

# TENDER DOCUMENT

- 1 Name of work : Data Collection/ Generation And Analysis Of Various Samples In Connection With Eia-Emp Preparation Of Lingaraj Ocp Expn (13.0 Mtpa To Normative 16.0 Mtpa With A Peak Production Of 20.0 Mtpa Within MI Area Of 1410.020), Talcher Coalfield, Mcl.
- 2 Tender Notice No. & Date : 261 dt. 01-11-2012
- 3 Earnest Money Deposit : Rs 13,400.00 (Rupees thirteen thousand and four hundred ) only.
- 4 Completion period of work : Three months.
- 5 Date & time of submission of tender : Upto 3.00 p.m. on 01.12.2012
- 6 Date & time of opening of tender : At 3.30 p.m. on 01.12.2012
- 7 Tender Document issued to : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature of Issuing Officer

Cost of tender document submitted vide CR No. Dt.  
 Certified that this documents contains from page 01 to 58

## PART : I (TECHNICAL / COMMERCIAL BID)



REGIONAL INSTITUTE - VII  
 CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED  
 (A subsidiary of Coal India Limited)  
 BHUBANESWAR (ODISHA) - 751 001

I N D E X

<u>SECTION</u>	<u>PAGE NO.</u>
1. Tender Document issue details	01 -01
2. I N D E X	02 - 02
3. Notice Inviting Tenders	03 - 04
4. Detailed Tender Notice	05 - 08
5. Instruction to the Bidders	09 - 10
6. Process for Evaluation of Tenders	11 - 11
7. General Terms & Conditions	12 - 41
8. Additional Terms & Conditions	42 - 44
9. Technical Specifications	45 - 48
10. Additional Safety Measures to be taken by the Contractors : Safety Code.	49 - 51
11. Compliance of Labour Laws	52 - 54
12. Proforma for execution of agreement	55- 56
13. <u>Registers to be Maintained</u> :	
i) Sample Register	57 - 57
ii) Site Order Book	57 - 57
iii) Hindrance Register	57 - 57
iv) Formats for Affidavit / Declatration	58 – 58
14. Part –II	59-61



works shall not be permitted. For further details, please log on CMPDI's web page <http://www.cmpdi.co.in./www.tenders.gov.in>. Any tenderer, who desires to download the tender document from website and submit the tender on due date and time, may do so subject to the condition that they will deposit the cost of tender document for each set in the form of Demand Draft drawn on any nationalised / scheduled Bank payable to "CMPDIL, Regional Institute, Bhubaneswar" payable at Bhubaneswar.

Duly filled in sealed tenders in two parts should be submitted in the office of the Regional Director, CMPDI RI-VII, Bhubaneswar upto 3.00 p.m. on **01.12.2012** and Part -I of the tenders shall be opened at 3.30 p.m. on the same day in presence of the attending tenderers or their authorised representatives.

The Earnest Money will have to be deposited in the form of Bank Draft from any nationalized/scheduled Bank payable to "CMPDIL, Regional Institute, Bhubaneswar" payable at Bhubaneswar. The Earnest Money Deposit shall be submitted in a separate sealed envelope, which will be opened first. CMPDI does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders without assigning any reason whatsoever.

HOD (Civil)/RI-VII

COPY TO

1. GM (C) , CMPDI HQ, Ranchi.
2. R.D, CMPDI RI-VII, Bhubaneswar.
3. HOD (C), CMPDIL, RI-I, II, III, IV, V, VI. HOD (FIN) / HOD (ADMN), CMPDI RI-VII, Bhubaneswar
4. O.I.C,CMPDI,exploration Camp, Gopalpur,Talcher &Kosala.
5. NOTICE BOARDS CMPDI RI-VII, Bhubaneswar.

CENTRAL MINE PLANNING & DESIGN INSTITUTE LIMITED  
OFFICE OF THE REGIONAL DIRECTOR  
6TH FLOOR, GRUHA NIRMAN BHAWAN  
SACHIVALAYA MARG  
BHUBANESWAR

**DETAILED TENDER NOTICE**

1. Sealed tenders in prescribed forms and parts with the name of work superscribed as "Data Collection/ Generation And Analysis Of Various Samples in Connection With Eia-Emp Preparation Of Lingaraj Ocp Expn (13.0 Mtpa To Normative 16.0 Mtpa With A Peak Production Of 20.0 Mtpa Within MI Area Of 1410.020), Talcher Coalfield, Mcl." vide tender notice no 261 dt. 01.11.2012 on each of the envelopes are invited from bonafide and experienced contractors and will be received at the office of the Regional Director, CMPDI, RI-VII, Bhubaneswar upto 3.00 p.m. on dt. **01.12.2012**. All the tenders shall be opened at 3.30 p.m. on the same day in presence of the attending tenderers or their authorised representatives at office of the Regional Director, CMPDI RI-VII, Bhubaneswar, who wish to be present. In case where the tender is in two parts, only Part-I will be opened on the scheduled date and time.

2(a) Tenders should be submitted in the prescribed form in time. These forms together with the proposed contract document including specifications and tender drawings (if any) may be obtained from the office of the Regional Director, CMPDI RI-VII, Bhubaneswar on payment of cost of tender document in cash (non-refundable), to FM (Cash), on any working day between 11.00 am and 4.00 pm, sum of **Rs. 500.00 (Rupees five hundred only)** as application fee for each set. General Specifications and description of the work is enclose with the tender document.

2(b) Any bid received after the deadline prescribed at Clause : 1 above due to any reason, whatsoever, will not be accepted. In the event of the specified date for the submission of the bids being declared a holiday by the employer, the bids will be received upto the time on the next working day.

2(c) Tenders thus submitted shall consist of the following :

- i) Complete set of the tender documents as sold, duly filled in and signed on all pages and at different places as required of the tender documents including Part : I and Part : II of the tenders as per the tender notice, as applicable.
- ii) Photocopy of Sales Tax Registration / TIN.
- iii) Photocopy of PAN (Permanent Income Tax Account No.).
- iv) Earnest Money Deposit (as specified hereinafter).
- v) Power of Attorney in the case the tender is signed by an authorised representative of the tenderer.
- vi) Photocopy of Service Tax Registration
- vii) Full name & address of the tenderer shall be written on the bottom left hand corner of the sealed cover.

2(d) Documents submitted alongwith the tender shall be final. No further correspondence with regard to completeness of documents submitted shall be made. Supplementary documents shall not be accepted unless they are asked for by the company.

2(e) The tender document in which the tender is submitted by the tenderer shall become the property of the Company and the Company shall have no obligation to return the same to the tenderer.

2(f) The tender shall be submitted in two parts as indicated in the Notice Inviting Tenders. **Part-I** shall consist of **technical/commercial bid and the credentials** as asked for.

**Part-II** shall consist of the tender documents as sold to the tenderers duly filling in rates, amounts etc. both in figures & words i.e. **price bid**.

The Earnest Money Deposit is to be deposited in a separate envelope altogether superscribing "Earnest Money Deposit" and not inside the envelope containing Part : I or Part-II of the Bid.

Part : I & Part-II should also be put in two separate sealed envelopes superscribed as such. Thereafter, all the three envelopes should be submitted in a sealed envelope with appropriate superscription. Every page of tender documents shall be signed by the tenderer.

- 2(g). Each bidder shall submit only one bid for one package. A bidder who submits or participates in more than one bid (other than as subcontractor or in case of alternatives that have been permitted or requested) will cause all the proposals with the bidders' participation to be disqualified.
3. Earnest Money should be deposited in a separate envelope in the form as indicated in the Notice Inviting Tenders (NIT) and Clause : 2 (f) above.
4. No tender shall be considered unless accompanied by the said Earnest Money.
5. The earnest money will be retained in the case of successful tenderer and refunded to the unsuccessful tenderers in due course and will not carry any interest. The earnest money deposited by the successful tenderer will be dealt with as provided elsewhere in the tender document.
- 6(a). Site Investigation Report : The contractor, in preparing the bid, shall rely on the site investigation report referred to in the contract data, supplemented by any information available to the bidder.
- 6(b). Every tenderer is expected, before quoting his rates, to go through the requirements of quality of materials/workmanship under specification/requirements and conditions of contract and to inspect the site/area of the proposed work.

In case of item rate tender a schedule of quantities is enclosed with the tender document. The tenderer should quote specific rate for each item in the schedule and the rates shall be in rupees and paise. The rates shall be written both in words and figures and the unit in the words and the amount against each item totalled. In the event of any discrepancy between the description in words and figures, the description in words will prevail.

**The rates for items of work should be inclusive of all incidentals, overheads, taxes, Octroi, duties, leads, lifts, carriage, tools & plant etc. as required for execution and completion of the work. Service tax and cess as applicable shall be quoted as indicated in the price bid document**

It shall be deemed that the tenderer has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether they actually visited the site/area or not and have taken all the above factors into account while quoting his rates.

- 7(a) Corrections where unavoidable, shall be made by crossing out and rewriting duly authenticated with full signature and date by the tenderer. Erasing or over-writing in the tender documents may disqualify the tender.
- 7(b) The tenders shall be submitted either in English or in Hindi.
- 8 Cost of Bidding : The bidder shall bear all costs associated with the preparation and submission of his bid and the employer will in no case be responsible and liable for those costs.
9. The tenderer shall closely study all specifications in detail which govern the rates for which they are tendering.
10. The work should be completed within **three(3) months** from the issue of letter of acceptance of tender/work order or handing over the site / handing over reasonable number of working drawings for starting of work (if any) to the contractor or the period of mobilisation allowed in the work order for starting the work in special circumstances, whichever is latest. The site may be handed over in phases.

11. On completion of the work all rubbish, debris, brick bats etc. shall be removed by the contractor (s) at his/their own expenses and the site be cleaned and handed over to the company and he / they shall intimate officially of having completed the work as per contract.
12. The company does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders without assigning any reasons whatsoever and to split up the work between two or more tenderers or accept the tender in part and not in its entirety.
13. The tenderer(s) will indicate the equipment/machinery/vehicles he/they is/are going to use on this job and also give adequate evidence of experience in doing similar works and financial capacity to complete the work in time.
14. The tenderer(s) should also state what technical/supervisory personnel he/they will be employing for supervising the work.

14(a) Full information should be given by the tenderer in respect of following :

- (i) If an individual : Full Name  
Postal Address  
Place of business
- (ii) If proprietary firm : Name of the Proprietor,  
Full postal address of Firm/Proprietor.
- (iii) If a partnership for : Full Name of Partners  
Full postal addresses of the registered office of firm & the partners  
Registered partnership Deed
- (iv) In case of company : Date and place of registration  
Memorandum & Articles of Association  
Name of the all the Directors  
Full postal address of the registered Office & all the Directors.
- (v) Joint Venture : Two or three Companies / Contractors participating in the tender as joint venture should submit firmwise partnership details, Banker's name, execution of work with details of contribution of each and all other relevant details.

14(b). Change in constitution of the contracting agencies :

Prior approval in writing of the company shall be obtained before any change is made in the constitution of the contracting agencies, otherwise it will be treated as a breach of contract.

15. Canvassing in connection with the tenders in any shape or form is strictly prohibited and tenders submitted by such tenderers who resort to canvassing shall be liable to rejection.
- 16(a). Every tenderer will have to submit a declaration in support of the authenticity of the credentials submitted by him along with the tender in the form of an "**affidavit**" as per the format provided at ANNEXURE at Page No.58.
- 16(b). If the tenderer deliberately provides wrong information or submits false credentials in support of his qualifications, the company reserves the right to terminate / rescind the contract, forfeit the EMD and other dues of the contractor and to take any other action as deemed fit.
17. An intending tenderer, after obtaining tender documents on payment of application fee, having doubts as to the meaning of any part of the tender documents may submit to the official inviting tender, a written request for interpretation or clarification thereof. Any interpretation or clarification of the tender documents by formal addendum if issued by the official inviting tender, shall be final and valid and binding on the company and the tenderers.

18. On receipt of letter for acceptance of the tender issued by the company, the successful tenderer shall execute/accept contract agreement/work order in the Company's prescribed form for the due fulfillment of the contract. Failure to enter into the required contract/accept the work order issued by the company with the specified period in the work order, shall entail cancellation of letter of acceptance of tender/work order and forfeiture of the earnest money. The written contract/work order to be entered into between the contractor and the company shall be the foundation of the right of both the parties and the contract shall not be deemed to be executed until the agreement/work order is signed/accepted by both the parties i.e. contractor and the Company.
- 19(a). The validity period of the tenders shall be 4 (four) months from the date of opening of price bid or revised price bid/negotiated offer, if any
- The tenderer shall not, during the said period or within the period extended by mutual consent, revoke or cancel his tender or alter the tender on any terms/conditions thereof without consent in writing of the company.
- In case of the tenderer violates to abide by this, the Company will be entitled to forfeit the Earnest Money and reject the tender.
- 19(b). The company reserves the right to postpone the date of receipt and opening of tenders or to cancel the tenders without assigning any reason whatsoever.
20. The company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.
20. The earnest money shall stand forfeited if the conditions as stipulated below are not fulfilled by the tenderer without furnishing any reason for the same.
21. This detailed Tender Notice shall be deemed to be part of the Contract Agreement/Work Order.
22. No subletting of work as a whole by the contractor is permissible. Subletting of work in piece rated jobs is permissible with the prior approval of the department.
- The Contract Agreement will specify major items of supply or services for which the contractor proposes to engage sub-contractor/sub-vendor. The contractor may from time to time propose any addition or deletion from any such list and will submit proposals in this regard to the Engineer-in-Charge/Designated Officer in charge for approval well in advance so as not to impede the progress of work. Such approval of the Engineer in Charge / Designated Officer in Charge will not relieve the contractor from any of his obligations, duties and responsibilities under the contract.
23. In case the contractor enters into any litigation such action should have to be taken in a court of law with jurisdiction over the place where the subject work is to be executed.

HOD (Civil)/RI-VII



## INSTRUCTION TO THE BIDDERS

1. The Bidders are supposed to visit and examine the site of work at their own cost and risk and obtain all information that may be necessary for participating in the tender and entering into contract.
2. The Bidders are advised to study this document in detail and understand all provisions.
3. Place of submission of Tender Document : Office of the Regional Director, RI-VII  
Central Mine Planning and Design Institute Limited  
6th Floor, Gruha Nirman Bhavan,  
Sachivalaya Marg  
Bhubaneswar.

4. **On opening of Part-I of the tenders, the following shall only be checked for deciding eligibility for opening of Price Bids (Part-II) :**

- i. Earnest Money Deposit of Rs. 13,400.00 (Rupees thirteen thousand and four hundred) only in the form of Demand Draft drawn on any nationalised / scheduled Bank payable to “**CMPDIL, Regional Institute, Bhubaneswar**” payable at Bhubaneswar.

Documentary proof of satisfactory execution, in its name as a prime contractor, having successfully completed similar works during last 7 (seven) years ending **31<sup>st</sup> October, 2012** should be either of the following :

- a. “Three similar completed works each costing not less than **40% of estimated cost.** or
- b. Two similar completed works each costing not less than **50 % of estimated cost.** or
- c. One similar completed work costing not less than **80% of estimated cost.**”

In case the bidder is not a prime contractor but a sub-contractor, the bidder experience as sub contractor will be taken into account if : The contract in support of qualification is a sub-contract in compliance with the provision of such sub-contract in the original contract awarded to prime contractor.

- **The “similar nature of works” shall mean data collection/ generation and analysis of various samples of air , water, noise, soil, flora & fauna, socio economic etc. related to EIA – EMP.**

- ii. Average annual financial turnover during the last 3 (three) years, ending 31st March of the previous financial year should be at least 30% of the estimated cost.

- The turnover figures shall be taken from the P&L Statement from Chartered Accountant or completion/ payment certificate issued by the employer.

- iii. Photocopy of Permanent Account Number (PAN).
- iv. Photocopy of Sales Tax Registration/TIN
- v. Photocopy of Service tax Registration
- vi. **Air, Water, Noise data & Soil analysis** :-Bidders should provide documentary evidence of owning an Environmental Laboratory or having MOU with an Environmental Laboratory. The Environmental Laboratory should be duly accredited by Central Pollution Control Board (CPCB), New Delhi or Ministry of Environment & Forest (MoEF) or NABL(National Accreditation Board for Testing and Calibration Laboratories) or Concerned State Pollution Control Board (SPCB) having jurisdiction in the command area for which the bidder proposes to bid. They should furnish such proof alongwith PART-I of the tender.

- vii. Affidavit regarding genuineness of the papers submitted and information furnished and non-relation in CMPDI duly authenticated by Notary as per the format provided at ANNEXURE at Page No. 58 on a non-judicial stamp paper of Rs. 5/- (Five)
  - viii. Power of Attorney of the person signing the Tenders, if Partner / Proprietor of the firm not signing the tenders.
  - ix. The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi Govt. Agencies or PSU's. as per the format provided at ANNEXURE at Page No. 58.
  - x. The tenderers are required to be registered under CMPF/EPF scheme and their employees should be covered under EPF/CMPF scheme. They should furnish such proof alongwith PART-I of the tender.
5. Tenders shall be rejected outright without any reference if the documents submitted by the tenderers alongwith their tender fail to prove eligibility in terms of above criteria. **Documents submitted alongwith the tenders shall be final and no supplementary document shall be accepted.**
  6. In Price Part, the overall lowest tenderer shall be considered for award of the work. Being lowest in any part of the tender shall be of no consequence and such tenderers shall not have any claim for award of part work.
  7. Tenders submitted shall become property of the company. Un-opened price bids of the ineligible tenderers shall be destroyed.
  8. If the rate quoted by the Contractor for item rate/percentage rate is un-workable in comparison to justified rate prepared by the department, the difference in cost between the two will be deposited by the contractor in advance as Guarantee. This will be called as Additional Performance Security. The additional Performance Security will be released after successful completion of the work.
  9. The Company shall be at liberty to deduct/appropriate from the security deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract and the amount appropriated from the security deposit shall have to be restored by further deduction from the contractor's subsequent on-account running bills, if any.
  10. Any willful attempt by the bidders to camouflage the deviations by giving them in the covering letter or in any other documents may render the bid itself as non-responsive.

NOTE :

- I. **The party who is interested to participate in the tender on downloading the Tender Document from Web-site shall have to Deposit the cost of tender document i.e Rs 500.00 along with their offer in the form of Demand Draft on any nationalised / scheduled bank in favour of "CMPDIL, Regional Institute, Bhubaneswar" payable at Bhubaneswar in addition to the EMD required to be submitted as per NIT.**
- II. **For those who shall download the tender document from CMPDI's website, shall have to give the following declaration under their signature :**

**"This is to certify that I/We have downloaded this tender document from CMPDI's website and is being submitted without any tampering on any page. Further, We understand that in the event of any tampering being detected at any stage or at any time, then in that case CMPDI has got the right to reject/ terminate this offer/ work and forfeit the EMD/ Security Deposit submitted by us and blacklist our firm".**

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## Process For Evaluation of Tenders

- (i) Tender Document shall be issued to intending bidders on request and production of cost of Tender document as stipulated in NIT.
- (ii) Tenders shall be submitted in two Parts as stipulated in NIT in the tender box placed in the office of the Regional Director, CMPDI, RI-VII, Bhubaneswar or as specified in NIT within the scheduled date and time.
- (iii) Part-I of the tenders will be opened in presence of attending bidders by duly constituted committee. The Part-II (Price bid) of all the bidders alongwith the workable/justified value of the work duly approved by the competent authority shall be sealed in a separate cover which would be kept in safe custody in the office of the Regional Director, CMPDI, RI-VII, Bhubaneswar.
- (iv) Part-I of the tenders shall be evaluated on scrutiny of Papers/Documents submitted by the tenderers along with the tenders strictly in terms of eligibility criteria as mentioned vide clause no. 4 of "instruction to the bidders" of NIT. The bidders who fail to fulfill eligibility criteria shall not be entitled for opening of their Part : II i.e. **price bid**.

***Bidders should also note that documents submitted along with the tender shall be final. No further correspondence with regard to completeness of documents submitted shall be made. Supplementary documents shall not be accepted.***

- (v) Part-II (**Price bid**) of those bidders who fulfil the eligibility criteria shall be opened only, on scheduled date and time with intimation to the eligible bidders. Tenders submitted shall be the property of the company. The company shall have no obligation to return the un-opened Price Bids to the in-eligible tenderers.
- (vi) The overall lowest tenderer shall be considered for award of the work. Being lowest in any Part of the tender shall be of no consequence and such tenders shall not have any claim for award of Part work.

Evaluation of lowest offered value shall be compared with the workable rate/justified value already prepared by the technical representatives of HOD (Civil)/RI-VII, Bhubaneswar in line with the CIL CIVIL ENGINEERING MANUAL.

If the value offered is less than the workable rate/justified value, difference of the two would have to be deposited by the lowest bidder as a Additional Performance Security (As per provision of the CIL CIVIL ENGINEERING MANUAL) to CMPDI ,RI-VII through Bank draft payable at Bhubaneswar before execution of agreement.

In case the offered value is more than the workable/justified value and beyond the provision of the CIL CIVIL ENGINEERING MANUAL, attempts shall be made by the Tender Committee to reduce the value through negotiation with the lowest bidder and liable to be cancelled if the quoted value is beyond provisions in Civil Engineering Manual.

- (vii) After observing the above formalities TCR would be processed, as the case may be, as per the guide lines of "CIL CIVIL ENGINEERING MANUAL."

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## **GENERAL TERMS AND CONDITIONS**

### **1. Definitions**

- i) "Employer" or "Company" means the Central Mine Planning & Design Institute Limited who will employ the contractor represented by the appropriate authority.
- ii) "Principal Employer" means the Central Mine Planning & Design Institute Limited or any of its subsidiaries or the officer nominated by the Company to function on its behalf.
- iii) The word "Contractor/Contractors" wherever occurs means the successful tenderer/tenderers who has/have deposited the necessary Earnest Money and has/have been given written intimation about the acceptance of tender and shall include legal representative of such individual or persons composing a firm or a company or the successors and permitted assignees of such individual, firm or Company, as the case may be.
- iv) "Site" means the land and places including any building and erection thereon, over, under, in or through which the permanent works or temporary works designed by the Engineer-in-Charge are to be executed and any other lands and places provided by the Employer for working space or any other purpose as may be specifically designated in the Contract as forming part of the site.
- v) The term "Sub-Contractor" as employed herein, includes those having a direct contract with Contractor either on piece rate, item rate, time rate or any other basis and it includes one who furnishes work to a special design according to the plans or specifications of this work but does not include one who merely supplies materials.
- vi) "Accepting Authority" shall mean the management of the company and includes an authorised representative of the company or any other person or body of persons empowered in this behalf by the company.
- vii) "Engineer-in-charge" shall mean the officer nominated by the company in the Civil Engineering cadre/discipline who is competent to direct supervisors and authorised to be in charge of the works for the purpose of this contract. The Engineer-in-Charge / Designated Officer in Charge who is of an appropriate seniority, will be responsible for supervising and administering the contract, certifying payments due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. The Engineer-in-Charge/Designated Officer in Charge may further appoint his representatives i.e. another person/Project Manager or any other competent person and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under their delegation of powers of the company. However, overall responsibility, as far as the contract is concerned, will be that of the Engineer in Charge/Designated Officer in Charge.
- viii) The "Contract" shall mean the notice inviting tender, the tender as accepted by the Company, the work order issued to the contractor, and the formal contract agreement executed between the company and the contractor together with the documents referred to therein including general terms and conditions, special conditions, if any, scope of work, frozen terms and conditions/technical parameters/scope of work and revised offer, if any, specifications, drawings, including those to be submitted during progress of work, schedule of quantities with rates and amounts.
- ix) A "Day" shall mean a day of 24 hours from midnight to midnight.
- x) The "Work" shall mean the works required to be executed in accordance with the contract/work order or parts thereof as the case may be and shall include all extra or additional, altered or substituted works or any work of emergent nature, which in the opinion of the Engineer-in-charge, become necessary during the progress of the works to obviate any risk or accident or failure or become necessary for security.
- xi) "Schedule of Rates" referred to in this conditions shall mean the standard schedule of rates prescribed by the company and the amendments issued from time to time.
- xii) "Contract amount" shall mean:

- a) in the case of turn key contracts the total sum for which tender is accepted by the company.
- b) in the case of other types of contracts the total sum arrived at based on the individual rates quoted by the tenderer for the various items shown in the "Schedule of Quantities" of the tender document as accepted by the Company with or without any alteration as the case may be.
- xiii) "Written notice" shall mean a notice or communication in writing and shall be deemed to have been duly served if delivered in person to the individual or to a member of the contractor's firm or to an office of the company for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.
- xiv) "The constructional plant" means all appliances, tools, plants or machinery or whatsoever nature required in or about the execution, completion or maintenance of the works but does not include materials or other things intended to form part of the permanent work.
- xv) "The Letter of Acceptance of Tender" means letter giving intimation to the tenderer that his tender has been accepted in accordance with the provisions contained in that letter.
- xvi) "Department" means the Town Engineering Department of Central Mine Planning & Design Institute Limited represented by the appropriate authority.
- xvii) "Act of insolvency" means as it is designed by Presidency Town Insolvency Act or Provincial Insolvency Act or any act amending such originals.
- xviii) The words indicating the singular only also include the plural and vice-versa where the context so requires.

## 2. **Contract Documents:**

The following documents shall constitute the contract documents :

- i) Notice Inviting Tender/Detailed Tender Notice.
- ii) Articles of Agreement /Letter of Acceptance of Tender/Work Order.
- iii) General Terms & Conditions of contract/Commercial Terms & Conditions of contract.
- iv) Additional Terms & Conditions of contract, if any.
- v) Specifications.
- vi) Schedule of quantities (or Bill of Quantities)/Schedule of work/Scope of work and schedule of deviation (to be provided by the contractor).
- vii) Frozen terms & conditions/technical parameters/scope of work and revised offer, if any.
- viii) Contract drawings and work programme.
- ix) Safety code etc. forming part of the tender.

### **N.B. : Deviations :**

Deviations sought by the bidders, whether they are technical or commercial deviations, must only be given in the schedules prescribed for them. Any willful attempt by the bidders to camouflage the deviations by giving them in the covering letter or in any other documents than the prescribed schedules may render the bid itself as non-responsive.

- 2.1 The contractor shall enter into and execute contract agreement in the prescribed form provided hereinafter. The cost of the stamp papers for the contract agreement shall be borne by the contractor. Two sets of contract document/agreements shall be prepared and signed by both the parties. One of the sets shall be stamped "Original" and the other "Duplicate." The duplicate copy will be supplied to the contractor free of cost and the original is to be retained by the company. For any additional copies required by the contractors the price to be charged would be that of the cost of the Tender Document (Application Fee).

The additional copies shall be certified by the Engineer-in-Charge.

The contractor shall keep copy of these documents on the site/place of work in proper manner so that these are available for inspection at all reasonable times by the Engineer-in-charge, his representative or any other officials authorised by the company for the purpose.

- 2.2 The contract document shall not be used by the contractor for any purpose other than this contract & the contractor shall ensure that all persons employed for this contract strictly adhere to this and maintain secrecy, as required of such documents.

### 2.3 **Tender Evaluation & Bid Assessment :**

The tenders received will be scrutinised and evaluated by duly constituted tender committee.

The tender committee will examine the comparative statements prepared by the concerned technical department, will satisfy itself that all aspects / conditions of each offer have been properly evaluated w.r.t. financial implication etc.

Tender received without Earnest Money will be rejected.

The deviations from the commercial terms & conditions and tender specifications are scrutinised before opening of price bids. **Normally no deviations in the commercial terms and conditions will be accepted.**

However, the tender committee may decide to scrutinise the different conditions given by the tenderers and formulate and freeze the acceptable conditions and intimate all the tenderers about the same and give them an opportunity to revise their price bid, if necessary, before opening the same.

The price bids are opened at the time and place fixed for the same in presence of the tenderers and committee members and due information for opening of Price Bid is to be given to all concerned. In case where the tenderers are given opportunity to revise their Price Bids, only the Revised Price Bids are opened and the original Price Bids are to be kept in tact in custody of the company.

***The Price Bids of the tenderers will have no conditions. The Price Bids which are incomplete and not submitted as per instructions given in the tender document will be rejected. (This will be applicable for work value of Rs. One crores and above)***

Bidders, who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the updated estimated value. The available Bid Capacity will be calculated as under :

**Assessed Available Bid capacity = (A x N x 2 – B)**

where :

A= Maximum value of Civil Engineering Works executed in any one year during the last five years (updated to present level @ 5% per calender year) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which bids are invited.

B = Value at present price level, of existing commitments and on going works to be completed during the next ..... months (period of completion of works for which bids are invited)

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

- made misleading or false representatitons in the forms, statements and attachments submitted in proof of the qualifying requirements, and / or
- record of poor performance such as abandoning of works, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc.



					order			completed.

**Quantities of works executed as prime contractor (in the same name and style) in the last five years \*\***

**The table given below is a typical example & the contents may vary depending upon the nature and scope of work.**

Year	Name of the work	Quantity of work performed (cum)			Remarks (indicate contract ref.)
		Cement F/Works, including	concrete RCC & PCC	Masonry	
2003 – 2004					
2004 – 2005					
2005 – 2006					
2006 – 2007					
2007 - 2008					

- 1. Enclose a certificate(s) from Engineer(s)-in-charge.**
- 2. Immediately preceding the financial year in which bids are received.**

**(THE SYSTEM OF DETERMINATION OF BID ASSESSMENT CAPACITY AS ABOVE WILL BE USED ONLY IN CASE OF WORKS OF ESTIMATED VALUE OF OVER Rs. ONE CRORE.)**

No documents presented by the bidder after the closing date and time of the bid will be taken into account unless it is of purely technical nature which has no bearing financially on the contract and which does not seek major changes in the technical specifications given in the bid document. If a bidder offers a rebate unilaterally after the closing date and time of the bid, it will not be taken into account for evaluation purpose by the tender committee, but if that bidder emerges as the lowest evaluated, the rebate offered will be taken into account for determination of the total offer.

If the bid of the successful bidder is seriously unbalanced in relation to the estimate of the cost of work to be performed under the contract, the company may require the bidder to produce detailed price analysis for any or all items of the Bill of Quantities to demonstrate the internal consistency of these prices with the construction method and the schedule proposed. After evaluation of the price analysis, the company may require that the amount of the performance security/security deposit is increased at the expense of the successful bidder to a level sufficient to protect the company against financial loss in the event of default on the part of the successful bidder under the contract.

#### **2.4 Abnormally High Rate (AHR) and Abnormally Low Rate (ALR) items :**

Abnormally High Rates and Abnormally Low Rates, if quoted by the contractor in item rate tenders will be identified and dealt with as under :



- i) For identification of AHR & ALR items the ceiling of  $\pm 20\%$  respectively, when compared with the updated estimated rate, will be considered.
- ii) Variation in quantity on quoted rate during execution for AHR and ALR items shall be permitted upto  $\pm 25\%$  (+25% for AHR and -25% for ALR) of the quantity provided for items of work below plinth level and  $\pm 5\%$  of the quantities provided for items of work above plinth level respectively.
- iii) Quantity variation beyond the limit mentioned at (ii) above shall be dealt by arriving at new rate based on prevalent market rates of material and labour analysed as per standard analysis of rate of NBO/CPWD. Payment of extra quantity over the permitted quantity of  $\pm 25\%$  and  $\pm 5\%$  (as the case may be) would be made on the basis of the new analysed rate.
- iv) For identified abnormally low rate (ALR) items, the contractor will be required to deposit with the company the difference in amount calculated between the departmental justified rate multiplied by the quantity of a particular ALR item and the ALR rate quoted by the contractor multiplied by the quantity of the same item.

The total amount to be deposited will be the sum total of all the identified ALR items calculated as per method outlined above.

Amount so retained will be refunded on successful completion of individual ALR items of work.

## 2.5 Negotiations :

Negotiations will be held only if the lowest rate received is not reasonable and decision of the company regarding reasonableness of rates quoted will be final and binding on the bidders.

Work will be awarded to the lowest bidder (L-1) without post tender negotiations if the rates are reasonable.

If the rates are not reasonable negotiations with L-1 only may be undertaken to arrive at a reasonable rate.

## 2.6 Acceptance of offer :

Letter of Acceptance is an acceptance of the offer by the company and it need not be accepted by the tenderers but the tenderers should acknowledge the receipt of the order within 15 days of mailing of work order and any delay in acknowledging the receipt will be treated as a breach of contract and compensation for the loss caused by such breach will be declared by the company by forfeiting EMD /Bid Bond.

## 2.7 Banned or delisted contractors :

The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs. If a bidder has been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs this fact must be clearly stated and it may not necessarily a cause for disqualification. If the declaration is not given, the bid will be rejected as non-responsive.

## 3. Discrepancies in contract documents & Adjustments thereof :

The documents forming part of the contract are to be treated mutually explanatory of one another and in case of discrepancy between schedule of quantity, the specifications and/or drawing, the following order of preference shall be observed :

- a) Description in Bill of Quantities of work.
- b) Particular specification and special conditions, if any.
- c) Drawings.

d) General specifications.

- 3.1 In the event of varying or conflicting provision in any of the document(s) forming part of the contract, the Accepting Authority's decision/clarification shall hold good with regard to the intention of the document or contract as the case may be.
- 3.2 Any error in description, quantity or rate in Bill of Quantities or any omission therefrom, shall not vitiate the contract or release the contractor from discharging his obligations under the contract including execution of work according to the Drawings and Specifications forming part of the particular contract document.
- 3.3 Any difference detected in the tender/tenders submitted resulting from :
- a) discrepancy between description in words and figures, the rate which corresponds to the amounts worked out by the contractor shall be taken as correct.
  - b) discrepancy in the amount quoted by the contractor due to calculation mistake of the unit rate and quantity, the unit rate shall be regarded as firm and amount corrected.
  - c) discrepancy in totalling or carry forward in the amount quoted by the contractor shall be corrected.

The tendered sum so corrected and altered shall be substituted for the sum originally tendered and considered for acceptance instead of the original sum quoted by the tenderer alongwith other tender/tenders. Rounding off to the nearest rupee should be done in the final summary of the amount instead of in totals of various sections of the offer.

#### **4. Security Deposit :**

- 4.1.1 Security Deposit shall consist of two parts :
- a) Performance Security to be submitted at award of work and
  - b) Retention Money to be recovered from running bills.
- The security deposit shall bear no interest.
- 4.1.2 Performance Security should be **5%** of contract amount and should be submitted within 28 days of receipt of LOA by the successful bidders in any of the form given below.
- a Bank Guarantee in the form given in the bid document.
  - Govt. Securities, FDR or any other form of deposit stipulated by the owner.
  - Demand Draft drawn in favour of CMPDI Ltd. on any Scheduled Bank payable at its Branch at Ranchi.

The Earnest Money / Bid Security deposited in the form of Bank Guarantee shall be discharged when the Bidder has signed the Agreement and furnished the required Performance Security / Security Deposit. The bid security deposited in the form of Demand draft/cash shall be adjusted against the security deposit.

If performance security is provided by the successful bidders in the form of Bank Guarantee it shall be issued either –

- (a) At Bidder's option by a nationalized/Scheduled Indian Bank or
- (b) By a foreign bank located in India and acceptable to the employer.
- (c) The validity of the Bank Guarantee shall be for a period of one year or ninety days beyond the period of contract, whichever is more.

Failure of the successful bidder to comply with the requirement as above shall constitute sufficient ground for cancellation of the award of work and forfeiture of the bid security.

- 4.2.1 All running on account bills shall be paid at 95% (ninety five percent) of work value. This 5% (five percent) deduction towards Retention Money will be the second part of security deposit.
- 4.2.2 5% Performance Security should be refunded within 14 days of the issue of defect liability certificate (taking over certificate with a list of defects). Retention Money should be refunded after issue of No Defect Certificate. Retention Money should be deducted at 5% from running bills.
- 4.3 Bank Guarantee towards security deposit shall be acceptable only for values above Rs. 50,000/- and the Bank Guarantee shall also be valid for a minimum period of one year or ninety days beyond the period of contract, whichever is more. Bank Guarantee is to be submitted in the format prescribed by the company. Bank Guarantee shall be irrevocable and will be from amongst the list of Banks (Scheduled Banks) provided in the bid document.

- 4.4 The company shall be at liberty to deduct/appropriate from the security deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract, and the amount appropriated from the security deposit shall have to be restored by further deduction from the contractors subsequent on account running bills, if any.

The refund of security deposit shall be subject to company's right to deduct/appropriate its due against the contractor under this contract or under any other contract.

- 4.5 On completion of the entire work and issue of defect liability certificate (taking over certificate with a list of defects) by the Engineer-in-Charge, one half of the security deposit remaining with the company shall be refunded. The other half shall be refunded to the contractor after issue of No Defect Certificate by the Engineer-in-Charge. On expiry of Defect Liability Period of six months, subject to the following conditions:

- a) Any defect/defects in the work, if detected after issue of defect liability certificate is/are rectified to the satisfaction of the Engineer-in-Charge within the said period.
- b) In the case of building work or other work of similar nature, the refund shall be made on the expiry of the said six months period or at the end of one full monsoon period i.e. June to September, whichever is later in point of time and any defects such as leakage in roof, effloresces in walls, dampness, defects in drainage etc. should be rectified to the satisfaction of Engineer-in-Charge.

**5. Deviations /Variations in Quantities and Pricing :**

The quantities given in the "Schedule of Quantities" are based on estimates and are meant to indicate the extent of the work and to provide a uniform basis for tendering and any variation either by addition or omission shall not vitiate the contract.

- 5.1 The company through its Engineer-In-charge or his representative shall, without radically changing the original scope and nature of the work under contract, have power to make any alterations in or additions to or substitution of the original specifications, drawings, designs and instructions that may appear to be necessary or advisable during the progress of the work.

The contractor shall be bound to carry out the works in accordance with the instructions given to him in writing by the Engineer-In-charge or his representative on behalf of the company. Such altered or additional or substituted work, which shall form part of the original contract, shall be carried out by the contractor on the same terms and conditions in all respects on which they agreed to do the main work and at the same rate/rates as are specified in the contract /work order.

- 5.2 The right is reserved to cancel any items of work included in the contract agreement or portion thereof in any stage of execution if found necessary to the work and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof.

- 5.3 If the additional, altered or substituted work includes any class of work for which rate/rates is/are not specified in the contract/work order, rates for such items shall be determined by the Engineer-In-charge as follows:

- a) In the case of percentage tenders, if the rate for the item of work executed is available in the company's approved SOR, it will be paid at the schedule rate plus or minus the accepted percentage as per contract.
- b) In case of item rate tenders, the rate for extra items shall be derived from the rate for similar item or near similar item of work available in the agreement schedule of work or by analysis of rates as at (c) below and the lower rate out of the above two shall be considered.
- c) In case the rate for extra item is to be derived by analysis of rate, the same shall be done by analysis on prevalent market rate of materials and labour based on standard norms of analysis of rate of NBO/CPWD.
- d) In case of combined tender with partly item rate for non-schedule items & partly percentage tenders for SOR items, the rate for extra item shall be derived as at (b) above in case of non-schedule item rates and in case of percentage rates for SOR items, the rates for extra items shall be derived as at (a) above.

In case of any difference between the contractor and the Engineer-In-charge as to the fixation of rates, the matter shall be referred to the accepting authority of the company i.e. HOD (C), CMPDI Ltd. whose decision shall be final and binding on the contractor.

- 5.4 Payment for such deviated items (additional/altered/substituted items of work or excess quantities of work beyond  $\pm 25\%$  of the agreement schedule) shall be made in the contractor's running on-account bills, till the revised estimate regularising these items are sanctioned by the competent authority of the company, at the provisional rates and shall not exceed:
- a) 75% of the rate recommended by the Engineer-In-charge to the accepting authority of the company i.e. HOD (TE), CMPDI Ltd. if the rate is directly available in the approved SOR of the company.
  - b) 50% of the rate recommended by the Engineer-In-charge to the accepting authority of the company, i.e. HOD (TE), CMPDI Ltd. if it is analysed item rate based on prevalent market rates of materials and labour following NBO/CPWD norms.
- 5.5 The time for completion of the originally contracted work shall be extended by the company in the proportion that the additional work (in value) bears to the original contracted work (in value) plus 25% of the time calculated as explained above or such further additional time as may be considered reasonable by the Engineer-In-Charge.
- 5.6 The company through its Engineer-In-charge or his representative, on behalf of the company, shall have power to omit any part of the work in case of non-availability of a portion of the site or for any other reason and the contractor shall be bound to carry out the rest of the work in accordance with the instructions given by the Engineer-In-charge. No claim from the contractor shall be entertained / accepted on these grounds.
- 5.7 In the event of any deviation being ordered which in the opinion of the contractor changes radically the original scope / nature of the contract, the contractor shall under no circumstances suspend the work, either original or altered or substituted, and the dispute/disagreement as to the nature of deviation and the rate/rates to be paid for such deviations shall be resolved separately with the company as per the procedures / norms laid down hereafter.

**6. Time for completion of contract, Extension thereof, Defaults and Compensations for delay :**

- 5.8 Time is the essence of the contract and as such all works shall be completed within the time stipulated in the contract/work order.
- 5.9
- 5.10 Immediately after the contract is executed/the work order is issued, the Engineer-In-charge and the contractor shall agree upon a detailed time and progress chart prepared based on BAR CHART/PERT/CPM techniques on the basis of a construction schedule submitted by the contractor at the time of executing contract showing the order in which the work is proposed to be carried out within the time specified in the contract document/work order. For the purpose of this detailed time and progress chart, the work shall be deemed to have commenced on the expiry of 10th (tenth) day from the issue of Letter of Acceptance of Tender / Work Order or handing over the site of work or handing over the reasonable number of working drawings to the contractor or the period of mobilisation allowed in the work order for starting the work in special circumstances, whichever is later.
- 5.11
- 6.1 If the contractor, without reasonable cause or valid reasons, commits default in commencing the work within the aforesaid time limit, the company shall without prejudice to any other right or remedy, be at liberty, by giving 15 days' notice in writing to the contractor to commence the work, to forfeit the Earnest Money deposited by him and to rescind the Letter of Acceptance of Tender / Work Order.

Additionally, the company will reserve the right to debar such defaulting contractors from participating in future tenders for a minimum period of one year.

If the contractor fails to maintain the required progress in terms of the agreed time and progress chart or to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation (Liquidated Damages) @ half percent (1/2%) of the contract price per week of delay. The aggregate of such compensation/ compensations shall not exceed 10 (ten) percent of the total value as shown in the contract.

This will also apply to items or group of items for which separate period of completion has been specified. The amount of compensation may be adjusted or setoff against any sum payable to the contractor under this or any other contract with the company.

**6.2.1** The company, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time of completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D, the company will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half percent of the contract value of the works for each week or part of the week subject to a ceiling of 10% of the contract price.

**6.2.2** The company, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract.

**6.2.3** The company, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.

**6.2.4** In the event of such termination of the contract as described in clauses 6.2.2 or 6.2.3 or both, the company, shall be entitled to recover L.D. upto ten percent (10%) of the contract value and forfeit the security deposit made by the contractor besides getting the work completed by other means at the risk and cost of the contractor.

**6.3 (a)** The Company may at its sole discretion, waive the payment of compensation on request received from the contractor indicating valid and acceptable reasons if the entire work is completed within the date as specified in the contract/work order or as validly extended date without stipulating any compensation for delay.

OR

**6.3 (b)** If the progress of the work or of any portion of the work is unsatisfactory, the Engineer-In-charge shall be entitled, after giving the contractor 15 days' notice in writing, to employ another Agency for executing the job or to carry out the work departmentally or contractually either wholly or partly debiting the contractor with the cost involved in engaging another agency or the cost involved in executing the work departmentally, as the case may be. The certificate to be issued by the Engineer-In-charge for the cost of the work so done shall be final and conclusive and the extra cost, if any, shall be borne by the contractor.

**6.4 Extension of date of completion:** On occurrences of any events causing delay as stated hereunder, the contractor shall intimate immediately in writing to the Engineer-In-charge :

a) **Force Majeure :**

- i) Natural phenomena, including but not limited to abnormally bad weather, unprecedented flood and draught, earth-quakes & epidemics.
- ii) Political upheaval, civil commotion, strikes, lockouts, acts of any Govt. (domestic/foreign) including but not limited to war, proprieties, quarantine embargoes.

The successful bidder will advise in the event of his having to resort to this clause by registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the cause of delay within 15 days of the occurrence and cessation of such force majeure condition.

In the event of delay due to force majeure for more than one month the contract may be terminated at the discretion of the company. Terminateion under such circumstances will be without any liability on either side.

- b) Serious loss or damage by fire.
- c) Non-availability of stores which are the responsibility of the company to supply as per contract.
- d) Non-availability of working drawings in time, which are to be made available by the company as per contract during progress of the work.
- e) Delay on the part of the contractors or tradesmen engaged by the company not forming part of the contract, holding up further progress of the work.
- f) Non-availability or breakdown of tools and plants to be made available or made available by the company.
- g) The execution of any modified or additional items of work or excess quantity of work.
- h) Any other causes which, at the sole discretion of the company, is beyond the control of the contractor.

6.4.1 **A hindrance register** shall be maintained by both, the department and the contractor, at site to record the various hindrances, as stated above, encountered during the course of execution.

Hindrance Register will be signed by both the parties. The contractor may also record his observations in the hindrance register. In case the contractor has a different opinion for hindrance and a dispute arises then the matter would be referred to the Engineer-in-Charge and / or the next higher authority whose decision would be final and binding on the contractor and the decision to be communicated within 15 days.

6.4.2 The contractor shall request the company in writing for extension of time within 15 days of happening of such event causing delay stating also, the period for which extension is required. The company may, considering the genuinity of the request, give a reasonable extension of time for completion of the work. Such extension shall be communicated to the contractor in writing by the company through the Engineer in Charge within 1 month of the date of receipt of such request.

6.4.3 The opinion of the Engineer-in-Charge, whether the grounds shown for the extension of time are or are not reasonable, is final. If the Engineer-in-Charge is of the opinion that the grounds shown by the contractor are not reasonable and declines to the grant of extension of time, the contractor cannot challenge the soundness of the opinion by reference to arbitration.

The opinion of the Engineer-in-charge that the period of extension granted by him is proper or necessary is not, however, final. If the contractor feels that the period of extension granted is inadequate, he can appeal to the HOD (C) of the company for consideration on the question whether the period of extension is or is not proper or necessary.

6.4.4 Provisional extension of time may also be granted by the Engineer-In-Charge during the course of execution, on written request for extension of time within 15 (fifteen) days of happening of such events as stated above, reserving the company's right to impose/waive penalty at the time of granting final extension of time as per contract agreement.

6.4.5 When the period fixed for the completion of the contract is about to expire, the question of extension of the contract may be considered at the instance of the contractor or the department or of both. The extension will have to be by party's agreement, express or implied.

In case the contractor does not apply for grant of extension of time within 15 (fifteen) days of the hindrance occurring in execution of the work and the department wants to continue with the work beyond the stipulated date of completion for reason of the work having been unavoidably hindered, the Engineer-in-charge can grant extension of time even in the absence of application from the contractor. Such extension of time granted by the Engineer-In-Charge is valid provided the contractor accepts the same either expressly or implied by his actions before and subsequent to the date of completion. Such

extension of time shall be without prejudice to Company's right to levy compensation under the relevant clause of the contract.

The contractor shall however use his best efforts to prevent or make good the delay by putting his endeavours constantly as may be reasonably required of him to the satisfaction of the Engineer-In-Charge.

**7. Materials supply & other facilities :**

7.1 The company does not undertake any responsibility for supply of any materials to the contractor.

7.2 If the steel is issued by the department, the wastage of steel shall be the barest minimum. The wastage allowed from theoretical quantity will be upto a maximum of 5% to cover the wastage due to cutting into pieces, brnding and other factors. No cut pieces or scrap less than 2 mtr. in length will be taken by the department. Efforts should be made to use the cut pieces of 2 mtr. or above length as far as possible.

If the wastage of steel is more than the permissible variation mentioned above the cost of excess wastage made by the contractor shall be recovered at double the issue rates indicated above, or 115% of prevailing market rate including sales tax and general tax during the period of work, whichever is more.

No allowances shall be entertained on account of Rolling Margin for the steel either issued by the department or procured by the contractor.

7.3 If the cement is issued by the department, the variation of 5% will be permitted over the thereoretical consumption of cement for value of work upto Rs. 10.00 lakhs and 3% for value of work above Rs. 10.00 lakhs. In the event of cement consumed is more/less than specified above, the recovery for the quantity of cement consumed in excess or less than the specified quantity shall be made at double the issue rate or 115% of prevailingmarket rate including sales tax and general tax during the period of work, whichever is more.

7.4 In case the department is not able to supply cement/steel as per the provisions of the contractd, the Engineer In Charge may allow, with the approval of HOD (C) of the company, the contractor in writing for procurement of cement/steel from the approved sources and the extra on this accouant including transport charges, if any, over the issue rate shall be reimbursed to the contractor on production of authentic documents. Transportation of cement/steel from the place of purchase to the site of work and proper storage of cement/steel at site shall be contractor's responsibility. He should maintain proper account of cement/steel issued/procured by him and should allow inspection of his godown and his cement/steel account by the concerned Engineer-in-Charge or any other authorised officers of the company. Contractor should draw materials from the company on the basis of actual requirement as assessed by the Engineer In Charge on "as and when required" basis.

7.5 Recovery of cost of materials issued on sale A/c will be made as per actual consumption basis but the Engineer-In-Charge will have the discretion for making full recovery while processing a particular bill or asking for the return of the balance materials if the work is not progressing satisfactorily.

The contractor shall keep accurate record of materials issued by the company, maintain proper account for the materials received and consumed in the work and shall be open to check by the Engineer-In-Charge or his authorised representative. The contractor shall ensure that such materials are consumed for the contract works only and the Register for the aforesaid account shall be signed both by the representatives of Engineer-In-Charge and the contractor.

7.6 All materials, tools and plants brought to site by the contractor including the materials supplied by the company shall be deemed to be held in lien by the company and the contractor shall not have the right to remove the same from the site, without the written permission of the Engineer-In-Charge. The company shall not however the liable for any loss, theft or damage due to fire or other cause during this period of lien, the responsibility for wich shall lie entirely on the contractor.

7.7 The contractor shall bear the cost of loadings, transportation to site, unloading, storing under cover as required etc. as may be necessary for the use and keeping the materials in good condition.

- 7.8 Any surplus materials issued by the company, remaining after completion or termination of the contract, shall be returned by the contractor at his cost to the place of issue and the Engineer-In-Charge shall accept the same at the rate not exceeding the rate at which these were originally issued taking into consideration the deterioration or damage, if any, that may have been caused during the custody of the contractor. In the event, the contractor fails to return the surplus materials out of those supplied by the company, the Engineer-In-Charge may, in addition to any other liability which the contractor would incur in this regard, by giving notice in writing require the contractor to pay the amount at double the issue rate for such unreturned surplus materials or 115% of the prevailing market rate including Sales Tax & General Tax during the period of work, whichever is more.
- 7.9 On completion or on termination of the contract and on complete recovery of secured advance paid by the company, if any, in respect of materials brought to site, the contractor with due permission of the Engineer-In-Charge shall be entitled to remove at his expenses all surplus materials originally supplied by him and upon such removal, the same shall become the property of the contractor.
- 7.10 All charges on account of octroi, terminal or sales tax and other dues on materials obtained for the works from any source (excluding materials supplied by the company) shall be borne by the contractor.
- 7.11 The contractor shall arrange necessary electricity at his own cost for the work and his own establishment. However, if available and feasible the company may arrange electricity at one point near the work site and necessary recovery of cost of energy consumed will be made at rates prescribed by the company from time to time. Energy meter for this purpose shall be provided by the contractor.
- 7.12 The contractor shall arrange necessary water for the work and his own establishment. However, if available and feasible the company may arrange water at one point near the work site for which recovery @ 1% of the contract value of work done will be made from the contractor's bill.
- 7.13 Coal required for manufacturing of bricks to be used in the work will be issued @ 25 tonnes per one lakh of bricks on payment at the rate prevailing on the date of issue. Requirement of coal may vary depending on the quality of coal. Transportation of coal and the charges thereof shall be contractor's responsibility.
- 7.14 Explosives, detonators and other inflammable materials shall not be used in the execution of the work at site by the contractor without prior written permission of the Engineer-In-Charge. Transportation and storage of such materials shall be done in specified manner in accordance with the law in force. The contractor shall also obtain licence under such laws for, transportation, storage, use and all other operations, connected with the handling of the same.

## **8. Quality Assurance – Materials and Workmanship :**

The contractor shall carry out and complete the work in every respect in accordance with the contract and shall ensure that the work conforms strictly to the drawings, specifications, instructions of the Engineer-In-Charge. The Engineer-In-Charge may issue from time to time, further drawings, detailed instructions/directions in writing to the contractor. All such drawings, instructions/directions shall be consistent with the contract documents and should be reasonable inferable therefrom, alongwith clarifications/explanations thereof, if necessary.

- 8.1 For Quality Assurances of all the Civil Engineering Works the norms/guidelines laid down by the company herein and elsewhere will form part of the contract for the purpose of quality of works.
- 8.2 The contractor shall be responsible for correct and complete execution of the work in a workman like manner with the materials as per specification which shall be subject to the approval of the company. All work under execution in pursuance of the contract shall be open to inspection and supervision by the Engineer-In-Charge or by his authorised representative or any other official of higher rank or any other person authorised by the company in his behalf and the contractor shall allow the same.
- 8.3 All materials to be provided by the contractor shall be in conformity with the specifications/schedule of work as per the contract and the contractor shall furnish proof, if so required by the Engineer-In-Charge to his satisfaction that the materials do so comply.



- 8.4 The contractor shall immediately after the award of work draw up a schedule giving dates for submission of samples as required or necessary as per the specification for approval of Engineer-In-Charge who shall approve, if found acceptable, promptly so that there is no delay in the progress of the work of the contractor or of the work of any of the sub-contractor.

On receipt of samples as per schedule, the Engineer-In-Charge shall arrange to examine/test with reasonable promptness ensuring conformity of the samples with the required specification and complying with the requirements as per contract documents keeping in view that the work shall be in accordance with the samples approved by him. The contractor shall not start bringing materials at the site unless the respective samples are approved. Materials conforming to approved samples shall only be brought to site.

Samples are to be supplied by the contractor at his own cost. The cost involved in tests shall be borne by the contractor. If any test is ordered by the Engineer-In-Charge which is to be carried out by any independent person or agency at any place other than the site even then the cost of materials and testing charge etc. shall be borne by the contractor. If the test shows that the materials are not in accordance with the specifications, the said materials shall not be used in the work and removed from the site at contractor's cost.

- 8.5 The company, through the Engineer-In-Charge, shall have full powers to reject any materials or work due to a defect therein for not conforming to the required specifications, or for materials not being of the required quality and standard or for reasons of poor workmanship or for not being in accordance with the sample approved by him. The contractor shall forthwith remedy the defect/replace the materials at his expense and no further work shall be done pending such rectification/replacement of materials, if so instructed by the Engineer-In-Charge.

In case of default on the part of the contractor, the Engineer-In-Charge shall be at liberty to procure the proper materials for replacement and/or to carry out the rectifications in any manner considered advisable under the circumstances and the entire cost and delay for such procurement/rectification shall be borne by the contractor.

- 8.6 The Engineer-In-Charge shall be entitled to have tests carried out for any materials, according to the standard practice followed for such tests, other than those for which satisfactory proof has already been furnished by the contractor who shall provide at his expense all facilities which the Engineer-In-Charge may require for the purpose.

The cost of any other tests, if so required by the Engineer-In-Charge, shall be borne by the contractor only, if the test shows the workmanship or materials not to be in accordance with the provision of the contract or the instruction of Engineer-In-Charge, but otherwise by the company.

- 8.7 **Access to the works :** The Engineer-in-charge and any person authorised by the company shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles are being obtained for the works and the contractor shall afford every facility for and every assistance in obtaining the right to such access.

- 8.8 **Inspection of works :**

i) No work shall be covered up or put out of view without the approval of the Engineer-In-Charge or the Engineer-In-Charge's representative or any other officer nominated by the company for the purpose and the contractor shall afford full opportunity for the EIC or EIC's representative or any other officer nominated by the company for the purpose to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The contractor shall give due notice to the Engineer-In-Charge's representative whenever any such work or foundations is ready or about to be ready for examination and the Engineer-In-Charge's representative shall, without unreasonable delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such work or foundations.

ii) The contractor shall uncover any part or parts of the works or making openings in or through the same as the Engineer-In-Charge may from time to time direct and shall reinstate and make good such part or parts to the satisfaction Engineer-In-Charge.

If any such part or parts have been covered up or put out of view after compliance with the requirement of sub-clause above and are found to be executed in accordance with the contract, the expenses of uncovering, making openings in or through and making good the same shall be borne by the Employer, but in any other cases all costs shall be borne by the contractor.

#### **8.9 Removal of Improper Work and Materials :**

- i) The Engineer-In-Charge shall during the progress of the works have power to order in writing from time to time :
  - a) The removal from the site, of any materials which in the opinion of Engineer-In-Charge, are not in accordance with the contract/work order/approved sample.
  - b) The substitution with proper and suitable materials.
  - c) The removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which in respect of materials or workmanship is not in accordance with the contract.
- ii) In case of default on the part of the contractor in carrying out such order, the Engineer-In-Charge shall be entitled to employ and pay other agency to carry out the same and all expenses consequent thereon shall be recoverable from the contractor or may be deducted from any amount due or which may become due to the contractor.

8.10 **Devaluation of work :** In lieu of rejecting work done or materials supplied not in conformity with the contract/work order/approved samples, the Engineer-In-Charge or any other officer nominated by the company for the purpose may allow such work or materials to remain, provided the Engineer-In-Charge/the officer nominated by the company is satisfied with the quality of any materials, or the strength and structural safety of the work, and in that case shall make such deduction for the difference in value, as in his opinion may be reasonable.

8.11 **Final Inspection of work :** The Engineer-In-Charge and any other officer nominated by the company for the purpose shall make final inspection of all work included in the work of the contract/work order, or any portion thereof, any completed structure forming part of the work of the contract, as soon as practicable after notification by the contractor that the work is completed and ready for acceptance. If the work is not acceptable to the Engineer-In-Charge at the time of such inspection, he shall inform the contractor in writing as to the particular defects to be remedied before final acceptance can be made.

8.12 **Defects appearing after acceptance :** Any defects which may appear within the defect liability period and arising, in the opinion of the Engineer-In-Charge, from lack of conformance with the drawings and specifications, shall, if so required by the Engineer-In-Charge in writing, be remedied by the contractor at his own cost within the time stipulated by the Engineer-In-Charge. If the contractor fails to comply, the Engineer-In-Charge may employ other persons to remedy the defects and recover the cost thereof from the dues of the contractors.

8.13 **Site Order Book :** A Site Order Book is a Register duly certified by the Engineer-In-Charge regarding number of pages it contains, each page being numbered, name of work, name of contractor, reference of contract/work order and the aforesaid certificate should be recorded on its first page.

Site Order Books shall be maintained on the sites of works and should never be removed therefrom under any circumstances. It shall be the property of the company. The Engineer-In-Charge or his authorised representative shall duly record his observations regarding any work which needs action on the part of the contractor like, improvement in the quality of work, failure to adhere to the scheduled programme etc. as per contract/work order. The contractor shall promptly sign the site order book and note the orders given therein by the Engineer-In-Charge or his representative and comply with them. The compliance shall be reported by the contractor in writing to Engineer-In-Charge in time so that it can be checked.

The Site Order Book will be consulted by the Engineer-In-Charge at the time of making both running on account and final bills of the contractor. A certificate to this effect should be given in the Measurement books by the Engineer-In-Charge or his representative.

- 8.14 **Samples and Testing of Materials :** All the materials to be procured by the contractor and to be used in work shall be approved by the Engineer-In-Charge in advance, and shall pass the tests and analysis required by him, which will be as specified in the specifications of the items concerned and / or as specified by BIS or the IRC standard specifications acceptable to the Engineer-In-Charge. The method of sampling and testing shall be as per the relevant BIS, IRC and other relevant standards and practices. Minor minerals like sand, stone chips etc. shall be conforming to relevant BIS standards. All bought out items including Cement and Steel shall be procured from such manufacturers who hold valid licence conforming to relevant BIS standards for manufacturing of such items.
- 8.15 **Storage of Materials :** Materials shall be so stored as to ensure the preservation of the quality and fitness for the work. When considered necessary by the Engineer-In-Charge, they shall be placed on wooden platforms or other hard, clean surfaces and not directly on the ground.

Materials shall be placed under cover when so directed and the contractor shall erect and maintain at his own cost temporary weather-proof sheds at the work site for the purpose. Stored materials shall be so located as to facilitate prompt inspection. All stored materials shall be inspected at the time of use in the work, even though they may have been inspected and approved before being placed in storage or during storage.

- 8.16 **Defective Materials :** All materials not conforming to the requirements of the specifications shall be considered as defective, and all such materials, whether in place or not shall be rejected. They shall be removed immediately by the contractor at his expenses and replaced with acceptable material.

No rejected material, the defects of which have been subsequently corrected, shall be used on the work until approval in writing has been given by the Engineer-In-Charge. Upon failure on the part of the contractor to comply with any instruction of the Engineer-In-Charge made under the provisions of this article within the time stipulated by the Engineer-In-Charge, the Engineer-In-Charge shall have the authority to remove and replace defective material and recover the cost of removal and replacement from the contractor.

Further all such defective materials lying at site not removed and replaced within 30 days after issue of notice by the Engineer-In-Charge, if the Engineer-In-Charge so decides, shall dispose off such material in any manner without any further written notice to the contractor.

## 9. **Measurement and Payments :**

Except where any general or detailed description of the work in the Bill of Quantities or specifications of the contract/work order provides otherwise, measurement of work done shall be taken in accordance with the relevant standard method of measurement published by the Bureau of India Standards (BIS) and if not covered by the above, other relevant Standards/Practices shall be followed as per instructions of the Engineer-In-Charge.

- 9.1 All items of work carried out by the contractor in accordance with the provision of the contract having a financial value shall be entered in the Measurement Book as prescribed by the company so that a complete record of the measurements is available for all the works executed under the contract and the value of the work executed can be ascertained and determined therefrom. Measurements of completed work/portion of completed work shall be recorded only in the Measurement Books.
- 9.2 Measurement shall be taken jointly by the Engineer-In-Charge or his authorised representative and by the contractor or his authorised representative.
- 9.3 Before taking measurements of any work, the Engineer-In-Charge or the person deputed by him for the purpose shall intimate the contractor to attend or to send his representative to attend the measurement. Every measurement thus taken shall be signed and dated by both the parties on the site on completion of the measurement. If the contractor objects to any measurements, a note to that effect shall be made in the Measurement Book / Log Book and signed and dated by both the parties.

- 9.4 The measurement of the portion of work/items of work objected to, shall be remeasured by the Engineer-In-Charge himself or the authority nominated by the company for the purpose in the presence of the contractor or his authorised representative and recorded in the M.B. which shall be signed and dated by both the parties. Measurements so recorded shall be final and binding upon the contractor and no claim whatsoever shall thereafter be entertained.

In case the contractor or his authorised representative does not attend to the joint measurements at the prefixed date and time after due notice, the measurements taken by the Engineer-In-Charge or his representative shall be final and binding on the contractor.

Measurement of the extra items of work or excess quantities of work duly authorised in writing by the Engineer-In-Charge shall also be taken and recorded in the M.B. based on the existing items in the SOR of the company and if such items do not exist in the company's SOR, the description of the work shall be as per actual execution. Payment for such extra items will be based on the rates to be derived as described in the relevant clauses of the contract/work order.

- 9.5 No work shall be covered up or put out of view without the approval by the Engineer-In-Charge and recording of measurements and check measurement thereof duly accepted by the contractor. The contractor shall provide full opportunity to the Engineer-In-Charge or his representative to examine and measure all works to be covered up and to examine the foundations before covering up.

The contractor shall also give notice to Engineer-In-Charge whenever such works or foundations are ready for examination and the Engineer-In-Charge shall without unreasonable delay arrange to inspect and to record the measurements, if the work is acceptable and advise the contractor regarding covering of such works or foundations.

- 9.6 In case of items which are claimed by the contractor but are not admissible according to the department, measurements of such items, will be taken for record purposes only and without prejudice so that in case it is subsequently decided by the department to admit the contractor's claims, there should be no difficulty in determining the quantities of such work. A suitable remark should, however, be made against such measurements to guard against payment in the ordinary way.

- 9.7 **Payments :** The running on account payments may be made once in a month or at intervals stipulated in the work order / contract agreement.

- 9.7.01 Running on account bill/bills for the work executed/materials supplied in accordance with the work order/contract shall be prepared on the basis of detailed measurements recorded as described hereinbefore and processed for payments.

- 9.7.02 Payment of on account bill shall be made on the Engineer-In-Charge's certifying the sum to which the contractor is considered entitled by way of interim payment for the following :

- a) The work executed as covered by the bill/bills after deducting the amount already paid, the security deposit and such other amounts as may be deductible or recoverable in terms of the work order/contract.
- b) (i) Payment for excess quantity of work done with the written instructions of the Engineer-In-Charge for items already appearing in the bill of quantities of work with approved rates, will be made alongwith the on account bills only upto 10% of the quantity provided in the agreement subject to overall value of work not exceeding agreement value.  
  
(ii) The HOD (C) of the company/or the Staff Officer(C) of the Area may authorise interim payment for excess work done upto 20% of the quantity of work provided in the Bill of Quantity of the work awarded from Company level and Area level respectively subject to overall value of work done does not exceed the contract value.
- c) Extra items of work executed will be paid on specific written authorisation of HOD (C) of the company or Staff Officer(Civil) of the Area provided that the value of such extra items of

work when added together is not more than 10% of the contract value and the total gross payment including excess quantity does not exceed the contract value.

Balance amount on account of excess quantity and extra items of work executed shall be paid after the deviation estimate/revised estimate regularising the extra items and excess quantities of work is sanctioned by the competent authority of the company with the concurrence of the Finance Department of the Company.

- d) On the Engineer-In-Charge's certificate of completion in respect of the work covered by the contract/final measurements of the work certified by the Engineer-In-Charge or his representative.

- 9.7.03 The measurements shall be entered in the M.B for the work done upto the date of completion and evaluated based on the approved rates for the items in the contract agreement/sanctioned revised estimate. In case of extra items of work, the rates shall be derived as stated in the relevant clause of the contract.

The payments shall be released against the final bill subject to all deductions which may be made on account of materials supplied, water supply for construction, supply of electricity and any other dues payable by the contractor to the company, and further subject to the contractor having given to the Engineer-In-Charge a no claim certificate. The contractor shall indemnify the company against proof of depositing royalty on account of minor minerals used in the work before the final bill is processed for payments. The final payment to be made will also be subject to clause 4.5 of the General Terms and Conditions of the contract.

- 9.7.04 Any certificate given by the Engineer-In-Charge for the purpose of payment of interim bill/bills shall not of itself be conclusive evidence that any work/materials to which it relate is/are in accordance with the contract and may be modified or corrected by the Engineer-In-Charge by any subsequent certificate or by the final certificate.

- 9.7.05 The company reserves the right to recover/enforce recovery of any over payments detected after the payment as a result of post payment audit or technical examination or by any other means, notwithstanding the fact that the amount of disputed claims, if any, of the contractor exceeds the amount of such overpayment and irrespective of the facts whether such disputed claims of the contractor are the subject matter of arbitration or not.

The amount of such over payments shall be recovered from subsequent bills under the contract, failing that from contractor's claim under any other contract with the company or from the contractor's security deposit or the contractor shall pay the amount of over payment on demand. In case of contractor's non-payment on such demand, the same should be realised from the contractor's dues, if any, with Coal India Limited or any of its subsidiaries.

- 9.7.06 The contractors are required to execute all works satisfactorily and according to the specifications laid down in the contract/work order. If certain items of work, executed by the contractor, are below specifications, the contractor should re-do them according to the specifications and instruction of Engineer-In-Charge and if the contractor fails to rectify the defect within the time and in the manner specified by the Engineer-In-Charge, the work shall be got re-done or rectified by the department at the risk and cost of the contractor. Engineer-In-Charge may accept such work of below specifications provided the department is satisfied with the quality of such works and the strength/structural safety of such works. In that case Engineer-In-Charge shall make such deductions for the difference in value, as in his opinion is reasonable and is approved by the accepting authority of the company i.e. HOD (C) of the company in this case or any other officer nominated by HOD (C) for the purpose.

**9.7.07 Payment Stage : The payment stage involved will be as under :**

- i) Signature of EA(C)/Sr.Overseer(C)/Overseer(C) in MB's both in pages recording measurements, abstract of bill & the duly filled in bill form.
- ii) Signature of Engineer(C)/EE(C) with appropriate check measurements in the MB's and the bill form.
- iii) Signature of Sr.EE(C)/SE(C) with appropriate check measurements in MB's and the bill form.

- iv) Signature of Engineer-In-Charge as per definition as at clause 1 (vii) of the General Terms & Conditions, as a token of acceptance for payment of the bill. The EIC may sign in the abstract of the bill in the MB & the bill form. In between stage (iii) & (iv) accountal checking may be made by the concerned Accounts Officer/Accounts.

9.7.08 **Secured Advance** : Secured advance can be paid for items of materials required for execution of the work and covered under categories A & B and supplied by the contractor at work site, supported by necessary vouchers, challans, test certificates etc. after execution of indemnity bond as per prescribed Form of the company on non-judicial stamp paper of prescribed value.

The advance shall be recovered in four equal installments or as per consumption whichever is higher. Engineer-In-Charge shall recover at his discretion all or any part of secured advance paid, if in his opinion the work is not progressing satisfactorily or the security of these materials at site is not adequately taken care of by the contractor. **Secured advance shall be payable for contracts of value above Rs. 10.00 lakhs only.**

Secured advance for structural steel sections, reinforcement steel and cement, collected at site, will be paid upto 75% of the corresponding stock yard prices of SAIL for the corresponding steel items and Govt. approved/DGSD prices for cement, if the same exists.

In case of non-availability of Govt. approved prices of cement & steel and for the materials falling under Category – A & B the secured advance will be paid at the basic rate available in the approved schedule of rates of the company plus or minus the overall percentage on which the work was awarded, provided such rate is not more than 60% of the quoted rate of the contractor for the actual work.

At any point of time the outstanding recoverable secured advance shall not be more than 10% of the contract value.

**Items against which secured advance can be granted :**

### **Category – A**

#### **Civil :**

1. Bricks.
2. Stone and brick aggregates.
3. Stones.
4. Finished products of brass, iron and steel such as doors & windows frames, wire mesh, gate, GI sheets.
5. Precast RCC products such as pipes, jalli, water storage tanks etc.
6. Doors & Window fittings.
7. Pipes and sanitary fittings of CI, SCI & HCI.

#### **Electrical :**

1. Steel conduits.
2. G. I. pipes.
3. I. C. Boards
4. Switchgears (Air circuit breakers & Air break switches).
5. C. I. Boxes.
6. A. C. S. R. Conductors.
7. A. C. Plant & Machinery.
8. Pumps.
9. Generating sets (without oil).

Items against which secured advance can be granted :

### **Category – B**

#### **Civil :**

1. Glazed tiles, terrazzo tiles and similar articles.
2. Marble slabs.
3. Asbestos cement products.
4. Finished timber products such as doors, windows, flush doors, particle boards (subject to mandatory test being satisfactory) etc.
5. Bitumen in sealed drums.
6. Bitumen felt
7. Polythene pipes and fittings and tanks.
8. Sanitary fittings and pipes of S.W., porocelain and chinaware materials.
9. Laminated/Safety, one way vision, and bullet proof glasses.
10. Chemical required for antitermite treatment (in sealed drums).
11. Paints, varnishes, distempers, pigment, spirits etc.

**Electrical :**

1. Transformers.
2. Oilfilled switch gears.
3. LT & HT cables.
4. Fans.
5. Storage and Dry Batteries.
6. Insulation tapes.
7. Epoxy cable compounds.
8. Electric light fittings.
9. Wooden battens, casing & capping and wooden boards.
10. Flexible wires.
11. PVC materials.
12. Oil and lubricants.
13. Rubber materials.
14. Glass wool, thermocole & other insulating materials.
15. Porcelain H.T. and L.T. insulators.

In addition to idemnity bond, for materials listed under Category-B, the contractor shall be required to provide necessary insurance cover of equivalent value of materials.

Items against which no secured advance shall be granted :

**Civil :**

1. Glass products other than those indicated in Category-B.
2. Sand and moorum.
3. Chemical compounds other than those indicated in Category – B.

**Electrical :**

1. Glass gloves and shades.
2. Bulbs and tubes.
3. Petrol and diesel.
4. Freon and other refrigeration gases.

- 9.8. Income tax deduction @ 2% (two percent) of the gross value of each bill or at the rate as ammended from time to time, shall be made unless exempted by the competent authority of the Income Tax Department.

Sales tax on works contract shall be payable by the contractor. If, however, the company is asked to make deduction from the contractor's bills, the same shall be done and a certificate to this effect shall be issued to the contractor for dealing with the State Govt. and the company does not take any responsibility to do anything further in this regard.

- 9.9 No interest shall be payable on the amounts withheld, under the terms of the Contract Agreement/Work Order.

**10. Termination, Cancellation, Suspension and Foreclosure of Contract :**

The company shall, in addition to other remedial steps to be taken as provided in the conditions of contract be entitled to cancel the contract in full or in part, if the contractor :

- a) makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer-In-Charge, then on the expiry of the period as specified in the notice.

**Or**

- b) commits default/breach in complying with any of the terms and conditions of the contract and does not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer-In-Charge, then on the expiry of the period as may be specified by the Engineer-In-Charge in a notice in writing.

**Or**

- c) obtains a contract with the company as a result of ring tendering or other non-bonafide methods of competitive tendering

**Or**

- d) shall offer or give or agree to give any person in the service of the company or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/acts of favour in relation to the obtaining or execution of this or any other contract for his company.

**Or**

- e) fails to complete the work or items of work with individual dates of completion, on or before the date/dates of completion or as extended by the company, then on the expiry of the period as may be specified by the Engineer-In-Charge in a notice in writing.

**Or**

- f) transfers, sublets, assigns the entire work or any portion thereof without the prior approval in writing from the Engineer-In-Charge. The Engineer-In-Charge may by giving a written notice, cancel the whole contract or portion of it in default.

10.1 The contract shall also stand terminated under any of the following circumstances :

- a) If the contractor being an individual in the case of proprietary concern or in the case of a partnership firm any of its partners is declared insolvent under the provisions of Insolvency Act for the time being in force, or makes any conveyance or assignment of his effects or composition or arrangements for the benefit of his creditors amounting to proceedings for liquidation or composition under any insolvency Act.
- b) In the case of the contractor being a company, its affairs are under liquidation either by a resolution passed by the contractors' company or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or reorganisation, or a receiver or manager is appointed by the court on the application by the debenture holders of the contractor's company, if any.
- c) If the contractor shall suffer an execution being levied on his/their goods, estates and allow it to be continued for a period of 21 (twenty-one) days.
- d) On the death of the contractor being a proprietary concern or of any of the partners in the case of a partnership concern and the company is not satisfied that the legal representative of the deceased proprietor or the other surviving partners of the partnership concern are capable of carrying out and completing the contract. The decision of the company in this respect shall be final and binding which is to be intimated in writing to the legal representative or to the partnership concern.

8.2 On cancellation of the contract or on termination of the contract, the Engineer-In-Charge shall have powers :

- a) to take possession of the site and any materials, constructional plant, equipment, stores etc. thereon.



- b) to carry out the incomplete work by any means at the risk and cost of the contractor.
- c) to determine the amount to be recovered from the contractor for completing the remaining work or in the event the remaining work is not to be completed the loss/damage suffered, if any, by the company after giving credit for the value of the work executed by the contractor upto the time of cancellation less on a/c payments made till date and value of contractor's materials, plant, equipment, etc. taken possession of after cancellation.
- d) to recover the amount determined as above, if any, from any money due to the contractor on any account or under any other contract and in the event of any shortfall, the contractor shall be called upon to pay the same on demand. The need for determination of the amount of recovery of any extra cost/expenditure or of any loss/damage suffered by the company shall not however arise in the case of termination of the contract for death/demise of the contractor as stated in clause 10.1(d) of the contract.
- e) to give the contractor or his representative of the work 7 (seven) days' notice in writing for taking final measurement for the works executed till the date of cancellation or termination of the contract. The Engineer-In-Charge shall fix the time for taking such final measurement and intimate the contractor in writing. The final measurement shall be carried out at the said appointed time notwithstanding whether the contractor is present or not. Any claim as regards measurement which the contractor is to make shall be made in writing within 7 (seven) days of taking final measurement by Engineer-In-Charge as aforesaid and if no such claim is received, the contractor shall be deemed to have waived all claims regarding above measurements and any claim made thereafter shall not be entertained.

### **8.3 Suspension of work :**

- i) The company shall have power to suspend the work or any part thereof and the Engineer-In-Charge may direct the contractor in writing to suspend the work, for such period and in such manner as may be specified therein, on account of any default on the part of the contractor, or for proper execution of the work for reasons other than any default on part of the contractor, or on ground of safety of the work.
- ii) In the event of suspension for reasons other than any default on the part of the contractor, extension of time shall be allowed by the company equal to the period of such suspension and the contractor shall properly protect and secure the works to the extent necessary during such suspension.

The contractor shall carry out the instructions given in this respect by the Engineer-In-Charge and if such suspension exceeds 45 (forty five) days, the contractor will be compensated on mutually agreed terms.

- 8.4 The work shall, throughout the stipulated period of contract, be carried out with all due diligence on the part of the contractor. In the event of termination or suspension of the contract, on account of default on the part of the contractor, as narrated hereinbefore, the security deposit and other dues of this work or any other work done under this company shall be forfeited and brought under the absolute disposal of the company provided, that the amount so forfeited shall not exceed 10 (ten) percent of the contract value.

### **8.5 Foreclosure of contract :**

If at any time after acceptance of the tender the company decides to abandon for any reason whatsoever the company, through its Engineer-In-Charge, shall give notice in writing to that effect to the contractor. In the event of abandonment the company shall be liable :

- a) to pay reasonable amount assessed and certified by the Engineer-In-Charge of the expenditure incurred, if any, by the contractor on preliminary works at site e.g. temporary access roads, temporary construction for labour and staff quarters, office accommodation, storage of materials, water storage tanks and water supply for the work including supply to labour/staff quarters, office etc.

- b) to pay the contractor at the contract rates full amount for works executed and measured at site upto the date of such abandonment.
- c) to pay for the materials brought to site or to be delivered at site, which the contractor is legally liable to pay, for the purpose of consumption in works carried out or were to be carried out but for the foreclosure, including the cost of purchase and transportation and cost of delivery of such materials. The materials to be taken over by the company should be in good condition and the company may allow at its discretion the contractor to retain the materials in full or in part if so desired by him and to be transported by the contractor from site to his place at his own cost with due permission of the Engineer-In-Charge.
- d) to take back the materials issued by the company but remaining unused, if any, in the work on the date of abandonment/reduction in the work, at the original issue price less allowance for any deterioration or damage caused while in custody of the contractor.
- e) to pay for the transportation of tools and plants of the contractor from site to contractor's place or to any other destination, whichever is less.

8.5.01 The contractor shall, if required by the Engineer-In-Charge, furnish to him books of accounts, papers, relevant documents as may be necessary to enable the Engineer-In-Charge to assess the amounts payable in terms of clauses 10.5 (b) (c) & (e) of the contract. The contractor shall not have any claim for compensation for abandonment of the work, other than those as specified above.

#### **9. Completion Certificate :**

Except in cases where the contract provides for "Performance Test" before issue of completion certificate, in which case the issue of completion certificate shall be in accordance with the procedure specified therein, the contractor shall give notice of completion of work, as soon as the work is completed and submit 2 (two) copies of Draft Report to the Engineer-In-Charge. The Engineer-In-Charge and / or any other Officer nominated for the purpose by the company, shall within 30 (thirty) days from the receipt thereof, inspect the work and ascertain the defects/deficiencies, if any, to be rectified by the contractor as also the items, if any, for which payment shall be made at reduced rate.

If the defects, according to the Engineer-In-Charge, are of a major nature and the rectification of which is necessary for the satisfactory performance of the contract, he shall intimate in writing the defects and instruct the contractor to rectify the defects/remove deficiencies within the period and in the manner to be specified therein. In such cases completion certificate will be issued by the Engineer-In-Charge after the above rectifications are carried out/deficiencies are removed by the contractor to the satisfaction of Engineer-In-Charge.

In the event there are no defects or the defects/deficiencies are of a minor nature and the Engineer-In-Charge is satisfied that the contractor has already made arrangements for rectification, or in the event of contractor's failure to rectify the defects for any reason whatsoever, the defects can be rectified by the company departmentally or by other means and the 50% of the security deposit of the contractor shall be sufficient to cover the cost thereof, he shall issue the completion certificate indicating the date of completion of the work, defects to be rectified, if any, and the items, if any, for which payment shall be made at reduced rate indicating reasons therefor and with necessary instructions to the contractor to clear the site/place of work or all debris/waste materials, scaffoldings, sheds, surplus materials etc. making it clean.

- 11.1 In case where separate period of completion for certain items or groups of items are specified in the contract, separate completion certificate for such items or groups of items may be issued by the Engineer-In-Charge after completion of such items on receipt of notice from the contractor only in the event the work is completed satisfactorily in every respect.

Refund of security deposit and payment of final bill shall, however, be made on completion of the entire contract work, but not on completion of such items of work.

#### **12. Additional Responsibilities of Contractor(s) :**

The cost on account of the "Additional Responsibilities of the Contractors" under this clause is deemed to be included in the tendered rates.

- i) The company reserves the right to let other contractors also work in connection with the Project and the contractor/contractors shall co-operate in the works for the introduction and stores and materials and execution of his / their works.
- ii) The contractor/contractors shall keep on the work site during the progress a competent and experienced Resident Engineer exclusively for the work and necessary assistants who shall represent the contractor(s). The contractor shall employ, on the site in connection with the execution and maintenance of the work, the following technical staff :

***For Buildings, Roads, Water Supply & Sanitary Works :***

Engineer as per addition Diploma & 4.	1) For value of works ranging from Rs. 10 lakhs to 20 lakhs	<b>1</b>	Experienced Diploma holder.
	2) For value of work above Rs. 20 lakhs and upto Rs. 1 crore	<b>1</b>	Experienced Graduate in addition to Diploma holder Sl. no. 4 below.
	3) For value of works in excess of Rs. 1 crore & for every additional 2 crores or part thereof	<b>1</b>	Graduate Engineer extra in addition to Graduate Engineer and holder as pe Sl. no. 1
	4) For value of work in excess of Rs. 20 lakhs & for every additional Rs. 50 lakhs or part thereof.	<b>1</b>	Diploma holder extra.

***For Industrial Structures :***

and & 4.	1) For value of work ranging from Rs. 5 lakhs to Rs. 15 lakhs	<b>1</b>	Experienced Diploma holder.
	2) For value of work over Rs. 15 lakhs and upto Rs. 75 lakhs	<b>1</b>	Experienced Graduate Engineer in addition to Diploma holder as per Sl. no.4 below.
	3) For value of work in excess of Rs. 75 lakhs & for every additional Rs. 1.5 crores or part thereof	<b>1</b>	Graduate Engineer extra in addition to Graduate Engineer Diploma holder as pe sl.no. 1
	4) For value of work in excess of Rs. 15 lakhs & for every additional Rs. 50 lakhs value or part thereof.	<b>1</b>	Diploma holder extra.

The contractor shall intimate the Engineer-In-Charge in writing the names, qualifications, experience and full postal address of each and every technical personnel employed at site by him.

The contractor(s) shall not be allowed to execute the work unless he/they engage the required technical staff at site as stated above. The delay on this account, if any, shall be the contractor's responsibility.

Important instructions shall be confirmed to the contractor(s) in writing. If the contractor/contractors in courses of the works finds/find any discrepancy between the drawing, forming part of the contract documents and the physical conditions of the locality or any errors or omissions in drawings except those prepared by himself/themselves and not approved by the Engineer-In-Charge. It shall be his/their duty to immediately inform the Engineer-In-Charge in writing and the Engineer-In-Charge shall verify the same. Any work done after such discovery and without intimation as indicated above will be done at the risk of the contractor/contractors.

iii) The contractor/contractors shall employ only competent, skillful and orderly men to do the work. The Engineer-In-Charge shall have the right to ask the contractor/contractors to remove from the work site any men of the contractor/contractors who in his opinion is undesirable and the contractor/contractors will have to remove him within 3 (three) hours of such orders.

The contractor shall employ apprentices in the execution of the contract work as required under Apprentices Act.

The contractor shall further be responsible for making arrangements at his own cost, for accommodation and social needs of the staff and workers under his employment.

- iv) Precautions shall be exercised at all times by the contractor(s) for the protection of persons (including employees) and property. The safety required or recommended by all applicable laws, codes, statutes and regulations shall be observed by the contractor(s). In case of accidents, the contractor(s) shall be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other similar laws in force, and the contractor(s) shall indemnify the company against any claim on this account.

All scaffoldings, ladders and such other structures which the workmen are likely to use shall be examined by the Engineer-In-Charge or his authorised representative whenever they want and the structure must be strong, durable, and safe and of such design as required by Engineer-In-Charge.

In no case any structure condemned by the Engineer-In-Charge or his authorised representatives shall be kept on the work and such structure must be pulled down within three hours of such condemnation and any certificate or instructions, however, shall in no way absolve the contractor/contractors from his/their responsibility, as an employer, as the company shall in no way be responsible for any claim.

The contractor/contractors shall at all times exercise reasonable precautions for the safety of employees in the performance of his/their contract and shall comply with all applicable provisions of the safety laws drawn up by the State Govt. or Central Govt. or Municipalities and other authorities in India. The contractor/contractors shall comply with the provision of the safety hand book as approved and amended from time to time by the Government of India.

- v) The contractor/contractors shall familiarise themselves with and be governed by all laws and rules of India and Local statutes and orders and regulations applicable to his/their work.
- vi) The contractor shall maintain all records as per the provision made in the various statutes including Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (Regulation & Abolition) Central Rules, 1971, Minimum Wages Act, Workmen Compensation Act etc. and latest amendment thereof. Such records maintained by the contractor shall be opened for inspection by the Engineer-In-Charge or by the nominated representative of the Principal Employer.
- vii) The contractor/contractors shall provide facilities for the sanitary necessities of all persons employed on the work shall be constructed and maintained in the number, manner and place approved or ordered by the Engineer-In-Charge. The contractor/contractors shall vigorously prohibit committing of nuisance at any other place. Cost of all works under this item shall be covered by the contractor/contractor's tendered rates.
- viii) The contractor/contractors shall furnish to the Engineer-In-Charge or his authorised representative with work reports from time to time regarding the contractor/contractors organisation and the progress made by him/them in the execution of the work as per the contract.

- ix) All taxes, whether Local, Municipal, Provincial or Central etc. and cess, royalties etc. are payable or may become payable during the entire periods of contract, shall be to the contractor/contractors account and shall be deemed to have been included in the tender for the work to be executed by him/them.

However, in the event of any changes in the Sales Tax on Works Contract as required by the Statutory Authority during the contract period, necessary adjustments will be made in contractual payments. For this purpose, the base date shall be the date on which the price bids/revised price bids have been opened.

Amount payable/repayable for any subsequent change in the Sales Tax on Works Contract will be made to / from the contractors after departmental verification of such changes of tax laws issued by the statutory authority.

In case the company land is used for manufacture of bricks or extraction of gravels etc. the contractor will have to pay compensation to the company (apart from the liability of the contractor to make the payment of royalty etc. to the State Government) at the same rates or royalty fixed by the State Government or an appropriate deduction may be made in the rate to be paid to the contractors.

- x) The contractor/contractors shall make his/their own arrangements for all materials, tools, staff and labourer required for the contract, which shall include cost of lead, lift, loading, unloading, railway freight, recruiting expenses and any other charges for the completion of the work to entire satisfaction of the company.
- xi) The contractor/contractors shall make their own arrangement for carriage of all materials to the work site at his/their own cost.
- xii) The work shall not be sublet to any other party, unless approved by Engineer-In-Charge, in writing.
- xiii) a) No fruit trees or valuable plants or trees with trunk diameter exceeding 150mm shall be pulled, destroyed or damaged by the contractor/contractors or any of his/their employees without the prior permission of the company, failing which the cost of such trees or plants shall be deducted from the contractor/contractors dues at the rate to be decided by the company. The rates quoted are supposed to include clearance of shrubs and jungles and removal of such trees upto 150 mm dia., as will be permitted by the Engineer-In-Charge in writing.
- b) Anything of historical or other interest or of significant value unexpectedly discovered on the site is the property of the employer. The Contractor is to notify the Nodal Officer or his nominee of such discoveries and carry out the Nodal Officer or his nominee's instructions for dealing with him.
- xiv) The contractor/contractors shall not pay less than the minimum wages to the labours engaged by him/them as per Minimum Wages Act or such other legislation or award of the minimum wage fixed by the respective State Govt. or Central Govt. as may be in force.
- xv) All accounts shall be maintained properly and the company shall have the right of access and inspection of all such books of accounts etc., relating to payment of labourer considered necessary and the company may arrange for witnessing the payment to the labourer by its representatives.
- xvi) The contractor shall in addition to any indemnity provided by the relevant clauses of the agreement or by law, indemnify and keep indemnified for the following :
- a) The company or any agent or employee of the company against any action, claim or proceeding relating to infringement or use of any patent or design right and shall pay any royalties or other charges which may be payable in respect of any article or material included in the contract.

However, the amount so paid shall be reimbursed by the company in the event such infringement has taken place in complying with the specific directions issued by the company or the use of such article or material was the result of any drawing and/or specifications issued by the company after submission of tender by the contractor. The contractor must notify

immediately after any claim being made or any action brought against the company, or any agent or employee of company in respect of any such matter.

- b) The company against all claims, damages or compensation under the provisions of payment of Wages Act, 1938, Minimum Wages Act, 1948, Employer's Liability Act, 1938. The Workmen's Compensation Act, 1923, Industrial Dispute Act, 1947, Mines Act as applicable, Employees State Insurance Act 1948 and Maternity Benefit Act, 1961, Acts regulating P.F. or any modification thereof or any other law relating thereto and rules made thereunder from time to time, as may be applicable to the contract which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and also against costs, charges and expenses of any suit, action or proceedings arising out of any accident or injury.
  - c) The company against all losses and claims for injuries or damages to any third party or to any property belonging to any third party which may arise out of or in consequence of the construction of maintenance or performance of the work under the contract and against all claims/demands proceedings/damages, cost charges and expenses, whatsoever, in respect of or in relation thereto.
- xvii) The contractor is under obligation to hand over to the company the vacant possession of the completed building structures failing which the Engineer-In-Charge can impose a levy upon the contractor upto 5% of the total contract value for the delay in handing over the vacant possession of the completed works after giving a 15 (fifteen) days notice to the contractor.
- xviii) **a) INSURANCE :** The contractor shall take full responsibility to take all precautions to prevent loss or damage to the works or part thereof for any reasons whatsoever (excluding act of God e.g. flood, riots, war, earthquake, etc.) and shall at his own cost repair and make good the loss/damage to the work so that on completion, the work shall be in good order and condition and in conformity with the requirements of the contract and instructions of the Engineer-In-Charge.

In case of construction works without limiting the obligations and responsibilities under the contract, the contractor shall take insurance policy for the total value of work for the period from commencement to completion including defect liability period against risk of loss/damage to the extent as permissible under the law of insurance.

The contractor shall arrange necessary insurance and pledge the same in the name of the company and all moneys payable by the insurers shall be recovered by the company which shall be paid to the contractor in installments as may be certified by the Engineer-In-Charge for the purpose of rebuilding or replacement or repair of the works and/or goods destroyed or damaged for which payment was received from the insurers.

- b) Where any company building or part thereof is used, rented or leased by the contractor for the purpose of storing or using materials of combustible nature, the contractor shall take separate insurance policy for the entire building and the policy shall be deposited with the company.
- c) The contractor shall at all times during the tenure of the contract indemnify the company against all claims, damages or compensation under the provision of the Workmen's Compensation Act and shall take insurance policy covering all risk, claims, damages, or compensation payable under the Workmen's Compensation Act or under any other law relating thereto.
- d) the contractor shall ensure that the insurance policy/policies is/are kept alive till full expiry of the contract by timely payment of premiums and it/they shall not be cancelled without the approval of the company and a provision is made to this effect in all policies and similar insurance policies are also taken by his sub-contractors if any. The cost of premium shall be borne by the contractor and it shall be deemed to have been included in the tendered rate.
- e) In the event of contractor's failure to effect or to keep in force the insurance referred to above or any other insurance which the contractor is required to effect under the terms of the contract, the company may effect and keep in force any such insurance and pay such premium/premiums as may be necessary

for that purpose from time to time and recover the amount thus paid from any moneys due to the contractor.

***THIS CLAUSE (Cl. xviii) SHALL BE APPLICABLE FOR WORKS OF ESTIMATED VALUE OF OVER Rs. 50 LAKHS.***

- xix) **Setting Out :** The contractor shall be responsible for the contract and proper setting out of the works and correctness of the position, reduced levels, dimensions and alignment of all parts of the work including marking out the correct lay out in reference to the permanent bench mark and reference points. Only one permanent bench mark and basic reference lines shall be marked and shown to the contractor as basic data.

The contractor shall have all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of work any error is detected in respect of the position, levels, dimensions or alignment of any part of the work, the contractor on being required to do so by the Engineer-In-Charge or his representative shall at the expenses of the contractor rectify such errors to the satisfaction of Engineer-In-Charge unless such error is due to incorrect data supplied by the Engineer-In-Charge.

- xx) On receipt of Letter of Acceptance of Tender/Work Order the contractor shall forthwith Register and obtain Licence from the competent authority under the Contract Labour (Regulation & Abolition) Act 1970, the Contract Labour (Regulation & Abolition) Central Rules, 1971 and submit certified copies of the same to the Engineer-In-Charge and the Principal Employer.
- xxi) The contractor shall be registered with the concerned State Govt. and the Central Govt. in respect of Sales Tax Act and the certificate having details of Registration No. period of validity etc. should be submitted to the Engineer-In-Charge.
- xxii) The contractor shall, in connection with works, provide and maintain, at his own cost, all lights, security guards, fencing when and where necessary as required by the Engineer-In-Charge for the purpose of protection of the works, materials at site, safety of workmen and convenience of the public.
- xxiii) All materials (e.g. stone, moorum and other materials) obtained in the course of execution of the work during excavation and dismantling etc. shall be the property of the company and the same may be issued to the contractors, if required for use in the works at the rates to be fixed by the Engineer-In-Charge.
- xxiv) Unless otherwise specifically provided for, dewatering of excavation pits, working areas etc. shall be the contractor's responsibility and is to be carried out at his own cost as per instructions of EIC. The rates quoted by the contractor shall be deemed to include the dewatering costs.
- xxv) ***Approval by the Nodal Officer/ Engineer-In-Charge or his nominee :*** The contractor shall submit specifications and drawings showing the proposed temporary works to the Nodal Office/ Engineer-In-Charge or his nominee, who is to approve them if they comply with the specifications and drawings.

The contractor shall be responsible for design of Temporary Works.

The Nodal Officer / Engineer-In-Charge or his nominee's approval shall not alter the contractor's responsibility for design of the Temporary Works.

**13. Defects Liability Period :**

In addition to the defect/s to be rectified by the contractor as per terms of the contract/work order, the contractor shall be responsible to make good and remedy at his own expenses the defect/s mentioned hereunder within such period as may be stipulated by the Engineer-In-Charge in writing :

- a) Any defect/defects in the work detected by the Engineer-In-Charge within a period of 6 (six) months from the date of issue of completion certificate.

- b) In the case of building works or other works of similar nature any defect in the work detected by the Engineer-In-Charge within a period of 6 (six) months from the date of issue of completion certificate or before the expiry of one full monsoon period i.e. June to October whichever is later in point of time.
- 13.1 A programme shall be drawn by the contractor and the Engineer-In-Charge for carrying out the defects by the contractor detected within the defect liability period and if the contractor fails to adhere to this programme, the Engineer-In-Charge shall be at liberty to procure proper materials and carry out the rectifications in any manner considered advisable under the circumstances and the cost of such procurement of materials and rectification work shall be chargeable to the contractor and recoverable from any of the pending dues of the contractors.

The defect liability period can be extended by the company on getting request from the contractor only for valid reasons.

There will be no defect liability period for works like Grass Cutting, Jungle Cutting, Surface Dressing and any other work of similar nature to be decided by the Engineer-In-Charge.

#### **14. Operating and Maintenance Manual :**

If "as built" drawings and/or Operating and Maintenance Manual are required the contractor shall supply them by the dates as per instruction of the Engineer-In-Charge.

If the contractor does not supply the drawings and/or Manual by the dates as stated above, or they do not receive the Nodal Officer or his nominee's approval, the Nodal Officer or his nominee shall withhold the amount as stated in the agreement.

#### **15. Settlement of Dispute / Arbitration :**

15.1 Engineer Incharge of the work will make every effort to avoid litigation and disputes with the contractors during the course of execution. However, if such disputes take place between the contractor and the department, it should be mutually settled by a committee comprising of Staff Officer (C)/Dy GM(C), Area Finance Manager and a representative nominated by CGM(C)/GM(C)/HOD(C) of the Area/Project. The contractor should make request in writing to the Engineer-In-Charge for settlement of such disputes/claims within 30 days of arising of the cause of dispute/claim and if in the opinion of Engineer-In-Charge the dispute cannot be settled at his level, he will refer the matter to the above committee for settlement within 30 days of receiving intimation from the contractor.

15.2 In case the dispute still persists and the Committee referred above and the Contractors are unable to arrive at a settlement, the matter shall be referred to the Head of Town Engineering Department/Director of the company shall take all effective steps to settle the disputes so raised by negotiation between the parties and if necessary through a committee of the officials as may be considered fit or proper, within 90 days from the date of reference of the dispute.

#### **15.3 Arbitration :**

- i) In the event of failure in arriving at any settlement within a period of 90 days as referred to in the preceding paragraph such dispute or difference may be referred to the Sole Arbitrator to be nominated by the Chair-Cum-Managing Director of the company. Request for such arbitration by the Sole Arbitrator has to be made in writing by the concerned party to the Chairman-Cum-Managing Director of the company within 90 days from the date of failure of settlement of the dispute. The Sole Arbitrator can be an employee of the company or otherwise connected with the company. There shall be no objection to any such appointment.

In the event of the arbitrator neglecting or refusing to act or resigning or being unable to act for any reason whatsoever the Chairman-Cum-Managing Director of the company shall substitute such Arbitrator by a fresh nomination. No person other than the nominated or appointed as aforesaid shall act as an Arbitrator. Should any request for arbitration is not made in writing within the time stipulated



herein above it shall be deemed to have been waived such right for arbitration and absolutely barred to refer the matter to the arbitration at all.

Work under the contract shall be continued by the Contractor during the Arbitration proceeding unless otherwise directed in writing by the company. Payment due or payable by the company shall not be withheld on account of such arbitration proceedings.

Subjects to as aforesaid the Arbitration and Conciliation Act, 1996 or any statutory modification thereof and rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause, venue of the arbitration shall be at the Headquarters of the Company or the place where the cause of action has arisen on the sole discretion of the arbitrator.

- ii) The above arbitration clause shall not be applicable in the case of dispute between Public Sector Undertaking inter se or between one Public Sector Undertaking and the government Department and the provisions contained in the following paragraph shall be applicable for such dispute.

In the event of any dispute or difference relating to the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either party to the arbitration of one of the arbitrators in the Department of Public Enterprises to be nominated by the Secretary to the Government of India, Incharge of the Bureau of Public enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to the arbitration under this clause. The award of the arbitrator shall be binding upon the parties to the dispute, provided however any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law secretary or the Special Secretary / Additional Secretary when so authorised by the Law Secretary whose decision shall bind the parties finally and conclusively. The parties in the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

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### **ADDITIONAL TERMS AND CONDITIONS**

The following additional terms and conditions are also acceptable to the company. The tenderers are requested not to quote any further additional conditions in the tender :

#### **1. Mobilisation Advance :**

No mobilisation advance is payable for the works.

#### **2. Application of Price Variation Clause :**

No escalation shall be payable for the work on any account.

### **SPECIAL TERMS & CONDITIONS**

Notwithstanding anything stated in this agreement, under mentioned Special Terms & Conditioned would be operative and fully binding on the Contractor.

- 1. Contractor would be deemed to have acquainted himself with the tasks to be performed, requirement and procedure for environmental data generation. Rates are valid for site/project location and conditions and for performance of the various tasks, sub task etc., whether specifically mentioned or not and are deemed to include handling and transportation of samples, power supply and infrastructure facilities for sampling, analysis etc. and all inputs, activities attendant upon proper execution of the work conforming to the requirements of Ministry of Environment, Forest and Wildlife and to the satisfaction of the client.**
- 2. For Environmental Data Generation, The rates for the various items, sub-tasks, tasks (as the case be ) includes sampling, transportation and handling of samples, analysis, performance of tasks etc. contractor would be required to comply with the following :-**
  - i) Furnish documentary evidence in respect of currently valid recognition as prescribed in Clause no-3.2 of section-1 (INSTRUCTION TO BIDDERS) for the laboratory and infrastructure which the contractor would be deploying for performance of the tasks of environmental data generation.
  - ii) Sampling, Analysis including method of testing shall conform to relevant Indian Standards, and in the absence thereof International Standards and code of practice. Ambient Air Quality monitoring furnished in emission regulations brought out by the Central Board for Prevention and Control of Water Pollution is to be assimilated by the contractor.
  - iii) Wherever feasible, contractor would be required to keep referral sample with indication of sample particulars (location, date & time of sampling etc.) and the same shall be preserved for such period as may be specified by the client. On client summons or requisition, contractor would be required to make available the sample to the client for getting analysis of testing carried out through any recognized laboratory or agency. In the event of variance in the test or analysis results of referral sample and the results furnished by contractor, it will be open to the client to recover the amount paid to the contractor for such work.
  - iv) Contractor would consult the client for sample size, location and other details connected with the work. Location of sampling points delineated on Map would be furnished to the contractor by the client, if considered necessary.
  - v) On receipt of assignment, contractor would furnish to the client, work programme, name of persons (with their qualification and proof of expertise to be deployed for carrying out the tasks assigned. Only qualified and experienced persons having required and expertise would be deployed by the contractor to the satisfaction of the client.
  - vi) In case analysis or test result indicate excessive or abnormal values of specific parameters, site conditions or likely reasons thereof shall be recorded in the remarks brought out in explanatory note by the contractor.
  - vii) Contractor will be required to defend the work carried out by him and accuracy thereof and shall be required to clarify, elaborate or justify in the context of evaluation of the tasks (carried out by the contractor) asked by State Pollution Control Board/ Ministry of Environment, and Forests and Wild life authority of State/ Government of India.
  - viii) In case environmental data generation covers more than one location, i.e. adjoining or in proximity, the sampling locations and size etc. would be so planned to keep the cost at

- minimum. In respect of land use plan, socio-economic study. etc. for such situations, payment will be admissible adopting rate for one single unit plus extra on prorata for the additional quantities or work involved.
- ix) The payment for Environmental Data Generation shall be made as per the actual number of samples analyzed and given in the report(s).
  - x) Arrangement for transport of agency's men and material required for the job has to be made by the agency- The responsibility for the security of the equipment lies on the agency.  
In case the data is not accepted by MOEF, the same has to be regenerated by the agency at his own cost.
  - xi) In case the agency fails to get the data generated within the stipulated time, CMPDI may get the said data generated by some other agency at the agency's cost.
3. Contractor would furnish to the client 2(two) copies of draft reports relating to environmental data generation. They would also submit final reports in 3 (three) copies and a soft copy (in CD). Digitized plan will be supplied along with the report and a soft copy in AutoCAD or as per instruction of Engineer- in- charge .  
The report shall also contain following Digitised Plans in Autocad :
    - a) Plan showing 10 Km radius area from the periphery of the project boundary showing the surface features namely National / State Highways , rail routes , rivers, nullahas, lakes, villages , different industries etc. as per instruction of Engr- in-Charge.
    - b) Plan showing the locations of Air sampling stations within core zone & buffer zone ( 10 Km radius area from the periphery of the project boundary).
    - c) Plan showing the locations of water sampling stations within core zone & buffer zone ( 10 Km radius area from the periphery of the project boundary).
    - d) Plan showing the locations of noise sampling stations within core zone & buffer zone ( 10 Km radius area from the periphery of the project boundary).
    - e) Plan showing the locations of soil sampling stations within core zone & buffer zone ( 10 Km radius area from the periphery of the project boundary).
  4. **If there is delay on the part of the client in making available committed data, information etc. corresponding extension of time for the actual period involved would be granted by the client without imposition of penalty. It is clearly understood that no claim from the contractor would rest with the client or shall be entertained by the client.**
  5. Contractor would invariably in advance, in writing intimate the client, represented by Regional Director, CMPDI, RI-VII, Bhubaneswar of the contractor's expert personnel visiting coal project or site proposed to be visited tasks proposed to be carried, expected duration of such visit so that the client can, if considered necessary, depute his representative or authorize any other person to supervise and/or overview the work being carried out. Client is authorized to visit the Laboratory and acquaint himself that the tasks carried out by the contractor of his duties, responsibilities including execution of the work conforming to Indian standards and in the absence thereof international standards and code of practice.
  6. The contractor/contractors shall not pay less than the minimum wages to the labour engaged by him/them, in any, as per Minimum wages Act or such other legislation or award or the minimum wages fixed by the respective state government as may be in force and in this matter the decision of the client shall be final and binding.
  7. All accounts shall be maintained in English and the company shall have the right of access and inspection of all such books of accounts, etc. relating to payment of labours if considered necessary and the client may arrange for witnessing the payment to the labours by its representatives.
  8. The contractor / contractors shall in addition to any indemnity provided by law, indemnify the client against all liabilities whatsoever arising out of the workman's compensation Act 1932 or any enactment and amendments thereto and contractor shall be wholly responsible for observance of all statutory rules and regulations under any act or award of the Government in force in matters relating to the employment, payment and retrenchment of labour.  
No claim shall lie against the client for damaged done by any act of god or on account of circumstances beyond the client's control.

If in any matter which is not expressly provided for or against conditions of any matter or practice appears prejudicial to the interest of client or the public, the client may call upon the contractor to remedy, modify or remove such matter or practice and this shall be binding on the contractor.

9. The work order can also be terminated by the Regional Director, CMPDI,RI-VII , Bhubaneswar if it is found that the information furnished by the agency at the time of tender proved to be false.
10. Regional Director, CMPDI,RI-VII , Bhubaneswar reserves the right to terminate the work order without assigning any reason whatsoever after giving a month's notice. The agency shall be paid final dues after assessing the work done till date and after recovery of all dues, if any.

## TECHNICAL SPECIFICATIONS

### Air Quality

- (i) **Parameters to be covered:**  
As per Environmental Standards for Coal Mines (GSR no. 742(E) dt. 25th September, 2000) & NAAQS dt. 18 November, 2009 : SPM, RPM 10.0, RPM 2.5, SO<sub>2</sub> and NO<sub>x</sub> as well as heavy metals in air such as HG, Pb, As, Cr etc..
- (ii) **Methodology:** As specified in the standards mentioned in National Ambient Air Quality Standards (NAAQS), IS 5182 (Part II) – 1969 for Sulphur Dioxide, IS 5182 (Part IV) – 1973 for Suspended Matter, IS 5182 (Part V) – 1975 for Sampling of Gaseous Pollutants, IS 5182 (Part VI) – 1975 for Nitrogen Oxides and subsequent amendment.
- (iii) **Location of Monitoring Stations: The air quality stations shall be six at a project site, depending upon local conditions and other factors.**

**Frequency of sampling:** The frequency of air sampling would be twice a week for 24 hour duration for 12 weeks in one season. The air quality monitoring at all the selected sites will be done simultaneously.

The air quality monitoring shall be carried out for one season (except monsoon).

### Micro- Meteorological Data

- (i) Parameters to be covered: Ambient Temperature (mean, maximum, minimum) in degree Kelvin; Wind Speed (Min., Max., % Calm) in m/sec; Wind Direction in degree; Rainfall (mm); Relative Humidity (%), Cloud Cover (Oktas of sky). Wind Rose pattern for one full season based on hourly data for a day for 3 months in a season – sixteen radial
- (ii) Methodology: Wind Velocity and wind direction to be measured by using cup anemometer and wind vane respectively, ambient temperature by wet and dry bulb thermometer, relative humidity by hygrometer, pressure by using aneroid barometer, rainfall data collection with the help of self-recording rain gauge and cloud cover shall be measured by visual inspection.
- (iii) Frequency of observations: Micrometeorology and microclimatic parameters shall be recorded by installing a meteorological station. Wind velocity, wind direction, ambient temperature, relative humidity, cloud cover and wind rose pattern for one full season based on hourly data for a day for 3 months in a season
- (iv) Reporting Pattern:
- (a) Hourly data to be given for wind velocity, wind direction, temperature, relative humidity, cloud cover, rainfall along with
    - (b) Predominant wind direction,
    - (c) Maximum, minimum and average wind velocity, ambient temperature, relative humidity, rainfall
    - (d) Atmospheric pressure
    - (e) Sky appearance
    - (f) Daily wind roses
    - (g) Seasonal wind rose (16 directions)
    - (h) Shift wise wind roses (day time and night time – 8.00 am & 6.00 pm.)
    - (i) Abstract of Meteorological Data for every season detailing
      - Average daily wind velocity (m/s) minimum, maximum and % duration (<1, 1-5, 5-11) data
        - Average daily predominant wind direction (wind blowing from)
        - Average daily temperature (°K) minimum, maximum
        - Average daily mean relative humidity (%)
        - Average daily rainfall (mm)
        - Average daily sky appearance
      - Average seasonal wind velocity (m/s) minimum, maximum and % duration (<1, 1-5, 5-11) data
        - Average seasonal predominant wind direction (wind blowing from)
        - Average seasonal temperature (°K) minimum, maximum
        - Average seasonal mean relative humidity (%)
        - Average seasonal rainfall (mm)
        - Average seasonal sky appearance

The meteorological data is to be depicted through suitable graphics. The report shall be submitted in hard copy and soft copy.

### **Water Quality**

- (i) **Parameters to be covered:**  
 Mine / Effluent Sample – As per parameters and methodology detailed in Schedule VI Standards Environment (Protection) Rules, 1986, General Standards for discharge of environment pollutants Part-A: Effluents for Inland surface discharge (Class A). (GSR no. 422(E) dt. 19<sup>th</sup> May, 1993 and as amended on 31.12.1993 and 2.4.1996)  
 Surface Water Samples – As per parameters and methodology detailed in IS:2296:1982, Inland surface water standards (class C). Class C- Tolerance limit for surface water used for drinking water source with conventional treatment followed by disinfection. Drinking Water Samples – As per parameters and methodology detailed in IS:10500:1991 (Drinking Water Specification – 1<sup>st</sup> Revision) and subsequent amendment.
- (ii) **Methodology of Sampling & Analysis**
  - (a) The sampling of water sample is to be done as per standard procedure {IS: 3025 (Part -1) – 1987} effluent from the nearest mine, workshop, washery; surface water in vicinity of the coal project – ponds, nallas; drinking water from dug wells / drill well and from nearest similar coal projects or any source that may be specified by CMPDI .
  - (b) Methodology of analysis shall be as detailed in relevant volumes of BIS 3025/ NEERI/ Standard Methods (AAPHA)
- (iii) **Frequency of sampling**  
 Number of sample from each source shall usually be one. However, the frequency & number of samples can vary & shall be specified at the time of placement of order. Total number of samples will be as per Bill of Quantity depending on local conditions.

### **Noise Level**

- (i) **Parameters to be covered:** dB(A) Leq value, day time (6 am to 10 pm) & night time (10 pm to 6 am), Schedule III, Environment (Protection) Rules, 1986 – Ambient Air Quality Standards in respect of Noise, at mine site, coal handling plant, coal washery, residential areas / townships, mining and associated activities in the above mentioned coalfields or at any place in India. The duration of recording the observations at each station during day time and nighttime shall be continuous between 6.0 AM to 10.0 PM and 10.0 PM to 6.0 AM respectively.
- (ii) **Methodology:** With the help of Leq Integrated Noise Level Meter
- (iii) **Frequency:** The frequency and number of samples shall be specified by CMPDI at the time of placement of order, once ( on day and night i.e. 24 hours ) during the season under consideration.
- (iv) **Location:** The noise level stations shall be same as the air quality stations i.e. 6(six) number unless otherwise specified in the work order.

### **Soil Analysis**

- (i) **Parameters to be covered:** (a) pH, (b) Cation exchange capacity (c) Electrical conductivity (d) Mechanical soil analysis (soil texture) (e) Nitrogen available (f) Phosphorous available (g) Potash available (h) SAR in soil extract (i) Water holding capacity (j) Organic Carbon (available) (k) Specific gravity – density (l) Field capacity (m) Wilting Coefficient.
- (ii) **Methodology of Sampling and Analysis**  
 The samples shall be collected at three depths at each sampling location (30 cm, 60 cm, 90 cm) below ground level by auger sampler. The sampling site shall be specified by CMPDI in the above-mentioned coalfields .

### **Ecological Studies (Flora / Fauna)**

**Description of flora & fauna should be given separately in the core and buffer zones.\***

[\*Consult the Wildlife (Protection) Act, 1972 as amended subsequently and list species with (1) Common name (2) Scientific name and (3) under which schedule of the Wildlife (Protection) Act the identified species fall (4) *Red Data Book* . Get the list authenticated by an Expert in the field /

credible scientific institute / University / Chief Wildlife Warden Office. **Information to be based on field survey.**]

<b>A. Flora</b>	<b>Core Zone</b>	<b>Buffer Zone</b>
1. Agricultural crops		
2. Commercial crops		
3. Plantation		
4. Natural vegetation / forest type		
5. Grass lands		
6. Endangered species		
7. Endemic species		
8. Others (specify)		
<b>B. Fauna (Terrestrial / Aquatic)</b>		
1. Total listing of faunal elements		
2. Endangered species		
3. Endemic species		
4. Migratory species		
5. Details of aquatic fauna, if applicable		

**Baseline Data for Conservation of flora / fauna:** should plan field studies – 1) scale of study – ensure representativeness of the landscape features, eco-systems, habitat types and species range through topographical maps, remote sensing or thematic maps 2) sampling size & frequency 3) timing of the study – allow recording of observations to cover different activity phases for important species such as time resting, feeding, hunting, daily movements etc. 4) Seasonality of the study – incorporation of information on important life cycle events of key species (Animals – breeding and nesting seasons, migration patterns, Plants – flowering and fruiting seasons 5) Number of observations depending on parameter and scope, driven by expected outputs (one time observation, chance observation, regular observation) . The data should be both qualitative and quantitative (can be aided by computers, remote sensing, video-graphy etc.. Source of secondary information is to be stated. Information contained in baseline should be able to allow identification of impacts.

Suggestive conservation plan is to be included for endangered / endemic species.

### **Socio-Economic Profile**

Socio-economic data shall be generated for study area covering 10 km from the periphery of the project. The villages falling in core zone i.e leasehold area and buffer zone i.e area beyond leasehold but within 10 km radius from periphery of leasehold should also be indicated. Number of villages and village wise data as per the latest census records are also to be indicated. The list has to be authenticated by an expert in the field/ University.

**The information provided in the report shall cover the following or as per instruction of Engineer- in-charge :**

- a) Social Profile  
Total Population with breakup including, male – female & SC- ST.  
Literacy level of both male and female separately  
House hold size (average) .  
Occupational health survey
- b) Economic  
Occupational Structure  
Land Use Pattern
- c) Infrastructure Facilities  
Source of water supply  
Educational Institutes
- d) Occurrence of any historical / archaeological sites in the core and buffer zone
- e) Presence of important surface features, namely National / State Highways, Railway, major rivers , lake, and different industries with locations on the Toposheet plan of GSI .  
The house – hold survey shall include human settlement

	Core Zone	Buffer Zone
<b>Population *</b>		
<b>No. of Villages</b>		
<b>Households village-wise</b>		

(\* as per latest census records or actual survey)

**Villages falling within the study area**

	Villages	
	Number	Name
Core Zone		
500 m from the blasting site(s)		
Buffer zone		
Township site		

**Details of village(s) in the core zone**

S.No.	Village Name	Population		Average Annual Income
		Tribal	Others	

Occupational Health Issues

The bidder shall also undertake a baseline survey on the health of the population and get the same authenticated by a Registered Medical Practitioner/Govt. Health Officer, wherever possible. Such a person has to be a qualified medical practitioner (MBBS).

The survey has to be conducted on 250 household represented across the spectrum of male and female population, for the following age groups:

- Upto 5 years
- Above 5 years to 18 years
- Above 18 years to 40 years
- Above 40 years

The survey should include the vital personal history of the individual including their habits and their medical history. This is to be based on their documents, if made available by the person or on their oral evidence, clearly stating this fact in the report. The report should specify the type of diseases, if any, and whether these are chronic or occasional and in percentage.



## ADDITIONAL SAFETY MEASURES TO BE TAKEN BY THE CONTRACTORS

### Safety Code

- i) Suitable scaffolds should be provided for workmen for all works that can not safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds, shall be provided on the ladder and the ladder shall be given a inclination not steeper 1/4 to 1 (1/4 horizontal and 1 vertical).
- ii) Scaffolding or staging more than 12' above the ground or floor swing or suspended from over head support or erected with stationary support shall have a guard fail properly attached, braced or otherwise secured at least 3' high above the floor or platform of such scaffolding or staging and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be fastened as to prevent if from swaying from the building or structure.
- iii) Working platform gangways and stairways should be so constructed that they should not sag and if the height of the platform of the Gangway or the Stairway is more than 12' above ground level or floor level they should be closely binded and should have adequate with and should be suitably fenced, as described as (ii) above.
- iv) Every opening in the floor of a building or in working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 3'0".
- v) Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be provided securely fixed. No portable single ladder shall be over 30' in length while the width between side rails in running ladder shall in no case be less than 11.5 for ladder upto and including 10' length. For longer ladder this width should be increased at least 1/4% for each additional foot of length. Uniform step spacing shall not exceed 12%. Adequate precautions shall be taken to prevent danger from electrical equipment. No material on any of the sites of works shall be taken to cause danger from electrical equipment. No materials on any of the sites of works shall be so soaked or placed as to cause danger or inconvenience to any person or the public. The contractor shall also provide all necessary fencing light to protect the public from accident and shall be bound to bear the expenses of defence of every suit; action or other proceedings at all they may be brought by any person for injury sustaining owing to neglect to the above precautions and to pay damage and cost which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.
- vi) **Excavation and Trenching :** All trenching four feet or more in depth, shall at all times be supplied with at least on ladder for each 100' in length or fraction there of ladder shall be extended from bottom of the trench to at least 3' above the surface or the ground. The side of the trenches which are 5' or more in depth shall be stopped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of slides collapse. The excavated materials shall not be placed within 5' or more in depth shall be stopped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of slides collapse. The excavated materials shall not be placed within 5' of the edge of the trench or half of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
- vii) **Demolition :** Before any demolition work is commenced and also during the process of the work:
  - a) All road and open areas adjacent to the work site shall either be closed or suitably protected.
  - b) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.

- c) All possible steps shall be taken to prevent danger to persons employed from risk of life from explosion, or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to tender it unsafe.
- viii) All necessary personal safety equipment as considered adequate by the Engineer-in-charge should be kept available for the use of the persons employer on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned.
- a) Workers employed for mixing asphalt, materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
  - b) Those engaged in white washing and mixing or stacking of cement bags or any materials which is injurious to the eyes shall be provided with protective goggles.
  - c) Those engaged in welding works shall be provided with welders glass.
  - d) Stone breakers shall be provided with protective goggles and protective clothing, and seated at sufficiently safe intervals.
  - e) When workers are employed in sewers and manholes, which are in use the contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers asked to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
  - f) The contractors shall not employ men below the age 18 years and women on the work of painting with products containing lead in any form whenever man above the age of 18 are employed for the work of lead painting the following precautions should be taken:
- ix) **Painting :**
- a. No paints containing lead or lead products should be used except in the form of paste or ready made paint.
  - b. Suitable face masks should be supplied for use to the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
  - c. Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during the process of work.
- x) When the work is done near any place where there is a risk of drowning necessary equipment should be provided and kept ready. Prompt rescue of any person in danger and adequate provision should be made for prompt first-aid treatment of all injuries like to be sustained during the course of the work.
- xi) Use of hoisting machines and tackles including their attachment, uncharge and supports shall conform to the following standard or conditions.
- a) Those shall be of good mechanical construction, sound materials and adequate strength and free from Patent defect and shall be kept in good working order.
  - b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
  - c) Every crane driver or hoisting appliance operator shall be properly qualified and no person under an age 21 years should be incharge of any hoisting machine including scaffold and one who gives signals to operator.
  - d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or means of suspension, the safe working load shall be

ascertained by adequate means. Every hoisting machine and all referred to above shall be plainly marked with safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated beyond the safe working load except for the purpose of testing.

- e) In case of departmental machines, the safe working load shall be modified by the Electrical Engineer. As regards contractors, machine, the contractor shall notify the safe working load of the machine to the Engineer Incharge whenever he brings any machinery to sit of work and get it verified by the Electrical Engineer concerned.
- f) Gearing, Transmission, Electric wiring and other dangerous parts of housing appliance should be provided with efficient safeguard. Hoisting appliances should be provided with such means as shall reduce risk of a accidental descent of the load. Adequate precautions should be taken to reduce to the minimum risk or any part of suspended load becoming accidentally displaced.
- g) When workers are employed on electrical installation which are already energised, insulating mats, wearing apron such as gloves, sleeves, and boots as may be necessary should be provided. The workers should not wear any rings, watches, and carry keys or other materials which are good conductors of electricity.
- xii) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffolds, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.
- xiii) These safety provision shall be brought to the notice of all concerned by display on a Notice Board at a prominent place at the work spot. The persons responsible for compliance of the safety code shall be named there by the contractor.
- xiv) To insure effective enforcement of the rules and regulations relating to Safety Precautions, the arrangements made by the contractor shall be open to inspections by the Labour Officer, Engineer Incharge of the department or their representative.
- xv) Notwithstanding the above clause from (i) to (xiv) there is nothing in these to exempt the contractor from operation of any other Act or Rule in force in Republic of India.

## COMPLIANCE OF LABOUR LAWS

### 1. Labour

- 1.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, their payment, housing, feeding and transport.  
The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by contractor on the site and such information respecting contractor's equipment as the Engineer may require.
- 1.2 The work has to be carried out through regular employees as far as possible and the Wages thereof are to be made in their bank accounts

### 2. Compliance with Labour Regulations

- 2.1 During continuance of the contract, the contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law, including rules, regulations, bye laws that may be passed or notification that may be issued under any labour law in further either by the State or Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The contractor shall be held responsible in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made thereunder, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications bye laws/acts/rules/regulations/including amendments, if any on the part of the contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the contractor and the sub-contractor in no case shall be treated as the employees of the Employer at any point of time.

- 2.2 SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENT ENGAGED IN BUILDING AND OTHER CONSTRUCTION / CIVIL WORKS.
- a) **Workmen Compensation Act, 1923** :- The act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) **Payment of Gratuity Act, 1972** :- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death the rate of 15 days' wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) **Employees PF and Miscellaneous Provisions Act, 1952** :- The Act provides for monthly contributions by the employer and workers @10% or 8.33% or as applicable. The benefits payable under the Act are :
- i. Pension or family pension on retirement or death as the case may be.
  - ii. Deposit linked Insurance on the death in harness of the worker.
  - iii. Payment of PF accumulated on retirement/death etc.
- d) **Maternity Benefit Act, 1951** :- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) **Contract Labour (Regulation & Abolition) Act, 1970** :- The Act provides for certain welfare measures to be provided by the contractor to contract labour and in case the contractor fails to provide, the same are required to be provided by the Principal Employer by Law. The Principal Employer is

required to take Certificate of Registration and the contractor is required to take license from the designated Officer. The Act is applicable to the establishments or contractor of Principal Employer if they employ 20 or more contract labour.

- f) **Minimum Wages Act, 1948 :-** The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employment.
- g) **Payment of Wages Act, 1936 :-** It lays as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) **Equal Remuneration Act, 1979 :-** The Act provides for payment of equal wages for work of equal nature of Male and Female workers and for not making discrimination against Female employee in the matters of transfers, training and promotion etc.
- i) **Payment of Bonus Act, 1965 :-** The Act is applicable to all establishments employing 20 or more workmen. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs. 3500/- per month or less. The bonus to be paid to the employee getting Rs. 2500/- per month to about upto Rs. 3500/- per month, shall be worked out by taking wages as Rs. 2500/- per month only. The Act does not apply to certain establishments. Some of the State Governments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of the Act.
- j) **Industrial Disputes Act, 1947 :-** The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) **Industrial Employment (Standing Orders) Act, 1946 :-** It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the State and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- l) **Trade Union Act, 1926 :-** The Act lays down the procedure for registration of trade unions of workmen and employees. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) **Child Labour (Prohibition & Regulation) Act, 1986 :-** The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building Industry.
- n) **Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act, 1997 :-** The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided, certain facilities such as Housing, Medical-Aid, Travelling expenses from home upto the establishment and back etc.
- o) **The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act of 1996 :-** All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as canteens, First-Aid facilities, Ambulance, Housing accommodation for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

- p) **Factories Act, 1948** :- The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working houses, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

PROFORMA FOR EXECUTION OF AGREEMENT

AGREEMENT NO. \_\_\_\_\_ DT. \_\_\_\_\_

This Agreement is made on this \_\_\_\_\_ day of \_\_\_\_\_ 2012 between the Central Mine Planning and Design Institute Limited, RI-VII, a Company Registered under the Indian Companies Act, 1956 having its Registered Office at Gondwana Place, Kanke Road, Ranchi (hereinafter called the Company which expression shall, unless repugnant to the subject or context, include its successors and assignees) of the one part and (Name of the contractor) carrying on business as a (Partnership / proprietorship / Ltd. Co. etc.) firm under the name and style \_\_\_\_\_ (hereinafter called the "said Contractor" which expression shall, unless the context requires otherwise include them and their respective heirs, executors, administrators and legal representatives) of the other part.

And whereas the Company invited tender for the work \_\_\_\_\_ against Tender Notice No. \_\_\_\_\_.

And whereas the said contractor/firm submitted tender for the said work and deposited a sum of Rs. \_\_\_\_\_ as Earnest Money and whereas the tender of the said contract has been accepted by the company for execution of the said works.

**NOW THIS AGREEMENT WITNESS AND IT IS HEREBY AGREED AS FOLLOWS :-**

- 1) In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the tender papers hereinafter referred to.
- 2) The following documents which are annexures to this agreement should be deemed to form and be read and construed as part of this agreement viz.
  - i) Annexure-A Tender Notice (Page ..... to .....)
  - ii) Schedule-A General terms & conditions. Special conditions and General technical specifications (page ..... to .....)
  - iii) Schedule-B The probable Quantities and Amount (Page ..... to .....)
  - iv) Schedule-C Negotiation letters –
  - iv) Schedule-D Letter of Acceptance / Work Order (Page ..... to .....)
  - v) Schedule-E Drawings (page ..... to .....)
- 3) In consideration for the payment of the sum of Rs. .... (W/O value; both in words and figures) or such other sum as may be arrived at under the clause of the specification relating to Payment by item's measurements at unit prices by the Company, the said Contractor shall, subject to the terms & conditions contained herein execute and complete the work as described and to the extent of probable quantities as indicated in Schedule B with such variations by way of alteration, addition to or reduction from the said works.
- 4) The company has converted a sum of Rs. .... only, from the amount of Rs. .... deposited by the said contractor as Earnest Money, into "Initial Security Deposit" of 1% of the awarded work value. The excess/balance amount of earnest money shall be adjusted in the Security Deposit.
- 5) The said contractor hereby convenants with the company that the Company shall retain a sum of Rs. .... or such sum as may be arrived at based on the

executed value of the work, as security deposit for the fulfilment of the contract to the satisfaction of the Company.

IN WITNESS WHEREOF THE parties herein have set their hands and seals the date and year above written :

- 1. Partner Signature
- 2. Partner Signature

On behalf of M/s .....  
The Contractor, as one of the constituted attorney,

In the presence of –

- 1. Name \_\_\_\_\_ Signature  
Address :  
Occupation :

Signed by Sri ..... on behalf of  
(name of Company) in presence of – Signature

- 1. Name : Signature
- 2. Address :





NON JUDICIAL STAMP PAPER OF RS. 5.00

AFFIDAVIT

I, ..... Partner/Legal  
Attorney/Proprietor/Accredited Representative of M/s .....  
solemnly declare that :

- 1 I/We are submitting tender for the work  
.....  
.....  
.....against Tender Notice No. ....Dtd. ....
2. My self or Our partners do not have any relative working in CMPDI Ltd.
- 3 All information furnished by me/us in respect of fulfillment of eligibility criteria and information given in this tender is complete, correct and true.
- 4 All docuemnts/credentials submitted alongwith this tender are genuine, authentic, true and valid.
- 5 If any information or document submitted is found to be false/incorrect, department may cancel my/our Tender and action as deemed fit may be taken against me/us including termination of the contract, forfeiture of all dues including Earnest Money and blacklisting of our firm and all Partners of the firm etc.
- 6 We have read the tender document and understood all provisions and specifications in totality. All terms and conditions are acceptable to us. We do not have any terms and conditions of our own.
7. I/We, hereby, declare that I/We have not been banned or delisted by any Govt. or Quasi Govt. Agencies or PSU's.
8. I/We, hereby, declare that the DD/BC has been prepared from the account of the tenderer.

Seal of Notary

Signature of the Tenderer

Date :

# TENDER DOCUMENT

- 1 Name of work : Data Collection/ Generation And Analysis Of Various Samples In Connection With Eia-Emp Preparation Of Lingaraj Ocp Expn (13.0 Mtpa To Normative 16.0 Mtpa With A Peak Production Of 20.0 Mtpa Within MI Area Of 1410.020), Talcher Coalfield, Mcl.
- 2 Tender Notice No. & Date : 261 dt. 01-11-2012
- 3 Earnest Money Deposit : Rs 13,400.00 (Rupees thirteen thousand and four hundred ) only.
- 4 Completion period of work : Three months.
- 5 Date & time of submission of tender : Upto 3.00 p.m. on 01.12.2012
- 6 Date & time of opening of tender : At 3.30 p.m. on 01.12.2012
- 7 Tender Document issued to : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature of Issuing Officer

Cost of tender document submitted vide CR No. Dt.  
 Certified that this documents contains from page 59 to 61

## PART : II (PRICE BID)



REGIONAL INSTITUTE - VII  
 CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED  
 (A subsidiary of Coal India Limited)  
 BHUBANESWAR (ODISHA) - 751 001

**Data Collection/ Generation and Analysis Of Various Samples in connection with EIA-EMP preparation of Lingaraj OCP expansion (13.0 MTPA to normative 16.0 MTPA with a peak production of 20.0 MTPA within ML Area of 1410.020), Talcher Coalfield, MCL**

SI No	Description of Item	Unit	Qty	Rate to be Quoted	Amount (Rs)
1	Ambient Air Sampling and analysis of PM10, PM2.5, SO <sub>2</sub> , NO <sub>x</sub> , etc as per National Ambient Air Quality Standards (NAAQS), CPCB notification vide No.B-29016/20/90/PCI-L dated 18th Nov 2009 and subsequent amendments (if any) and preparation of a consolidated one season report. {The consolidated report should cover all the stations of the project. The report should also include the micrometeorological study for the season as described in Part- 1 of the Bid Document, Technical Specification Item no. 2 (Micro-meteorological data). There will be one station for each project to generate micro-meteorological data. Note: i) The air quality station shall be six to eight at a project site depending on local condition and other factors. ii) The frequency of air sampling at each station would be twice a week for twenty four hours duration for twelve weeks in one season i.e 2 sample per week x 12 weeks= 24 samples per station in a season. i.e., 24 x 8 =192 samples each for PM10, PM2.5, SO <sub>2</sub> , and NO <sub>x</sub> for 8 Air Monitoring Stations} And heavy metals* like Lead (Pb), Arsenic (As), Nickel (Ni), Mercury (Hg), Chromium (Cr), Selenium (Se), Cobalt (Co), Copper (Cu), Zinc (Zn), Magnesium (Mg) *(The heavy metals to be analyzed once in a season). Quoted rates per station should be inclusive of the apportioned cost towards generation of micro-meteorological data for the season and preparation of consolidated report, all inclusive as per the direction of Engineer-in-Charge.	Each station per season for 24 samples	8.00		
2	<b>Water Sampling, Analysis and preparation of Report, all inclusive as per direction of Engineer-in-charge for the following category of samples.</b> <b>(A)</b> MOEF Schedule VI - General Standards for discharge of environment pollutants Part –A: Effluent parameters for Inland Surface Discharge (class A), (GSR no. 422(E) dt. 19th May, 1993 and as amended on 31.12.1993 and 2.4.1996) Parameters to be analyzed (27): Colour, Odour, Total Suspended Solids, pH, Temperature, Oil & grease, Ammonical nitrogen (as N), Total Kjeldahl nitrogen (as NH <sub>3</sub> ), BOD (5 days, 200C), COD, Arsenic, Lead, Cadmium, Hexavalent chromium, Total chromium, Copper, Zinc, Selenium, Nickel, Flouride, Dissolved phosphates (as P), Sulphide (as S), Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), Manganese, Iron (as Fe), Nitrate Nitrogen (as N), Mercury.	Each Sample	1.00		
	<b>(B)</b> Drinking water, parameters as per IS: 10500:1991. Parameters to be analyzed (25): Colour, Odour, Taste, Turbidity, pH, Total Hardness (as CaCO <sub>3</sub> ), Iron (as Fe), Chlorides (as Cl), Dissolved Solids, Calcium (as Ca), Copper (as Cu), Manganese (as Mn), Sulphate (as SO <sub>4</sub> ), Nitrate (as NO <sub>3</sub> ), Flouride (as F), Residual free chlorine, Cadmium (as Cd), Selenium (as Se), Arsenic (as As), Lead (as Pb), Zinc (as Zn), Hexavalent chromium (as Cr <sub>6</sub> +), Boron, Phenolics (as C <sub>6</sub> H <sub>5</sub> OH), Alkalinity. <b>(1 dug well and 1 tube well in upstream side of the project &amp; 1 dug well and 1 tube well in downstream side of the project),</b>	Each Sample	4		
	<b>(C)</b> Surface water, parameter as per IS:2296:1982 (Inland surface waters), Class C- Tolerance limit for surface water used for drinking water source with conventional treatment followed by disinfection. Parameters to be analyzed (21): Colour, Oil & grease, Dissolved Oxygen, Taste, pH, Iron (as Fe), Chlorides (as Cl), BOD (5 days, 200C), Total Dissolved Solids, Copper (as Cu), Hexavalent chromium (as Cr <sub>6</sub> +), Sulphate (as SO <sub>4</sub> ), Nitrate (as NO <sub>3</sub> ), Fluoride (as F), Total coliform organisms (MPN/100 ml), Cadmium (as Cd), Selenium (as Se), Arsenic (as As), Lead (as Pb), Zinc (as Zn), Phenolics (as C <sub>6</sub> H <sub>5</sub> OH). <b>(1 stream/river and 1 tank/pond in upstream side of the project &amp; 1 stream/river and 1 tank/pond in downstream side of the project).</b>	Each Sample	4.00		
3	Noise Level Measurement and preparation of Report, based on dB(A) Leq. value, day time (6 am to 10 pm) & night time (10 pm to 6 am), Schedule III, Environment (Protection) Rules, 1986 – Ambient Air Quality Standards in respect of Noise. The duration of recording the observations at each station during day time and night time shall be half an hour (30 minutes). {2 samples (day & night) x 8 stations x 3 months = 48} All inclusive as per direction of Engineer-in-charge.	Each Location	48.00		
4	Soil Sampling , Analysis and preparation of Report, (i)The samples shall be collected at three depths at each sampling location (30 cm, 60 cm, 90 cm) below ground level by auger sampler. (ii) Parameters to be covered: (a) pH, (b) Cation exchange capacity (c) Electrical conductivity (d) Mechanical soil analysis (soil texture) (e) Nitrogen available (f) Phosphorous available (g) Potash available (h) SAR in soil extract (i) Water holding capacity (j) Organic Carbon (available) (k) Specific gravity – density (l) Field capacity (m) Wilting Coefficient. (iii) Sampling locations are as follows: a) One location in Proposed OB dump area b) 2 locations in core zone area c) 2 locations in buffer zone area (1 agricultural and 1 village) All inclusive as per direction of Engineer-in-charge.	Each Sample	5.00		

SI No	Description of Item	Unit	Qty	Rate to be Quoted	Amount (Rs)
5	<p>Conducting Ecological study of area covering Flora and fauna including conversation plan for endangered and endemic species for both flora and fauna based on the field survey and preparation of report. The field survey of flora &amp; fauna should be conducted by deploying botanist and zoologist respectively as per direction of engineer-in-charge. The survey should include the following:</p> <p>1.Survey of terrestrial &amp; aquatic flora &amp; fauna for core &amp; buffer zone separately.</p> <p>2.Survey of study areas in terms of features like breeding &amp; spawning grounds, habitats flight paths, migratory paths. 3.Survey of flora covering types e.g. agricultural crops, commercial crops, plantation, natural vegetation/forest type, grass lands. The endangered &amp; endemic species of flora besides any other flora, if present are also to be identified.</p> <p>4. the survey will cover total listing of faunal population. The survey should also cover endangered ,endemic, migratory &amp; detail of aquatic fauna. 5. The survey should cover possible effects of the proposed developmental activity on terrestrial species (fauna, fish, coral),habitats, aesthetics of the area, on natural resources e.g. soil, geological formations, dunes beaches, lakes, forests, coral reefs, mangroves, swamps and crops and atmosphere.</p> <p>6. The assessment of potential damage to terrestrial and aquatic flora and fauna. The impacts should be categorized as primary and secondary, temporary and long term ,unavoidable and risk, trans- boundary impacts, possible irreversible changes.</p> <p>7. Recommendation of mitigation measures. All inclusive as per direction of Engineer-in-charge</p>	Each Project	1.00		
6	<p>Conducting Socio-Economic study and preparation of report covering the study area as per the instruction of Engineer -in-charge, based on the latest Census report. The information provided in the report should include the following: 1. Social profile a. Total population with break up including, male female and SC-ST. b. Literacy level of both male and female separately. c. house hold size (average).</p> <p>2 Economic a. Occupational structure b. Land use pattern.</p> <p>3. Infrastructure Facilities.</p> <p>a. Source of water supply.</p> <p>b. Educational institutes.</p> <p>c. Occupational Health survey (Population in the impact zone and measures for occupational health &amp; safety of the personnel &amp; manpower.</p> <p>d. Occurrence of any historical / archaeological sites in the core and buffer zone. 4. Number and names of villages falling within the study area in a tabular form (i) in the core zone,(ii)Buffer zone:(a) in area covering 500m from quarry edge of open cast mines (b) township (c) remaining part of buffer zone (excluding a) &amp; b). 5. Details of villages in core zone giving the following information in a tabular form (i) village name,(ii) population (Tribal and others), (iii) List of villages should include amenities available to each village.</p> <p>6. Household survey data sheet of 250 houses.</p> <p>7. the household survey should include average annual income per family with break up of source of income including primary, secondary &amp; tertiary source of income. All inclusive as per direction of Engineer-in- charge</p>	Each Project	1.00		
7	Household survey of 250 houses. The house hold survey data sheets should also be included in the report.	Each House	250.00		
8	Characteristic of coal this includes grade of coal and other characteristics – ash & Sulphur and heavy metals including levels of Hg, As, Pb, Cr, Cu, CO.	Each Element	10.00		
				<b>SUB-TOTAL</b>	
				<b>SERVICE TAX AS APPLICABLE</b>	
				<b>GRAND TOTAL</b>	

Amount In Words :

Signature Of The Tenderer