

# REQUEST FOR PROPOSAL (RFP)

**FOR** 

**SELECTION OF PLANNING & DESIGN CONSULTANT** 

**FOR** 

**ESTABLISHMENT** 

**OF** 

**CENTRAL ENVIRONMENTAL LABORATORY** 

**AT** 

**SECTOR-13, NAYA RAIPUR** 

**FOR** 

CHHATTISGARH ENVIRONMENT CONSERVATION BOARD

Member Secretary Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) Paryavas Bhavan, North Block Sector-19, Naya Raipur (C.G.) 492002 Phone:0771-2512220

Email - hocecb@gmail.com

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# **IMPORTANT NOTE & TENDER NOTICE:**

Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) requests for proposal for Selection of Planning & Design Consultant for Establishment of Central Environmental Laboratory at Sector-13, Naya Raipur from competent organisations registered in India. All proposals should be addressed to:

Member Secretary Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) Paryavas Bhavan, North Block Sector-19, Naya Raipur (C.G.) 492002

Bids received after the due date will be rejected.

The document can be downloaded from the website <a href="http://enviscecb.org/Advertisement.htm">http://enviscecb.org/Advertisement.htm</a>. The parties are advised to study the document carefully. Submission of response to this Request for Proposal shall be deemed to have been done after careful study and examination of this document with full understanding of its implications. Bidders must ensure that they submit all the required documents indicated in the RFP document without fail. Bids received without supporting documents for the various requirements mentioned in the tender document are liable to be rejected at the initial stage itself.

Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) reserves the right to accept or reject in part or full any or all the offers without assigning any reasons.

## DISCLAIMER

The information contained in this Request for Proposal (hereinafter referred to as "RFP") document provided to the Bidders, by the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB), or any of their employees or advisors, is provided to the Bidder(s) on the terms and conditions set out in this RFP document and all other terms and conditions subject to which such information is provided.

The purpose of this RFP document is to provide the Bidder(s) with information to assist in the formulation of Proposals. This RFP document does not aim to hold all the information each Bidder may require. This RFP document may not be appropriate for all persons, and it is not possible for the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB), their employees or advisors to consider the business/investment objectives, financial situation and particular needs of each Bidder who reads or uses this RFP document. Each Bidder should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP document and where necessary obtain independent advice from appropriate sources.

Chhattisgarh Environment Conservation Board, Naya Raipur (CECB), their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the RFP document.

Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP document.

# **List of Abbreviations**

CECB Chhattisgarh Environment Conservation Board ISO International Organisation for Standardization

#### 1 BACKGROUND

Increased industrial activities along with enhanced regulatory interventions have extended the compliance management function of Chhattisgarh Environment Conservation Board (CECB). One of the key components of compliance management is sampling and analysis of discharge streams from the industries. Besides industries, discharges from domestic, agricultural and commercial activities also cause significant impact to the environment that warrants monitoring, sampling and analysis.

#### Provisions under the Water (Prevention & Control of Pollution) Act, 1974

Under Section 17 (2)

The Board may establish a Laboratory to enable the board to perform its functions under this section efficiently.

#### Provisions under the Air (Prevention & Control of Pollution) Act, 1981

Under Section 17 (2)

The Board may establish a Laboratory to enable the board to perform its functions under this section efficiently.

While outsourcing of the monitoring, sampling and analysis activities to accredited external laboratories are common but sole dependence on such external laboratories weakens the State's compliance management capability.

This very reason necessitates the development of a Central Laboratory at CECB, Naya Raipur.

#### 2 VISION

This would be a State of the Art environmental laboratory capable of performing analysis of highest standard (accredited as per ISO 17025) for all regulated parameters. This laboratory should act as the referral laboratory for all environmental sampling and analysis in the State of Chhattisgarh.

A mobile laboratory, capable of sampling and on-site analysis of hazardous substances, besides routine samples as part of compliance monitoring, should also be part of this laboratory. Moreover, there should be facility for setting of pilot plant for research and developmental purpose.

This laboratory should have minimum environmental foot-print in terms of energy consumption, emission, effluent and waste disposals.

## 3 ABOUT THIS REQUEST FOR PROPOSAL (RFP)

Chhattisgarh Environment Conservation Board, Naya Raipur (CECB), invites technical and financial proposals from reputed organisations who are capable of "Establishment of Central Environmental Laboratory at Sector-13, Naya Raipur" through <a href="http://enviscecb.org/Advertisement.htm">http://enviscecb.org/Advertisement.htm</a> as detailed in the Scope of Work of this RFP. The successful bidder will Plan and Design the proposed solution as per requirement mentioned in this RFP. The bidders are advised to study the tender document carefully. Submission of bids shall be deemed to have been done after careful study and examination of the tender document

with full understanding of its implications. This section provides general information about the issuer, important dates and addresses and the overall eligibility criteria for the bidders.

## **Fact sheet**

1	Tender No.	01/2017-2018/ Chhattisgarh Environment Conservation Board,
		Naya Raipur (CECB) /2017
2	Scope of Work	Establishment of Central Environmental Laboratory at Sector-13,
	1	Naya Raipur
3	Name of the tender issuer	Member Secretary
4	Date of issue of tender	31/10/2017
	document	
5	Last date for sending Pre	14/11/2017
	Bid Query	
6	Pre Bid Meeting	A Pre-Bid meeting will be held on Friday, 17/11/2017 at 01:00 PM
		at Chhattisgarh Environment Conservation Board, Naya Raipur
		(CECB) office, Naya Raipur.
7	Pre-bid query response	22/11/2017
	would be published on	
8	Last Date for Submission	15/12/2017 Time: 01:00 PM
	of Bids	
9	Physical submission of	Friday, 15/12/2017 by 01:00 P.M. along with Technical Bid as per
	EMD (in the	submission instructions in Sec. <b>5.4.3</b> of the RFP.
	form of DD/BG)	
10	Date of Opening of	Friday, 15/12/2017 at 03:00 P.M.
	Technical Bids	
11	Date of Presentation	To be informed later through e-mail
12	Date of Commercial Bid	To be informed later through e-mail (Bidder should furnish the e-
	opening	mail of one authorized representative)
13	Place of Physical	Office of Member Secretary
	Submission of EMD	Chhattisgarh Environment Conservation Board, Naya Raipur
		(CECB)
		Paryavas Bhavan,
		North Block Sector-19,
		Naya Raipur (C.G.) 492002
		as per instruction given in Sl. No. 9.
14	Address for	Office of Member Secretary
	Communication	Chhattisgarh Environment Conservation Board, Naya Raipur
		(CECB)
		Paryavas Bhavan,
		North Block Sector-19,
		Naya Raipur (C.G.) 492002
15	Cost of Tender Document	Rs 5,000 (Rs. Five Thousand only) through Demand Draft in favour
		of Member Secretary, Chhattisgarh Environment Conservation
		Board, Naya Raipur
16	Earnest Money Deposit	Rs. 2, 50,000/- (Rupees Two lakh Fifty Thousand only).
	(EMD)	EMD may be submitted in Demand Draft in the name of Member
		Secretary, Chhattisgarh Environment Conservation Board, Naya
		Raipur (CECB):-
		1. Original copy of the DD should be submitted to Chhattisgarh
		Environment Conservation Board, Naya Raipur (CECB)
		office as per instruction given in Sl. No. 9.
		OR
		EMD may be submitted in the form of Bank Guarantee (BG) as per
		format mentioned in the RFP on stamp paper of value required under

		law duly signed by authorized representative of Bank:		
		1. Original copy of BG should be submitted to Chhattisgarh		
		Environment Conservation Board, Naya Raipur (CECB)		
		office as per instruction given in Sl. No. 9.		
17	Validity of Proposal	Proposals must remain valid for 180 days after the submission date.		
18	Bid Submission	Bid will be submitted in Hard Copy in three separate <b>Envelopes.</b> Refer Sec.		
		<b>5.7</b> of the RFP.		
19	Availability of Tender	Tender can be downloaded from		
	Document	http://enviscecb.org/Advertisement.htm		
20	Method of Selection	QCBS		
21	Expected date for			
	commencement of	Within 15 days from the date of signing of contract.		
	consulting services			

#### 4 ELIGIBILITY CRITERIA

# 4.1 Pre-Qualification

The bidders should meet the following Eligibility Criteria and must submit documentary evidence in support of their claim for fulfilling the criteria and they should submit an undertaking on their letterheads to the fairness of these documents while submitting the bid. The bids received without the documentary evidence will be rejected outright.

CECB seeks proposals from specialised design, consultancy organisation with a proven track record in planning and design of laboratories for participation in tender for Establishment of Central Environmental Laboratory at Sector-13, Naya Raipur.

The pre-qualification criteria are as under:

#	Pre-Qualification Criteria Description	Supporting Documents to be submitted by the Bidders
1	<b>Legal Entity:</b> The prime bidder (in case of consortium not more than one) should be a company registered in India under companies Act 1956, registered with the Service Tax Authorities and operating for the last Five years in Building Planning, Design, Architecture Services as of 31 <sup>st</sup> March 2017.	Bidder should submit the following: a) RoC b Copy of Service Tax/ GST Registration Certificate.
2	<ul> <li>Turnover: <ul> <li>a. The Bidder should have a minimum average annual turnover of at least Rs.2 Cr in the previous three financial years in building design/consultancy services i.e. 2014-15, 2015-16 and 2016-17.</li> <li>b. Bidder should have positive Net profit after tax during any of the last three financial years namely 2014-15, 2015-16 and 2016-17.</li> </ul> </li> <li>Note: Turnover in areas other than mentioned above shall not be considered for evaluation</li> </ul>	Bidder should submit any of the following:  a) Copies of Certified audited Balance sheet / Profit & Loss statement. OR b) Certificate from the statutory auditor.  Form PQ-4 should be filled and stamp by the bidders in addition.
3	Past Experience:  The bidder should be a specialised design, consultancy organisation with a proven track record in planning and design of laboratories and must have completed during last 5 years at a minimum:  i) 1 laboratory with built-up area more than 20,000 square foot; OR  ii) 2 laboratories with built-up area more than 12,500 square foot each; OR  iii) 3 laboratories with built-up area more than 10,000 square foot each.  For International/National/State/UT Government Depts./	<ul> <li>a) Bidder should submit the PO / Work orders.</li> <li>b) Project Completion Certificate from the client in case of completed projects. Form PQ-5 should be filled and stamp by the bidders in addition.</li> </ul>

	PSUs in last five years.	
4	The bidder who is proposed as Lead design consultant must have designed at least 1 building rated 3* as per GRIHA rating criteria or equivalent.	Valid certificate needs to be attached.
5	Manpower Deployment: The Bidder should have minimum technical workforce of 20 people including planner, architect, MEP, HVAC specialists, draughtsman, etc.	Bidder should submit the self-declaration letter by the authorized signatory.
6	Blacklisting: The Bidder/Consortium partner should not be blacklisted by any Central/State Government, Ministry or Agency for breach of Contractual Conditions. The Bidder should also not be entangled in any legal disputes with any Govt. / PSU body.	Bidder should submit Self declaration that the Bidder is not black listed and is not in any legal disputes as on the bid calling date. Self-Declaration Certificate to be enclosed in the bid duly signed by the authorized signatory on its company letter head. Format for not blacklisting is mentioned in Form PQ-1 enclosed in Annexure IV
7	The bidder should furnish, as part of its proposal, an Earnest Money Deposit (EMD) of the Rs. 2,50,000/-(Rs. Two Lakhs Fifty Thousand only) The EMD should be in the form of DD/Bank Guarantee (As per format prescribed in this RFP) issued by a Nationalized / Scheduled Bank.	EMD may be submitted in Demand Draft in the name of Member Secretary, Chhattisgarh Environment Conservation Board, Naya Raipur (CECB):-  1. Original copy of the DD should be submitted to Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) office as per instruction given in Sl. No. 9 of the Fact Sheet (Page 8).  OR  EMD may be submitted in the form of Bank Guarantee (BG) as per format mentioned in the RFP on stamp paper of value required under law duly signed by authorized representative of Bank:  1. Original copy of BG should be submitted to Chhattisgarh Environment Conservation Board,
		mentioned in the RFP on stamp of value required under law duly by authorized representative of  1. Original copy of BG should submitted to Chhattisgarh

# **4.2 EVALUATION CRITERIA**

Project Evaluation Committee (PEC) will evaluate the Requests for Proposal from the applicants as per the following criteria:

S.N.	Parameter	Max Score	Required Eligible Document
1.	The Bidder should have previous design/ consultancy project experience of similar nature during last 5 years.     Built-up Area Marks   Summing up value $\geq 60,000$ sqft of Maximum 3 Projects 15 Marks   Summing up value $\geq 30,000$ sqft but $< 60,000$ sqft of Maximum 3 Projects 10 Marks   Summing up value $\geq 20,000$ sqft but $< 30,000$ sqft of Maximum 3 Projects 5 Marks	15	<ul> <li>Bidder should submit the following:</li> <li>a) Bidder should submit the PO / Work orders.</li> <li>b) Project Completion Certificate from the client in case of completed projects.</li> </ul>
2.	2. The Bidder, a single legal entity registered in India, and must have an minimum average annual turnover of not less than Rs. 2 Crore ( <b>Two Crore</b> ) in <b>Building Design/Consultancy Services</b> for the last three financial years (2014-15, 2015-16, 2016-17).  = Rs. 2 Crore - 2 Mark  For each additional Rs. 2 Crore (Two Crore) in turnover, additional 2 points will be awarded, subject to a maximum of 10 Marks		Bidder should submit any of the following: a) Copies of Certified audited Balance sheet / Profit & Loss statement. OR b) Certificate from the statutory auditor.
3	The bidder whose design is proposed in the EOI shall have designed buildings certified to be 3* as per GRIHA rating criteria or equivalent.  Each Projects rated 3* or equivalent – 2 Marks  Each Projects rated 4* or equivalent – 3 Marks  Each Projects rated 5* or equivalent – 5 Marks  to a maximum of 10 Marks.		Copy of project completion certificate along with Certificate from Building Rating Agency needs to be attached.
4	Every applicant will be given at least a time slot of 60 minutes to present his/her design concepts and how to implement the project. Company profile, past experiences, etc. should be limited to 7 slides only; software/ internet connectivity should be arranged by the bidder for		Copy of presentation to be submitted.  Presentation of required capability by

S.N.	Parameter		Max Score	Required Eligible Document
	presentation.  The presentation should focus on the following:  • A 3D view of the interior/ exterior design  • Fire/Safety Protections  • Utilities  • Ergonomics  • Environment Protection  • Energy Optimisation  • Special features, if any.  • Project Implementation Strategy.			the bidder.
5	Proposed team and profiles for development of the design below category of individuals must be part of the team.  Team Leader and Design Architect – Experience in requirement analysis, customization and design of specialised facilities.  Must have designed at least one similar project.  Minimum Qualification Should Master in Architecture (additional qualification in Management will be preferred)  Civil Construction Expert Resource should have valid industry experience and having project experience of at least 2 similar construction projects (by built-up area).  Minimum Qualification ME / M. Tech (Civil)	Average exp >15 yrs - 4 Marks Average exp 10-15 yrs -2 Marks Average exp <10 yrs - 0 Marks  Average exp >10 yrs - 4 Marks Average exp 5-10 yrs -2 Marks Average exp 5-10 yrs -2 Marks Average exp <5 yrs -0 Marks	25	CV as per the given format mentioned in Form Tech-7 enclosed in Annexure 4

S.N.	Parameter		Max Score	Required Eligible Document
	Electrical Engineer Resource should have valid industry experience and having project experience of at least 2 similar construction projects (by built-up area).  Minimum Qualification ME / M. Tech (Electrical)	Average exp >10 yrs - 4 Marks Average exp 5-10 yrs -2 Marks Average exp <5 yrs - 0 Marks		
	Laboratory Specialist Resource should have valid industry experience and having experience in establishing and operating ISO 17025 accredited laboratories.  Minimum Educational Qualification: M.Sc (Chemistry)	Average exp >8 yrs - 4 Marks Average exp 5-8 yrs -2 Marks Average exp <5 yrs -0 Marks		
	Sustainability & Environmental Specialist Resource should have valid industry experience and having experience in facilitating GRIHA (or equivalent) rated structures (at least one 3* rated projects) and design of environmental control systems.	Average exp >8 yrs - 3 Marks Average exp 5-8 yrs -2 Marks Average exp <5 yrs - 0 Marks		
	Minimum Educational Qualification:  Master in Environmental Science/ Engineering with LEED (or equivalent) certificate			
	Fire & Safety Specialist Resource should have valid industry experience and having experience in design of fire and safety systems.  Minimum Educational Qualification:	Average exp >8 yrs - 3 Marks Average exp 5-8 yrs -2 Marks Average exp <5 yrs -0 Marks		
	Recognised degree/diploma from reputed institutions			

S.N.	Parameter		Max Score	Required Eligible Document
	Quantity Surveyor Resource should have valid industry experience and having project experience of at least 2 similar construction projects (by built-up area).  Minimum Qualification Recognised degree/diploma from reputed institutions	Average exp >10 yrs - 3 Marks Average exp 5-10 yrs -2 Marks Average exp <5 yrs - 0 Marks		
6.	<ol> <li>Comprehensiveness of the project plan – 3 Marks</li> <li>Activities, sequencing, dependencies among activities –3 Marks</li> <li>Resource planning, allocation and loading – 3 Marks</li> <li>Project Status Reporting mechanism – 3 Marks</li> <li>Risk Management, Mitigation and Exit plan – 3 Marks</li> </ol>		10	Bidder has to provide detailed work break down structure (WBS), clear assumptions, timelines, defined resources, roles & responsibilities in MS-Project format in both soft and hard copies as part of the Project Implementation Strategy document to be submitted along with RFP.
7.	Similar Project Experience of providing consultancy/ designing of State of the Art Laboratory facility for International/National/State/UT Government Depts./ PSUs.  1 Project – 5 Marks 2 Project – 10 Marks		10	
		Total	100	

**Note:** Minimum qualifying Marks in Technical Qualification is 70 out of 100 Marks. Only those applicants securing 70 marks or above may be invited for presentation. Commercial proposal will be opened for only those bidders who will secure 70 marks and above.

## 5 INSTRUCTIONS TO THE BIDDERS

#### 5.1 General

- a) While every effort has been made to provide comprehensive and accurate background Information and requirements and specifications, Bidders must form their own Conclusions about the services required. Bidders and recipients of this TENDER may wish to consult their own legal advisers in relation to this TENDER. Information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by or on behalf of the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) on the basis of this TENDER.
- c) No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB). Any notification of preferred bidder status by the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) shall not give rise to any enforceable rights by the Bidder. The Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB).

### **5.2 Compliant Tenders / Completeness of Response**

- a) Bidders are advised to study all instructions, forms, requirements, appendices and other information in the TENDER documents carefully. Submission of the bid / proposal shall be deemed to have been done after careful study and examination of the TENDER document with full understanding of its implications
- b) Failure to comply with the requirements of this paragraph may render the Proposal non-compliant and the Proposal may be rejected. Bidders must:
- i. Comply with all requirements as set out within this TENDER.
- ii. Include all supporting documentations specified in this TENDER

#### **5.3 Pre-Bid Meeting & Clarifications**

#### 5.3.1 Bidders Queries

- a) Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) shall hold a pre-bid meeting with the prospective bidders on Date, Time and Address mentioned in Fact Sheet of this document.
- b) Two (2) authorized representative of interested organization may attend pre-bid meeting at their own cost after giving prior intimation to Member Secretary, Chhattisgarh Environment Conservation Board, Naya Raipur (CECB).
- c) Pre-bid queries of only those bidders will be responded, who have registered themselves on or before response of pre-bid queries is released.

- d) Bidders are requested to submit the e-mail address and mobile no. of one authorized person for all communications along with the registration.
- e) The Bidders will have to ensure that their queries for Pre-Bid meeting should reach to Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) by email (Excel File only) on or before last date for sending pre-bid queries mentioned in Fact Sheet of this document through the e-mail of only authorized representative of the bidder.
- f) The queries should necessarily be submitted in the following format:

#	TENDER Document Reference(s) (Section & Page Number(s))	Content of TENDER requiring Clarification(s)	Points of Clarification
1			
2			
3			
4			
5			

- g) Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) shall not be responsible for ensuring that the bidder's queries have been received by them. Any requests for clarifications post the indicated date and time may not be entertained by the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB).
- h) Bidders must confirm their participation in advance. The purpose of the meeting is to provide Bidders information regarding the TENDER, project requirements, and opportunity to seek clarification regarding any aspect of the TENDER and the project. However, the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) reserves the right to hold or reschedule the Pre-Bid meeting.

## 5.3.2 Responses to Pre-Bid Queries and Issue of Corrigendum

- a) The Officer notified by the Member Secretary, Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) will endeavour to provide timely response to the queries. However, Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) undertakes to answer all the queries that have been posed by the bidders.
- b) At any time prior to the last date for receipt of bids, Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the TENDER Document by a corrigendum.
- c) The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) website <a href="http://enviscecb.org">http://enviscecb.org</a>.
- d) Any such corrigendum shall be deemed to be incorporated into this TENDER.

e) In order to provide prospective Bidders reasonable time for taking the corrigendum into account, Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) may, at its discretion, extend the last date for the receipt of Proposals.

## 5.4 Key Requirements of the Bid

## 5.4.1 Right to Terminate the Process

- a) Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) may terminate the TENDER process at any time and without assigning any reason. Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) makes no commitments, express or implied, that this process will result in a business transaction with anyone.
- b) This TENDER does not constitute an offer by Chhattisgarh Environment Conservation Board, Naya Raipur (CECB). The bidder's participation in this process may result Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) selecting the bidder to engage towards execution of the contract.

#### 5.4.2 TENDER Fees

Bidder needs to pay Rs. 5,000 to Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) as a Demand Draft in the Name of Member Secretary, Chhattisgarh Environment Conservation Board for document processing.

## 5.4.3 Earnest Money Deposit (EMD)

a) EMD needs to be submitted in Demand Draft/BG:-

EMD may be submitted in Demand Draft in the name of Member Secretary, Chhattisgarh Environment Conservation Board, Naya Raipur (CECB):

1. Original copy of the DD should be submitted to Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) office as per instruction given in Sl. No. 9 of the Fact Sheet (Page 8).

OR

EMD may be submitted in the form of Bank Guarantee (BG) as per format mentioned in the RFP on stamp paper of value required under law duly signed by authorized representative of Bank:

- 1. Original copy of BG should be submitted to Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) office as per instruction given in Sl. No. 9 of the Fact Sheet (Page 8).
- b) EMD of all unsuccessful bidders would be refunded by Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) within 60 Days of the bidder being notified as being unsuccessful.
- c) EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.
- d) The EMD may be forfeited:
  - If a bidder withdraws its bid during the period of bid validity.

• In case of a successful bidder, if the bidder fails to sign the contract in accordance with this TENDER.

## 5.4.4 Authentication of Bids

A Proposal should be accompanied by a power-of-attorney in the name of the signatory of the Proposal as per Form PQ-3 enclosed in Annexure-4 of this TENDER.

#### 5.5 Preparation and Submission of Proposal

#### 5.5.1 Proposal Preparation Costs

The bidder shall be responsible for all costs incurred in connection with participation in the TENDER process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions / presentations, preparation of proposal, in providing any additional information required by Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process. Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### 5.5.2 Language

The Proposal should be filled by the bidders in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the documents, the English translation shall govern.

## 5.6 Evaluation process

- a) Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) will constitute a Tender Evaluation Committee to evaluate the responses of the bidders.
- b) The Proposal Evaluation Committee constituted by the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) shall evaluate the responses to the TENDER and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.
- c) The decision of the Tender Evaluation Committee in the evaluation of responses to the TENDER shall be final. No correspondence will be entertained outside the process of evaluation with the Committee.
- d) The Tender Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their proposals.
- e) The Tender Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations.
- f) Each of the responses shall be evaluated as per the criteria and requirements specified in this TENDER.

## 5.6.1 Tender Opening

Received bids will be opened by the evaluation committee in front of the representative of the Participating bidders however presence of a bidder representative during opening of the bids is not mandatory.

#### 5.6.2 Tender Validity

The offer submitted by the Bidders should be valid for minimum period of 180 days from the date of opening of Tender.

#### 5.6.3 Tender Evaluation

- i) Initial Bid scrutiny will be held and incomplete details as given below will be treated as non-responsive. If Proposals;
  - a. Are not submitted in as specified in the TENDER document.
  - b. Received without the Letter of Authorization (Power of Attorney).
  - c. Are found with suppression of details
  - d. With incomplete information, subjective, conditional offers and partial offers submitted
  - e. Submitted without the documents requested in the checklist
  - f. Have non-compliance of any of the clauses stipulated in the TENDER
  - g. With lesser validity period.
- ii) All responsive Bids will be considered for further processing as below. Tender evaluation Committee will prepare a list of responsive bidders, who comply with all the Terms and Conditions of the Tender. All eligible bids will be considered for further evaluation by a Committee according to the Evaluation process define in this TENDER document. The decision of the Committee will be final in this regard.
  - a. Evaluation committee will examine the bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.
  - b. The Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) may conduct clarification meetings with each or any bidder to discuss any matters, technical or otherwise.
  - c. Further, the scope of the evaluation committee also covers taking any decision with regard to the Tender Document, execution/ implementation of the project including management period.
  - d. Proposal shall be opened in the presence of bidders representatives who intend to attend at their cost. The bidders' representatives who are present shall sign a register giving evidence of their attendance
  - e. Proposal document shall be evaluated as per the following steps.

#### • Preliminary Examination of Pre-qualification/Eligibility Criteria documents:

The Pre-qualification document will be examined to determine whether the bidder meets the eligibility criteria, whether the proposal is complete in all respects, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting the minimum levels of the performance or eligibility criteria specified in various section of this Tender Document will be rejected and will not be considered further.

• Evaluation of document: A detailed evaluation of the bids shall be carried out in order to determine whether the bidders are competent enough and whether the technical aspects are substantially responsive to the requirements set forth in the Tender Document. Bids received would be assigned scores based on the parameters defined in the table below.

All supporting document submitted in support of Eligibility and Technical Evaluation matrix should comply the following:-

- i. All copies of supporting documents to be submitted to Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) in quality print.
- ii. Supporting document should clearly indicate value of the completed project and scope of work/ services should be clearly highlighted.
- iii. Completion certificate should clearly indicate the value and duration of the project.
- iv. In case of Bidder is having Non-Disclosure Agreement (NDA) with their client no such experience will be counted (if agreement copy not submitted).
- v. Incomplete order copy submitted by the bidder will not be considered for evaluation.
- vi. In case of projects where order for recurring /Extension and subsequent order has been placed on the Bidder only the mentioned order value will be considered for evaluation.

Bidders failing to comply any of the above then the Bid will be summarily rejected.

#### **Evaluation of Commercial Bid:**

- a. The commercial bids of only technically successful Bidder(s) whose bids have been awarded 75 or more marks in aggregate by the Committee will be opened. The evaluation will be carried out if Commercial bids are complete and computationally correct. The lowest Commercial proposal will be allotted a Commercial score of 100 marks. The Commercial score of other Bidder(s) will be computed by measuring the respective Commercial bids against the lowest proposal.
- b. The bidder with the Highest Technical Marks will be awarded 100 marks and others bidders will be awarded on a percentile basis (e.g.) if the highest technical mark is 90, the T1 bidder will get (Tm) 100 marks. A bidder awarded 80 marks will get (80/90) x 100=88.88 Marks.

## c. Computing the final ("T1-L1") marks:

The composite score is a weighted average of the Technical and Commercial Scores. The ratio of **Technical and Commercial score is 70:30 respectively**. The composite (T1 - L1) marks will be derived using the following formula:

#### T1 & L1 evaluation

**Technical Marks** (**TM**) = Bidders actual Technical Score (ATS) /Highest Technical Score (HTS)

**Commercial Marks (CM)** = Lowest Commercial Proposal (LCP) / Bidder's Actual Commercial Proposal (ACP)

Composite (T1 – L1) marks = 
$$(TM * 0.70 + CM * 0.30) * 100$$

Thus the composite (T1 - L1) marks shall be out of a maximum of 100 marks. The responsive Bidder(s) will be ranked in descending order according to the composite (T1 - L1) marks, which is calculated based on the above formula. The highest-ranking Bidder as per the composite (T1 - L1) marks will be selected. These evaluation criteria will be weighted by **CECB** management and applied to Bidder responses to determine which Bidder is the Most Preferred Bidder for **CECB**.

#### 5.7 Prequalification and Technical Proposal

## • Prequalification/ Eligibility Criteria

Pre-qualification document as per eligibility criteria specified under Section -3 above along with the following documentations should be submitted in **Envelope A**:

- a. The Earnest Money Deposit
- b. The profile of the bidder along with required certifications that the period of validity of bids is 180 days from the last date of submission of proposal.
- c. Audited annual financial results (balance sheet and profit & loss statement showing business in India) of the bidder for the last three financial years.
- d. Reference list of major clients
- e. Power-of-attorney granting the person signing the proposal the right to bind the bidder as the Constituted attorney of the Directorate'.
- f. A copy of the Tender Document, all pages duly-signed by the authorized signatory towards acceptance of the terms and conditions of the Tender Document.

## • Technical proposal

Technical Proposal Standard Forms shall be used for the preparation of the Technical Proposal. It should consist of the following and submitted in **Envelope B**:

- a. Technical Proposal Submission Form (Ref: Form TECH 1)
- b. Consultant's Organization and Experience (Ref: Form TECH 2 A&B)
- c. Description of Approach, Methodology and Work Plan for Performing the Assignment (Ref: Form TECH-3)
- d. Team Composition and Task Assignments (Ref: Form TECH-4)
- e. Work Schedule (Ref: Form TECH-5)
- f. Documents For Evaluation Along With RFP (Ref: Form TECH-6)
- g. Curriculum Vitae (CV) for Proposed Professional Staff (Ref: Form TECH-7)
- h. All other relevant document for Technical Evaluation

#### • Commercial proposal

i. Form FIN-1: Financial Proposal Submission Form – to be submitted directly to Chhattisgarh Environment Conservation Board in **Envelope** C.

- ii. Form FIN-2: Summary of Costs to be submitted directly to Chhattisgarh Environment Conservation Board in **Envelope C**.
- iii. Form FIN-3: Performance Bank Guarantee at the rate of 10% of the awarded project cost to be submitted within 15 days of issuance of letter of intent notifying the award of the contract in **Envelope D**.

#### 5.8 Modification and withdrawal of Bids

Once the Bid is submitted modification and withdrawal is not permitted.

## **5.9 Proposal Forms**

- i. Wherever a specific form is prescribed in the Proposal document, the Bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the required information.
- ii. For all other cases, the Bidder shall design a form to hold the required information.
- iii. Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) shall not be bound by any printed conditions or provisions in the Bidder's Proposal.

# 5.10 Contacting the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB)

- Any effort by a Bidder to influence the proposal evaluation, proposal comparison or contract award decisions may result in the rejection of the proposal.
- Bidder shall not approach Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) officers after office hours and/or outside Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) office premises, from the time of the proposal opening till the time the Contract is awarded.

## 5.11 Eligibility Criteria

The bidder shall meet the criteria for eligibility mentioned in the Tender document. The bidder must have registration certificate, registration under Labour Laws Contract Act, valid sales tax registration certificate and valid service tax registration certificate, whichever is applicable, for this Tender.

#### **5.12** Tentative Schedule of Events

Tentative schedule of events regarding this tender shall be as per the dates and time given in the Section-2: Fact Sheet.

#### 5.13 Opening of Proposal

First, the Envelope containing Earnest Money Deposit (EMD) will be opened, and if found, that the bidder has furnished all the documents in the prescribed manner, then the second

Envelope containing Technical Proposal will be opened. The commercial proposal would be opened in presence of technically short-listed bidders. The Evaluation Committee or its authorized representative will open the tenders. Sequence of Bid is as follows:

- a. EMD
- b. Technical
- c. Commercial

## **5.14 Deciding Award of Contract**

- i. The Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) reserves the right to ask for a technical elaboration/clarification in the form of a technical presentation from the Bidder on the already submitted Technical Proposal at any point of time before opening the Commercial Proposal. The Bidder shall furnish the required information to Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) and its appointed representative on the date asked for, at no cost to the Chhattisgarh Environment Conservation Board, Naya Raipur (CECB). The Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) may at its discretion, visit the office of the Bidder any-time before the signing of Agreement.
- ii. Chhattisgarh Environment Conservation Board, Naya Raipur (CECB) shall inform those Bidders whose proposals did not meet the eligibility criteria or were considered non-responsive, informing that their Commercial Proposals will be returned unopened after completing the selection process. Chhattisgarh Environment Conservation Board (CECB) shall simultaneously notify those Bidders who qualify for the Evaluation process as described in this Tender Document, informing the date and time set for opening of Commercial Proposals. The notification may be sent by e-mail or fax.
- iii. The bidder's name, the Proposal Price, the total amount of each proposal and other such details as the Tendering Authority may consider appropriate, will be announced and recorded by the Chhattisgarh Environment Conservation Board (CECB) at the opening of bid.
- iv. Chhattisgarh Environment Conservation Board (CECB) shall inform the Bidder whose proposal is accepted via issuance of Letter of Intent (LoI) in duplicate copy. Bidder shall acknowledge the LoI and return the duplicate copy duly sealed and signed, within seven days from the issue of LoI by Chhattisgarh Environment Conservation Board (CECB).
- v. After acceptance of LoI Performance Security shall be deposited as specified in this document for signing an Agreement with Chhattisgarh Environment Conservation Board (CECB).

#### **Special Condition for Awarding the Agreement:**

Chhattisgarh Environment Conservation Board (CECB) will sign the Agreement with Successful Bidder for a period of 8 months for Planning and Designing and for support till the completion of construction of the laboratory.

#### 5.15 Confidentiality

- As used herein, the term —Confidential Information means any information, including information created by or for the other party, whether written or oral, which relates to internal controls, computer or data processing programs, algorithms, electronic data processing applications, routines, subroutines, techniques or systems, or information concerning the business or financial affairs and methods of operation or proposed methods of operation, accounts, transactions, proposed transactions or security procedures of either party or any of its affiliates, or any client of either party, except such information which is in the public domain at the time of its disclosure or thereafter enters the public domain other than as a result of a breach of duty on the part of the party receiving such information. It is the express intent of the parties that all the business process and methods used by the Bidder in rendering the services hereunder are the Confidential Information of the Bidder.
- The Bidder shall keep confidential, any information related to this tender, with the same degree of care as it would treat its own confidential information. The Bidders shall note that the confidential information will be used only for the purposes of this tender and shall not be disclosed to any third party for any reason what so ever.
- At all time of the performance of the services, the Bidder shall abide by all applicable security rules, policies, standards, guidelines and procedures. The Bidder should note that before any of its employees or assignees is given access to the Confidential Information, each such employee and assignees shall agree to be bound by the term of this tender and such rules, policies, standards, guidelines and procedures by its employees or agents.
- The Bidder should not disclose to any other party and keep confidential the terms and conditions of this Contract agreement, any amendment hereof, and any Attachment or Annexure hereof.
- The obligations of confidentiality under this section shall survive rejection of the contract.
- The successful bidder must maintain absolute confidentiality of the documents/maps/tools/data collected in any form including electronic media and any other data/information provided to him or collected during the execution of the work.
- The bidder should not use the Project data for any purpose other than the scope of work specified in the document and added/ amended before signing the contract.
- The Bidder must remove/ destroy the entire data from his custody after completion of the contract period. If at any stage it is found that the bidder is using the data provided by the client any time during the contract execution or after completion of the contract for any other purposes, stringent legal action will be initiated as per applicable law of land and the contract will be terminated without assigning any reasons.
- Bidder shall not disclose to any one, any information marked as confidential and communicated or made available or accessible by the firm during execution of the work.

#### **5.16** Execution of Agreement

After acknowledgement of the LoI by the selected bidder, a performance security of 10% of contract value has to be deposit in the form of FDR/TDR/DD/BG of any nationalized\Scheduled Bank in the name of The Chief Executive Officer, Chhattisgarh Environment Conservation Board (CECB), Raipur, till the completion of the project and shall sign the Agreement with in Twenty one days from the issue of LoI.

#### **5.17 Duration of the contract:**

The CONTRACT shall be valid for a period of 8 months for planning and designing and for support till the completion of construction of the laboratory from the date of signing of Agreement.

#### 5.18 Terms and Conditions: Applicable Post Award of Contract

#### 5.18.1 Termination Clause

#### i) Right to Terminate the Process

Chhattisgarh Environment Conservation Board (CECB) reserves the right to cancel the contract placed on the selected bidder and recover expenditure incurred by Chhattisgarh Environment Conservation Board (CECB) under the following circumstances:-

- The selected bidder commits a breach of any of the terms and conditions of the bid. The bidder goes into liquidation, voluntarily or otherwise.
- An attachment is levied or continues to be levied for a period of seven days upon effects of the bid.
- If the selected bidder fails to complete the assignment as per the time lines prescribed in the TENDER and the extension if any allowed, it will be a breach of contract. The Chhattisgarh Environment Conservation Board (CECB) reserves its right to cancel the order in the event of delay and forfeit the bid security a liquidated damages for the delay.
- If deductions of account of liquidated damages /Penalty exceeds more than 10% of the total contract price.
- In case the selected bidder fails to deliver the services as stipulated in the delivery schedule, Chhattisgarh Environment Conservation Board (CECB) reserves the right to procure the same or similar services from alternate sources at the risk, cost and responsibility of the selected bidder. After award of the contract, if the selected bidder does not perform satisfactorily or delays execution of the contract, Chhattisgarh Environment Conservation Board (CECB) reserves the right to get the balance contract executed by another party of its choice by giving one month notice for the same. In this event, the selected bidder is bound to make good the additional expenditure, which Chhattisgarh Environment Conservation Board (CECB) may have to incur in executing the balance contract. This clause is applicable, if for any reason, the contract is cancelled.

• Chhattisgarh Environment Conservation Board (CECB) reserves the right to recover any dues payable by the selected Bidder from any amount outstanding to the credit of the selected bidder, including the pending bills and/or invoking the bank guarantee under this contract.

## II) Consequences of Termination

- In the event of termination of the Contract due to any cause whatsoever, [whether consequent to the stipulated term of the Contract or otherwise], Chhattisgarh Environment Conservation Board (CECB) shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the Vendor shall be obliged to comply with and take all available steps to minimize loss resulting from the termination/breach, and further allow the next successor Vendor to take over the obligations of the erstwhile Vendor in relation to the execution/continued execution of the scope of the Contract.
- Nothing herein shall restrict the right of Chhattisgarh Environment Conservation Board (CECB) to invoke the Chhattisgarh Environment Conservation Board (CECB) Guarantee and other guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available Chhattisgarh Environment Conservation Board (CECB) under law or otherwise.
- The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

#### **5.18.2** *Penalty*

The Bidder shall perform its obligations under the agreement entered into with the Chhattisgarh Environment Conservation Board (CECB), in a professional manner. In the event of failure to maintain the SLAs, penalty would be levied up to a maximum of 10% of the total cost.

Chhattisgarh Environment Conservation Board (CECB) may recover such amount of penalty from any payment being released to the Bidder, irrespective of the fact whether such payment is relating to this contract or otherwise.

If any act or failure by the bidder under the agreement results in failure or inoperability of systems and if the Chhattisgarh Environment Conservation Board (CECB) has to take corrective actions to ensure functionality of its property, the Chhattisgarh Environment Conservation Board (CECB) reserves the right to impose penalty, which may be equal to the cost it incurs or the loss it suffers for such failures.

- Chhattisgarh Environment Conservation Board (CECB) may impose penalty to the extent of damage to its any equipment, if the damage was due to the actions directly attributable to the staff of Bidder.
- The Chhattisgarh Environment Conservation Board (CECB) shall implement all penalty clauses after giving due notice to the bidder.
- If the Bidder fails to complete the due performance of the contract in accordance with the specification and conditions of the offer document, the Chhattisgarh Environment Conservation Board (CECB) reserves the right either to cancel the order or to recover a suitable amount as deemed reasonable as Penalty / Liquidated Damage for non-performance.

#### 5.18.3 Dispute Resolution Mechanism

The Bidder and the Chhattisgarh Environment Conservation Board (CECB) shall endeavour their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:

- a. The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within seven (7) days of receipt of the notice.
- b. Matter will be referred for negotiation between Officer nominated by Chhattisgarh Environment Conservation Board (CECB) and the Authorized Official of the Bidder. The matter shall then be resolved between them and the agreed course of action documented within a further period of 15days.

In case any dispute between the Parties, does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in Raipur and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.

The Arbitration Notice should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within 45 days from receipt of the notice. All notices by one party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document.

Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides. The Bidder shall not be entitled to suspend the Service/s or the completion of the job, pending resolution of any dispute between the Parties and shall continue to render the Service/s in accordance with the provisions of the Contract/Agreement notwithstanding the existence of any dispute between the Parties or the subsistence of any arbitration or other proceedings.

#### **5.18.4** *Notices*

Any notice given by one party to the other pursuant to this contract shall be sent to the other party in writing, e-mail or Facsimile. A notice shall be effective when delivered or tendered to other party whichever is earlier.

#### 5.18.5 Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or Chhattisgarh Environment Conservation Board (CECB) as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

- Natural phenomenon, including but not limited to floods, droughts, earthquakes and epidemics.
- Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos.
- Terrorist attack, public unrest in work area provided either party shall within 10 days from occurrence of such a cause, notifies the other in writing of such causes. The bidder or Chhattisgarh Environment Conservation Board (CECB) shall not be liable for delay in performing his/her obligations resulting from any force majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions relating to indemnity, confidentiality survive termination of the contract.

#### 5.18.6 Failure to agree with Terms and Conditions of the TENDER

Failure of the successful bidder to agree with the Terms & Conditions of the TENDER shall constitute sufficient grounds for the annulment of the award, in which event Chhattisgarh Environment Conservation Board (CECB) may award the contract to the next best value bidder or call for new proposals from the interested bidders or invoke the PBG of the most responsive bidder.

#### 5.18.7 Limitation of Liability

Limitation of liability shall be as per applicable law. The aggregate liability of the supplier/selected bidder to the Purchaser, whether under the Contract, in tort, or otherwise, shall not exceed the amount specified in the Contract.

## 5.19 Service Level Agreement (SLA)

Penalties shall not be levied on the successful bidder in the event of force Majeure affecting the SLA which is beyond the control of the successful bidder. The following is the table providing the indicative SLA for the project:

Sl. No.	SLA Description	Criteria
1	On Approval of Final Conceptual layout,	Within 60 days from the date
	Draft Building plans, Sections Block cost	of placement of Work
	Estimate and Presentation (incl. 3D plans)	order/Agreement by
		Chhattisgarh Environment
		Conservation Board (CECB)
2	Approval of Civil and Structural Detailed	Within 120 days from the
	Design	date of placement of Work

r				
		order/Agreement by Chhattisgarh Environment		
		Conservation Board (CECB)		
3	Approval of MEP and Utilities Detailed	Within 150 days from the		
	Design	date of placement of Work		
		order/Agreement by		
		Chhattisgarh Environment		
		Conservation Board (CECB)		
4	Approval of Interior Design and Work-	Within 210 days from the		
	Stations	date of placement of Work		
		order/Agreement by		
		Chhattisgarh Environment		
		Conservation Board (CECB)		
5	<b>Development of tender document for</b>	Within 240 days from the		
	Construction with detailed specifications, Bill	date of placement of Work		
	of Quantities and Cost Estimates	order/Agreement by		
		Chhattisgarh Environment		
		Conservation Board (CECB)		
6	Periodic Supervision	(24+1) months from the date		
	(24months for execution and one month for	of award of contract for		
	submitting completion Report and drawings,	construction/execution of		
	issuance of completion / occupancy	work.		
	certificate.)			

#### 5.20 Right of Monitoring, Inspection and Periodic Audit

The Chhattisgarh Environment Conservation Board (CECB) reserves the right to inspect and monitor / assess the progress / performance at any time during the course of the Contract, after providing due notice to the Selected Bidder. The Chhattisgarh Environment Conservation Board (CECB) may demand, and upon such demand being made, the selected bidder shall provide with any document, data, material or any other information required to assess the progress of the project.

The Chhattisgarh Environment Conservation Board (CECB) shall also have the right to conduct, either itself or through any another agency as it may deem fit, an audit to monitor the performance by the Selected Bidder of its obligations/functions in accordance with the standards committed to or required by the Chhattisgarh Environment Conservation Board (CECB) and the Selected Bidder undertakes to cooperate with and provide to the Chhattisgarh Environment Conservation Board (CECB) / any other Consultant/ Agency appointed by the Chhattisgarh Environment Conservation Board (CECB), all documents and other details as may be required by them for this purpose. Any deviations or contravention identified as a result of such audit/assessment would need to be rectified by the Selected Bidder failing which the Chhattisgarh Environment Conservation Board (CECB) may, without prejudice to any other rights that it may have, issue a notice of default.

#### 5.21 Chhattisgarh Environment Conservation Board (CECB)'s Obligations

The Chhattisgarh Environment Conservation Board (CECB) representative shall interface with the Selected Bidder, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract. Chhattisgarh Environment Conservation Board (CECB) shall:

- Ensure that timely approval is provided to the selected Bidder, where deemed necessary, which should include diagram / plans and all specifications related to services required to be provided as part of the Scope of Work.
- Facilitate the successful bidder by way of providing land for the facility. Details of the land allocated for the facility is attached in Annexure 3.
- Facilitate the successful bidder in getting all necessary approvals from concerned departments for implementation of the Project

## **5.22 Information Security**

The Selected Bidder shall not carry and/or transmit any material, information, layouts, diagrams, data, storage media or any other goods/material in physical or electronic form, which are proprietary to or owned by the Chhattisgarh Environment Conservation Board (CECB), out of premises, without prior written permission from the Chhattisgarh Environment Conservation Board (CECB).

The Selected Bidder shall, upon termination of this agreement for any reason, or upon demand by Chhattisgarh Environment Conservation Board (CECB), whichever is earliest, return any and all information provided to the Selected Bidder by Chhattisgarh Environment Conservation Board (CECB), including any copies or reproductions, both hard copy and electronic.

#### 5.23 Indemnity

The Selected Bidder shall execute and furnish to the CECB, a Deed of Indemnity in favour of the Chhattisgarh Environment Conservation Board (CECB), in a form and manner acceptable to CECB, indemnifying Chhattisgarh Environment Conservation Board (CECB) from and against any costs, losses, damages, expenses, claims including those from third parties owing infringement or misappropriation of a patent, copyright, trademark and trade secret, arising or incurred inter- alia during and after the Contract period arising out of:

- Negligence or wrongful act or omission in connection with or incidental to this Contract; or
- Any breach of any of the terms the Selected Bidder's Proposal as agreed, the Tender and this Contract by the Selected Bidder or its team.

The indemnity shall be to the extent of 100% of project cost in favour of the Chhattisgarh Environment Conservation Board (CECB).

## 5.24 Milestone, Timeline and Payment Schedule

## 5.24.1 Total Cost of Services

The total cost of the Services payable is set forth as per the successful bidder proposal to Chhattisgarh Environment Conservation Board (CECB) and as negotiated thereafter and issuance of work order/Agreement. Payments under this Contract shall not exceed the amount specified in Commercial proposal.

# 5.24.2 Payment Milestones and Timeline

#	Milestone	Timeline (with reference to Project Award Date)	% of Payment	Basis of Approval			
A	Comprehensive campus layout plan, Architectural services, Planning, designing, preparation of DPR for Buildings and periodic supervision						
1	On Approval of Final Conceptual layout, Draft Building plans, Sections Block cost Estimate and Presentation (incl. 3D plans)	Within 60 Days	10%	Sign-off on Concept Design by CECB			
2	Approval of Civil and Structural Detailed Design	Within 120 Days	10%	Sign-off on Detailed Design by CECB			
3	Approval of MEP and Utilities Detailed Design	Within 150 Days	10%	Sign-off on Detailed Design by CECB			
4	Approval of Final campus layout & Building plans, all working drawings for civil work, Service Drawings, Landscape, hard scape and Interior Drawings	Within 180 Days	10%	Sign-off by CECB			
5	Development of tender document for Construction with detailed specifications, bill of quantities and cost estimate	Within 240 Days	10%	Issue of RFP for Construction by CECB			
6	Periodic Supervision						
i)	Issue of Work order to the contractor for Construction/ Execution	18 months after Issue	10%				
ii)	After completion of 20% of the work	of Work order to the	6%				
iii)	After completion of 40% of the work	contractor for	6%				
iv)	After completion of 60% of the work	Construction/	6%				
v)	After completion of 80% of the work	Execution	6%				
vi)	After completion of 100% of the work		6%				
vii)	On submitting Completion Report and Drawings and Issuance of completion /occupancy certificate	1 month after completion of construction	10%	Receipt of completion /occupancy certificate			
	100% Amount, equal to 80% of the value of Contract						

#	Milestone	Timeline (with reference to Project Award Date)	% of Payment	Basis of Approval		
В	Comprehensive Architectural services for Planning, designing, preparation of DPR for interiors and Furnitures for the buildings and its periodic supervision					
1	On submission of Draft conceptual plan, Block Estimate of cost and Presentation	Within 60 Days	10%	Sign-off on Concept Design by CECB		
2	On Approval of Final Conceptual layout, Draft interior and furniture plans, Sections Block cost Estimate and Presentation	Within 120 Days	10%	Sign-off on Detailed Design by CECB		
3	Approval of Final plans, all working drawings for furniture, Services Drawings, and Interior Drawings	Within 210 Days	10%	Sign-off on Detailed Design by CECB		
4	On Approval of detailed cost estimates, Rate analysis, GFC drawings, specifications and Tender Documents and deployment of support staff at Raipur	Within 240 Days	20%	Sign-off on Detailed Design by CECB		
5	Periodic Supervision					
i)	Issue of Work order to the contractor for Construction/ Execution	18 months after Issue	10%			
ii)	After completion of 20% of the work	of Work order to the	6%			
iii)	After completion of 40% of the work	contractor for	6%			
iv)	After completion of 60% of the work	Construction/ Execution	6% 6%			
v) vi)	After completion of 80% of the work  After completion of 100% of the work		6%			
vii)	On submitting Completion Report and Drawings and Issuance of completion /occupancy certificate	1 month after completion of construction	10%	Receipt of completion /occupancy certificate		
100% Amount, equal to 20% of the value of Contract						

- a. All payments will be made in INR only.
- b. No advance will be paid or no letter of credit will be issued.
- c. The payment will be subject to fulfilment of delivery obligations.
- d. The Duties and Taxes as applicable at the time of supply within the Delivery Schedule specified in the Tender will be paid.
- e. In case, the Duties and/or Taxes have been reduced retrospectively, the successful bidder is liable to return the same.
- f. The Successful Bidder will have full and exclusive liability for payment of all Duties, Taxes and other statutory payments payable under any or all of the Statutes/Laws/Acts etc. now or hereafter imposed.
- g. Payment shall be made within 30 days of the submission of invoices.

#### 5.25 Events of Default by the Selected Bidder

The failure on the part of the Selected Bidder to perform any of its obligations or comply with any of the terms of this contract shall constitute an Event of Default on the part of the Selected Bidder. The events of default as mentioned above may include inter-alia the following:

- The Selected Bidder has failed to perform any instructions or directives issued by the Chhattisgarh Environment Conservation Board (CECB) which it deems proper and necessary to execute the scope of work under the Contract, or
- The Selected Bidder has failed to adhere to any of the key performance indicators as laid down in the Service Level Agreement / Contract, or if the Selected Bidder has fallen short of matching such standards/targets as Chhattisgarh Environment Conservation Board (CECB) may have designated with respect to any task necessary for the execution of the scope of work under this Contract. The above mentioned failure on the part of the Selected Bidder may be in terms of failure to adhere to timelines, specifications, requirements or any other criteria as defined by Chhattisgarh Environment Conservation Board (CECB);
- The Selected Bidder has failed to remedy a failure to perform its obligations in accordance with the specifications issued by the Chhattisgarh Environment Conservation Board (CECB), despite being served with a default notice which laid down the specific deviance on the part of the selected Bidder to comply with any stipulations or standards as laid down by the Chhattisgarh Environment Conservation Board (CECB); or
- The Selected Bidder / Bidder's Team has failed to conform to any of the Service/Facility Specifications/standards as set out in the scope of work of this Tender document or has failed to adhere to any amended direction, modification or clarification as issued by the Chhattisgarh Environment Conservation Board (CECB) during the term of this Contract and which the Chhattisgarh Environment Conservation Board (CECB) deems proper and necessary for the execution of the scope of work under this Contract;
- The Selected Bidder has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Proposal, the Tender and this Contract
- There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to the Selected Bidder.
- The Selected Bidder / Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws.
- Where there has been an occurrence of such defaults inter alia as stated above, the Chhattisgarh Environment Conservation Board (CECB) shall issue a notice of default to the Selected Bidder, setting out specific defaults / deviances / omissions and providing a notice of Sixty days to enable such defaulting party to remedy the default committed.

• Where despite the issuance of a default notice to the Selected Bidder by the Chhattisgarh Environment Conservation Board (CECB) and the Selected Bidder fails to remedy the default to the satisfaction of the Chhattisgarh Environment Conservation Board (CECB), the Chhattisgarh Environment Conservation Board (CECB) may, where it deems fit, issue to the defaulting party another default notice or proceed to adopt such remedies as may be available to the Chhattisgarh Environment Conservation Board (CECB).

## **5.26** Liquidated Damages

Subject to clause for Force Majeure, if the bidder fails to complete the services under Project scope of work before the scheduled completion date or the extended date or if the Selected Bidder repudiates the contract before completion of the work, the Chhattisgarh Environment Conservation Board (CECB), at its discretion, may without prejudice to any other right or remedy available to it under the contract, recover a maximum of 10 percent of the project cost from the Selected Bidder, as Liquidated Damages (LD).

In case it leads to termination, Chhattisgarh Environment Conservation Board (CECB) shall give thirty days' notice to the Selected Bidder of its intention to terminate the contract and shall so terminate the contract unless during the thirty days' notice period, the Selected Bidder initiates remedial action acceptable to the Chhattisgarh Environment Conservation Board (CECB).

The Chhattisgarh Environment Conservation Board (CECB) may without prejudice to its right to affect recovery by any other Method, deduct the amount of liquidated damages from any money belonging to the Selected Bidder in its hands (which includes the Chhattisgarh Environment Conservation Board (CECB) right to claim such amount against Selected Bidder's Bank Guarantee) or which may become due to the Selected Bidder. Any such recovery or liquidated damages shall not in any way relieve the Selected Bidder from any of its obligations to complete the work or from any other obligations and liabilities under the Contract.

#### **5.27** Continuance of the Contract:

Notwithstanding the fact that settlement of dispute(s) (if any) under arbitration may be pending, the parties hereto shall continue to be governed by and perform the work in accordance with the provisions under the Scope of Work to ensure continuity of operations.

#### **5.28** Conflict of interest

The Bidder shall disclose to Chhattisgarh Environment Conservation Board (CECB) in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for the Vendor the Bidders team) in the course of performing the Service(s) as soon as practical after it becomes aware of that conflict.

#### 5.29 Severance

In the event any provision of the Contract is held to be invalid or unenforceable under the applicable law, the remaining provisions of this Contract shall remain in full force and effect.

# **5.30** Governing Language

The Agreement shall be written in English language. Subject to below Clause, such language versions of the Agreement shall govern its interpretation. All correspondence and other documents pertaining to the Contract that are exchanged by parties shall be written in English language only.

## 5.31 "No Claim" Certificate

The Selected Bidder shall not be entitled to make any claim, whatsoever against Chhattisgarh Environment Conservation Board (CECB), under or by virtue of or arising out of, the contract, nor shall Chhattisgarh Environment Conservation Board (CECB) entertain or consider any such claim, if made by the Selected Bidder after it has signed a —No claim certificate in favour of Chhattisgarh Environment Conservation Board (CECB) in such form as shall be required by it after the work is finally accepted.

# 5.32 Publicity

The Selected Bidder shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the Chhattisgarh Environment Conservation Board (CECB) first gives its written consent to the selected bidder.

## 5.33 GENERAL

## ➤ Relationship between the Parties

- Nothing in the Contract constitutes any fiduciary relationship between the Chhattisgarh Environment Conservation Board (CECB) and Selected Bidder/ Bidder's Team or any relationship of employer employee, principal and agent, or partnership, between the Chhattisgarh Environment Conservation Board (CECB) and Selected Bidder.
- No Party has any authority to bind the other Party in any manner whatsoever except as agreed under the terms of the Contract.
- Chhattisgarh Environment Conservation Board (CECB) will not be under any obligation to the Implementation Agency's Team except as agreed under the terms of the Contract.

## No Assignment

• The Selected Bidder shall not transfer any interest, right, benefit or obligation under the contract without the prior written consent of Chhattisgarh Environment Conservation Board (CECB).

#### Survival

• The provisions of the clauses of the Contract in relation to documents, data, processes, property, Intellectual Property Rights, indemnity, publicity and confidentiality and ownership survive the expiry or termination of this Contract and in relation to confidentiality, the obligations continue to apply unless Chhattisgarh Environment Conservation Board (CECB) notifies the Selected Bidder of its release from those obligations.

#### **▶** Entire Contract

• The terms and conditions laid down in the Tender and all annexure thereto as also the Proposal and any attachments/annexes thereto shall be read inconsonance with and form an integral part of the Contract. The Contract supersedes any prior contract, understanding or representation of the Parties on the subject matter.

# ➤ Governing Law

- This contract shall be governed in accordance with the laws of India.
- Jurisdiction of Courts
  - The High Court bench at Bilaspur, Chhattisgarh has exclusive jurisdiction to determine any proceeding in relation to the Contract.

#### Compliance with Laws

The Selected Bidder shall comply with the laws in force in India in the course of performing the Contract.

#### Notices

#### A —notice means:

- a notice; or
- A consent, approval or other communication required to be in writing under the Contract. All notices, requests or consent provided for or permitted to be given under this Contract shall be in writing and shall be deemed effectively given when personally delivered or mailed by pre-paid certified/registered mail, return receipt requested, addressed as follows and shall be deemed received two days after mailing or on the date of delivery if personally delivered:

To.

Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Paryavas Bhavan, North Block Sector-19, Naya Raipur (C.G.) 492002 E-mail: hocecb@gmail.com

To Selected Bidder at:

Attn:

Address:

[Phone:] [Fax:]

Any Party may change the address to which notices are to be directed, by giving a notice to the other party in the manner specified above. A notice served on a Representative is taken to be notice to that Representative's Party.

#### Waiver

- Any waiver of any provision of this Contract is ineffective unless it is in writing and signed by the Party waiving its rights.
- A waiver by either Party in respect of a breach of a provision of this Contract by the other Party is not a waiver in respect of any other breach of that or any other provision.
- The failure of either Party to enforce at any time any of the provisions of this Contract shall not be interpreted as a waiver of such provision.

#### Modification

• Any modification of the Contract shall be in writing and signed by an authorized representative of each Party.

#### > Taxes

- Bidders are required to quote the charges inclusive of all Taxes. The same would be shown as a separate line item in the commercial form.
- Any upward/downward revision of taxes shall be applicable at the time of invoicing. However, to arrive at the bid value of the respective bidder, biddr has to quote the charges inclusive of all taxes mentioning the prevailing tax rates.

# > Application

• These General Conditions shall apply to the extent that provisions in other parts of the Contract do not supersede them.

## **5.34 Fraud and Corrupt Practices**

• The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this TENDER, the Chhattisgarh Environment Conservation Board (CECB) shall reject a Proposal without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the —Prohibited Practices) in the Selection Process. In such an event, the Chhattisgarh Environment Conservation Board (CECB) shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, time, cost and effort of the Authority,

in regard to the TENDER, including consideration and evaluation of such Bidder s Proposal.

- Without prejudice to the rights of the Chhattisgarh Environment Conservation Board (CECB) under Clause above and the rights and remedies which the Chhattisgarh Environment Conservation Board (CECB) may have under the LoI or the Agreement, if an Bidder or Systems Implementation Agency, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LoI or theexecution of the Agreement, such Bidder shall not be eligible to participate in any tender or TENDER issued by the Chhattisgarh Environment Conservation Board (CECB) during a period of 2(two) years from the date such Bidder, as the case may be, is found by the Chhattisgarh Environment Conservation Board (CECB)to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, asthe case may be.
- For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them.

#### > "Corrupt practice" means

- i. the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process(for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Chhattisgarh Environment Conservation Board (CECB) who is or has been associated in any manner, directly or indirectly with the Selection Process or the LoI or has dealt with matters concerning the Agreement or arising therefrom, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Chhattisgarh Environment Conservation Board (CECB), shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or
- ii. save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LoI or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LoI or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of the Chhattisgarh Environment Conservation Board (CECB) in relation to any matter concerning the Project;
- **"fraudulent practice" means** a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;
- ➤ —Coercive practice means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person participation or action in the Selection Process;

# > "undesirable practice" means

- i. establishing contact with any person connected with or employed or engaged by Chhattisgarh Environment Conservation Board (CECB) with the objective of canvassing,
- ii. lobbying or in any manner influencing or attempting to influence the Selection Process; or
- iii. having a Conflict of Interest; and
- ➤ "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating afull and fair competition in the Selection Process.

## > Arbitration

Chhattisgarh Environment Conservation Board (CECB) and the selected bidder shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract. If, after thirty (30) days from the commencement of such informal negotiations, Chhattisgarh Environment Conservation Board (CECB) and the selected Bidder have been unable to amicably resolve the dispute, either party may require that the dispute be referred for resolution to Secretary, Government of Chhattisgarh, Department of Housing and Environment, as single party Arbitrator in accordance with the Arbitration and Conciliation Act, 1996. Decision of arbitrator shall be final and binding to all parties. All Arbitration proceedings shall be held at Raipur, Chhattisgarh, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.

# **5.35** Terms of Payment

The Successful Bidder shall bear their own costs of any Site Survey, Conveyance, audits and inspections etc. The terms of payment are inclusive of any costs of the solution.

#### 5.36 Obligations

The Successful Bidder shall be obliged to implement any proposed changes once approval in accordance with Article above has been given, with effect from the date agreed for implementation.

#### 5.37 Award of Contract

The proposals will be ranked in terms of the Overall Scores obtained from Highest to Lowest. The bidder with the highest overall score will be considered for award of contract.

#### 5.38 Notification of Award

Prior to expiration of the period of bid validity, Chhattisgarh Environment Conservation Board (CECB) will notify the successful bidder(s) in writing, that their bid has been accepted.

#### 6 FUNCTIONS OF THE PROPOSED LABORATORY

#### **6.1 Testing Parameters in Proposed Laboratory**

The scope of this laboratory should at least include the parameters regulated under:

The Water (Prevention and Control of Pollution) Act, 1974 and its amendments, rules and notifications

The Air (Prevention and Control of Pollution) Act 1981 and its amendments, rules and notifications

The Environment (Protection) Act, 1986 and its amendments, rules and notifications

The detailed list of parameters to be analysed by this laboratory is presented in Annexure 1.

# 6.2 Mobile Laboratory for Compliance Assessment and Environmental Disaster Response

The proposed facility should have a mobile laboratory that will have provisions for collection of all types of samples and conduct in-situ analysis for routine parameters for compliance assessment. This mobile laboratory should be fitted with complete range of meteorological sensors to collect data and predict potential impact zones based on on-board dispersion models.

# 6.3 Research and Development Support for Sustainable Environment

The proposed facility should have space and infrastructure to install pilot plants for research and development related to Sustainable Environment. Since the requirements might vary depending on the specific need, infrastructure to be provided for this purpose will be basic and should be extendable in terms of coverage and function.

#### 7 SCOPE OF THE TENDER

CECB desires to develop a "Central Laboratory at Naya Raipur" along with necessary infrastructure facilities. The broad scope of work also includes:

- a. Preparation of Laboratory layout Planning integrating with the existing built-up areas infrastructure, urban and landscape design, Architectural Design (Site Layout, Building layout plan, Building design, structural design, service design and preparation of working drawings) including preparation of cost estimates, bills of quantities, obtaining the statutory approval, assistance to Project Management Consultants (PMC) in framing the tender document for project execution and periodic site supervision of project.
- b. Preparation of Comprehensive Architectural services for planning, designing, preparation of Detailed Project Report (DPR) for interiors and furniture's and periodic supervision.

The design and drawings prepared by the Consultant will be vetted and approved (proof checked) by NIT Raipur/ IIT or any other institute as approved by CECB.

#### 7.1 Proposed Buildings and allied infrastructures

CECB has been allocated about 6000sqm space in Sector 13, The campus shall be developed with reference to the approved master plan with phase 1 development of about 2325sqm of built-

up space. The built-up area may vary Plus / minus 10% ( Ten Percent) However the consultant shall plan the campus and allied facilities for the complete FAR.

The building shall be proposed with additional facilities with;

- 1. 5 star as per GRIHA rating criteria or equivalent
- 2. Minimum 20nos. of Office seating space
- 3. Minimum 30 seater Conference Room.
- 4. Recreational space,
- 5. Canteen

This proposed scope is tentative and detailed area shall be finalized along with the approval of concept plan by the authority.

#### **Facilities:**

- 1. HVAC systems
- 2. Fire Alarm & Fire fighting systems
- 3. BMS systems
- 4. CCTVs
- 5. Electrification (Internal & External) works with ECBC Compliant, Lift, DG system, UPS,LAN and IT works,
- 6. Complete Interiors and furnishings

#### **Allied Infrastructures**

- a) The design is to include not only the layout of the buildings and their facilities but also the associated infrastructure like
  - Gated complex with Boundary wall,
  - Approach road and Internal road network
  - Utilities
  - Water supply, sewerage and drainage system
  - Landscape
  - Signage
  - Rain water harvesting, and
  - Solid waste management system
- b) These requirements also need suitable support facilities like the computer center, stores, utility buildings, maintenance stores etc.
- c) It is desired to utilize the land required for above purposes judiciously and allocate sensibly the remaining for future development and growth. After fulfilling the current space requirements, the rest land area is to be kept vacant, and open for:
  - Intense greening,
  - Generating and developing rain water channels which will initiate the ground water recharge efforts in this area,
  - Kept reserved for future growth and development of the campus as the needs change.

The list of minimum infrastructure and facilities is presented in Annexure 2 of the RFP.

# 7.2 Comprehensive Laboratory Planning Architectural services for the Buildings and other structures and periodic supervision

The broad scope of services shall include but not limited to the following:

1. Overall design of the full site in the form of outer block design, elevations and 3D forms and total parking requirement with clear cut identification of the area

- 2. Preparation of comprehensive Architectural Design for the development (Site Layout, Building layout Plan, building design, structural design, service design and preparation of working drawings)
- 3. Obtaining the statutory approvals and other required clearances
- 4. Preparation of detailed cost estimates, Rate analysis and all working drawings good for construction
- 5. Preparation of BOQs, specifications & Drawing
- 6. Periodic supervision and coordination with CECB, Proof Checking Organisation, PMC and contractor

# 7.3 Comprehensive Architectural services for Planning designing, preparation of DPR for interiors and Furniture and periodic supervision

The broad scope of services shall include but not limited to the following:

- 1. Overall Furniture and Interior design of the building and structures in the form of outer block design, elevations and 3D forms with clear cut identification of the area for the development
- 2. Preparation of comprehensive Architectural Design for the full phase of development (Site Layout, Furniture layout Plan, Furniture and Interior design, structural design, service design and preparation of working drawings) for Furnishing of buildings
- 3. Obtaining the statutory approvals and other required clearances
- 4. Preparation of detailed cost estimates, Rate analysis and all working drawings good for construction
- 5. Preparation of BOQs, specifications & Drawings
- 6. Periodic supervision and coordination with CECB, Proof Checking Organisation, PMC and contractor

# **Detailed Scope**

# A. Comprehensive Laboratory Planning , Architectural services for the Buildings and other structures and periodic supervision

Preparation of comprehensive Campus layout Planning, Architectural design (Site Layout, Building layout Plan, building design, structural design, service design and preparation of working drawings) including preparation of detailed cost estimates, specifications, rate analysis and Bill of quantities.

## Stage 1: Conceptual design and cost

The consultant shall:

1. Prepare a design brief after taking into consideration the Client's requirements and discussion with concerned departments for detail building uses, activities, functional relationship, space requirement and site Planning.

- 2. Study of Development plan, Urban Design Guidelines, GDCR of Naya Raipur, Bhoomi Vikas Niyam of Chhattisgarh and study of local Architecture of Chhattisgarh.
- 3. Conduct detailed site survey identifying physical features and contours, detailed Site Evaluation, Geo technical survey, Site analysis/opportunities and constraints study, analysis of architectural character, connectivity, social issues and heritage.
- 4. Prepare Conceptual plan of landscape, building foot print (including water harvesting and other site measures) and location of utilities
- 5. Study and incorporate Architectural controls/guidelines/regulations for proposed building based on the Master Plan and Urban Design Guidelines for Naya Raipur city
- 6. Prepare a report for of concept design containing all the above clearly bringing out the design thought process and comparison of options.
- 7. Submit the draft conceptual layout, estimate of cost and the report as described under sub para 1 to 7 above.

# **Deliverables (5 Sets)**

a) hard copies and soft copies (editable format in CD ROM) of conceptual design

## Stage 2: Draft Building Plans and cost of estimate

The consultant shall:

- 1. Make a presentation of the conceptual layout and take into consideration any change, modification if required
- 2. Prepare the draft conceptual layout with cost estimate incorporating desired changes for approval of the CECB
- 3. Submit final layout after incorporating changes, if any, by CECB
- 4. Prepare draft Building Plans, Elevation and sections and cost of estimate and submit for approval and make presentation
- 5. Submit a design basis report for structural design
- 6. Submit a design basis report for all the services.

#### **Deliverables (5 Sets)**

Hard copies and soft copies (editable format in CD ROM) of Final conceptual design

A In the form of Plans, elevations, sections etc. in suitable scale

B 3d Forms study by giving 3D views of final design, detail model at suitable scale & Walkthrough of premium HD quality showing different portions, entrances, parking area, different types of activities, features and movements in each room as per instruction of Client.

C any relevant details supporting the concepts

D broad cost estimates for overall building and Landscape

- a) hard copies and soft copies (editable format in CD ROM) of draft Building plans, elevation and sections
- b) hard copies and soft copies (editable format in CD ROM) of Design Basis report for Structural design and services.

# Stage 3: Preparation of structural designs and working drawing for civil works, all services, Landscape and interior design

The consultant shall:

- 1. Prepare the draft final building plan, elevations, sections and cost of estimate incorporating desired changes for approval for CECB.
- 2. Submit final Building plan after incorporating changes if any for approval of CECB as required
- 3. Assist CECB after approval of Final building plan in obtaining approval and clearances from various authorities as required
- 4. Prepare structural design and working drawings required for execution of all civil works for building and site development and submit for approval.
- 5. The Structural Design and Drawings are to be vetted and got approved (Proof Checked) from NIT Raipur / IIT or any other institute as approved by CECB.
- 6. Fee for proof checking of the structural designs and drawings shall be paid by CECB however, the liasoning and reiteration in designs/drawings, if needed, shall be done by the Consultant at his own cost.
- 7. Modify the structural designs and working drawings based on the comments of proof checking agency appointed by CECB and resubmit for approval.
- 8. Preparation of Working drawings for all services, Landscape and interior design, covering:
- · Electrical and telecom design
- Public Health Engineering services covering the following systems:
- i. Water Supply
- ii. Sanitation and drainage
- iii. Water treatment—recycle and reuse options
- iv. Solid waste Management system
- · Design and working drawings covering.
- i. Fire Protection System
- HVAC Engineering covering all heating, ventilation and air-conditioning system Design Proposal systems and working drawings covering.
- i. Building automation system
- ii. Lifts system

- 9. Prepare Design and working drawings for internal and external Landscape.
- 10. Prepare general furniture layout for all the built up areas and allocated spaces
- 11. Prepare Interior Design and working drawings for all the built-up areas and common spaces such as entrance plaza, lobby areas, conferences, meeting rooms etc in the form of false ceiling, flooring, acoustics, illumination, painting, wall textures, finishes and furniture's design.
- 12. Submit the working drawings for all services, landscape, interiors to the CECB for approval
- 13. Modify the working drawing based on the comments and resubmit to CECB for approval

Prepare detail cost estimate, Bill of quantities and rate analysis on the basis of local DSR/Market rates based on the final design and working drawings and submit to CECB for approval after finalization of working drawings.

#### **Deliverables (5 Sets)**

- a) hard copies and soft copies (editable format in CD ROM) of Final Building plans, elevation and sections
- b) hard copies and soft copies (editable format in CD ROM) of Structural designs and working drawings for civil works
- c) hard copies and soft copies (editable format in CD ROM) of working drawings of services, landscape and interiors
- d) hard copies and soft copies (editable format in CD ROM) of detail cost estimates, Bill of Quantities and rate analysis

#### Stage 4: Finalization of detail cost estimates, rate analysis and Bill of Quantities

The consultant shall:

- 1. Modify detail cost estimates, rate analysis and Bill of quantities based on the comments of CECB and resubmit for approval
- 2. On approval of detail cost estimate, rate analysis and Bill of quantities Provide inputs and clarification to PMC for finalizing tender documents including code of practice covering aspects like mode of measurement, method of payments, quality control procedures on materials & works and other General and Special conditions of contract. (Main responsibility of preparing tender documents will be with PMC)
- 3. Assist CECB and PMC in the Selection process management for the appointment of Contractor.
- 4. Obtaining all statutory approvals from Local Authority and the government

#### **Deliverables (5 Sets)**

Hard copies and soft copies (editable format in CD ROM) of detailed cost estimates, rate analysis and Bill of quantities, specification, all working drawings and special conditions of contract.

#### Stage 5: Issue of all Working drawings

The consultant shall:

1. Modify all the working drawings (GFC, Structural, utilities landscape, services and interiors) and issue for construction based on the comments of CECB.

Deliverables (5 Sets)

hard copies and soft copies (editable format in CD ROM) of working drawings of all the works such as GFC, Structural, utilities landscape, services and interiors.

#### Stage 6: Supervision during construction phase

The technical consultant shall:

- 1. Coordinate with PMC and provide clarification on any details required by the Authority and PMC.
- 2. Review the shop drawings prepared by contractor for construction on site and give timely approval.
- 3. Attend periodic site meetings and work progress review meetings as requested by PMC and CECB.
- 4. At least 24 Visit to the site of work, at intervals, to inspect and evaluate the construction works by the review experts as desired by CECB/ PMC in writing. This shall include visits by the expert designers for clarification / decision etc to the site. The expert shall be available for one full day. The visit shall be planned in one weeks' notice. These visits shall be in addition to the site supervision staff deputed during construction period. Have to revise any detail if any discrepancy is there between drawing and actual possibility on site based on the suggestion of PMC without causing any price escalation in the project cost.
- 5. Have to give timely approval to samples of materials forwarded by PMC.
- 6. Specific comment on the extra items/ deviations their rate analysis wrt tender conditions and market rates.

Deliverables (5 Sets)

Hard copies and soft copies (editable format in CD ROM) of work completion status at every stage as defined in the payment schedule

#### **Stage 7: Completion of Services**

The consultant shall

1. Prepare and submit completion reports and drawings for the project as required and

- 2. Assist the Client to get the "Completion/Occupancy Certificate" from statutory authorities, wherever required.
- 3. Assist PMC in issuing three sets of 'as built' drawings including services and structures in soft and hard copies.

Deliverables (5 Sets)

Hard copies and soft copies (editable format in CD ROM) of as built drawings including services and structures

Hard copies and soft copies (editable format in CD ROM) of completion report

# B. Comprehensive Architectural services for Planning, designing, preparation of DPR for interiors and Furniture and periodic supervision

Preparation of comprehensive Architectural design for Planning, designing, preparation of DPR for interiors and Furniture and preparation of working drawings including preparation of detailed cost estimates, specifications, rate analysis and Bill of quantities.

Stage 1: Conceptual design and cost

The consultant shall:

- 1. Prepare a design brief after taking into consideration the Client's requirements and discussion with concerned departments for detail building uses, activities, functional relationship, space requirement and site Planning.
- 2. Prepare preliminary proposal for development.
- 3. Space planning, and area distribution
- 4. General furniture layout
- 5. Prepare a report for of concept design containing all the above clearly bringing out the design thought process and comparison of options.
- 6. Estimated cost of design..
- 7. Submit the draft conceptual layout, cost estimate and the report as described as above.

Deliverables (5 Sets)

Hard copies and soft copies (editable format in CD ROM) of conceptual design

#### Stage 2: Draft Plans and Block cost of estimate

The consultant shall:

- 1. Make a presentation of the conceptual layout and take into consideration any change, modification if required
- 2. Prepare the draft conceptual layout with estimated cost incorporating desired changes for approval of CECB
- 3. Submit final layout after incorporating changes, if any, by CECB
- 4. Prepare draft layout Plans, Elevation and sections and block cost of estimate and submit for approval and make presentation.
- 6. Preparation of comprehensive Architectural Design for the full phase of development (Site Layout, Furniture layout Plan, Furniture and Interior design, structural design, service design and preparation of working drawings) for Furnishing of various sections in the Central Laboratory at Naya Raipur.
- 7. Submit a design basis report for all the services.

Deliverables (5 Sets)

Hard copies and soft copies (editable format in CD ROM) of Final conceptual design

- A In the form of Plans, elevations, sections etc. in suitable scale
- B 3d Forms study by giving 3D views of final design, detail model at suitable scale
- C broad cost estimates
- a) Hard copies and soft copies (editable format in CD ROM) of draft furniture & Furnishing plans, elevation and sections
- b) Hard copies and soft copies (editable format in CD ROM) of Design Basis report

## Stage 3: Preparation of working drawing for interior and furnishing design

The consultant shall:

- 1. Prepare the draft final interior and furnishing plan, elevations, sections and block cost of estimate incorporating desired changes for approval for CECB
- 2. Submit final interior and furnishing plan after incorporating changes if any for approval of CECB as required
- 3. Assist CECB after approval of Final interior and furnishing plan in obtaining approval and clearances from various authorities as required
- 5. The Structural Design and Drawings are to be vetted and got approved (Proof Checked) from NIT Raipur / IIT or any other institute as approved by CECB.

- 6. Fee for proof checking of the structural designs and drawings shall be paid by CECB, however, the liasoning and reiteration in designs/drawings, if needed, shall be done by the Technical Consultant at his own cost.
- 7. Modify the structural designs and working drawings based on the comments of proof checking agency appointed by CECB and resubmit for approval.
- 8. Preparation of Working drawings for all interior design
- 9. Prepare general & detailed furniture layout for all the built up areas and allocated spaces
- 10. Prepare Interior Design and working drawings for all the built-up areas and common spaces such as entrance plaza, lobby areas, conferences, meeting rooms etc in the form of false ceiling, flooring, acoustics, illumination, painting, wall textures, finishes and furniture's design.
- 11. Submit the working drawings for all interiors to the CECB for approval
- 12. Modify the working drawing based on the comments and resubmit to CECB for approval

Prepare detail cost estimate, Bill of quantities and rate analysis on the basis of local DSR / Market rates based on the final design and working drawings and submit to CECB for approval after finalization of working drawings.

Deliverables (5 Sets)

- a) hard copies and soft copies (editable format in CD ROM) of Final plans, elevation and sections
- b) hard copies and soft copies (editable format in CD ROM) of working drawings of interiors
- c) hard copies and soft copies (editable format in CD ROM) of detail cost estimates, Bill of Quantities and rate analysis

#### Stage 4: Finalization of detail cost estimates, rate analysis and Bill of Quantities

The consultant shall:

- 1. Modify detail cost estimates, rate analysis and Bill of quantities based on the comments of CECB and resubmit for approval
- 2. On approval of detail cost estimate, rate analysis and Bill of quantities Provide inputs and clarification to PMC for finalizing tender documents including code of practice covering aspects like mode of measurement, method of payments, quality control procedures on materials & works and other General and Special conditions of contract. (Main responsibility of preparing tender documents will be with PMC)
- 3. Assist CECB and PMC in the Selection process management for the appointment of Contractor
- 4. Obtaining all statutory approvals from Local Authority and the government

Deliverables (5 Sets)

Hard copies and soft copies (editable format in CD ROM) of detailed cost estimates, rate analysis and Bill of quantities, specification, all working drawings and special conditions of contract

#### Stage 5: Issue of all Working drawings

The consultant shall:

1. Modify all the working drawings (GFC, Structural, utilities landscape, services and interiors) and issue for construction based on the comments of CECB

Deliverables (5 Sets)

hard copies and soft copies (editable format in CD ROM) of working drawings of all the works such as GFC, Structural, utilities landscape, services and interiors.

Stage 6: Supervision during construction phase

The technical consultant shall:

- 1. Coordinate with PMC and provide clarification on any details required by the Authority and PMC.
- 2. Review the shop drawings prepared by contractor for construction on site and give timely approval.
- 3. Attend periodic site meetings and work progress review meetings as requested by PMC & CECB.
- 4. At least 6 Visit to the site of work, at intervals, to inspect and evaluate the construction works by the review experts as desired by CECB/ PMC in written. This shall include visits by the expert designers for clarification / decision etc to the site. The expert shall be available for one full day. The visit shall be planned in one weeks' notice. These visits shall be in addition to the site supervision staff deputed during contruction period. Have to revise any detail if any discrepancy is there between drawing and actual possibility on site based on the suggestion of PMC without causing any price escalation in the project cost.
- 5. Have to give timely approval to samples of materials forwarded by PMC.
- 6. Specific comment on the extra items/ deviations their rate analysis wrt tender conditions and market rates.

Deliverables (5 Sets)

Hard copies and soft copies (editable format in CD ROM) of work completion status at every stage as defined in the payment schedule

## **Stage 7: Completion of Services**

The consultant shall

- 1. Prepare and submit completion reports and drawings for the project as required
- 2. Assist CECB to get the "Completion/Occupancy Certificate" from statutory authorities, wherever required.
- 3. Assist PMC in issuing three sets of 'as built' drawings including services and structures in soft and hard copies.

Deliverables (5 Sets)

Hard copies and soft copies (editable format in CD ROM) of as built drawings including services and structures

Hard copies and soft copies (editable format in CD ROM) of completion report

## 7.4 APPROVAL FROM LOCAL AUTHORITIES AND GOVERNMENT

The Technical Consultant shall proactively assist the Authority in obtaining 'approval from all concerned local authorities, other Government Departments etc. which are required as per law. The Technical Consultant shall ascertain the formalities that need to be gone through and submissions that need to be made. The Team Leader or the Local Architect, whoever is duly authorized to sign the submissions shall sign and make necessary submissions in this regard. The Technical Consultant shall interact with the relevant authorities, wherever required for obtaining clearances/approvals and carry out necessary changes/improvements required for obtaining such clearance/ approval. Technical Consultant shall make presentations regarding proposals as and when required for obtaining approvals, clearances etc. or as otherwise requested by the Authority. The responsibility for defending the plans/ proposals and designs including modifications thereto, if any, before the various authorities shall remain with the Technical Consultant All necessary e approvals have to be arranged before Stage 4. If any fee is to be paid in obtaining the approvals to the local bodies or the Govt. the same shall be paid by CECB on submission of the demand note by the Consultant.

## 7.5 ASSISTANCE IN PREPRATION OF PROPOSAL DOCUMENTS

The Technical Consultant shall assist the Authority in preparation of the tender documents by providing intermittent inputs as and when required. The costs of all such inputs provided by the Technical Consultant shall be deemed to be included in the Financial Proposal and no separate costs or expenses would be payable for this work.

#### 7.6 ASSISTANCE IN PRE-PROPOSAL MEETINGS

The Technical Consultant shall assist the Authority in pre- Proposal meetings for selection of the contractor. The Technical Consultant shall envisage this in their financial proposal and no additional cost will be paid by the Authority for this work. It shall be the responsibility of the Technical Consultant to provide these intermittent services as per the Scope of Work.

#### 7.7 ASSISTANCE FROM AUTHORITY

Authority would provide all relevant available data on the project site, and other documents/information/reports in its possession as it may consider relevant to the study as and

when such information is received by/is available with Authority. The Applicants would be required to check the veracity of the information provided and Authority would not be liable for any deficiency in the information provided.

## 7.8 PERODIC SUPERVISION (Back office team)

After the commencement of work the consultant shall provide all assistance to the CECB/ PMC in providing any further clarifications, details, designs, drawings, etc required during the execution and sort out any queries raised by the contractor without any additional cost.

The Team Leader and other members of Team shall provide a minimum of one visit per month during the construction period subjected to a maximum of 30visits. The visits shall be in addition to the visits required to Naya Raipur before finalizing the construction agency i.e. issue of work order to the construction agency.

#### 7.9 Checklist:

List	of Documents	Submitted (Y/N)		
Enve	elope - A			
1.	The profile of the bidder along with required certifications that the period of validity of bids is 180 days from the last date of submission of proposal.			
2.	Audited annual financial results (balance sheet and profit & loss statement showing business in India) of the bidder for the last three financial years.			
3.	Reference list of major clients.			
4.	Declaration for Not Black Listed (Form PQ -1).			
5.	Bank Guarantee Form for EMD (Ref: Form PQ – 2).			
6.	Power-of-attorney granting the person signing the proposal the right to bind the bidder as the Constituted attorney of the Directorate (Ref: Form $PQ-3$ ).			
7.	A copy of the Tender Document, all pages duly-signed by the authorized signatory towards acceptance of the terms and conditions of the Tender Document.			
Enve	Envelope - B			
1.	Technical Proposal Submission Form (Ref: Form TECH – 1)			
2.	Consultant's Organization and Experience (Ref: Form TECH – 2 A&B)			
3.	Description of Approach, Methodology and Work Plan for Performing the Assignment (Ref: Form TECH-3)			

4.	Team Composition and Task Assignments (Ref: Form TECH-4)		
5.	Curriculum Vitae (CV) for Proposed Professional Staff (Ref: Form TECH-5)		
6.	DOCUMENTS FOR EVALUATION ALONG WITH RFP (Ref: Form TECH-6)		
7.	Work Schedule (Ref: Form TECH-7)		
8.	All other relevant document for Technical Evaluation		
Enve	Envelope - C		
1.	Form FIN-1: Financial Proposal Submission Form to be submitted directly to Chhattisgarh Environment Conservation Board.		
2.	Form FIN-2: Summary of Costs – to be submitted directly to Chhattisgarh Environment Conservation Board.		
Enve	Envelope - D		
1.	Form FIN-3: Performance Bank Guarantee at the rate of 10% of the awarded project cost – to be submitted within 15 days of issuance of Letter of Intent notifying the award of the Contract.		

# Annexure 1: Scope of Environmental Analysis

# 7.9.1 Water and Wastewater Analysis

# A. PHYSICAL PARAMETERS

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS
MAN	DATORY PARAMETERS	
1.	Colour	a. Visible comparison method (only potable waters)
		b. Spectrophotometric Method (All)
2.	Conductivity	Conductivity Meter
3.	pH Value	Electronic (pH Meter)
4.	Total solids [dried at 103-105 °C]	Gravimetric
5.	Total suspended solids [dried at 103-105 °C]	Gravimetric
6.	Total dissolved solids [dried at 180 °C]	Gravimetric
7.	Fixed and volatile solids [ignited at 550 °C]	Gravimetric
8.	Turbidity	Nephelometric
9.	Temperature	Thermometer
10.	Velocity and discharge measurement of river, drain, industrial effluent stream etc	a. Cross-Section-velocity Method
10.		b. Weirs (Rectangular or V Notch or U-Notch) `

		c. Chemical Methods.	
SECO	SECONDARY PARAMETERS		
1.	Flocculation test (Jar test)	Dosing of coagulants	
2.	Odour	Threshold odour test	
2	Settleable solids	Volumetric using Imhoff concentration	
3.		Gravimetric	
4.	Sludge volume index (SVI)	Volumetric followed by gravimetric (using Imhoff conc. and filtration device)	
_	Salinity	a. Electrical conductivity method	
5.		b. Density method	
6.	Settled sludge volume	Volumetric	

# **B. INORGANIC PARAMETERS**

# (i) General & Non-metallic

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS	
MAN	MANDATORY PARAMETERS		
1	Acidity	a. Electrometric/Potentiometric titration	
1.	Acidity	b. Color Indicator titration	
	Alkalinity	a. Electrometric/Potentiometric titration	
2.	Alkalinity	b. Color Indicator titration	
	Ammonical Nitrogen	a. Distillation followed by colorimetric method     (Nesselerization or phenate)	
3.		b. Distillation followed by titrimetric method	
		c. Distillation followed by ion Selective electrode method	
	Chloride	a. Titrimetric (Argentometric or Mercuric Nitrate)	
4.		b. Potentiometric	
5.	Chlorine Residual	Titrimetric	
		a. Winkler titrimetric-azide modification	
6.	Dissolved Oxygen	b. Membrane electrode method	
7.	Fluoride	a. Distillation followed by Colorimetric (SPADNS or Alizarin Red)	
		b. Distillation followed by Fluoride selective electrodes	
8.	Total hardness	Titrimetric (EDTA method)	

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS
0	Total kiohldal nitrogon	a. Macro kjehldal method
9.	Total kjehldal nitrogen	b. Semi micro kjehldal method
10.	Nitrite nitrogen	Colorimetric
		a. Colorimetric
11.	Nitrate nitrogen	b. Cadmium reduction method
		c. Electrode method
12.	Phosphate	Colorimetric
10	Sulphate	a. Turbidimetric
13.	Supridie	b. Gravimetric method with residual/ignition of residue
SECO	NDARY PARAMETERS	
1	Carbon Dioxide	a. Titrimetric
1.		b. Nomographic
	lodine	a. Leuce Crystal violet method
2.		b. Amperometric titration method
3.	Chlorine demand	Dosing of sampling chlorine solution
4.	Bromide Colorimetric (Curcumin or Carmine)	
	Sulphide	a. lodometric method
5.		b. Ion selective electrode method
		c. Methylene blue method
,	Sulphite	a. Titrimetric
6.		b. Phenonthralin method
7	Silica	a. Molybdosilicate method
7.	SIIICU	b. Heterotopy blue method
		a. Distillation followed by Titrimetric
8.	Cyanide	b. Distillation followed by Colorimetric
		c. Distillation followed by Cyanide - Selective Electrode

# (ii) Trace Metals

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS
MAND	ATORY PARAMETERS	
1.	Boron (B)	Flame atomic absorption (direct)
2.	Cadmium (Cd)	Flame atomic absorption (extracted)
3.	Calcium (Ca)	Traine diottic absorption (extracted)

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS
4.	Chromium (Cr) Total	Flame photometry
5.	Chromium (Cr) Hexavalent	Electro thermal atomic absorption
6.	Copper (Cu)	Hydride/cold vapour atomic absorption
7.	Iron (Fe)	Inductively coupled plasma (ICP)
8.	Lead (Pb)	
9.	Magnesium (Mg)	ICP/MASS Spectrometry ICP/MS
10.	Mercury (Hg)	Anodic stripping voltametry
11.	Nickel (Ni)	
12.	Potassium (K)	Alternative methods (colorimetric/
13.	Sodium (Na)	titrimetric by difference etc)
14.	Sodium absorption ratio (SAR)	
15.	Zinc (Zn)	
SECON	IDARY PARAMETERS	
1.	Arsenic (As)	Flame atomic absorption (direct)
2.	Aluminium (Al)	
3.	Beryllium (Be)	Flame atomic absorption (extracted)
4.	Barium (Ba)	Flame photometry
5.	Lithium (Li)	Electro thermal atomic absorption
6.	Manganese (Mn)	Hydride/cold vapour atomic absorption
7.	Selenium (Se)	Inductively coupled plasma (ICP)
8.	Silver (Ag)	
9.	Strontium (Sr)	ICP/MASS Spectrometry ICP/MS
10.	Tin (Sn)	Anodic stripping voltametry
11.	Antimony (Sb)	
12.	Cobalt (Co)	Alternative methods (colorimetric/
13.	Vanadium (V)	titrimetric by difference etc)

# C. ORGANIC (GENERAL) & TRACE ORGANICS

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS
MANDA	TORY PARAMETERS	
1	Bio-chemical Oxygen Demand (BOD)	a. Three days BOD at 27 0C
1.		b. Five days BOD at 20 0C
2.	Chemical oxygen demand (COD)	a. Open reflux method
2.		b. Closed reflux titrimetric method

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS
		c. Closed reflux colorimetric
3.	Oil & Grease	a. Grass metric (simple extraction)
٥.	Oii & Greuse	b. Soxhlet extraction
4	Phonol	a. Distillation followed by colorimetric
4.	Phenol	b. Chloroform extraction
		a. Organo-chlorine : BHC, DDT, Aldrin, Endosulphan (USEPA 3510/8081B)
5.	Pesticides (each)	b. Organo nitrogen-phosphorous : Malathion, methyl parathion, Chloropyriphos (USEPA 3510/8081B)
SECON	IDARY PARAMETERS	
1.	Adsorbable organic halogens (AOX)	Adsorption pyrolysis titrimetric
2.	Organic carbon (in solids)	Rapid titrametration method
	Total organic carbon (TOC)	a. High temperature combustion
3.		b. Persulphate ultraviolet or heated persulphate oxidation
		c. Wet oxidation method
	Surfactants	a. Surfactant separation by sublimation
4.		b. Anionic surfactants as MBAS
		c. Non ionic surfactants as CTAS
5.	Carbon/Nitrogen Ratio	By calculation
6.	Tannin & lignin	Colorimetric method
7.	Polychlorinated biphenyl (PCB's)	USEPA 3510/8082A
8.	Polynuclear aromatic hydrocarbon (PAH) each	USEPA 3510C/8270D/8100
9.	Volatile Organics	USEPA 5021
10.	Trihalomethanes	USEPA 8260C

# D) Microbiological Tests

S. No.	PARAMETER	TYPICAL METHODS OF ANALYSIS	
MANDATORY PARAMETERS			
1.	Total coliform	a. Multiple tube technique	
'-		b. Membrane filter technique	
2.	Faecal coliform	a. Multiple tube technique	
2.		b. Membrane filter technique	
3.	Faecal streptococci	a. Multiple tube technique	
3.		b. Membrane filter technique	
4.	E. Coli	a. Multiple tube technique	
4.		b. Membrane filter technique	
SECONDARY PARAMETERS			
	Total plate count	a. Pore plate method	
1.		b. Spread plate method	
		c. Membrane filter method	
2.	Enterococcus	a. Multiple tube technique	
۷.		b. Membrane filter technique	

# E) Toxicological Tests

S. No.	MANDATORY PARAMETER	S. No.	SECONDARY PARAMETER
		1.	Bio-accumulation, bio magnification and bio- transformation studies
Bioassay method for evaluation of  1. toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	2.	Estimation of the effect at tissue level	
		3.	Measurement of toxicity using Daphnia or other organism
		4.	Measurement of toxicity factor using zebra fish (dimensionless toxicity test

# F) Biological Tests

S. No.	PARAMETER	S. No.	PARAMETER
1.	Benthic organism identification and count	5.	Saprobity Index
2.	Macrophytic identification	6.	Chlorophyll
3.	Planktonic identification count	7.	Primary productivity
4.	Measurement of various diversity index	8.	P/R Ratio

# 7.9.2 Air Emission Analysis

The laboratory should be capable of analyzing air samples for the following parameters:

# A) Ambient Air / Fugitive Emissions

S. NO.	GROUP OF PARAMETER	TYPICAL METHODS OF ANALYSIS
MANDA	TORY PARAMETERS	
1.	Nitrogen dioxide as NO2	
2.	Sulphur dioxide (SO2)	
3.	Total suspended particulate matter	Gravimetric (High-Volume)
4.	Respirable suspended particulate matter (PM10)	Gravimetric (High-Volume with Cyclone)
SECONI	DARY PARAMETERS	
1.	PM2.5	
2.	Ammonia	
3.	Carbon monoxide	
4.	Chlorine	
5.	Fluoride	
6.	Non methane hydrocarbon	
7.	Lead	
8.	Methane	
9.	Ozone	
10.	Benzene Toluene Xylene (BTX)	
11.	Polycyclic aromatic hydrocarbon (PAH) Benzo- a-pyrine & others	
12.	Volatile Organic Carbon	

# B) Stack gases/source emission

S. NO.	GROUP OF PARAMETER	TYPICAL METHODS OF ANALYSIS
MANDA	ATORY PARAMETERS	

1.	Particulate matter	Gravimetric
2.	Sulphur dioxide	EPA Modified West & Gaeke method
3.	Velocity & flow	Pitot Tube & Rotameter
4.	Carbon dioxide	
5.	Carbon monoxide	NDIR technique
6.	Temperature	Thermometer
7.	Oxygen	
8.	Oxides of nitrogen	Arsenite modified Jacob & Hochheiser
SECON	DARY PARAMETERS	
1.	Acid mist	
2.	Ammonia	Nessler's method
3.	Chlorine	
4.	Fluoride (Particulate)	Specific Ion Meter
5.	Fluoride (Gaseous)	
6.	Hydro-chloric acid	
7.	Total Hydro carbon	Infra Red analyser
8.	Hydrogen Sulphide	Methylene-blue
9.	Carbon disulphide	
10.	Mercaptan	
11.	Benzene Toluene Xylene (BTX)	
12.	Mercury	
13.	Asbestos	
14.	Dioxin & Furan	

# C) Noise Level

S. NO.	GROUP OF PARAMETER	TYPICAL METHODS OF ANALYSIS
1.	Noise level measurement (20 to 140 dba)	
2.	Ambient Noise & Source specific noise	

# D) Meteorological Monitoring

S. NO.	GROUP OF PARAMETER	TYPICAL METHODS OF ANALYSIS
MANDAT	MANDATORY PARAMETERS	

1.	Ambient Temperature	
2.	Wind direction	
3.	Wind speed	
4.	Relative Humidity	
SECONDARY PARAMETERS		
1.	Solar radiation	
2.	Rain fall	

# E) Vehicular Emission Monitoring

S. NO.	GROUP OF PARAMETER	TYPICAL METHODS OF ANALYSIS	
MANDAT	ORY PARAMETERS		
1.	Carbon monoxide		
2.	Smoke Density		
3.	Hydrocarbon		
SECONDA	SECONDARY PARAMETERS		
1.	Oxides of Nitrogen		

# 7.9.3 Land Environment (including solid wastes) Analysis

The proposed laboratory should be capable of performing the following analysis:

# A) Soil/Sludge/Sediment and Solid Waste

S. NO.	MANDATORY PARAMETER	S. NO.	SECONDARY PARAMETER
1.	Boron	1.	Ammonia
2.	Cation Exchange Capacity (CEC)	2.	Bicarbonate
3.	Electrical Conductivity (EC)	3.	Calcium
4.	Nitrogen availability	4.	Calcium carbonate
5.	Organic carbon/matter (chemical method)	5.	Chloride
6.	рН	6.	Colour
7.	Phosphorous (available)	7.	Exchangeable sodium percentage (ESP)
8.	Phosphate (ortho)	8.	Gypsum requirement
9.	Phosphate (total)	9.	H. Acid
10.	Potassium	10.	Heavy metal
11.	SAR in soil extract	11.	Magnesium
12.	Sodium	12.	Mechanical soil analysis
13.	Soil moisture	13.	Nitrate

S. NO.	MANDATORY PARAMETER	S. NO.	SECONDARY PARAMETER
14.	TKN	14.	Nitrite
15.	Calorific value	15.	PAH
		16.	Pesticide
		17.	Potash (available)
		18.	Sulphate
		19.	Sulphur
		20.	TOC
		21.	Total water soluble salt
		22.	Water holding capacity

Typical Methods of Analysis: Collected and analysed as per soil analysis reference book, M.I. Jackson and soil analysis reference book by C.A. Black as well as IS 9334: 1979; IS 9235: 1979; IS 10158: 1982

# B) Characterization of Hazardous Waste

S. No.	PARAMETER	TYPICAL METHODS OF ANAYSIS
1.	Preparation of Leachate (TCLP extract/water extract)	-
2.	Determination of various parameter in Leachate i.e. metal, pesticides etc.	Methods as prescribed in water analysis
3.	Corrosivity	a. Electrometric (by pH meter)
3.	Conosivity	b. Corrosivity toward steel
4.	Reactivity	Identification of characteristic properties i.e. explosive, reading violent, violently react with water forms potential explosive mixture with water etc.
5.	Ignitability	a. By Pen sky martens apparatus
J.		b. By seta flash closed cap tester
6.	Toxicity	Toxicity characteristics leaching procedure (TCLP)

# Annexure 2: Infrastructure Requirements

The laboratory should have sufficient space, proper design, interior furnishing, proper ventilation, proper lighting, temperature control, dust free atmosphere etc. since all these factors influence the quality of analytical data generated in a laboratory and also may affect the production of reliable data. Regular and proper supply of some of the essential needs like water and electricity is to be ensured for smooth functioning of the laboratory. In addition to these, other important factors like facilities for preservation of samples, weighing, cleaning of glassware, quality of chemicals, fire-fighting facilities, laboratory safety and first-aid facilities are also an essential requirements.

# Laboratory Design/Housing/Building

Laboratory design plays a major role for efficient functioning of laboratory activities. Laboratory design should incorporate good spacing, proper ventilation system, well-ventilated stack rooms, store rooms, laboratory hoods, sinks, miscellaneous safety equipment like eye wash fountain, safety showers and arrangement for safe disposal of wastes. The proposed build-up area of the Central Lab is approximately 25,000 Square ft in total. The laboratory should preferably be designed in such a way that all the laboratory facility are located in ground floor excluding external facilities such as ETP, Pilot Plant, Parking etc. The building should not be more than two storied (G+1). It is envisaged that supporting facilities such as Library, Conference room, Offices, Server room etc will be on the first floor. The designs should satisfy all applicable Indian standards and norms. Laboratory building must have proper space for carrying out following activities separately for environmental samples:

#### Water Analysis Section

- I. Physico-chemical analysis
- II. Microbiological examination
- III. Biological examination

# Air Analysis Section

- I. Ambient Air Monitoring & Analysis
- II. Source Emission Monitoring & Analysis
- III. Vehicular Emission Monitoring & Analysis
- IV. Noise Monitoring

Soil and Solid Waste (including hazardous wastes) Analysis Section

Instrumentation Section (Analysis requiring sophisticated instruments)

- I. Inorganic analysis
- II. Organic analysis

All Infrastructural supply and discharge facilities for water, power, gas and air must be easily accessible and serviceable without constructional changes. All materials selected and specified must be of high quality and suitable for their functional end use. Laboratory design, outlay and materials should be selected and specified to minimize maintenance and operational costs of the facilities. It is envisaged that newly assigned tasks to the laboratory or any changes with reference to new instrument/equipment methods, analysts etc. can be smoothly accommodated.

The laboratory should maintain the following work areas with adequate instrumentation and infrastructure:

- I. Analytical Lab
- II. Balance room
- III. Instrument room with adequate provision of Gas cylinders etc.
- IV. Microbiology room
- V. Sample pre-treatment
- VI. Digestion & extraction room for pesticides & metals
- VII. Sample receipt section
- VIII. Sample storage
- IX. Conference room-cum-library
- X. Staff room
- XI. Computer room
- XII. Store room
- XIII. Maintenance room
- XIV. Laboratory Record room
- XV. Field monitoring equipment room
- XVI. Waste storage room

Table 1: List of Infrastructural Equipment/Items

S. NO.	ITEMS
1.	Air conditioner (split type)
2.	Air Conditioner (Window type)
3.	Breathing apparatus
4.	Cold room far sample storage
5.	Computer with printer
6.	Constant voltage transformer
7.	Face shield and helmet
8.	Gas mask
9.	Refrigerator (frost free, CFC free)
10.	Tool Kit (Electrical & Mechanical)
11.	Uninterrupted power supply (UPS) system
12.	First aid box
13.	Trolley for sample transportation
14.	Fume Hood
15.	Exhaust System
16.	Fire Extinguisher
17.	Electricity Generator
18.	Gas Cylinder Trolleys

#### **Laboratory Furniture**

The laboratory furniture and work benches with ergonomic designs to be given more emphasis to provide suitable laboratory work environment. The convenience and ease of laboratory works depend upon the quality, dimension and placement of laboratory furniture as well as their ergonomic design. The laboratory working benches top surfaces should be made up of acid and alkali resistant materials. The steel/aluminium frames used in furniture or fittings should be non-corrosive type. Wherever stainless steel materials are needed, the same should be provided. The writing desks should also to be laminated and non-corrosive. The storage cupboard shall be made up of clipboard covered with melamine sheets. All the furniture should be designed specifically according to the requirement of the laboratory so as to maximize the quality of work output.

#### Sample Digestion System/Hood system

An efficient hood system is necessarily required at laboratories in order to remove various toxic and hazardous fumes from the work place generated during use of organic solvent/or during acid digestion.

#### **Electricity supply and Electrical services**

Regular and stabilized electricity supply (220-230 volts) is essential for smooth functioning of the laboratory and its instruments. Necessary and adequate provisions should be made for continuous supply, constant voltage, adequate load, desired level of illumination, proper electrical fittings etc.

Because of the specialized nature of analytical work in laboratories, the lighting system are specific and different from those in other areas since laboratory works involve accurate readings of glassware-graduations, balance, verniers, and other measuring lines, level of illumination, brightness, glass and location of light source should be controlled to facilitate ease in making these measurements and to provide maximum comfort for the laboratory analysts.

Some sophisticated instruments like Spectrophotometer, Flame photometer, Atomic Absorption Spectrophotometer, Gas chromatograph, Mercury Analyzer, Balance etc. requires constant voltage to maintain stabilized and drift-free instrument operation. The electric voltage regulation is therefore utmost necessary and can be achieved through use of voltage stabilizers and Uninterrupted Power Supply (UPS) system. Since the electrical supply for laboratory needs to be continuous, there should be the additional provision of Diesel Generator (D.G.) sets for continuous supply of power to equipment like BOD Incubator, Oven etc.

Care must be taken to ground all equipment that could constitute a shock hazard. The three-pronged plugs that incorporate grounds are best for this purpose.

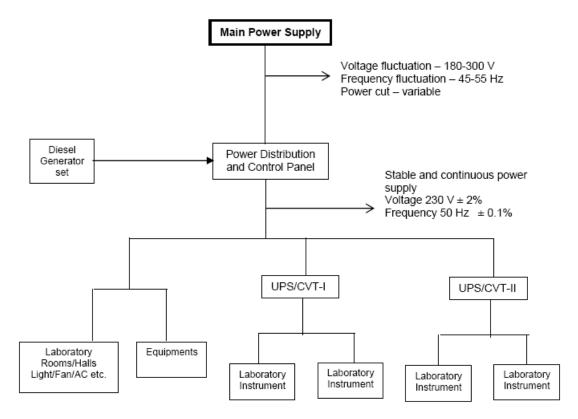


Figure 1: Schematic diagram of the power supply system at Environmental Laboratory

#### Water Supply and Distilled / De-ionized water

Water is an essential and basic need for laboratory operations, washing, cleaning etc. therefore the laboratory should have provision for continuous water supply either from a direct supply source or through storage tanks. It is preferred, if a dedicated water storage tank is made available exclusively for laboratory use. To avoid deterioration of stored water, frequent cleaning of storage tank is essential, particularly if the stored water is being used for drinking purpose also.

Distilled water is one of basic requirement of the laboratory and analytical errors are encountered because of improper quality of distilled water. Distilled or deionize water is used in the laboratory for preparation of reagents, dilution, and final rinsing of glasswares. Ordinary distilled water may be contaminated by dissolved gases from surrounding environment, materials leached from the container, in which it is prepared or stored. Hence for specific determinations, deionized/distilled water may require further purification. Generally, distilled water with electrical conductivity of 2.0 µsiemen/cm or less is considered reasonably ideal for routine work. The degree of purity of distilled water can be further classified as:

Purity	Maximum conductivity µsiemen/cm	Approximate concentration of electrolyte (mg/l)
Pure	10	2-5
Very pure	1	0.2-0.5
Ultra pure/Nanopure	0.1	0.01-0.02
Theoretically pure	0.05	0.00

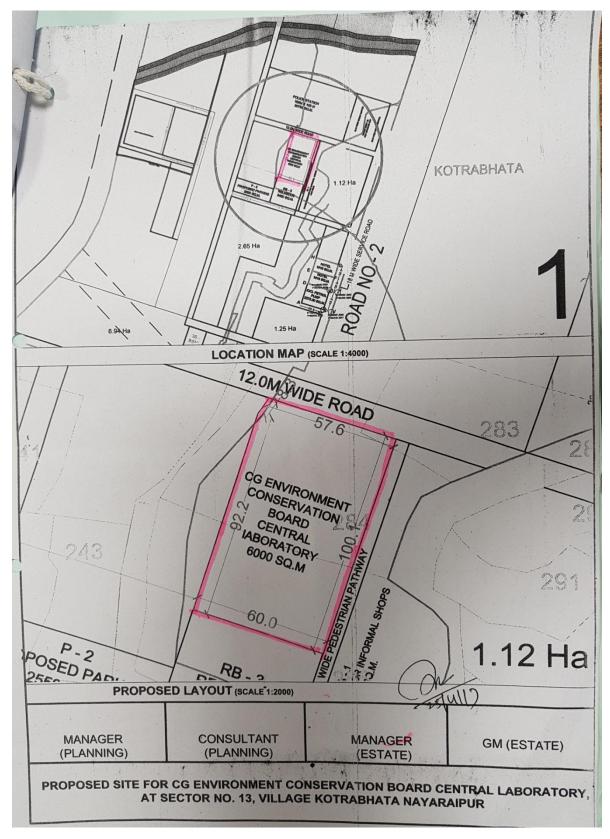
#### **Emission, Effluent and Waste Management Systems**

The laboratory should have efficient systems for managing all types of discharge streams – gaseous, liquid and solid. Stacks should be fitted with air pollution control devices whereas effluent streams should be treated in Effluent Treatment Plants. Hazardous wastes should be managed through authorized waste management organisations. To the extent possible, non-hazardous waste should be sent for reuse and recycling.

## **Parking Areas**

The facility should have adequate parking area for the mobile laboratory as well as for staff and visitors.

# Annexure 3: Proposed Laboratory Site



Area of the proposed site is 6000 sq.m. It is located at Sector-13, close to CECB Head Office in Naya Raipur.

# Annexure 4: Standard formats for Pre-qualification, technical and financial proposal

	itted as part of the techno-commercial proposal – <b>Envelope A</b> )
Date	
То,	
Member Secretary, Chhattisgarh Enviro Paryavas Bhavan, North Block Sector Naya Raipur (C.G.)	onment Conservation Board (CECB), -19,
Dear Sir,	
Ref.: Tender No.	
	hereby confirm that our firm has not been banned ernment organization/Financial institution/Court /Public sector
Signature of Bidder Place: Name Date: Designation	

This Dood of Coordinates associated at

# Form PQ-2 Format for Bank Guarantee for Earnest Money Deposit

(To be provided in original on stamp paper of value required under law duly signed by Authorized representative of Bank)

(Original Copy to be submitted as part of the techno-commercial proposal – **Envelope**A)

This beed of Guarantee executed at by by
(Name of the Nationalised Bank) having its Head / Registered office at
, and having one of its branches at Raipur
(hereinafter referred to as —the Guarantorll) which expression shall unless it be
repugnant to the subject or context thereof include its heirs, executors, administrators,
successors and assigns;
. (
In favour of Member Secretary, Chhattisgarh Environment Conservation Board (CECB),
Paryavas Bhavan, North Block Sector-19, Naya Raipur (C.G.) 492002 (hereinafter
referred to as — CECB) which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;
context thereof include its helis, executors, administrators, successors and assigns,
Whereas Name of the bidder Ltd., a Company / partnership
firm / proprietorship concern registered under the(name of the
relevant act/law under which incorporated) having its registered office at
(hereinafter called —Bidder which expression shall unless it be
repugnant to the subject or context thereof include its executors, administrators,
successors and assigns) has submitted its Proposal for award of —"Selection Of
Planning & Design Consultant For Establishment Of Central Environmental
Laboratory At Naya Raipur For Chhattisgarh Environment Conservation Board"
vide Invitation for Tender Document No dated issued by
Chhattisgarh Environment Conservation Board (CECB) Government of Chhattisgarh
(hereinafter referred to as —the Project).
, ,
Whereas in terms of the Invitation for Tender Document Nodated
(hereinafter referred to as Tender Document) issued by Chhattisgarh
Environment Conservation Board (CECB), the Bidder is required to furnish to
Chhattisgarh Environment Conservation Board (CECB) an unconditional and irrevocable
Bank Guarantee for an amount of INR 2,50,000 (INR Two Lakh Fifty Thousand only) as
Earnest Money Deposit and the Guarantor has at the request of the Bidder agreed to
provide such Guarantee being these Presents:
Now this Deed witnessed that in consideration of the premises, we,
Bank Hereby agree, declare, undertake and guarantee as follows:

1. We as primary obligor hereby irrevocably, unconditionally and without reservation Guarantee the due and faithful fulfilment and compliance of the terms and conditions of the tender by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to Chhattisgarh Environment Conservation Board (CECB) an amount not exceeding INR 1, 00,000 (INR One Lakh only) without any demur, reservation, recourse, contest or protest and without reference to the Bidder, if the Bidder has failed to comply with and fulfil all or any of the terms and conditions contained in the tender. A letter from Chhattisgarh Environment Conservation Board (CECB) stating that the Bidder is in default in the due and faithful fulfilment and compliance with the terms and conditions contained in the tender shall be final, conclusive and binding on the Bank, in respect of

the forfeiture of the Earnest Money Deposit and the amount due and payable under this Guarantee.

- 2. This Guarantee shall remain in full force and effect for a period of 180 (One hundred and Eighty) days from the \_\_\_\_\_ (Proposal Due Date).
- 3. Subject to clause 1 above, any claim for payment under this Guarantee shall be in the form of a written declaration by Chhattisgarh Environment Conservation Board (CECB).
- 4. We......Bank further agree that Chhattisgarh Environment Conservation Board (CECB) shall be the sole judge as regards the determination as to whether the Bidder is in default of due and faithful fulfilment and compliance of the terms and conditions contained in the Tender and the decision of Chhattisgarh Environment Conservation Board (CECB) in this regard shall be final and binding on us, notwithstanding any differences between Chhattisgarh Environment Conservation Board (CECB) and the said Bidder and/or any dispute between Chhattisgarh Environment Conservation Board (CECB) and the Bidder pending before any Court, Tribunal, Arbitrator or any other authority.
- 5. Chhattisgarh Environment Conservation Board (CECB) shall have the full liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any other terms and conditions of the said Tender document or to extend the time frame for completion of bidding process or the period of fulfilment and compliance with the terms and

conditions contained in the said Tender document by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Tender document or the securities available to Chhattisgarh Environment Conservation Board (CECB) and the bank shall not be released from its liability under these presents by any exercise by Chhattisgarh Environment Conservation Board (CECB) of the liberty with reference to the matters aforesaid orby reason of time being given to the said Bidder or any other forbearance, act or omission on the part of Chhattisgarh Environment Conservation Board (CECB) or any indulgence by Chhattisgarh Environment Conservation Board (CECB) to the said Bidder or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.

6. Any notice by way of request, demand or otherwise hereunder shall be sent by courier or by registered mail to the Bank, addressed as aforesaid.
7. We undertake to make the payment on receipt of your notice of claim on us addressed to (name of Bank along with branch address) and delivered at our above branch that shall be deemed to have been duly authorised to receive the said notice of claim.
8. It shall not be necessary for Chhattisgarh Environment Conservation Board (CECB) to proceed against the said Bidder before proceeding against the bank and the Guarantee herein contained shall be enforceable against the bank, notwithstanding any other security which Chhattisgarh Environment Conservation Board (CECB) may have obtained or obtained from the said Bidder, shall at the time when proceedings are taken against the bank hereunder, be outstanding or unrealised.
9. We Bank lastly undertake not to revoke this guarantee during its currency except with the previous express consent of Chhattisgarh Environment Conservation Board (CECB) in writing and agree that any change in the constitution of the Bank or the said Bidder shall not discharge our liability hereunder.
10. The Bank declares that it has the power to issue this guarantee and the undersigned have full powers to do so on behalf of the Bank.
Date day of 2017
Signature of the Issuing / Authority with seal
CORPORATE SEAL
For Bank
Note: A covering letter of confirmation is also to be given by the bank along with this bank guarantee.

### Form PQ-3 Format for Power of Attorney

(Original Copy to be submitted as part of the techno-commercial proposal –**Envelope A**)

(To be provided in original as part of Envelope-A: Technical Bid to CECB office as per tender document on along with actual bid submission on stamp paper of value required under law duly signed by authorized representative of Bank)

Dated:	

# POWER OF ATTORNEY To Whomsoever It May Concern

Know all men by these presents, we (name and registered office address of the
Bidder) do hereby constitute, appoint and authorize Mr (Name of the Person(s)),
domiciled at (Address), acting as (Designation and the name of the firm),
as Authorized Signatory and whose signature is attested below, as our attorney, to do in our
name and on our behalf, all such acts, deeds and things necessary in connection with or
incidental to our Proposal for — Consultancy Services for Inventorization and Characterization
of Hazardous Waste (HW) Categories in Chhattisgarh State, vide Invitation for Tender (Tender
Document) Document dated, issued by Member Secretary, Chhattisgarh Environment
Conservation Board (CECB), Paryavas Bhavan, North Block Sector-19, Naya Raipur (C.G.) 492002,
including signing and submission of all documents and providing information and responses to
clarifications / enquiries etc. as may be required by Chhattisgarh Environment Conservation
Board or any governmental authority, representing us in all matters before Chhattisgarh
Environment Conservation Board (CECB), Paryavas Bhavan, North Block Sector-19, Naya Raipur
(C.G.) 492002, and generally dealing with CECB in all matters in connection with our Proposal for
the said Project. We hereby agree to ratify all acts, deeds and things lawfully done by our said

attorney pursuant to this Power of Attorney and t aforesaid attorney shall and shall always be deemed	,
For	
(Signature)	
(Name, Title and Address)	
Accept	
(Attested signature of Mr	) (Name, Title and Address of the
Attorney)	
Notes:	

- To be executed by the Bidder
- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a resolution / power of attorney in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executants(s).

## Form PQ-4 Format for Annual Turnover & Profit After Tax Statement Of The Last Three Financial Years Certified By The Statutory Auditor

S.No.	Financial year	Annual Turnover (Rs. in crores)	Profit after tax (Rs. in crores)

## Signature of applicant\* (with seal)

\* by a person having necessary authorization /power of attorney to do so on behalf of firm/company

Form PQ-5 Format for SIMILAR PROJECTS UNDERTAKEN AS DESIGN CONSULTANT

Present Status of the Project	Project Cost (in Lakhs)	Period of Execution and date of completion	Built-up Area in Sqft. (Value of the Project)	Details and Contact person of Client	Name of the project, and its details	S.No.

Note: Attach documentary proof, Attach additional sheets, if required.

## Signature of applicant\* (with seal)

\* by a person having necessary authorization /power of attorney to do so on behalf of firm/company

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## Form TECH-1: Technical Proposal Submission Form

(Original Copy to be submitted as part of the Technical Proposal – **Envelope B**)

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate Envelope1.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Consultant]<sup>1</sup>

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in Paragraph Reference 17 of the Fact Sheet, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in Paragraph Reference 21 of the Fact Sheet.

We understand you are not bound to accept any Proposal you receive.

We remain,
Yours sincerely,
Authorized Signature [In full and initials]:
Name of Firm:

-

<sup>&</sup>lt;sup>1</sup> [Delete in case no association is foreseen.]

# Form TECH-2: Consultant's Organization and Experience A - Consultant's Organization

(Original Copy to be submitted as part of the Technical Proposal – Envelope B)

[Provide here a brief (two pages) description of the background and organization of your firm/entity and each associate for this assignment.]

### **B** - Consultant's Experience

(Original Copy to be submitted as part of the Technical Proposal – **Envelope B**)

[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under this assignment. Use maximum 20 pages.]

Assignment name:	Approx. value of the contract (in INR):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in INR):
Start date (month/year): Completion date (month/year):	No of professional staff-months provided by associated Consultants:
Name of associated Consultants, if any:	Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):
Narrative description of Project:	
Description of actual services provided by your staff	within the assignment:

Firm'sName:

# Form TECH-3: Description of Approach, Methodology and Work Plan for Performing the Assignment

(Original to be submitted as part of the Technical Proposal – Envelope B)

[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (max. 50 pages, inclusive of charts and diagrams) divided into the following three chapters:

- a) Technical Approach and Methodology,
- b) Work Plan, and
- c) Organization and Staffing
- a) Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-5.
- c) Organization and Staffing. In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

### Form TECH-4: Team Composition and Task Assignments

(Original Copy to be submitted as part of the Technical Proposal – Envelope B)

Professional Staff				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

#### Form TECH-5 Work Schedule

(Original Copy to be submitted as part of the Technical Proposal – Envelope B)

No	A akiyib.	Months					
No.	Activity	1	2	3	4		n
1							
2							
3							
n							

- 1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in the form of a bar chart.

### Form TECH-6 PLEASE SUBMIT FOLLOWING DOCUMENTS FOR EVALUATION ALONG WITH RFP

- I. Brief design philosophy
- II. Salient features of the proposed facility
- III. A 3D architectural plan Interior and Exterior
- IV. Project organogram along with CVs of Key Personnel as per prescribed format
- V. Estimated budget for implementation of the bidder's plan and design

#### Form TECH-7 FORMAT FOR SUBMISSION OF CV

(To be provided in original as part of RFP - duly signed by Expert/ Applicant)

	d Position	art Or IN	arr - duly si	gried by Expert	Applicanty
Name of Firm					
Name of Expert					
Date of Birth			5. Citizenshi	р	
Education				•	
Membership in Profession	al Associations				
Countries of Work Experie	ences				
	Languages	Spec	aking	Reading	Writing
Languages	English				
	Hindi				
Employment Record					
From		То			
Employer:					
Position held					
From		To:			
Employer:					
Position held					
Note: Add separate shee	et if required.				
Work Undertaken That Be	st Illustrates Capab	ility To H	andle The Tas	sks Assigned	
Year					
Location					
Client					
Main Project Features					
Positions Held					
Activities Performed					
Note: Add separate shee	et if required.				

Expert's contact information:	(e-mai	lphone)
Certification:		

- I, the undersigned, certify to the best of my knowledge and belief that
- (i) This CV correctly describes my qualifications and experience
- (ii) I was not part of the team who wrote the Scope of Work for this RFP.
- (iv) I certify that I have been informed by the firm that it is including my CV in the Proposal for the {name of project and contract}. I confirm that I will be available to carry out the assignment for which my CV has been submitted in accordance with the project and the schedule set out in the Proposal.

Or [If the CV is signed by the firm's authorized representative and the written agreement Attached]

I, as the authorized representative of the firm submitting this Proposal for the {name of project and contract}, certify that I have obtained the consent of the named resource to submit his/her CV, and that I have obtained a written representation from the expert that s/he will be available to carry out the assignment in accordance with the implementation arrangements and schedule set out in the Proposal.

I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date: [Signature of Personnel or authorized representative of the firm] Day/Month/Yea
Full name of authorized representative:

#### Form FIN-1: Financial Proposal Submission Form

(To be Submitted in **Envelope-C**. If any bidder will submit the financial proposal in Envelope A or B then bid shall be rejected)

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for [Insert title of assignment] in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures<sup>2</sup>]. This amount is exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Paragraph Reference 17 of the Fact Sheet.

No commissions or gratuities have been or are to be paid by us to agents relating to this Proposal and Contract execution.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

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<sup>&</sup>lt;sup>2</sup> Amounts must coincide with the ones indicated under Total Cost of Financial proposal in Form FIN-2.

### Form FIN-2: Summary of Costs

(To be submitted in **Envelope-C**. If any bidder will submit the financial proposal in Envelope A or B then bid shall be rejected)

Item	Costs (In INR)
Total Costs of Financial Proposal3	

<sup>&</sup>lt;sup>3</sup> Indicate the total costs, net of any tax and cess, to be paid by the Client

### Form FIN-3: Performa of Performance Bank Guarantee

(To be stamped in accordance with stamp Act)
(To be issued by a Bank) (Original Copy to be submitted within 15 days of issuance of letter of intent notifying the award
of the contract— <b>Envelope-D</b> )
This Deed of Guarantee executed at ———————————————————————————————————
(hereinafter referred to as —the Guarantor) which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns;
In favour of Member Secretary of Chhattisgarh Environment Conservation Board, having its office at SDC Paryavas Bhavan, North Block Sector-19, Naya Raipur (C.G.) 492002 (hereinafter called — Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipurll which expression shall unless it be repugnant to the subject or context thereof include its heirs, executors, administrators, successors and assigns);
Whereas M/s a company formed under (specify the applicable law) and having its registered office at has been, consequent to conduct and completion of a competitive bidding process in accordance with the letter of requirements document No dated _/_/2017 issued by Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur, and selected M/s (hereinafter referred to as the Bidder) for the Agreement by Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur as more specifically defined in the aforementioned Document including statement of work and the Agreement executed between Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur and Bidder. The Agreement requires the Bidder to furnish an unconditional and irrevocable Bank Guarantee for an amount of Rs/-(Rupees
Whereas, the Bidder approached the Guarantor and the Guarantor has agreed to provide a Guarantee being these presents:
Now this Deed witnessed that in consideration of the premises, we, ———— Bank hereby Guarantee as follows:
The Bidder shall implement the Project, in accordance with the terms and subject to the conditions of the Agreement, and fulfil its obligations there under
We, the Guarantor, shall, without demur, pay to Member Secretary, Chhattisgarh Environment Conservation Board (CECB) Raipur an amount not exceeding Rs (Rupees only) within 7 (seven) days of receipt of a written demand therefore from Member Secretary, Chhattisgarh Environment Conservation Board (CECB) Raipur stating that the Bidder has failed to fulfil its obligations as stated in Clause 1 above.

The above payment shall be made by us without any reference to the Bidder or any other person and irrespective of whether the claim of Member Secretary, Chhattisgarh Environment Conservation Board (CECB)Raipur is disputed by the Bidder or not.

The Guarantee shall come into effect from\_\_\_\_\_\_ (Start Date) and shall continue to be in full force and effect till the earlier of its expiry at 17:00 hours Indian Standard Time on \_\_\_\_\_ (Expiry Date) (both dates inclusive) or till the receipt of a claim, from the Chhattisgarh Environment Conservation Board (CECB), Raipur, Government of Chhattisgarh under this Guarantee, which is one month after the expiry of performance guarantee, whichever is earlier. Any demand received by the Guarantor from Member Secretary, Chhattisgarh Environment Conservation Board (CECB) Raipur prior to the Expiry Date shall survive the expiry of this Guarantee till such time that all the moneys payable under this Guarantee by the Guarantor to Member Secretary, Chhattisgarh Environment Conservation Board (CECB) Raipur.

In order to give effect to this Guarantee, Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur shall be entitled to treat the Guarantor as the principal debtor and the obligations of the Guarantor shall not be affected by any variations in the terms and conditions of the Agreement or other documents by Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur or by the extension of time of performance granted to the Bidder or any postponement for any time of the power exercisable by Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur against the Bidder or forebear or enforce any of the terms and conditions of the Agreement and we shall not be relieved from our obligations under this Guarantee on account of any such variation, extension, forbearance or omission on the part of Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur or any indulgence by Member Secretary, Chhattisgarh Environment Conservation Board (CECB), Raipur to the Bidder to give such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

This Guarantee shall be irrevocable and shall remain in full force and effect until all our Obligations under this guarantee are duly discharged.

•	his guarantee and the undersigned is duly authorized to the power granted under
In witness, whereof the Guarantor year first here-in-above written.	has set its hands hereunto on the day, month and
Signed and Delivered byand authorised office.	Bank by the hand of Shri its
Authorised Signatory	_Bank