

**NOTICE INVITING TENDER (OPEN/PRESS TENDER)**

- 1. TITLE OF WORK :** Works contract for operation and maintenance of ETP plant of CIM, TXM, FYM and PRM division


BHEL, a schedule "A" Maharatna CPSE of Govt. of India, is an integrated power plant manufacturer and one of the largest engineering and manufacturing company of its kind in India engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for core sectors of the economy, viz. Power, Transmission, Industry(cement, fertilizers), Transportation (Railways), Renewable energy, Oil & Gas, Water and Defense with over 180 products offerings to meet the needs of these sectors.

Works Contracting Department (WCD), BHEL Bhopal invites tender on two part basis (Part – I, Techno commercial Bid & Part – II, Price Bid) from reputed, experienced and financially sound firms for the following work:-

- 2. Scope of Work:-**

Operation and maintenance of installed effluent treatment plants on day to day basis (i.e. 8 hourly basis), which involves following :

- I. To operate the ETP plant using existing facilities so that the final effluent parameters are within limit of MPPCB.
- II. Deputation of trained operator for successful day to day running of the plant and its supervision. The operator shall be experienced in
  - a) Safe handling the consumable chemicals
  - b) Operation of the plant
  - c) Minor maintenance of the plant
  - d) Spot testing of pH/TDS, if possible
  - e) Collection of samples.
- III. Operator shall be capable of filling log-book on day to day basis incorporating the following information-
  - a) Assistance to maintenance and repair work done
  - b) Quantity of effluents treated per day.
  - c) Chemicals used per day
  - d) End result of treated water based on both spot testing and final analysis.
  - e) The log book shall be verified by section supervisor/authorized representative. Log book shall be presentable for audit purpose when MPPCB inspector visits for verification.
- IV. All necessary consumable chemicals shall be provided by the contractor.
- V. Testing in detail shall be done fortnightly for both waste water and treated water and record shall be maintained in file and log book. In addition to testing at our TSD on random basis for limited 3 parameters (pH, TDS, TSS) all six parameters (pH, TDS, TSS, BOD, COD, O&G) shall be arranged by contractor to be analyzed in a reputed NABL approved laboratory with periodicity as mentioned above.
- VI. As per norms, following parameters are to be monitored with acceptance levels after effluent treatment/neutralization of treated water as mentioned below:
  - a) pH : 6.5-7.5
  - b) BOD : <10 mg/litre

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- c) COD : <75 mg/litre  
d) Suspended Solids (SS) : Nil

**Working Hours:** Working hours in 1st shift (7:00 AM to 4:00PM)

**3. Quantity : Total department wise quantity is as below,**

Sl. No.	ETP installed in block	FYM	TXM	CIM	PRM
01	Rated Capacity of ETP	5 KL/day	5 KL/day	1.2 KL/day	5 KL/day
02	Skilled Operator required	01	01	01 (Shared by CIM & PRM )	
03	Type of effluent treated	Effluent generated by the galvanization process. Details are given in annexure-II	Effluent generated by the painting process. Details are given in annexure-II	Effluent generated by the acid pickling process. Details are given in annexure-II	Effluent generated by the painting process. Details are given in annexure-II
03	Consumable Chemicals	As required	As required	As required	As required
04	Testing report of all six parameter of untreated water sample (as per clause 2(V))	Monthly	Monthly	Monthly	Monthly
05	Testing report of all six parameter of treated water sample (as per clause 2(V))	Monthly	Monthly	Monthly	Monthly

**\*2 additional test report of all six parameter of each treated and untreated water sample (as per clause 2(V)) for each plant required yearly at the time of maintenance, surveillance etc.**


3 operators required for operation and maintenance of 4 ETP plants installed at CIM, TXM, FYM and PRM division. One operator shall operate the ETP plants at CIM and PRM based on their operating cycles/ production load in day wise or combination of operating batches. One each to operate the ETP plants at FYM and TXM. Tentative items (chemicals) required are Lime, Alum, Hypo, Repalium, pH Booster and pH paper etc. Any other material required for effective operation and maintenance of ETP plant shall be brought by the contractor.

**4. Evaluation of the offer :**

- a. Deciding L1 firm :- The L1 bidder shall be decided on sum of total offered price to BHEL on overall cost basis.

In the course of evaluation, if more than one bidder happen to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders in sealed envelope.

In case more than one bidder happen to occupy L-1 status, even after soliciting discounts, the L-1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L-1 bidder(s) or there representative(s).

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- b. No condition or deviations should be asked for in price bid.
- c. The rate quoted by bidders, inclusive of all charges and applicable taxes, duties except GST of the Price Bid format, shall be considered for evaluation of rate. **No loading of price with regard to preferential payment within 45 days will be done for the bidders covered under MSMED act."**
- d. If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract, if awarded and forfeit the Security Deposit.

#### 5. Pre Qualification Requirement/ Qualification Criteria :

##### (A) Statutory Requirement :

- a. PF Certificate
- b. ESI Certificate
- c. Income tax PAN No.
- d. GSTIN

##### (B) Experience criteria :

Experience of Similar Works (Similar Works means "Operation of ETP or STP or Water treatment plant" in industrial establishment or govt./Public sector organization) during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:-

Three successfully completed Similar works costing not less than the amount equal to **Rs.0.88 lakh or 121 operation days for each.**

OR

Two successfully completed Similar works costing not less than the amount equal to **Rs.1.10 lakh or 151 operation days for each.**

OR


One successfully completed Similar works costing not less than the amount equal to **Rs.1.76 lakh or 282 operation days.**

##### (C) Average Annual Turnover :

Average Annual financial turnover during the last 3 years, ending 31<sup>st</sup> March of 2019 (Average of previous financial years 2017, 2018, 2019), should be at least **Rs.0.66 lakh.**

##### \*Note :-

- i. All the above conditions should be met by bidder firm only, not by any associate firm. The bidding firms shall submit the work order copies & its completion certificates to prove the desired experience. Only the firms meeting the above requirements shall be qualified technically for further processing of tender.
- ii. If both value or operation days are mentioned then whichever meet the qualification criteria shall be considered
- iii. The value of number of work orders allocated against same enquiry to a contractor will be considered as single work order value for qualifying purpose.
- iv. Those contractors who have worked in other PSUs / Govt. / Semi-Govt. / reputed Public companies for similar work should submit documents with respect to experience as below: Enclose copy of work order and work completion certificate clearly indicating WO ref, date, duration of work and the nature of work done. The work completion certificate should be verifiable and contact details of signing authority must be provided. In case BHEL desires to

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verify the document, responsibility lies with the bidder to get it verified to the full satisfaction of BHEL . Otherwise BHEL reserves the right to reject the tender and no claim or correspondence shall be entertained in this regard.

- v. Experience certificate of any Private organization, in addition to the requirements as in (iv) above, must be supported by CA certification in “ANNEXURE-I” below.
- vi. For consideration of running work order, the value completed on last day of month, previous to the one in which applications are invited will be considered based on certification of executing authority.
- vii. In case of composite Work order in which scope of work comprises multiple type of work then only that part of work will be considered, which pertains to similar works and value or operation days of similar works in total value should be mentioned in completion certificate.

**7. Date of commencement of work :** As per LOI (Tentatively from 1st February 2021).

**8. Contract Period :** 1(One) year from the date of commencement of work.

**9. Tender fee :-** Rs.500/- ( The tender fee is to be deposited online as procedure\*\* given below and print out of fee receipt should be submitted along with technical bid ). GST on tender fee shall be extra.

**10. Earnest Money Deposit :-** EMD of amount(**Rs.17639/-**) OR One Time EMD of amount 500000 (Five lacs only) is to be deposited online as per procedure\*\* given below and receipt should be submitted along with techno-commercial bid.

One Time EMD : For firm who had already deposited Rs.2,00,000 as One Time EMD has to deposit remaining balance amount Rs.3,00,000 and the enclose the documents for the same.

**Offer without a proper EMD will be rejected.**

**\*The procedure of depositing EMD/SD/Tender Fee is reiterated below:**

- i. For depositing amount online , depositor has to open SB-Collect through Online E-Payment option available on Internet ([www.bhelbpl.co.in](http://www.bhelbpl.co.in) under caption new link)
- ii. After reading the instruction for depositing the amount, EMD & Tender Fee amount shall be deposited. EMD and Tender Fee may please be deposited together under EMD module where the EMD & Tender Fee both are applicable.
- iii. After the successful payment DU No shall be generated from the banking system.
- iv. After depositing the amount, Depositor has to fill Deposit slip available on Internet ([www.bhelbpl.co.in](http://www.bhelbpl.co.in) under caption new link) by selecting required Enquiry number. Tender Fee and EMD may please be entered separately.
- v. As and when credit received in BHEL account, automatic mail will be sent to the depositor.

**Note :-** After submitting the Deposit Slip a control number will be generated through system which can be used for getting print out from the system.


**11. Tender fee and EMD exempted for MSME vendor as per govt. directive. For claiming tender fee and EMD exemption, valid MSME certificate has to submitted.**

**12. Last Date of Bid submission :-** 28-Dec-2020 by 11:00AM

**Date of Techno-commercial bid opening :-** After 02:00 PM on 28-Dec-2020.

**13. Venue for bids submission/ opening :-**

Tender Room, Admin Block, Ground Floor,  
BHEL, Bhopal-462022


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- 14.** Detailed information regarding bidding document if required can be obtained from Smt. Archana Chatterjee, DGM(WCD),( Phone 0755-2503424, email: a\_chatterjee@bhel.in) and Shri Ranjeet Kumar Singh Engineer (WCD), (Phone 0755-2503565,email : ranjeetksingh@bhel.in) between 10 AM to 4 PM on all working days.

**Note:-**

- (i) The envelope should be dropped in the tender box (Green colour) in the tender room. Tender received after 11:00AM will be treated as late tender on due date and will not be considered.
- (ii) The representative of the firm must bring their authority letter to witness the tender opening from 2:00PM onwards.
- (iii) After awarding work, No excuse shall be entertained for loss of bidder or any other compensation, the successful bidder is fully liable to fulfill all tender conditions.
- (iv) The contractor should provide uniform, shoes and other safety appliances within 15 days of commencement of order.

Archana chatterjee  
DGM(WCD)  
BHEL, Bhopal

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## ANNEXURE-I

We confirm that (contractor) M/S.....has completed work relating to “Operation of ETP or STP or Water treatment plant” in industrial establishment or govt./Public sector organization for M/S..... vide Work Order No..... dated.....and completion certificate Ref..... dated.....We also confirm that (contractor) M/S..... has received payment against the above WO and the same is recorded in book of accounts.

Sign & Seal of CA

If any of the information given in tender to qualify, found incorrect or false then BHEL may out rightly reject this offer and may also consider debarring us from participation in subsequent tenders.

Signature & Seal of Bidder

Contractor’s Name :

Address :

Phone No. :

Email:

**ANNEXURE-II****1. Effluent generated by the galvanization process in FYM division.**

Galvanizing process consists of following steps :

- (i) Pickling in Sulphuric acid
- (ii) Rinsing in steam water
- (iii) Degreasing in Alkali NaOH
- (iv) Rinsing in water
- (v) Fluxing in Zinc Chloride and Ammonium Chloride bath
- (vi) Dipping in Molten Zinc bath
- (vii) Cooling in water containing Potassium Dichromate inhibitor

**2. Effluent generated by the acid pickling process in CIM division :**

Process of acid pickling of bare copper coils :

- (i) Pickling solution is prepared with approx.. 10-25% of sulphuric acid added in water with 5-10% of potassium bi-chromate.
- (ii) Coils are heated in hot water tank separately.
- (iii) Then heated coils are submerged in pickling solution for some duration as per process.
- (iv) Then coils are rinsed with fresh water.

During pickling operation effluent/waste water is generated which contains pollutants such as heavy metals, chemicals, suspended matter, contaminants etc. This processed water be should be treated before discharging into natural stream.

**3. Effluent generated by the painting process in TXM division :**

The following paints/chemicals are being used in painting operation in TXM.

- (i) Epoxy Primer
- (ii) Epoxy Paint
- (iii) PU Paint

**4. Effluent generated by the painting process in PRM division :**

The following paints/chemicals are being used in painting operation in PRM :-

- (i) Epoxy Primer (red).
- (ii) Epoxy Thinner (for paint).
- (iii) Grey paint quick dry.

The above products may also contains red oxide, zinc phosphate, alkyd resin synthetic enamel, thinner.