

# **INFORMATION OF BID**

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## **DISCLAIMER**

1. BIADA (hereinafter referred to as “Authority”) has prepared this document to give interested parties background information on the Project. While the Authority has taken due care in the preparation of the information contained herein and believe it to be accurate, neither the Authority, nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied, as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.
2. The information is not intended to be exhaustive. Interested parties are required to make their own inquiries before taking decision to submit their Tender. The information is provided on the basis that it is non-binding on the Authority, any of its authorities or agencies or any of their respective officers, employees, agents or advisor.
3. The Authority reserves the right, without any obligation or liability whatsoever, to accept or reject any or all the Applications submitted in response to this TENDER at any stage of the process, to withhold or withdraw or to cancel or modify the process of this TENDER, at any time, without assigning any reason whatsoever.
4. No reimbursement of cost of any type will be paid to persons or entities expressing interest in response to this document.

# SECTION- I - PROJECT INFORMATION

## 1.1. BACKGROUND

Bihar Industrial Area Development Authority (BIADA) is a wholly owned undertaking of Government of Bihar. Moreover, it is a premier organization of the State Government. BIADA has been entrusted with the objective of providing Industrial infrastructure through development of different Industrial Areas spanning whole of Bihar. The responsibility of the BIADA is to augment and facilitate development of Industrialization through amenities in Industrial Areas namely Muzaffarpur, Hajipur, Fatuha and Barari. Bhagalpur. Furthermore, Common Effluent Treatment Plant (CETP) with Zero Liquid Discharge Facility is an essential component for the Industrial development as per the definition of National Green Tribunal (NGT) and Bihar State Pollution Control Board

### BIHAR INDUSTRIAL AREA DEVELOPMENT AUTHORITY

The BIADA is responsible for promoting and assisting the rapid development of industries in the Industrial Areas of Bihar. Various type of small, medium & big industries are flourishing with the assistance of this organization. Bihar Industrial Area Development Authority (BIADA) has been established by a legislation of State of Bihar namely Bihar Industrial Area Development Authority Act, 1974 with an objective and aim to promote and facilitate industrialization in the State. The BIADA Act, 1974 and Rules / Regulations framed there under provide the mechanism for achieving the stated aims and objectives.

BIADA has planned to establish CETP at Bela Industrial Area Muzaffarpur

The characteristic of the Proposed Project is being delineated herein below:-

1. The primary infrastructure will be linked to the site in terms of road, water & Power.
2. The Areas stated herein below has well developed plots with defined area and is equipped with all utility facility.
3. Integrated Environmental Management Plan including ZLD based CETP, wastewater & treated water Conveyance System, Waste Water Management facility, Green belt for odor management & Pollution control.
4. Technical Infrastructure such as Environmental Management Cell along with a well-developed Lab.

## 1.2. PROJECT

**1.2.1.**The Authority intends to undertake development of CETP with ZLD for effluents from various Industries.

**1.2.2.**The proposed CETP facility is to be designed to treat expected effluents being generated from industries based on ZLD concept. Prior to the release of effluents into the CETP, as per the inlet parameters, primary treatment should be done at individual industry unit as per MoEF & CC/CPCB/BSPCB guidelines. All concerned unit would treat their effluent in the primary ETP.

**1.2.3.**We have to achieve ZLD (Zero Liquid Discharge) for proposed CETP. Firm/agency may introduce any proven innovative technology/methodology to reduce the cost of CAPEX and OPEX of the project, as well as less land requirement.

### **1.3. PROJECT LOCATION & CONNECTIVITY**

#### **LOCATION**

Proposed Project Location is given below:

- **Muzaffarpur:** Plot No.: C-34, Bela Industrial Area, Tehsil: Musahari.
- **(Coordinates: Latitude: 26° 05' 15. 85" Longitude: 85° 25' 25. 88" )**

#### **CONNECTIVITY**

Industrial area is well connected with rest of the Country by road, rail and air as mentioned below:

- Muzaffarpur (a) Nearest railway Station – Narayanpur station  
(b) Nearest Airport – Muzaffarpur.  
(c) Situated at National Highway.

#### ➤ **LAND COST DETAILS**

The Proposed project shall be developed within the industrial area.

The cost of Land is Rs.162.50 Lakh per Acre

## SECTION II: INSTRUCTION TO APPLICANTS

### 2.1 GENERAL INSTRUCTIONS

**2.1.** Bihar Industrial Area Development Authority (hereinafter referred to as “Authority”) is engaged in developing and providing Industrial Infrastructure in Bihar. As part of this endeavor, the Authority has decided **DESIGN, SUPPLY, CONSTRUCTION, INSTALLATION & COMMISSIONING AND OPERATION & MAINTENANCE OF COMMON EFFLUENT TREATMENT PLANT CAPACITY 4 EXPANDABLE TO 5 MLD BASED ON ZERO LIQUID DISCHARGE (ZLD) CONCEPT AND WITHOUT ZLD CONCEPT WITH COMPLETE INFRASTRUCTURE ON TURNKEY BASIS, INCLUDING 10 YEARS OPERATION & MAINTENANCE** at Bela Muzaffarpur. (hereinafter referred to as “Project”) and has decided to carry out the bidding process for selection of the bidder to whom the Project may be awarded.

**2.1.2** The Authority invites Tender from interested parties (hereinafter referred as “Applicants”) who fulfill the eligibility criteria given in sections 3.1 and interested in participating for the Project.

**2.1.3** This TENDER is issued for development of 4 MLD expandable to 5 MLD Common Effluent Treatment Plants with Zero Liquid Discharge at Bela Industrial Area- muzaffarpur Bihar and continuous supply of effluent conveyance system and recycle water supply network to the industries.

**2.1.4** The developer selected through bid process is required to undertake, Design, supply, construction, erection, commissioning, trial run and Operation & Maintenance for 10 Years with 100% zero liquid discharge (ZLD) along with design, construction of effluent conveyance system including conveyance of effluent by tanker and recycled water supply network of proposed project.

**2.1.5** This Tender document contains for the Project as per following sections:

- Section I: Project Information
- Section II: Instruction to Applicants
- Section III: Qualification Criterion
- Annexures of formats
  1. Checklist for Submission of TENDER
  2. Financial Information of the Applicant

**2.1.6** All Tender submissions would be evaluated in terms of financial and technical capability of the Applicants. Detailed information on qualification criteria is available in this TENDER (Section III).

**2.1.7** Applicants are required to read carefully the contents of this document and to provide required information, as per the checklist so that capabilities of the Applicants can be fully appreciated and assessed.

**2.1.8** The Tender document can be downloaded from the following website -

[www.eproc.bihar.gov.in](http://www.eproc.bihar.gov.in) and [www.biadabihar.in](http://www.biadabihar.in)

**2.1.9** All TENDER submissions would be evaluated in terms of financial and technical capability of the Applicants.

**2.1.10** Qualified Bidders will be informed by the Authority through registered post/fax/e-mail.

**2.1.11** The Authority reserves the right to

- a. Reject or accept the TENDER,
- b. Cancel the process and reject all or any of the TENDER without assigning any reason whatsoever.

**2.1.12** The Selection Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Patna shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the selection process.

## **2.2 ELIGIBLE APPLICANTS**

**2.2.1** The Applicant for Tender will be a single entity or JOINT VENTURE as per the condition mentioned at Section –III.

**2.2.2** An Applicant shall not have a conflict of interest (hereinafter referred to as “**Conflict of Interest**”) that affects the bidding process. Any applicant found to have a Conflict of Interest shall be disqualified. An applicant shall be deemed to have a Conflict of Interest that affects the bidding process, if a constituent of such applicant is also a constituent of another applicant;

## **2.3 SUBMISSION OF TENDER**

**2.3.1** Applicants fulfilling the prescribed eligibility criteria may upload the bid through [www.eproc.bihar.gov.in](http://www.eproc.bihar.gov.in) in containing the following information:-

- (i) Covering letter
- (ii) Checklist of submissions as per **Annexure 1**
- (iii)** Financial Information certified by Chartered Accountant as per **Annexure 2**
- (iv) Audited Annual Accounts for the last three financial years
- (v) Relevant Experience certificates
- (vi) Bid document Fee- Demand Draft of INR 10,000/ in favour of "BIADA " payable at Patna.
- (vii) Bid processing fee as appear on [www.eproc.bihar.gov.in](http://www.eproc.bihar.gov.in) website.

### **Contact Persons:**

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**2.3.2** Applicants shall submit the TENDER/TECHNICAL BID on the prescribed format in English language.

**2.3.3** The TENDER/TECHNICAL BID shall be submitted along with a covering letter together with the desired supporting documents and proofs on the letter head of the applicant with each page of the Document duly signed by the head or authorized signatory of the Applicant with seal.

## **2.4 APPLICATION DUE DATE**

**2.4.1** Applications should be submitted as per date mentioned TENDER/TECHNICAL BID.

**2.4.2** The Authority may, in its sole discretion, extend the application due date by issuing an addendum.

## **2.5 AMENDMENT OF TENDER/TECHNICAL BID**

**2.5.1** At any time prior to the application due date, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by an applicant, modify the TENDER by the issuance of Addendum/ Amendment and posting it on the Website ([www.eproc.bihar.gov.in](http://www.eproc.bihar.gov.in)) and [www.biadabihar.in](http://www.biadabihar.in)

**2.5.2** In order to afford the applicants a reasonable time for taking an amendment into account, or for any other reason, the Authority may, in its sole discretion, extend the application due date.

## **2.6 TESTS OF RESPONSIVENESS**

**2.6.1** Prior to evaluation of applications, the Authority shall determine whether each application is responsive to the requirements of the TENDER. An application shall be considered responsive only if:

(a) It is received as per the checklist at Annexure-1.

(b) It is received by the application due date;

(c) It is signed and sealed;

(d) It contains all the information (complete in all respects) as requested in this TENDER;

**2.6.2** The Authority reserves the right to reject any Application which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Authority in respect of such Application.

## **2.7 DISQUALIFICATION OF APPLICANT**

**2.7.1** An Applicant can be disqualified if the Applicant:

- a. Does not meet the eligibility criteria of the Project.



- b. Does not submit the Application as per checklist given in Annexure 1 of this TENDER.
- c. Makes misleading or false representations in the forms, statements and attachments submitted in the Application
- d. Has record of poor performance such as abandoning the works, not properly completing the contract, litigation history, or financial failure/blacklisted etc.
- e. Application submitted is not accompanied with the requisite documentation or is non-responsive

## **2.8 BID DOCUMENT FEE**

- 2.8.1 The applicants are required to submit a Demand Draft (DD) Rs.10000/- drawn in favour of "BIADA" payable at Patna as Bid Document fee, which will be non-refundable.

## **SECTION - III**

### **3.1 EVALUATION PARAMETERS**

#### **(A) PRE QUALIFICATION CRITERIA FOR THE EXECUTION OF PROJECT**

1. The bidders should have experience of construction and Operation & maintenance of STP/ETP/CETP with suitable capacity as per followings:
  - I. One Project of 100% required capacity of proposed CETP.
  - II. Two Project of 80% required capacity of proposed CETP
  - III. Three Projects of 60% required capacity of proposed CETP
  
2. The average three years turnover of company should be as follows:
  - I. For 5 MLD CETP ---- INR 40 Crore

Note: The chartered accountant signature should bear his membership number also. All copies of certificate should be notarized.

- 3 Net Worth: Should be positive as per annual report for the latest financial year. The specific certificate to this effect should be obtained and produced from the qualified chartered accountant.

Note: The chartered accountant signature should bear his membership number also. All copies of certificate should be notarized.

- 4 The bidders should have experience in design and construction of sewerage network/effluent conveyance system/ water supply network.
- 5 The minimum experience of 5 km laying of sewerage network/effluent conveyance system/water supply network

Note: Experience of work done in the last 7 years from the date of NIT will be considered.

#### **5.2 EVALUATION OF BID**

- 5.2.1 The evaluation of bid will be as per the quoted price for CAPEX, OPEX of CETP, Land cost of CETP and Cost of Effluent Conveyance System and Recycled Water Supply Network pipeline including additional work.
- 5.2.2 Price bid will be opened on completion of evaluation of technical bid. Opening of price bid will be followed by e-reverse auction. Base price of e-reverse auction will be the lowest price evolved from price bid opening. The detailed procedure for e-reverse auction may be

intimated to the bidders in advance. However, BIADA reserves the right not to conduct e-reverse auction and can select the lowest bidder based on the price bid received.

#### **D JOINT VENTURE / CONSORTIUM / MOU**

JOINT VENTURE is allowed up-to 3 Companies/Firms/Proprietary concern. The detail terms condition of JV is mentioned hereunder-

1. Joint Ventures are allowed. Bids submitted by a Joint Venture (JV) of not more than three firms as partners shall comply with the following requirements:
  - (a) There shall be a Joint Venture Agreement (Refer Annexure-I of Part-I of GSCC ) specific for these contract packages between the constituent firms, indicating clearly, amongst other things, the proposed distribution of responsibilities both financial as well as technical for execution of the work amongst them. For the purpose of this clause, the most experienced lead partner will be the one defined. A copy of the Joint Venture agreement in accordance with requirements mentioned in Annexure - 1 shall be submitted before any award of work could be finalized.
  - (b) The bid, and in the case of the successful bidder, the Form of Agreement, etc., shall be signed and / or executed in such a manner as may be required for making it legally binding on all partners (including operative parts of the ensuing Contract in respect of Agreement of Arbitration, etc.). On award of work, the Form of Agreement and Contract Documents shall be signed by all partners of the Joint Venture to conclude Contract Agreement.
  - (c) Lead partner shall be nominated as being partner-in-charge; and this authorization shall be evidenced by submitting a power of attorney signed by the legally authorized signatories of all the partners.
  - (d) The partner-in-charge shall be authorized to incur liabilities and to receive instructions for and on behalf of the partners of the Joint Venture, whether jointly or severally, and entire execution of the Contract (including payment) shall be carried out exclusively through the partner-in-charge. A copy of the said authorization shall be furnished in this Bid.
  - (e) All partners of the Joint Venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under sub clause (c) above as well as in the Form of Tender and the Form of Agreement (in case of a successful bidder).
  - (f) In the event of default by any partner, in the execution of his part of Contract, the Employer shall be so notified within 30 days by the partner-in-charge, or in the case of the partner-in-charge being the defaulter, by the partner nominated as partner-in-charge of the remaining Joint Venture. The partner-in-charge shall, within 60 days of the said notice, assign the work of the defaulting partner to any other equally competent party acceptable to the Employer to ensure the execution of that part of the Contract, as envisaged at the time of bid. Failure to comply with

the above provisions will make the Contractor liable for action by the Employer under the Conditions of Contract. If the Most Experienced i.e. Lead Partner defined as such in the Communication approving the qualification defaults, it shall be construed as default of the Contractor and Employer will take action under the Conditions of Contract.

(g) Notwithstanding the permission to assigning the responsibilities of the defaulting partner to any other equally competent party acceptable to the Employer as mentioned in sub clause (f) above, all the partners of the Joint Venture will retain the full and undivided responsibility for the performance of their obligations under the Contract and/ or for satisfactory completion of the Works.

(h) The bid submitted shall include all the relevant information as required under the provisions of Sub-Clause 1.1 of IFB and furnished separately for each partner.

1.1.A To qualify for award of the Contract, each bidder should have in the last Seven years:

**Joint Venture must fulfill the following minimum qualification requirement.**

1. The lead partner shall meet not less than 50% of qualification criteria.

2. Each of the remaining partners shall meet not less than 25% of all the qualification criteria.

(a) The Lead partner achieved in any one year, a minimum financial turnover (as certified by Chartered Accountant, and at least 50% of which is from Construction and O&M of ETP/CETP) equivalent to amount given below:

(i) 50% of amount put to bid, in case the amount put to bid is Rs.200 lakhs and less.

(ii) 60% of amount put to bid, in case the amount put to bid is more than Rs. 200 lakhs. The amount put to bid above would not include maintenance cost for 10 years and the turnover will be indexed at the rate of 8% per year.

(b) Satisfactorily completed, as prime Contractor or sub-contractor, at least one similar work equal in value to one-third of the estimated cost of work (excluding maintenance cost for 10 years) for which the bid is invited, or such higher amount as may be specified in the Appendix to IFB.

1.1.B (a) Each bidder must produce:

(i) Copy of PAN Card issued by Income Tax Authorities;

(ii) An affidavit that the information furnished with the bid documents is correct in all respects; and

(iii) Such other certificates as defined in the Appendix to IFB. Failure to produce the certificates shall make the bid non-responsive.

(b) Each bidder must demonstrate:

(i) availability for construction work, either owned, or on lease or on hire, of the key equipment stated in the Appendix to IFB including equipments required for establishing field laboratory to perform mandatory tests, and those stated in the Appendix to IFB;

(ii) availability for construction work of technical personnel as stated in the Appendix to IFB.  
(c) The bidder must not have in his employment: (i) the near relations (defined as first blood relations, and their spouses, of the bidder or the bidder's spouse) of persons listed in the Appendix to IFB. (ii) without Government permission, any person who retired as gazetted officer within the last two years of the rank and from the departments listed in the Appendix to IFB.

1.1.C To qualify for a package of contracts made up of this and other contracts for which bids are invited in the Notice Inviting Tender, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

1.1.D If bidder is a Joint Venture, the partners would be limited to three (including lead partner). Joint Venture firm shall be jointly and severally responsible for completion of the project. Joint Venture must fulfill the following minimum qualification requirement.

i. The lead partner shall meet not less than 50% of qualification criteria given in sub-clause 1.1 A (a) & (b) of IFB above.

ii. Each of the remaining partners shall meet not less than 25% of all the criteria given in sub-clause 1.1 A (a) & (b) of IFB above.

iii. The Joint Venture must also collectively satisfy the subject of the criteria of Clause 1.1 B and 1.1 C of IFB for this purpose the relevant figures for each of the partners shall be added together to arrive at the Joint Venture total capacity which shall be 100% or more.

iv.. In the event that the Employer has caused to disqualify under Clause 1.2 of IFB below all of the Joint Venture partners will be disqualified.

v. Joint Venture Applicants shall provide a certified copy of the Joint Venture Agreement in demonstration of the partners undertaking joint and several liabilities for the performance of any contract entered into before award of work.

vi. The available bid capacity of the JV as required under Clause 1.3 of IFB below will be applied for each partner to the extent of his proposed participation in the execution of the work. The total bid capacity available shall be more than estimated contract value.

1.3 The Sub-Contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in sub-clause 1.3A above. 1.6 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity for construction work is equal to or more than the total bid value excluding maintenance.

1.4 The available bid capacity will be calculated as under:

Assessed Available Bid Capacity = ( A\*N\*M - B ) where

A = Maximum value of civil engineering works executed in any one year during the last five years (updated to the price level of the last year at the rate of 8 percent a year) taking into account the completed as well as works in progress. N = Number of years prescribed for completion of the works for which bids are invited (period up to 6 months to be taken as ½ and more than 6 months as 1 in a year). M = 2 or such higher figure not exceeding 3 as may be specified in the Appendix to IFB.

B = Value, at the current price level, of existing commitments and on-going works to be completed during the period of completion of the works for which bids are invited. Note: The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent.

1.5 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

(i) made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements; and/or (ii) record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc; and / or (iii) participated in the previous bidding for the same work and had quoted unreasonably high or low bid prices and could not furnish rational justification for it to the Employer.

#### **E. DURATION OF THE PROJECT**

- (I)** The duration of CETP Construction, Installation & Commissioning is 16 months from the execution of agreement (Including Monsoon Period).
- (II)** The duration of CETP operation is for 10 years including the defect liability period of one year after successful trial run of 3 months.
- (iii)** The duration of construction, laying including survey of industrial area for the construction of Effluent Conveyance System and Recycle Water Supply Network is one year from the execution of agreement.

## **SCOPE OF WORK & SALIENT FEATURES OF PROJECT**

1. Proposed CETP will be developed on 100% ZLD concept with complete infrastructure, utilities, in-house laboratories, transporting vehicle for collecting effluent and/or effluent pipeline, all necessary Civil, Piping, Mechanical, and Electrical & Instrumentation works, disposal etc. complete including Ten years operation & maintenance of CETP after successful commissioning on turnkey basis as per the requirement and technical specifications given in the bid document.
2. **Bidders are suggested to quote the price for the CETP as per the following concept in the given price bid format:**
  - A. With 100% ZLD**
  - B. Without ZLD (Up-to surface water discharge standard)**
3. **The bidders are suggested to design and establish the CETP of 4 MLD capacity that should be expandable to 5 MLD**
4. The ZLD should be designed & constructed for 100% capacity of proposed CETP.
5. In order to dewater accumulated effluent and de-sludge of accumulated sludge on the proposed land of CETP, the bidders are requested to upload their detailed cost breakup as per the following on e-proc. website:
  - a) Dewatering cost per m<sup>3</sup>
  - b) Treatment & disposal cost of accumulated water per m<sup>3</sup>
  - c) De- sludge cost per ton
  - d) Pre- treatment /stabilization and storage of hazardous sludge. The temporary wastewater & sludge treatment plant to be installed by the bidder.
6. Bidders are requested to upload cost breakup of total turnkey execution on the e-proc website.
7. The inlet characteristic provided for design placed at Part- 2 of the tender. Bidder should make provision to handle any shock- load come at CETP inlet at least 20% factor of safety.
8. Any amendment in Environmental clearance compliances/other statutory compliances will be in the scope of bidder. BIADA will provide necessary letter.
9. Mobilization advance and recovery may be provided as per the provision made in PWD Code.
10. The Special Purpose Vehicle (SPV) may be formed for smooth construction and O&M of CETP as well as effluent conveyance system and recycle water supply network. The proposed stakeholder of the SPV will be
  - i. Successful bidder
  - ii. BIADA
  - iii. IAMC (Industrial Area Management Committee)

The role & responsibilities will be decided after award of the work.

11. The bidders may introduce any of the proven technology for better operation flexibility and quality.
12. Approval and vetting of design and drawing from competent authority will in the scope of bidders.
13. If bidders suggest new technology; the amendment in Environmental clearance if required will be the bidder's scope.
14. Operation and maintenance cost need to be considered for 10 years by the bidders.
15. The copy of existing Environmental Clearance will be provided to the bidders.
16. The continuous online monitoring for inlet and outlet parameters will be required and will be scope of bidders.
17. Flow meter at unit level of quality approved by PCB/SPV to monitor the discharge quantity need to be installed by the member unit. The cost of the same will be in the scope of member units.
18. All relevant units should install Pre- Treatment Unit in their premises as per the laid down guidance of Central Pollution Control Board (CPCB). BIADA will insure the required PETP at unit level in association with BSPCB.
19. The SPV will not allow unit for any expansion or product change, if the total flow & combined characteristic of inlet to CETP exceed the design flow & characteristic. If the request for expansion/ Product change does not cross the design flow and combined inlet characteristic, then the SPV will give NOC to get required consent to establish or consent to operate from BSPCB.
20. The bidders are required to obtain Consent to Establish (CtE) and Consent to Operate (CtO) from Bihar State Pollution Control Board.
21. The supply of treated water to the industries is under the scope of bidder. The bidders should add cost toward supply of treated water/ recycled water in their O&M cost.
22. If any up-gradation is required in future, the BIADA may provide separate job order for up-gradation of the CETP but not necessarily to the same Contractor.
23. Trial run of three months to be done by the contractor after construction, erection and commissioning. After the trial run of three months the period of O&M of 10 years will be started.
24. The entire work i.e. CAPEX, OPEX of CETP, Conveyance System and disposal will be awarded to one bidder.
25. The storage and disposal of hazardous waste or sludge etc., biological sludge, evaporator salt etc. to the nearest TSDF is under the scope of bidder as per the guidelines of Pollution Control Board and other statutory body.
26. CCTV need to be installed for the monitoring of operation of CETPs.



27. The land and required infrastructure for temporary storage of Hazardous waste for 6 months need to be included by the bidders in the project cost.
28. JV/Consortium of maximum up-to 3 bidders will be allowed.
29. The entire project to be executed as per the stipulated norms of BSPCB/CPCB and other statutory body.
30. Not limiting to the scope of work and the technical specifications defined in subsequent sections , the Bidder has to ensure that he considers all the items that are required for the Construction of the CETP to ensure the desired outlet characteristics and a trouble free operation and maintenance within the quoted price.
31. An environment management plan should be prepared for the CETP and should be documented in the report.
32. The inlet and outlet effluent standards of the CETP should be with irrespective of the degree of treatment i.e primary, secondary or tertiary. Continuous flow meters, sensor and/or any other requisite equipment should be installed at the outlet of the CETP to monitor the same.
33. Adequate Linkage with Treatment, Storage and Disposal Facility (TSDF) for disposal of hazardous waste generated from the facility should be ensured.
34. The proposal should incorporate a scientific sludge management plan based on the sludge characteristics (i.e hazardous or nonhazardous)
35. The contractor should ensure that forward and backward linkages are in place include proper conveyance system from the individual units to the CETP effluent.

#### SPECIAL CONDITIONS FOR CETP AT INDUSTRIAL AREA

1. Tender must be quoted on turnkey basis like construction, supply, erection & commissioning of proposed CETP with complete infrastructure. As per technical specifications, process flow diagram/ layout of proposed common ETP provided in tender document. In addition the bidder is allowed to give his/her innovative technology.
2. Lump Sum tender shall be inclusive of all the required Material Labor including Statuary permissions etc. complete so as to commission the plant in all respect. However, bidders are advised to give item wise rate for further addition/deletion of items.
3. Interested bidders may visit the project site before bidding to understand the volume of work.

4. Contractor will be responsible for providing all Documentation to BIADA for all permission / clearance / NOC from Govt. authorities for establishment of CETP & further operation of CETP like Boiler; DG set firefighting system etc. The Environmental Clearance of projects has already taken.

#### **5. Operation and Maintenance:**

Operation and Maintenance Obligations:

5.1 The contractor shall operate the CETP as per standard operating procedures & norms of BPCB/ CPCB/ MoEF for round the clock i.e. 24x7

5.1.1 The O & M Period is 10 Years after 3 Months of Trial Run and shall start from the issuance of Completion Certificate by the Authority and during the O & M Period, the Contractor is responsible for O & M of the CETP, Network Conveyance System and disposal.

5.1.2 The Contractor shall in consultation with the Authority evolve an operation and maintenance manual (the "O &M Manual") for the regular work plan, the methodology for collection and deposit of wastewater and preventive maintenance of the waste water treatment plant in conformity with the provisions of this Agreement, Safety Requirements and Good Industry Practice. The O & M Manual has to be submitted to the Authority not later than 90 (ninety) days from signing of the Contract Agreement. It should show detailed operation procedures including a list of do's & don'ts.

No review and/or observation of the Engineer-in-Charge and/or its failure to review and/or convey its observations on the O&M Plan shall relieve the Contractor of its obligations and liabilities under this Agreement in any manner nor shall the Engineer-in-Charge or the Authority be liable for the same in any manner.

5.1.3 The Contractor is fully responsible for carrying out required repairs and maintenance of any or all the parts of the value chain of the waste water treatment plant at periodic intervals at its own cost and the Authority is not responsible for the same.

5.1.4 Replacement of spare parts shall be done as per the OEM manual of the equipment / machinery.

5.1.5 General or pre-schedule shutdown of the Plant for maintenance and servicing will be allowed for a maximum period of 48 hours. In case of any break down beyond 48 hours from the date and time of breakdown complaint registered, O & M Charges for the day(s) for which the Plant is not operated shall be deducted from the monthly payments to the Contractor as the Damages recovered.

5.1.6 In the event that the Contractor fails to repair or rectify any defect or deficiency in maintenance requirements within the period specified therein, it shall be deemed to be in breach of the Agreement and the Authority shall be entitled to recover Damages, to be calculated at 2% of the cost of such repair or rectification as estimated by the Authority for each day of delay until the breach is cured.

Recovery of such Damages shall be without prejudice to the rights of the Authority

under the Agreement, including the right of Termination thereof. The Damages shall not be recovered if the breach (ies) are on account of Force Majeure.

5.1.7 To maintain sufficient stock of the consumables required for smooth and efficient operations.

5.1.8 The Contractor will have to remove any person employed on the work if so desired by the Authority for misconduct, misbehavior, or for such other reasons.

5.1.9 The Contractor will have to follow all existing rules and regulations of the Government & labour department or as amended from time to time regarding the labour employed by him without entitling him for any extra claim on this account.

5.1.10 The Authority shall review the data logs on the monthly basis of the Contractor. Data logs to be prepared by Contractor in discussion and consultation with the Authority which shall cover test results of effluent characteristics of both inlet and treated water/sludge, attendance, duty slips, and repair and maintenance/spare parts replacement among other things;

5.1.11 Complaints will be referred to the Contractor by the Authority and the complaints are to be attended within 24 hours or as directed by the Authority; and

5.1.12 The Contractor shall have to handover the Plant to the Authority at the end of the Contract Period in fully working condition.

5.1.13 There shall be no discharge of effluent outside factory i.e. "Zero Liquid Discharge condition "to be maintained for all the time.

5.1.14 CETP operator shall monitor specified quality outlet parameters and flow rate on daily basis and submit the monitoring data to the SPCB on regular basis. Parameters to be specified by SPCB shall be monitored by the CETP operator online at outlet of a CETP and IT based linkage shall be provided by the operator to the SPCB. The SPCB shall ensure that continuous 24 hour data is displayed on its website.

## **5.2 Overriding powers of the Authority**

If in the reasonable opinion of the Authority, the Contractor is in material breach of its obligations under this Agreement and, in particular, the O&M Requirements, and such breach is causing or likely to cause material hardship or danger to the public, the Authority may, without prejudice to any of its rights under this Agreement including Termination thereof, by notice require the Contractor to take reasonable measures immediately for rectifying or removing such hardship or danger, as the case may be.

## **5.3 DAMAGES**

5.3.1 If it is found that the waste water treatment plant is not properly maintained as per the scope of the work defined in this Agreement, the Authority shall levy the Damages, and which shall be deducted from the monthly running bill of the Contractor.

5.3.2 In addition to the Damages that will be levied for non-maintenance of minimum service levels the Damages shall also be effected in case of the following deficiencies:

a. Untreated/partially treated wastewater is released into the environment; Damages at Rs. 5,000/- per event shall be charged by the Authority and this amount will be automatically deducted from the immediate next payment to the Contractor. and

b. If the complaints are not attended within the stipulated time of 24 hours or as directed by the Authority, Damages at Rs. 1,000/- per each such complaint shall be imposed.

#### **5.4 SAFETY REQUIREMENTS**

##### 5.4.1. Safety Requirements

The Contractor shall comply with the provisions of this Agreement, Applicable Laws and Applicable Permits and conform to Good Industry Practice for securing the safety of the Public.

#### **5.5: MONITORING OF OPERATION AND MAINTENANCE**

5.5.1 The contractor shall set up online monitoring system (24x7x365) and provide data to website to CPCB, BSCB and BIADA website.

Monthly status reports During Operation Period, the Contractor shall, no later than 7 (seven) days after the close of each month, furnish to the Authority and the Engineer-in-Charge a monthly report stating in reasonable detail the condition of the machinery including its compliance or otherwise with the O&M Requirements, test results of treated effluent, Maintenance Manual and Safety Requirements, and shall promptly give such other relevant information as may be required by the Engineer-in-Charge.

- 6 Contractor will be responsible for disposal of hazardous waste generated from CETP under the HW (M H & TBM) rules 2008 & amendments to the nearest TSDF (Treatment ,Storage and Disposal Facility) centre.
- 7 Contractor will do the routine checking of effluent transportation from user units to common ETP. It should be done by installing continuous monitoring system at individual/ group of industry level by the industrialist. Contractor will intimate to BIADA for any major leakage / seepage to attend the same. However minor leakage problems / covering of effluent transportation system will be taken-care by contractor for immediate solution.
- 8 The effluent from the industries would be conveyed through effluent conveyance system preferably by gravity and through intermediate pumping to the CETP.

- 9 Contractor will depute competent supervisor for day to day operation & maintenance of common ETP, so that supervisor can monitor the incoming effluent daily basis for any deviation / disputes in effluent quantity & quality.
- 10 BIADA will authorize to contractor for taking samples of effluent from user industry premises, in case of deviation circumstances.
- 11 Contractor will send the sample in well packed, sealed & labeled manner to MoEF approved laboratory immediately with intimation to BIADA on monthly basis. The charges of effluent Testing will be borne by Contractor.
- 12 Contractor will maintain daily log sheet, deviation, observations, flow coming to Common ETP, effluent discharges by user units.
- 13 Contractor will submit complete data of CETP operation & maintenance to BIADA on monthly basis.
- 14 Contractor will make ensure regular interaction with Engineer in-charge of BIADA and schedule of monthly visit of his senior technical officer to review the smooth operation & maintenance of CETP& coordination with user industry, so that implementation of user pay principle concept for effluent treatment & disposal management.
- 15 Contractor will make ensure regular uses of personnel protective equipments, uniform, six monthly medical records of his deployed site staff. Contractor will maintain the record of health & safety management for submission to BIADA on his demand.
- 16 Contractor will make ensure smooth operation & maintenance of CETP by close monitoring of operational parameters. In this regard any sampling & analysis of incoming effluent from user industries required for maintaining ZLD, it will be carried out by Contractor on his cost.
- 17 Contractor may also need to trouble shoot the problems of CETP during routine operation of common ETP, if any occurs, so that zero liquid discharge concept always meet the requirements of BIADA
- 18 In addition to qualified / experience supervisor, Contractor will depute skilled operator in all three shift, so that CETP can be run round the clock as emergency services for facilitating to user industries.
- 19 Contractor will make ensure regular effluent collection / reception at CETP.
- 20 Contractor will make ensure to ZLD concept, at any circumstances. Violation of this condition will attract penalty and / or termination of contract in terms of agreement of BIADA with contractor for this work.

- 21 The contractor has to deploy skilled, experienced staff for operation of plant.  
One Reliever operator to shift operators to avoid absence condition in any conditions.
- 22 Contractor has to deploy qualified one Supervisor in general shift for liaison with BIADA/BPCB/User Units of Industrial Area.
- 23 All spares /consumables/ wear-tear/ applicable items testing equipments drain valves to be arranged and used by the Contractor as per manufacturer's recommendations and good engineering practices.
- 24 All tools and tackles required for Electrical and Mechanical Maintenance/Cleaning /Removing grass and vegetation etc such as Brooms/ Forks /Bamboos/Spades /Pick axe /Pans/ Grass cutting tools or Machine etc. shall be provided by the contractor.
- 25 Contractor has to provide Personnel Protective Equipments (PPE) and Uniform to the staff appointed by him at his own cost, The Contractor is fully responsible for the safety of the persons & equipment's engaged by them. BIADA shall not be responsible.
- 26 The Contractor, his staff engaged shall abide with safety rules and regulations, Environment policy provisions of BIADA and the prevailing regulations, guidelines framed by the Central / State Pollution Control Boards.
- 27 The contractor should deployed manpower experience in MEE based Operation and Maintenance of CETP of industrial area.
- 28 The ZLD conditions, if not found within CETP premises, the remedial measures are to be taken immediately by the operating agency, till rectification is done and correct result is obtained. Any penalty on this account shall be borne by the Contractor.
- 29 The instructions of inspecting officer from BIADA and Pollution Control Board shall be binding on the contractor for compliance.
- 30 The agency has to depute a Supervisor capacity person to take instructions from BIADA/Pollution board officers and comply the same from contractor staff. The operators should be well qualified and experienced in the field operate such capacity plants.
- 31 Payment to the staff has to be made strictly in accordance to minimum wages Act.

- The following terms of Contract shall supplement the General conditions of Contract, wherever there is a conflict the provision herein shall prevail over those in the General conditions of Contract.
- Any disposal of material outside CETP shall be prohibited. The waste/ dispose material shall be disposed from CETP in environmentally & legally manner by the contractor at his own cost.
- The plants shall include such guards, hand-railing, access steel work, walk ways, etc, as may be required to meet the current relevant regulations for the safety of personnel and of the plant, and to afford adequate and safe access to all parts of it. All shall be of substantial design and construction. All moving parts shall be covered with safety guards. Where corrosion or abrasion of materials may be expected from contact with water or sediment or from any other cause, the Contractor shall supply suitably resistant materials. The Contractor shall make all reasonable efforts to reduce noise and vibration to a minimum. All rotating parts of the plant shall be statically and dynamically balanced so that they operate overall specified conditions without undue vibration. The equipment and system involved shall be designed such that noise level at any operating time shall not exceed 85 dB at 1m distance from equipment
- Platforms, ladders, walkways and railings for the safe and easy access to the units shall be provided. CI rungs shall be provided for safe and easy maintenance of all chambers, manholes and CETP units.
- During commissioning of CETP, the Contractor shall arrange at his own cost, analysis of the composite effluent samples all the effluent parameters required form an external laboratory approved by MoEF under EPA act 1986 or from the BPCB laboratory. The results shall conform to the performance guarantee for the plant which shall be a pre requisite for the takeover of the plant. In case of non-compliance to the guaranteed ZLD for given design input conditions, the Contractor shall take necessary measures to bring the plant to the desired performance.
- In case during the guarantee test run, the effluent flow or pollution load shall be found to be less than the rate input, the contractor shall undertake that as and when rated throughput and organic load conditions are available, the contractor shall extend necessary assistance to achieve the guaranteed output quality, through re- deputation of his personnel at a later date at mutually agreed terms.
- The Contractor shall depute plant personnel in the Operation & Maintenance practice for the Common Effluent Treatment Plant units during the operation & maintenance period for following aspect:
  - Familiarization with operational procedures and testing parameters.
  - Hands on experience on Operation of Equipment & chemical consumptions.
  - Routine preventive maintenance activities of the facilities.
  - Knowledge of emergency and breakdown systems.
  - Operational control & parameters to achieve treated output within norms.

- Data sheet/ log book & record keeping as per norms of BPCB & Standard practices
- Safety regulations and accident prevention.
- The scope of services shall include the Preparation and Submission of Operation & Maintenance Manual (One soft copy and 3 sets of hard copies) prior to plant commissioning. The Manual shall cover the following aspects: Brief process description & flow sheet. Unit wise function and description, equipment details with sizes and as build drawings, operational instructions, maintenance procedures. Plant start-up, commissioning, normal operations, effluent parameters testing procedures, emergency operation steps etc required for smooth operation & maintenance of common ETP units.
- All electrical works including electrical motors, for the various equipment, cabling, Motor Control center, starters, earthings conductors and earth pits etc. are to be provided by the Contractor. The scope of work includes all necessary civil works like panel foundations, cable trenches, cable supports, unit lighting, etc. complete.
- The manufacturer's guarantee for design, workmanship and performance for all bought out items shall be made available to the BIADA and shall be valid at least for the entire defects liability period. In the event of failure of any particular equipment which fails more than three times during the guarantee period as mentioned in clause below, the contractor shall replace at his own cost that equipment.



**ANNEXURE 1 : CHECKLIST FOR SUBMISSION OF TENDER/TECHNICAL BID**

S. No.	Enclosures to the TENDER	Status (Submitted/ Not Submitted)	Comments, if any
1	Covering Letter		
2	Memorandum of Association		
3	General Information		
4	Financial Information		
5	Audited Financial Statements/ Annual Reports (Last 3 Financial Years)		
6	Experience Certificates for Construction/ Development (with Operation & maintenance) during last seven years as per the qualifying criteria.		
7	Company profile and manpower information		
8	List of CETPS with specialized / sophisticated technologies (including patented ones)		
9	List of CETPs/ETP with ZLD Technology		
10	Bid Document Fee: Demand Draft (DD) Rs.10,000/-in favor of "BIADA payable at Patna		
11	Service Tax Registration, PAN No, GST		
12	Latest IT Returns (of last 3 financial years)		
13	Relevant Experience Certificate (In the last 7 Years)		
14	Copy of valid Provident Fund Registration Certificate.		
15	Letter of undertaking stating the litigation history , Non completion of work, Blacklisting, Debarment etc.		
16	EMD		
17	Qualification and Experience of MAN Power.		
18	Proof of liquid Assets in the form of solvency certificate not more than 6 months preceding the bid date for a value of Rs.2.00 Crores.		
19	JV Agreement as per Provisions at Annexure-I		
20	Additional Information if any.		

Note: All the relevant information of all the JV Partners should be enclosed.

**DATE:** -----

**DESIGNATION:-** -----

**COMPANY :**-----

**SIGNATURE:**-----

**ANNEXURE -2 :**

**FINANCIAL INFORMATION OF THE APPLICANTS**

**1. Turn Over of the Applicant**

*All figures in Crores*

Financial Year	Turnover	Profit
2016-17		
2017-18		
2018-19		
<b>Total</b>		

Financial Year: 1st April to 31<sup>st</sup> March

**1. Net-worth related data**

*All figures in Crores*

Description	As on 31.03.17	As on 31.03.18	As on 31.03.19	Average
<b>Single Applicant/ Lead Member</b>				
Paid up Capital				
<b>Add:</b> Free Reserves				
<b>Less:</b>				
Revaluation Reserve				
Intangible Assets				
Accumulated Losses				
Miscellaneous expenditure to the extend not written off				
<b>Net-worth</b>				

**Note:**

1. The Applicant shall submit annual reports and audited financial statements (Balance sheet, profit and loss account and if available cash/funds flow statement) containing the audited financial statements in support of the financial data.
2. In case of JV all the above information should be provided by each of the JV Partner.

**SIGNATURE** -----

**Name :-** -----