system shall be able to transmit real; time water quality data to desired location via Sim based communication.



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Keep the provision for display of other monitoring result conducted by MPPCB and Environment friendly slogan.

Control room should be set at MPPCB, Bhopal for displaying data for all display site.

### **Ward and Watch of the equipment at Site:**

Ensuring that the sensors, controllers, display board etc. safety and security of all the equipment shall be in the scope of the bidder.

The Bidder shall have to deploy their own manpower along with mobile & whatsapp facility and there should be Technical manpower at site 24 x 7 for any requirements needed at site by the client.

### **Installation at Site:**

The instrumentation system shall be installed and mounted on as per the locations decided by the Board. Utmost care to be taken to have sound installation at site as the system shall be installed in flowing water with often medium to high flow at site.

### **Any Room/Civil and Related Activity**

In case of any civil construction like mounting of Pillars, fabrication, stand, room, control room needed on the site, the same shall be in the scope of the Bidder and bid shall be inclusive of that by all means.

### **Commercial instruction to Bidders:**

Bidders to indicate what taxes shall be applicable that is Excise or GST on the system.

### **Certifications /References.**

Bidders shall submit the desired Documents to fulfil the eligibility conditions as mentioned in the Pre- Qualification Criteria.

Department shall under no circumstances give any additional amount during the time period / tenure as mentioned in the tender document.

In case the Bidders is found not adhering to the tender specs as mentioned in the tender the Department has the right to Blacklist the Bidder .This shall be important to ensure quality workmanship and quality product being provided to the Client

**Annexure – 5**

**TENDER ACCEPTANCE FORM**



# M. P. Pollution Control Board

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(To be submitted on Letter Head)

## (E-Tender Notice No. MPPCB/Pur./8/2019-2020) (Real Time Water Quality Monitoring Station)

Having carefully gone through the whole Tender Document, we, M/s.-----, the Bidder, agree to all terms and conditions mentioned in them and hereby, make the following offer to supply the Instruments/Equipments as per the Schedule requirements, delivery schedule and in conformity with all other conditions in the Tender Documents and amendments. We will arrange for demonstration of models of the Equipment/Instrument being offered, within India as per the convenience of the Purchaser.

### Bidder

1. Name of the Bidder-----
2. Address-----
3. Email-----
4. Phone-----
5. Income Tax Permanent Account Number (PAN)-----
6. Name and Complete Address of the Bidder's Bankers-----  
(a)-----  
(b)-----
7. Name and Designation of the Person Digitally signing and submitting the tender-----  
-----  
-----
8. Is the person digitally signing and submitting the tender authorized by the Bidder? (Yes/No)  
(Please enclose scanned copy of the Board's resolution authorizing the person to submit the bids without which the tender will be rejected)
9. Whether business dealings with the Bidder currently stand suspended/banned by any Ministry/Department of Government of India or any State Govt. (Yes/No)

### Qualification

10. Is the Bidder an OEM of the goods being offered? Yes/No
11. Is the Bidder an authorized agency/representative duly nominated by the OEM? Yes/No  
(If yes, please enclose required documents as mentioned in qualification criteria)
12. Turnover of the Bidder during the past three years (Rs. In Crores)

2016-2017-----  
 2017-2018-----  
 2018-2019-----  
 Average-----

13. How many similar kind of Equipment/Instrument, being offered, has the Bidder supplied during the past three years in India or abroad? ----- (Please enclose documentary proof-Purchase orders and minimum three performance reports)

### Offer

14. Make & Model Number of the Equipment/Instrument offered-----  
-----  
-----  
-----

**Technical documents to be enclosed**



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15. Technical Literature/Brochure of the Item quoted and Clause-wise response/compliance to requirement specified in Annexure-2 of the Tender Document. You may furnish additional information/clarification, documents, etc. in support of your offer.
16. Do you have your own set up in India to provide the maintenance during and after warranty period?
17. If yes, please provide details (in 100 words) including experienced manpower & resources details and enclose relevant documents

---

18. If answer to question at 16 is No, do you have any agreement with any other manufacturer or reputed agency to act as Manintenance contractor to provide maintenance during warranty and post warranty period? (Yes/No)
19. If answer to question No. 18 is yes, please provide details (in 100 words) and enclose a copy of the agreement, including previous experience and manpower details of the proposed agency in maintanance of similar type of equipment/Instruments.
20. Does the OEM/Its Authorized representative agree to provide Spares and Consumables for 10 years of trouble free operation and maintenance? (Yes/No)
21. Does the OEM/Its Authorized representative agree to provide After Sales Service /Post Contractual support i.e. repair, maintenance, supply of spares parts etc and will take up the post warranty AMC when asked to do so? (Yes/No)
22. Have you submitted the EMD online in the portal as prescribed in Tender Document ? (Yes/No)
23. Have you enclosed the following documents? (Yes/No)
  - (a) Scanned copy of the proof for submitting EMD online on the Portal? (Yes/NO)
  - (b) Tender Acepance Form as specified in the Tender? (Yes/No)
  - (c) Documents and relevant details to establish that the goods offered conform to the requirement of the tender documents and Technical Literature/Brochure etc. (Yes/No)
  - (d) Power of Attorney of Firm/resolution of Board of Directors of company for person or persons authorized to sign the Tender; (Yes/No)
  - (e) Authorization letter by the OEM (Manufacturer) or self declaration letter by OEM (if OEM is bidding); (yes/No)
  - (f) GST Registration Certificate and latest GST deposit receipt (in case of Indian Bidder) (Yes/No)
  - (g) An Undertaking to the effect that the Price Bid does not contain any condition/options whatsoever of the price demanded for sale. (Yes/No)
  - (h) Certificate for Non-blacklisting of firm and non-registration of criminal case? (Yes/No)
  - (i) Certified published annual reports showing the turnover and financial results. (Yes/No)
  - (j) Purchase orders and Performance Reports for the offered equipment/Instruments from Government Ministries/Departments/PSUs/Scientific Institutes of National Repute. (Yes/No)
  - (k) Warranty Certificate for three years of Comprehensive Warranty. (Yes/No)
  - (l) List of spares and Consumables required for 10 years trouble free operation and maintenance along with a certificate that Spares & Consumables will be provided for at least 10 years. (Yes/No)
  - (m) Duly signed and stamped Integrity pact (Yes/No)
  - (n) Any other documents that you consider necessary to strengthen your bid. (Yes/No/None required)

**Signature of the Bidder**.....  
**Name** .....  
**Business Address** .....  
 .....

**Place:** .....  
**Date:** .....



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## Annexure-6

### **BANK GURANTEE FORM FOR PERFORMANCE SECURITY**

The Member Secretary,  
M. P. Pollution Control Board,  
E-5, Sector, Paryawaran Parisar, Arera Colony,  
Bhopal – 462016 (M.P.)

WHEREAS ..... (Name and Address of the Supplier) (herein called “the Supplier”) has undertaken, in pursuance of contract no. .... dated..... To supply (Description of Goods and services) (herein called “ the contract”).

AND WHEREAS it has been stipulated by you in the said contract that the Supplier shall furnish you with a bank gurantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with and due performance of the contract.

AND WHEREAS we have agreed to give the Supplier such a bank gurantee;

NOW THEREFORE we hereby affirm that we are gurantors and responsible to you, on behalf of the Supplier, up to a total of..... (amount of the gurantee in words and figures), and we hereby irrevocably and absolutely undertake to pay you immediately, 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 gurantee) as aforesaid, without your needing to prove or to show grounds or reasons 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 further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder 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 gurantee and we hereby waive notice of any such change, addition or modification.

The Bank Gurantee shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this Bank Gurantee in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank or the Supplier.

The Bank further undertakes not to revoke this Gurantee during its currency except with the previous express consent of the Purchaser in writing.

The Bank declares that it has power to issue this Gurantee and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Gurantee for an on behalf of the Bank.

This gurantee shall be valid up to and including the .....day of ..... 20.....

.....

(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



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Annexure-7

**Tender no. MPPCB/Pur./08/2019-20  
(Real Time Water Quality Monitoring Station)**

## **INTEGRITY PACT**

### **General:**

This Pre-Bid Pre Contract Agreement (hereinafter called the Integrity Pact) is made on ..... day of the month of .....2020, between, MPPCB, An autonomous body acting through Shri R. S. Kori (Member Secretary, MPPCB, Bhopal) 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 Goods/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 MPPCB work under the aegis of Ministry of Environment, Government of Madhya Pradesh, performing its functions as per 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 flowing transparent procedures:

### **Commitments of the BUYER**

1.1 The BUYER undertakes that no official of the BUYER, connected directly or indirectly with the correct, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favor 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 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



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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 of such a breach.
- 1.4 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 an enquiry is being conducted by the BUYER the proceedings under the contract would not be stalled.

## **Commitments of BIDDERS**

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:

- 1.1 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.
- 1.2 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 disfavor to any person in relation to the contract with the Government.
- 1.3 BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 1.4 BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 1.5 The BIDDER further confirms and declares to the BUYER that the BIDDER is the original manufacturer/integrator/authorized government sponsored export entity of the defense stores and has not engaged any individual or firm or company whether Indian 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 to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 1.6 The BIDDER, either while presenting the bid or during pre-contract negotiation or before signing the contract, shall disclose any payments he has made, is committed



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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 for such payments.

- 1.7 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.
- 1.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 1.9 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 data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 1.10 The BIDDER commits to refrain from giving any compliant directly or through any other manner without supporting it with full and verifiable facts.
- 1.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 1.12 If the BIDDER or any employee of the BIDDER or any person action on behalf of the BIDDER, either directly or indirectly, as 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.
- 1.13 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.

## 2. **Previous Transgression**

- 2.1 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 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.
- 2.2 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.

## 3. **Sanctions for Violations**

- 3.1 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 of pre-contract negotiation without assigning any reason or giving any compensation to the BIDDER. However the proceedings with the other BIDDER (s) would continue.



# M. P. Pollution Control Board

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- (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.

3.2 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.

3.3 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.

## 4. Fall Clause



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- 4.1 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.
- 5. **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.
- 6. **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.
- 7. **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.
- 8. **Validity:** 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. 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.
- 9. The parties hereby sign the Integrity Pact at .....on.....

**BUYER**

Name of the Officer.  
Designation  
MPPCB, Bhopal

**BIDDER**

CHIEF EXECUTIVE OFFICER  
Name of Firm/Agency

Witness

Witness

1..... 1.....  
 2..... 2.....



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**Annexure-8**

**Tender no. MPPCB/Pur./08/2019-20  
(Real Time Water Quality Monitoring Station)**

**MANUFACTURER’S AUTHORIZATION FORM**

To,

**The Member Secretary,  
M. P. Pollution Control Board,  
E-5, Paryavaran Parisar, Arera Colony,  
Bhopal – 462 016 (Madhya Pradesh)**

**Dear Sir,**

**Ref.: Your Tender Document No. MPPCB/ Pur./08/2019-2020.**

We....., who are proven and reputable manufacturers of ..... (Name and description of the goods offered in the tender) having factories at ..... hereby authorize M/s..... (Name and Address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender documents for the above goods manufactured by us. M/s ..... (Name and Address of the agent) is having ..... Years agreement/ association with us since.....

We further confirm that no Supplier or firm or individual other than M/s ..... (Name and Address of the agent) is authorized to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred Tender Documents for the above goods manufactured by us.

We also hereby extent our full comprehensive warranty, as applicable as per the conditions, for the Scientific Instruments/Equipments offered for supply by the above firm against this Tender Document.

Yours Faithfully,

---

.....  
**(Signature with dtae, name and designation)**  
**For and on behalf of M/s.....**

**(Name & address of the Manufacturer)**

Note: This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having power of attorney to legally bind the manufacturer.

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Annexure-9

**Tender no. MPPCB/Pur./08/2019-20  
(Real Time Water Quality Monitoring Station)**

## CERTIFICATE OF SUPPLY, INSTALLATION & COMMISSIONING

**F. No.**-----

**Dated**-----

1. Reference of Purchase Order-----
2. Is is certified that
  - (a) M/s ..... Have completed the supply, installation and Commissioning of the Equipment/Instrument ....., Model....., Serial No..... on dated..... at ..... designated site.....(Name of the site)
  - (b) The process of handling/taking over of the aforesaid system, accessories and services specified in the Contract to the satisfaction of the Purchaser, has been completed on dated .....
  - © The aforementioned Equipment/Instruments worked satisfactorily during the trial period of 15 days starting w.e.f .....(date) to ..... (date)

### **For Contractor**

Witness:  
Signature  
Name  
Designation  
Address  
Date

### **For Purchaser**

Witness:  
Signature  
Name  
Designation  
Address  
Date



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