



सीएमपीडीआई
cmpdi

A Mini Ratna Company

TENDER DOCUMENT

FOR

**ENVIRONMENTAL BASE LINE DATA
GENERATION for one season (non-monsoon)**

In respect of

Air, Water, Noise & Soil Analysis study

For

**Two Projects of M/s Northern Coalfields Limited
(NCL)**

(GROUP – I)



September, 2015

Central Mine Planning and Design Institute Ltd.

(A Subsidiary of Coal India Ltd.)

**Regional Institute –VI, PO – Jayant,
Singrauli, MP – 486890.**

SECTION-1

e- TENDER NOTICE

e- TENDER NOTICE FOR THE WORK OF

Environmental Base Line Data Generation for one season (Non-Monsoon) in respect of Air, Water, Noise & Soil Analysis for Two Projects of M/s Northern Coalfields Limited (NCL) (GROUP - I)

TENDER NOTICE NO. : CMPDI/RI-VI/ENV/2015-16/6/1823

Date: 06.11.2015

1. Tenders are invited on-line on the website <http://mcltenders.gov.in> from the eligible bidders having Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India **and which can be traced up to the chain of trust to the Root Certificate of CCA for the following work:**

Description of work	Estimated Cost of Work per Annum (Rs. In Lakhs)	Earnest Money (In Rs.)	Application fee (In Rs.)	Period of Completion (In days)
Environmental Base Line Data Generation for one season (Non-Monsoon) in respect of Air, Water, Noise & Soil Analysis for Jayant & Dudhichua OC Projects of M/s Northern Coalfields Limited (NCL) (GROUP - I)	₹ 26.89490	₹ 26895.0/-	0.00	The validity period of contract is 6 months from the date of issue of work order.

2. **Time Schedule of Tender:**

Sl.No.	Particulars	Date	Time (IST)
a.	Tender Publication Date	13.11.2015	11.00 Hours
b.	Document download Start Date	13.11.2015	11.00 Hours
c..	Document download End Date	11.12.2015	17.00 Hours
d.	Bid Submission Start Date	13.11.2015	11.00 Hours
e.	Bid Submission End Date	11.12.2015	17.00 Hours
f.	Start Date for seeking Clarification on-line	13.11.2015	11.00 Hours
g.	Last Date for seeking Clarification on-line	04.12.2015	17.00 Hours
h.	Date of Pre-bid Meeting	NA	
i.	Last Date of receipt of EMD	NA	
j.	Technical Bid Opening Date	14.12.2015	11.00 Hours

For details of qualification requirements, bid security and complete tender document, visit our website www.cmpdi.co.in, or <http://eprocure.gov.in/cppp>. Detailed Tender Notice is available at <https://mcltenders.gov.in>.

NOTE: End user portal agreement of MCL is applicable for CMPDI also.

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
(A Subsidiary of Coal India Limited)
Regional Institute –VI, PO – Jayant,
Singrauli, MP – 486890

TENDER NOTICE NO. : CMPDI/RI-VI/ENV/2015-16/6/1823

Date: 06.11.2015

DETAILED E -TENDER NOTICE

FOR THE WORK OF

Environmental Base Line Data Generation for one season (Non-Monsoon) in respect of Air, Water, Noise & Soil Analysis for Two Projects of M/s Northern Coalfields Limited (NCL) (GROUP – I)

TENDER NOTICE NO. : CMPDI/RI-VI/ENV/2015-16/6/1823

Date: 06.11.2015

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For details of qualification requirements, bid security and complete tender document, visit our website www.cmpdi.co.in, or <http://eprocure.gov.in/cppp>. Detailed Tender Notice is available at <https://mcltenders.gov.in>

NOTE: End user portal agreement of MCL is applicable for CMPDI also.

2. **Deposit of EMD:**

- i) Earnest Money can be deposited online on e-Procurement portal of MCL by following mode:

- a) Online fund transfer from Axis Bank
b) NEFT from any Scheduled Bank

(EMD through NEFT has to be paid strictly as per the challan generated by the respective bidder on e-procurement portal of MCL. The EMD payment through NEFT mode should be made well ahead of time to ensure that the EMD amount is transferred to MCL account (Pool Account) before bid submission).

- ii) In case of online payment of EMD, the bid submission can be made only when the EMD is received by MCL (Pool Account).
- iii) In case of online payment of EMD, if the payment is made by the bidder within the last date & time of bid submission but not received by MCL (Pool Account) within the specified period due to any reason then the bid will not be accepted. However, the EMD will be refunded back to the bidder.

3. **Availability of Tender Documents:** Detailed Tender Notice & Tender Documents including terms and conditions of works shall be available on e-tendering portal <https://mcltenders.gov.in> and Tender Notice shall be available at websites www.cmpdi.co.in, or <http://eprocure.gov.in/cppp>.

4. **Clarification of Bid:** The bidder may seek clarification on-line within the specified period. However, the management will clarify as far as possible the relevant queries.

5. The bidders have to accept the on-line user portal agreement which contains the acceptance of all the Terms and Conditions of NIT and tender document, undertakings and the e-Procurement system through <https://mcltenders.gov.in> in order to become an eligible bidder. This will be a part of the agreement.

6. **General Instructions for Submission of Tender:** A bidder should strictly comply with the following instructions:

- (a) Bidders are required to submit offers on-line offers in two parts.
(b) Two Parts of the bid should contain the details as follows:

Part-I: Letter of Bid,

Part-II: Prices, only in the Excel format, as indicated in the Tender Document.

7. **Eligible Bidders:**

The invitation for bid is open to all bidders including an individual, proprietorship firm, partnership firm, company or a Joint Venture having eligibility to participate as per eligibility criteria stipulated in clause No.8 of NIT and having Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India **and which can be traced up to the chain of trust to the Root Certificate of CCA.**

Note: Joint Venture: Two or three companies/contractors may participate in the tender as Joint Venture (JV). Joint Ventures must comply with the following requirements:

- i. The qualifying criteria parameter e.g. experience, financial resources(of the relevant period) and the equipment/fleet strength of the individual partners of the JV /

CONSORTIUM will be added together and the total criteria should not be less than as spelt out in qualifying/eligibility criteria as specified in e-tender Notice.

- ii. The formation of joint venture / Consortium or change in the Joint Venture /Consortium character/ partners after submission of the bid and any change in the bidding regarding Joint Venture /Consortium will not be permitted.
- iii. The bid, and in case of a successful bid -the agreement, shall be signed so as to legally bind all partners jointly and severally and any bid shall be submitted with a copy of the Joint Venture /Consortium Agreement providing the joint and several liabilities with respect to the contract.
- iv. The pre-qualification of a Joint Venture /Consortium does not necessarily pre-qualify any of its partners individually or as a partner in any other Joint Venture /Consortium or association. In case of dissolution of a Joint Venture /Consortium, each one of the constituent firms may pre-qualify if they meet all the pre-qualification requirements, subject to written approval of the employer.
- v. The bid submission must include documentary evidence to the relationship between Joint Venture /Consortium partners in the form of JV / Consortium Agreement to legally bind all partners jointly and severally for the proposed agreement which should set out the principles for the constitution, operation, responsibilities regarding work and financial arrangements, participation (percentage share in the total) and liabilities (joint and several) in respect of each and all of the firms in the Joint Venture /Consortium. Such JV / Consortium Agreement must evidence the commitment of the parties to bid for the facilities applied for (if pre-qualified) and to execute the contract for the facilities if their bid is successful.
- vi. One of the partners shall be nominated as 'In-charge' of the contract and shall be designated as Lead Partner. This authorization shall be evidenced by submitting with the bid a Power of Attorney signed by legally authorized signatories of all the partners.
- vii. The JV / Consortium Agreement must provide that the Lead Partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture /Consortium and the entire execution of the contract shall be done with active participation of the Lead Partner.
- viii. The contract agreement should be signed by each Joint Venture /Consortium Partners. Subsequent declarations/ letters /documents shall be signed by lead partner authorized to sign on behalf of the JV/ Consortium or authorized signatory on behalf of JV/Consortium.
- ix. The bid should be signed by all the partners of the Joint Venture/Consortium.
- x. An entity can be a partner in only one Joint Venture /Consortium. Bid submitted by Joint Venture /Consortiums including the same entity as partner will be rejected.
- xi. The JV / Consortium agreement may specify the share of each individual partner for the purpose of execution of this contract. This is required only for the sole purpose of apportioning the value of the contract to that extent to individual partner for subsequent submission in other bids if he intends to do so for the purpose of the qualification in that Bid.
- xii. The earnest money / bids security bank guarantee can be submitted by the Joint Venture /Consortium or one or more partners of the Joint Venture /Consortium.
- xiii. The JV / Consortium agreement must specifically state that it is valid for the project for which bidding is done. If JV/Consortium breaks up midway before award of work and

during bid validity period bid will be rejected. If JV / Consortium breaks up midway before award of work and during bid validity/after award of work/during pendency of contract, in addition to normal penalties as per provision of bid document, all the partners of the JV/Consortium shall be debarred from participating in future bids for a minimum period of 12 months.

- xiv. JV / Consortium agreement shall be registered in accordance with law so as to be legally valid and binding on the members before making any payment.
- xv. JV / Consortium shall open a bank account in the name of JV / Consortium and all payments due to the JV / Consortium shall be credited by employer to that account only. To facilitate statutory deductions all statutory documents like PAN/TIN etc shall be submitted by JV / Consortium before making any payment.

8. **Eligibility Criteria:**

Eligibility Criteria

For Group – I (Air, Water, Noise & Soil Analysis Study):

To qualify in work as mentioned in the NIT the tenderers should own an environmental laboratory or have 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 & Climate Change (MoEFCC) 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.

A. Work Experience

The intending tenderer must have in its name as a prime contractor experience of having successfully executed works in any Government/Semi-Government/Public Sector Undertakings (Central/State)/Private Firm (only if the Private Firm is a Company registered under Indian Companies Act'1956) of similar nature valuing 65% of the "Annualized Value or Estimated Value whichever is less" of the work put to tender in any year (a 'year' in this context is a continuous period of 365 days starting at any date of the year) during last 7 (seven) years ending last day of month previous to the one in which bid applications are invited.

(In case the bidder is not a prime contractor but a sub-contractor, the bidder's 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.)

"Annualized Value" of the work shall be calculated as the "Estimated Cost/Period of completion in days x 365".

The cost of executed works shall be given a simple weightage to bring them at current price level by adding 5% for each completed year (total number of days/365) after the end date of experience **till the last day of month** previous to one in which e-Tender has been invited.

The definition of similar work shall be as follows:

"Environmental Base Line Data Generation in respect of ambient Air quality, Water (Ground/ Drinking/ Surface/ Mine Water/ Effluent) Quality, Noise & Soil Characteristics of a locality."

In respect of the above eligibility criteria, the bidders are required to furnish the following information on-line:

- i) Start date & End date of each qualifying experience (similar work)
- ii) Agreement Number/Work Order Number of each experience
- iii) Work Order Issuing authority of each experience
- iv) Percentage (%) share of each experience (100% in case of an individual/ proprietorship firm or a partner in a partnership firm and the actual % of share in case of a Joint Venture)
- v) Executed Value of work against each experience
- vi) Confirmation in the form of Yes/No regarding submission of similar work experience as defined in the NIT.

Note: In case the bidder is a Joint Venture, the work experience of any one, two or three of the individual partners of JV may be furnished as the work experience of the bidder.

B. Working Capital:

Evidence of possessing adequate working capital (at least 20% of the "Annualized Value or Estimated Value whichever is less" of this work) inclusive of access to lines of credit and availability of other financial resources to meet the requirement. The bidder should possess the working capital within three months prior to the date of opening of tender.

In respect of the above eligibility criteria the bidders are required to furnish the following information on-line:

- i) Amount of available Working Capital inclusive of lines of credit and availability of other financial resources.
- ii) Date on which the bidder possesses the required Working Capital.
- iii) Name of the Chartered Accountant (CA).
- iv) Membership Number of the Chartered Accountant (CA) who certifies the bidder's working capital on a particular date.
- v) Date of Issue of certificate.

Note: In case the bidder is a Joint Venture, the above information in respect of each individual partner of JV may be furnished and the working capital of all partners will be added by the system to calculate the Working Capital of the bidder.

C. Financial Turnover:

The bidder should submit information on financial turnover during last three years.

D. Permanent Account Number(PAN):

The bidder should possess Permanent Account Number (PAN) issued by Income Tax Department, Govt. of India.

Confirmation regarding possessing of Permanent Account Number (PAN) issued by Income Tax Department, Govt. of India in the form of Yes / No

Note: In case the bidder is a Joint Venture, the PAN Number of each individual partner of JV will be furnished.

~~***E. VAT/Sales Tax Registration on Works Contract:***~~

~~The bidder should possess a VAT/ Sales Tax Registration on works contract issued by Sales Tax department of any Indian State/UT.~~

~~Confirmation regarding possessing of VAT/ Sales Tax Registration on Works Contract issued by Sales Tax department of any Indian State in the form of Yes / No~~

~~Note: In case the bidder is a Joint Venture, the TIN/Sales Tax Registration Number of each individual partner of JV will be furnished.~~

F. Service Tax Registration Certificate

The bidder should possess a Service Tax Registration Certificate issued by Govt. Dept of any Indian State.

Confirmation regarding possessing of Service Tax Registration Certificate issued by Sales Govt. Dept. of any Indian State in the form of Yes / No

- G. **An Affidavit** on a non-judicial stamp paper of minimum value of Rs.5 regarding genuineness of the information furnished by him on-line and authenticity of the scanned copy of documents **uploaded** by him on line in support of his eligibility, as per the format given in the bid document at Section - 3

H. Legal Status of the bidder:

Any one of the following documents:

1. Affidavit or any other document to prove proprietorship/individual status of the bidder.
2. Partnership deed containing name of partners.
3. Memorandum & Article of Association with certificate of incorporation containing name of bidder
4. Joint Venture agreement containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner.

I. Digital Signature Certificate (DSC):

If the bidder himself is the DSC holder bidding on-line, then no document is required. However, if the DSC holder is bidding online on behalf of the bidder, then the Power of Attorney or any sort of legally acceptable document for the authority to bid on behalf of the bidder is required.

J. Banning:

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 be a cause for disqualification. If the declaration is not given, the bid will be rejected as non-responsive.

9. Submission of Bid:

- a In order to submit the Bid, the bidders have to get themselves registered online on the e-Procurement portal (<https://mcltenders.gov.in>) with valid Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India and which can be traced up to the chain of trust to the Root Certificate of CCA. The online Registration of the Bidders on the portal will be free of cost and one time activity only. If the bidder is an individual person, then he should register himself under "Individual" category and if the bidder is a proprietorship firm/partnership firm/Joint Venture/Company then registration should be under "Corporate" category. The registration should be in the name of bidder, whereas DSC holder may be either bidder himself or his duly authorized person.
- b The bidders have to accept, unconditionally, the online user portal agreement which contains the acceptance of all the Terms and Conditions of NIT including General and

Special Terms & Conditions and other conditions, if any, along with on-line undertaking in support of the authenticity of the declarations regarding the facts, figures, information and documents furnished by the Bidder on-line in order to become an eligible bidder. No conditional bid shall be accepted.

NOTE: End user portal agreement of MCL is applicable for CMPDI also.

- c **Letter of Bid:** The format of Letter Of Bid (LOB) (as given in the NIT at section 3 will be downloaded by the bidder and **will be printed/typed on their letter head**. This document will be signed by the bidder or authorized person of bidder or DSC holder bidding online with authorization from bidder and the scanned copy of the same will be uploaded during bid submission in Cover-I. **The content of the "Letter of Bid" uploaded by the bidder must be the same as per the format downloaded from website and it should not contain any other information.**

The Letter of bid will be digitally signed by DSC holder submitting bid online and it does not require any physical signature. However, if the Letter of Bid (LOB) bears the physical signature in addition to the digital signature of DSC holder, it will be accepted without questioning the identity of person signing the Letter of Bid.

If there is any change in the contents of Letter of Bid uploaded by bidder as compared to the format of Letter of Bid uploaded by the department with NIT document, then the bid will be rejected.

- d **Price Bid (Part-II):** The Price Bid containing the format BOQ will be in Excel format and will be downloaded by the bidder and he will quote for **Item Rate** on the BOQ Excel file. Thereafter, the bidder will upload the format BOQ Excel file during bid submission in cover-II. L-1 will be decided on overall quoted value.

"In cases where the system does not read the values of any of the BOQs submitted against a tender while generating BOQ comparative chart, a manual comparative statement will be prepared based on the data available in the BOQs uploaded by the bidders and the same shall be considered for evaluation and uploaded on the system for viewing by the public".

The Price Bids of the bidders will have no condition. The Price Bid which is incomplete and not submitted as per instruction given above (and also online) will be rejected. Any alteration/ modification in the excel format may lead to rejection of the bid.

Tenderers should quote their rates excluding the impact of Service-Tax. Applicable Service Tax payable by the Tenderer / Service Provider will be reimbursed on production of documentary evidence towards payment of such Service Tax to the Government Exchequer.

The Tenderer (Service Provider) will have to raise separate bill for claiming the reimbursable amount of Service Tax paid by him / them. Such bills should necessarily contain Contractor's Service Tax Registration Number with details of Range / Division / Commissionerate address with documentary evidence of payment of Service Tax to the Government Exchequer. Separate challans should have to be submitted for separate services with specific mention of the services rendered to the CMPDI.

In case of any default / delay in payment of Service Taxes, wrong claim of CENVAT credit etc. by the Contractor / Service Provider, the CMPDI would not be responsible and in no case any such claim of the Contractor / Service Provider will be entertained by CMPDI.

Bill of Quantity of Environmental Base Line Data Generation for one season (Non-Monsoon) in respect of Air, Water, Noise & Soil Analysis for Jayant & Dudhichua OC Project of M/s Northern Coalfields Limited (NCL) (GROUP - I)

Study Area: Study area for the purpose of quoting the rates should be considered 10kms radius from periphery of mine lease hold. Core zone is mine lease area and rest of the area is buffer zone.

Sl. No.	Description of Item	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
1	Ambient Air Sampling and analysis of RPM (PM₁₀), PM_{2.5}, SO₂, NO_x, Mercury (Hg), Lead (Pb), Chromium (Cr), Nickel (Ni), Cadmium (Cd) & Arsenic (As) as per G.S.R. 742(E) dt. 25th September, 2000 –Ambient Air Quality Standard for coal mines and as per G.S.R. 826 (E) dated 16.11.09 of MoEFCC for National Ambient Air Quality Standards 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- I of the Bid Document, Section-5 (Technical Specification) Item no. 2 (Micro-meteorological data). There will be one station for each project to generate micro-meteorological data. Note i) The frequency of air sampling for PM₁₀, PM_{2.5}, SO₂ & NO_x 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 x 8 stations x 2 projects= 384 samples in total for a season.} ii) The frequency of analysis of heavy metals like Pb, Hg, Cr, As, Ni, Cd in PM₁₀ shall be one sample per station per month i.e., 8 stations x 1 sample x 3 months x 2 projects=48 samples in total for a season. iii) 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. iv) Number of Sampling station shall be eight per project.				
1.1	Sampling for Particulate matter (24 hours) and Gaseous Pollutant and Analysis of PM10, PM2.5, SO2 and NOX	Each station (24 samples at each station)			
1.2	Analysis of heavy metals like Pb, Hg, Cr, As, Ni, Cd in PM10	Each sample			
1.3	Sampling & analysis of mineralogical composition of PM10, particularly with respect to free Silica as per direction of EIC.	Each sample			
2.0	Water Sampling, Analysis and preparation of Report, all inclusive as per direction of Engineer-in-charge for the following category of samples.				
2.1	MOEFCC 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) Following parameters of Effluent sample are to be analysed Odour, Temperature, Turbidity, Colour, p H, Solid (Suspended), Total Kjeldahal Nitrogen(TKN), Cyanide, Ammonical Nitrogen, BOD, COD, Nitrate Nitrogen, Phosphate (Ortho), Calcium, Chlorides, Chlorine Residual, Fluoride, Hardness (Total), Sulphate, Sulphide, Phenolics, Aluminium, Cadmium, Boron, Chromium Hexavalent, Iron, Nickel, Copper, Lead, Manganese, Mercury, Selenium, Zinc, Vanadium, Arsenic, Chromium (Total), Oil & Grease Sampling Station: The sampling station shall be three per project. Frequency of Sampling: The frequency of water sampling at each station would be one sample per station per project in one season i.e 1 samples x 3 stations x 2 projects=6 samples in total.	Each sample			
2.2	Drinking water, parameters as per IS: 10500:2012 Following parameters of Drinking water samples are to be analysed Odour, Taste, Temperature, Turbidity, Colour, Solid (Dissolved), Alkalinity, Cyanide, Calcium, Chlorides, Chlorine Residual,	Each sample			

	Fluoride, Hardness (Total), Nitrate, p H, Arsenic, Sulphate, Phenolics, Aluminum, Cadmium, Boron, Chromium Hexavalent, Iron, Copper, Lead, Manganese, Mercury, Selenium, Zinc, detergent, Faecal Coliform (MPN) Sampling Station: The sampling station shall be six per project. Frequency of Sampling: The frequency of water sampling at each station would be one sample per station per project in one season i.e 1 samples x 6stations x 2 projects=12 samples in total.				
2.3	Surface water, parameter as per (Inland surface waters), Class C- Tolerance limit for surface water used for drinking water source with conventional treatment followed by disinfection. Following parameters of Surface water sample are to be analysed Odour, Temperature, Colour, Solid (Suspended), Solid (Dissolved), Dissolve Oxygen (DO), Cyanide, BOD, pH, Nitrate Nitrogen, Calcium, Chlorides, Fluoride, Total Hardness (CaCO₃), Sulphate, Phenolic, Cadmium, Chromium Hexavalent, Iron, Copper, Lead, Manganese, Magnesium, Mercury, Selenium, Zinc, Arsenic, Total Coliform, Oil & Grease Sampling Station: The sampling station shall be three per project. Frequency of Sampling: The frequency of water sampling at each station would be one sample per station per project in one season i.e 1 samples x 3stations x 2 projects=6 samples in total.	Each sample			
3.0	Noise Level Measurement and preparation of Report, based on dB(A) Leq value, day time (6.00 AM to 10.00 PM) & night time (10.00 PM to 6.00 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 continuous between 6.0 AM to 10.0 PM and 10.0 PM to 6.0 AM respectively. All inclusive as per direction of Engineer-in-charge. Sampling Station: The sampling station shall be eight per project.	Each sample			

	Frequency of Sampling: The frequency of sampling at each station would be one day sample & one night sample per station per fortnight per project for three months i.e 2 samples x 2 times per month x 3months x 8stations x 2 projects=192 samples in total.				
4.0	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. All inclusive as per direction of Engineer-in-charge. Sampling Station: The sampling station shall be three for Jayant OCP & four for Dudhichua OC project. Frequency of Sampling: The frequency of sampling at each station would be one sample per depth per station per project for one season i.e 1 samples x 3 depths x7stations =21 samples in total.	Each sample			
5.0	Transportation Charges per project for all parameters of Group-1	Per Project			
TOTAL					

NB:

Tenderers /Service Providers should quote their rates excluding the impact of Service Tax. Applicable Service Tax paid by the Tenderer/ Service Provider will be reimbursed as applicable. The service invoice should clearly mention the service tax registration number of the service provider and the name of the service receiver i.e. CMPDI Ltd.

- All bids are to be submitted on-line on the website <https://mcltenders.gov.in>. No bid shall be accepted off-line.

11. It is the bidder's responsibility to comply with the system requirement i.e. hardware, software and Internet connectivity at bidder's premises to access the e-tender portal. Under any circumstance, CMPDIL shall not be liable to the bidders for any direct/indirect loss or damages incurred by them arising out of incorrect use of the e-tender system or Internet connectivity failures.
12. After receipt of "EMD" as stated in clause No.2 of NIT, the part-I will be opened on-line, on the scheduled date and after the pre-scheduled time by the Bid Openers with their Digital Signature Certificate (DSC). The bidder can view bid opening remotely on their personalized dash board under "Bid Opening (Live)" link. Part-I shall be evaluated by the system online based on the information furnished by bidders on-line in accordance with clause No 8 of NIT (Eligibility Criteria). This on-line evaluation will be validated by CMPDI.
13. After evaluation of Part-I, all the bidders will get the information regarding their eligibility on website. Thereafter, a system generated e-mail confirmation will be sent to all successful bidders communicating the date and time of opening of Price bid (Part-II).
14. The Price-bid of the successful bidders (qualified in Technical-bid) will be opened on-line, on the scheduled date and after the prescheduled time by the Bid Openers with their Digital Signature Certificate (DSC). The bidder can view bid opening remotely on their personalized dash board under "Bid Opening (Live)" link. The bidders will get the information regarding the status of their financial bid and ranking of bidders on website.
15. After opening of Price-bid, the list of documents required to be submitted by L-1 bidder as enlisted below along with the qualification information as per format given below will be specified on-line by Evaluator indicating the start date and end date giving 7 days time for on-line submission by bidder. The L-1 bidder will get this information on their personalized dash board under "Upload confirmatory document" link. Additionally, information shall also be sent by system generated e-mail and SMS, but it will be the bidder's responsibility to check the updated status/ information on their personalized dash board at least once daily after opening of Price bid. No separate communication will be required in this regard. Non-receipt of e-mail and SMS will not be accepted as a reason of non-submission of documents within prescribed time. The bidder will upload the scanned copy of attested by notary public of all the specified documents in support of the information /declarations furnished by them on-line within the specified period of 7 days and simultaneously will submit the original Affidavit (As per Sl. No. 7 below) either in person or by post to the Tender Inviting Authority within 10 days of last date of online submission of documents.

Sl. No.	Eligibility Criteria	Scanned copy of documents (attested by Notary Public) to be uploaded by <u>L-1 bidder</u> in support of information/ declaration furnished online by the bidder against Eligibility Criteria (CONFIRMATORY DOCUMENT)
1.	Eligibility Criteria (Ref. Clause No. 8 of NIT)	Relevant certificates are to be furnished.
2.	Work Experience (Ref. Clause No.8 (A) of NIT)	Satisfactory Work Completion Certificate issued by the employer against the experience of similar work containing all the information furnished by bidder on-line.

3.	Working Capital (Ref. Clause No. 8 (B) of NIT)	Certificate of Working Capital issued by a Practicing Chartered Accountant, having a membership number with Institute of Chartered Accountants of India, containing all the information furnished by the Bidder on-line. (In case of JV, working capital certificate for the on-line submitted information of each individual partner of JV)												
4.	Financial Turnover (ref. Clause No.8 (C) of NIT)	Financial Turnover certificate for last 3 (three) financial years issued by a Practicing Chartered Accountant having a membership number with Institute of Chartered Accountants of India. The bidder should provide the information in the following table: <table border="1"> <tr> <th>Sl. No.</th><th>Financial Year</th><th>TurnOver</th></tr> <tr> <td>1.</td><td></td><td></td></tr> <tr> <td>2.</td><td></td><td></td></tr> <tr> <td>3.</td><td></td><td></td></tr> </table> (In case of JV, turnover certificate for each individual partner of JV)	Sl. No.	Financial Year	TurnOver	1.			2.			3.		
Sl. No.	Financial Year	TurnOver												
1.														
2.														
3.														
5.	Permanent Account Number (Ref. Clause No 8 (D) of NIT)	PAN card issued by Income Tax department, Govt. of India (In case of JV, PAN card for each individual partner of JV)												
6.	Service Tax (Ref. Clause No 8 (F) of NIT)	Service Tax Registration Certificate issued by Govt. Dept of any Indian State												
7.	Affidavit (Ref. Clause No 8 (G) of NIT)	An Affidavit on a non-judicial stamp paper of minimum value of Rs.5 regarding genuineness of the information furnished by him on-line and authenticity of the scanned copy of documents uploaded by him on-line in support of his eligibility, as per the format given in the bid document at Section 3.												
8.	Legal Status of the bidder (Ref. Clause No 8 (H) of NIT)	Any one of the following document : 1. Affidavit or any other document to prove proprietorship/Individual status of the bidder. 2. Partnership deed containing name of partners 3. Memorandum & Article of Association with certificate of incorporation containing name of bidder 4. Joint Venture agreement containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner.												
9.	Digital Signature Certificate (DSC) (Ref. Clause No 8 (I) of NIT)	If the bidder himself is the DSC holder bidding on-line then no document is required .However, if the DSC holder is bidding online on behalf of the bidder then the Power of Attorney or any sort of legally acceptable document for the authority to bid on behalf of the bidder												
10.	Banning (Ref. Clause No 8 (J) of NIT)	Declaration by the bidders that they have not been/have been banned or delisted by any govt. or quasi-govt. agencies or PSU, as per the Affidavit format given in the bid document at Section 3												
11.	Any other document to support the qualification information as submitted by													

	bidder on-line.
Note: Only one file in .pdf format can be uploaded against each eligibility criteria. Any additional/other relevant documents to support the information/declaration furnished by bidder online against eligibility criteria may also be attached by the bidder in the same file to be uploaded against respective eligibility criteria. Bidders are suggested to scan the documents in 100 DPI for maintaining clarity & easy upload.	

The Tender Committee will examine the uploaded documents against information/ declarations furnished by the L-1 bidder online. If they conform to all of the information /declarations furnished by the bidder online and do not change the eligibility status of the bidder, then the bidder will be considered eligible for award of Contract.

In case the Tender Committee finds that there is some deficiency in uploaded documents or documents have not been uploaded by L-1 bidder within the stipulated period, then the same will be specified online by Tender Committee clearly indicating the omissions/shortcomings in the uploaded documents and indicating Start Date and End Date giving 7 days time for online re-submission by L-1 bidder. The L-1 bidder will get this information on their personalized dash board under "Upload confirmatory document" link. Additionally, information shall also be sent by system generated e-mail and SMS, but it will be the bidder's responsibility to check the updated status/ information on their personalized dash board at least once daily after opening of Price-bid. No separate communication will be required in this regard. Non-receipt of email and SMS will not be accepted as a reason of non-submission of documents within prescribed time. The bidder will upload the scanned copy of attested by notary public of those specified documents within the specified period of 7 days and in case of Affidavit, will simultaneously submit the original Affidavit (As per Sl.No.15 above) either in person or by post to the Tender Inviting Authority within 10 days of last date of online submission of documents. No additional time will be allowed to the bidder for on-line submission of documents.

- i In case the L-1 bidder submits requisite documents online as per NIT, then the bidder will be considered eligible for award of Contract.
- ii In case the L-1 bidder fails to submit requisite documents online as per NIT, or if any of the information/declaration furnished by L-1 bidder online is found to be wrong by Tender Committee during evaluation of scanned documents uploaded by bidder, which changes the eligibility status of the bidder (for the first time), then the EMD of L-1 bidder will be forfeited and re-tender will be done. In this retender, offer from this bidder will not be accepted. This penal action will be enforced from the date of issue of such order.
- iii If the L-1 bidder fails to submit the requisite documents online as per NIT or if any of the information/declaration furnished by L-1 bidder online is found to be wrong by Tender Committee during evaluation of scanned documents uploaded by bidder, which changes the eligibility status of the bidder, **in two tenders**, floated by the same tender inviting authority, within a span of one year (to be counted with respect to date of e-publication of NIT), then the EMD of L-1 bidder will be forfeited and this bidder will be debarred for one year from participating in tenders in CMPDI and re-tender will be done. This penal action will be enforced from the date of issue of such order.
- iv It is the responsibility of L-1 Bidder to upload legible/clearly readable scanned copy of all the required documents as mentioned above.

NOTE:

- i In case of clause (ii) above, a letter will be issued to the bidder by Tender Inviting Authority with the approval of Tender Accepting Authority (in case Board is Tender Accepting Authority then with the approval of CMD), stating that the EMD of bidder is forfeited, the bidder is not allowed to participate in the next re-tender and if such act is

repeated next time within a span of one year, this bidder will be debarred for one year from participating in tenders in CMPDI.

- ii In case of clause (iii) above, a letter will be issued to the bidder by Tender Inviting Authority with the approval of Tender Accepting Authority (in case Board is Tender Accepting Authority then with the approval of CMD), stating that the EMD of the bidder is forfeited and this Bidder is debarred for one year from participating in tenders in CMPDI. This letter will be circulated to all RIs and CMPDI HQ and the updated list will be maintained by all Tender Inviting Authority/Evaluators.

- iii Penal action against clause (ii) & (iii) above will be enforced from the date of issue of such order. Such orders must be issued before inviting the retender.

16. **One Bid per Bidder:**

Each Bidder shall submit only one Bid, either individually, or as a partner in a partnership firm or a partner in a Joint Venture or a public limited firm. A Bidder who submits or participates in more than one Bid (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

17. **Refund of EMD:**

- a. If EMD is paid by the bidder in online mode (Direct Debit/NEFT) then the EMD of rejected bidders will be refunded directly to the account from where it had been received (except the cases where EMD is to be forfeited).
- b. No claim from the bidders will be entertained for non-receipt of the refund in any account other than the one from where the money is received.
- c. If the refund of EMD is not received by the bidder in the account from which the EMD has been made due to any technical reason then it will be paid through conventional system of e-payment. For this purpose, if required, Tender Inviting Authority will obtain the Mandate Form from the Bidder.
- d. In case the tender is cancelled then EMD of all the participating bidders will be refunded unless it is forfeited by the department.
- e. If the bidder withdraws his / her bid online (i.e., before the end date of submission of tender) then his/her EMD will be refunded automatically after the opening of Part I tender.
- f. The EMD of successful bidder (on Award of Contract) will be retained by CMPDIL and will be adjusted to Performance Security Deposit.

18. **Site Visit:**

The Bidder, at the Bidder's own responsibility, cost and risk, is encouraged to visit and examine the Site of works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for execution of the works. The cost of visiting the Site shall be at the Bidder's own expense.

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 he actually visits the site/area or not and has taken all the factors into account while quoting his rates.

19. **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.

20. **Change in Constitution of the Contracting Agency:**

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

21. 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 for rejection.

22. The tenderer shall closely study all specifications in detail, which govern the rates for which he is tendering.

23. **Currencies of Bid and Payment:**

The unit rates and prices shall be quoted by the Bidder entirely in Indian Rupees only.

24. The work should be completed within **5 months** and the date of commencement of the work will be reckoned from the actual date of handing over the site for this purpose.

25. He/they shall intimate officially of having completed the work as per contract.

26. The Bidder, whose Bid has been accepted, will be notified of the award on-line and also by registered post by CMPDI prior to expiration of the bid validity period. The L-1 bidder will get the information regarding award of work on their personalised dash-board on-line.

27. **Validity of offer:**

The validity period of the tenders shall be 120 (One Hundred Twenty) days from the end date of bid submission.

In exceptional circumstances, prior to expiry of the original time limit, the Employer may request the bidders to extend the period of validity for a specified additional period. The employer's request and the bidder's responses shall be made in writing. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid but will be required to extend the validity of his bid security/EMD (if submitted in the form of BG) for a period of 28 days beyond the extended validity of the bid.

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 or any terms/conditions thereof without consent in writing of the company. In case the tenderer violates to abide by this, the Company will be entitled to take action as per clause No. 28 (Modification and Withdrawal of Bid) of NIT.

28. **Modification and Withdrawal of Bid:**

Modification of the submitted bid shall be allowed on-line only before the deadline of submission of tender and the bidder may modify and resubmit the bid on-line as many times as he may wish.

Bidders may withdraw their bids on-line within the end date of bid submission and their EMD will be refunded. However, if the bidder withdraws his bid, he will not be able to resubmit the bid in this tender. For withdrawal of bid after the end date of bid submission, the bidder will have to make a request in writing to the Tender Inviting Authority. Withdrawal of bid may be allowed till issue of work order / LOA with the following provision of penal action:

- a. If the request of withdrawal is received before online notification for opening of price bid, the EMD will be forfeited and bidder will be debarred for 6 months from participating in tenders in CMPDI. The Price-bid of remaining bidders will be opened and the tender process shall go on.
- b. If the request of withdrawal is received after online notification for opening of price bid, the EMD will be forfeited and the bidder will be debarred for 1 one year from participating in tenders in CMPDI. The Price-bid of all eligible bidders including this bidder will be opened and action will follow as under:
 - i) If the bidder withdrawing his bid is other than L-1, the tender process shall go on.
 - ii) If the bidder withdrawing his bid is L-1, then re-tendering will be done.

(The penal action against clause (a) & (b) above will be enforced from the date of issue of such order.)

29. Every tenderer is expected, before quoting his rates, to go through the requirements of materials/workmanship under specification/requirements and conditions of contract and to inspect the site/area of the proposed work at his own cost. 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.

30. **Bid Prices:**

The Bidders shall offer for the whole work based on the priced Bill of Quantities submitted by the bidder. However, the employer reserves the right to allot part of the work at their discretion and no claims, whatsoever, shall be entertained in this regard.

The Bidder shall fill-in rates and prices for all items of the work described in the Bill of Quantities. The rates and prices quoted by the Bidder shall be fixed for the duration of the contract and shall not be subject to variations on any account except to the extent variations allowed as per the conditions of the contract of the bidding document. The base diesel price will be specified in the BOQ by the company.

31. (a) All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause as applicable on the last date of submission of tender, shall be included in the rates, prices and total Bid price submitted by the Bidder. All incidental, overheads etc. as may be attendant upon execution and completion of works shall also be included in the rates, prices and total Bid price submitted by the bidder.

However such duties, taxes, levies etc., which is notified after the last date of submission of tender and /or any increase over the rate existing on the last date of submission of tender shall be reimbursed by the Company on production of documentary evidence in support of payment actually made to the concerned authorities. Any decrease in duties, taxes, levies etc. as above shall be recovered by the Company.

The company reserves the right to deduct/withhold any amount towards taxes, levies, etc. and to deal with such amount in terms of the provisions of the Statute or in terms of the direction of any statutory authority and the company shall only provide with certificate towards such deduction and shall not be responsible for any reason whatsoever.

(b).Service Tax applicable for this work will be paid by the Contractor; hence the rate in the BOQ/Price Bid to be quoted by the bidder should be inclusive of Service Tax.

After the award of work, Contractor will have to submit VAT Registration certificate on works contract from the state of Jharkhand, before execution of agreement.

32. In case the works / service is awarded to a joint venture participating in the tender they have submit VAT, PAN and Service Tax registration (as applicable in the tender and for the bidder status) on the name of the Joint Venture after Award of the Works / Service at the time execution of agreement / before the payment of first running on account bill.
33. 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.
34. The Company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.
35. This Tender Notice shall be deemed to be part of the Contract Agreement. The "General Terms & Conditions", Additional Terms & Conditions, Special Terms & Conditions (if any), Technical Specifications, drawings (if any) and any other document uploaded on portal as NIT document forms an integral part of this NIT and shall also form a part of the Contract agreement.
36. 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.
37. The Company does not bind itself to accept the lowest tender and reserves the right to reject any or all of 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.

38. **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.

39. **Notification of Award and Signing of Agreement:**

The Bidder, whose Bid has been accepted, will be notified of the award on-line and also by registered post by the Employer prior to expiration of the Bid validity period. The L-1 bidder will get the information regarding award of work on their personalized dash-board on-line. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

The notification of award will constitute the formation of the Contract, subject only to the furnishing of a Performance Security/Security Deposit in accordance with Clause-4 of General terms & Conditions of the tender document.

The Agreement will incorporate all agreements between the Employer and the successful Bidder within 28 days following the notification of award along with the Letter of Acceptance.

40. Matters relating to any dispute or difference arising out of this tender and subsequent contract awarded based on this tender shall be subject to the jurisdiction of District Court, where the subject work is to be executed.

41. **Non-disclosure/ Confidentiality clause:**

The bidder will not at any time during pendency of contract or afterwards, disclose to any person any information as to documents, components, parts, information, drawings, data, sketches, plans, programs, specifications, techniques, processes, software, inventions and other materials, both written and oral, of a secret, confidential or proprietary nature, including without limitation any and all information relating to finance , invention, research, design or development of information system and any supportive or incidental subsystems, and any and all subject matter claimed in or disclosed by any patent application prepared or filed by or on behalf of CMPDI, in any jurisdiction, and any amendments or supplements thereto. The bidder should understand that any breach of this clause would constitute a serious offence for which appropriate legal action may be taken to ensure the enforcement of confidentiality clause.

CMPDI also desires that the bidder shall hold in trust and confidence, and not disclose to others or use for its own benefit or for the benefit of other, any Proprietary Information which is disclosed to the bidder by CMPDI at any time during the agreement / award of work / execution of work and thereafter. The bidder shall disclose Proprietary Information received under the contract to person within its organization only if such persons (i) have a need to know and (ii) are bound in writing to protect the confidentiality of such Proprietary Information. This clause shall survive and continue after any expiration or termination of the contract and shall bind the contractor, its employees, agents, representatives, successors, heirs and assigns.

42. The tenderer shall have to ensure implementation of CMPF/EPF, if applicable, in respect of the workers deployed by him.

If services are not found satisfactory, CMPDI reserves the right to cancel the contract within three-months.

Regional Director
CMPDI, RI - VI,
P.O: Jayant, Singrauli, MP-486890.

SECTION -2

GENERAL TERMS & CONDITIONS

GENERAL TERMS AND CONDITIONS

1.0 DEFINITIONS:

- i. The word “Company” or “Employer” or “Owner” or “Client” wherever occurs in the conditions, means the Central Mine Planning & Design Institute Limited, represented at the headquarters of the Company by the General Manager (Env.) or Regional Directors of the respective Institute or their authorized representatives or any other officer specially deputed for the purpose.
- ii. The word “Principal Employer” wherever occurs, means the authorized representative or any other officer specially deputed by the Company for the purpose.
- iii. The word “Contractor”/ “Contractors” or “Agency” wherever occurs means the successful Bidder/Bidders 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 and any constitutional, or otherwise change of which shall have prior approval of the employer.
- iv. “The Site” shall mean the site of the contract work including land and any building and erections thereon and any other land allotted by the Company for contractor’s use.
- v. The term “Subcontractor” as employed herein, includes those having a direct contract with contractor either on piece rate, items rate, time rate or on 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 supplied materials.
- vi. “Accepting authority” shall mean the management of the Company and includes an authorized representative of the Company or any other person or body of persons empowered in this behalf by the Company.
- vii. A “Day” shall mean a day of 24 hours from midnight to midnight.
- viii. “Engineer-in-charge/Designated Officer-in-charge” will be clearly defined in the contract document. Engineer-in-charge/Designated Officer-in-charge who is of an appropriate seniority will be responsible for supervising and administering the contract, certifying payment due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. 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 the 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.

The “Contract” shall mean the e-Tender Notice/Notice Inviting Tender (NIT), the tender as accepted by the Company and the formal agreement executed between the Company and the contractor together with the documents referred to therein, including general terms and conditions, special conditions, if any, specifications, including those to be submitted during progress of work, schedule of quantities with rates and amounts.

- x. The “Works” shall mean the works required to be executed in accordance with the contract 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 these conditions shall mean the standard schedule of rates prescribed by the Company and the amendments issued from time to time.
- xii. “Contract price” shall mean:-
 - (a) In the case of lump sum 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 Bill of Quantities of the tender documents 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 firm or to an office of the Corporation/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. “Drawings”/”Plans” shall mean all:
 - (a) Drawing furnished by the owner with the bid document, if any, as a basis for proposals,
 - (b) Working drawings furnished by the owner after issue of letter of acceptance of the tender to start the work,
 - (c) Subsequent working drawings furnished by the owner in phases during progress of the work, and
- xv. “Codes” shall mean the following, including the latest amendments, and/or replacements, if any
 - (a) Bureau of Indian Standards relevant to the works under the contract and their specifications.
 - (b) Indian Electricity Act and Rules and Regulations made thereunder.
 - (c) Indian Mines Act and Rules and Regulations made thereunder.
 - (d) Any other Act, rule and regulations applicable for employment of labour, safety provisions, payment of provident fund and compensation, insurance etc.
 - (e) Water (Prevention & Control of Pollution) Act, 1974
 - (f) Air (Prevention & Control of Pollution) Act, 1981
 - (g) Environmental Protection Act 1986
- xvi. Completion of work shall mean completion of field work and submission of final report duly accepted by engineer incharge.

2.0 CONTRACT DOCUMENTS:

The following documents shall constitute the contract documents: E Tender Notice

SECTION-1: e- TENDER NOTICE

SECTION -2: GENERAL TERMS & CONDITIONS

SECTION -3: LETTER OF BID & FORMATS

SECTION -4: SPECIAL TERMS & CONDITIONS

SECTION -5: TECHNICAL SPECIFICATIONS

Letter of Acceptance (LOA) of Tender indicating deviations, if any, from the conditions of contract incorporated in the NIT issued to the bidder and duly accepted by the Employer.

Scope of works/Bills of quantities/schedule of works/quantities and Finalized work programme.

- 2.1 After acceptance of tender and on execution of contract/issue of work order to proceed with the work, as the case may be, the contractor shall be furnished, free of charge, two copies of contract documents. (Certified true copies).
- 2.2 None of these documents shall be used by the contractor for any purpose other than this contract and 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 The Court of Waidhan shall have exclusive jurisdiction in all matters arising under this contract.

3.0 DISCREPANCIES AND ADJUSTMENTS THEREOF:

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

- (a) Description in schedule of quantities.
- (b) Particular specification and special conditions, if any
- (c) General specification

- 3.1 In the event of varying or conflicting provisions made in any of the document/documents 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 schedule of quantities or any omission there from, shall not vitiate the contract or release the contractor from discharging his obligations under the contract including execution of work according to the 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, then the rate which corresponds to the words quoted 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, then the unit rate shall be regarded as firm and amount corrected.

c. Discrepancy in totaling or carry forwards 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 tendered along with other tender/tenders. Rounding off to the nearest rupee will be done in the final summary of the amount instead of in totals of various sections of schedule of quantities.

4.0 SECURITY DEPOSIT/RETENTION MONEY:

4.1 Security Deposit shall consist of two parts:

- (a) Performance Security to be submitted at the time of award of contract as per 4.2 of section-2 and
- (b) Retention money to be recovered from running bills.

The security deposit shall bear no interest.

4.2 Performance security shall be 5% of the contract amount and is to be submitted within 28 days of receipt of LOA, by the successful bidder, in any of the form given below:

- A Bank Guarantee in the form given in the NIT
- Govt. Securities, FDR or any other form of deposit stipulated by the owner.
- Demand Draft drawn in favour of 'CMPDI Ltd., Regional Institute – Singrauli' on any Scheduled Bank payable at its branch at Singrauli.

The Earnest Money / Bid Security deposited shall be discharged when the bidder has signed the agreement and furnished the required Performance Security / Security Deposit equivalent to the 5% of the contract value.

If performance security is provided by the successful bidder 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 section of the Bank Guarantee shall be for a period of ninety days beyond the contract period of 12 months

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.

4.3 Retention money will be deducted at 5% from the bill that would be submitted by the contractor for the work done against the work order.

4.4 The performance security of 5% should be refunded after issue of completion certificate. Retention money of 5% deducted from the bills shall be refunded after final approval, by MoEFCC, of EIA / EMP Report prepared on the baseline data generation report, against the work order OR three years from acceptance of final report, whichever is earlier.

4.5 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.

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.

4.6 Failure of the successful bidder to comply with the requirements as above shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

5.0 PAYMENT:

5.1 Payment as per the unit rates as accepted by CMPDI and for quantities as approved by Regional Director, Regional Institute – VI, CMPDI, Singrauli -486890, (MP) after execution of security deposit as per Clause 4 above will be made on submission of environmental data generated and its report.

5.2 The tenderer will have to execute an agreement with Regional Director, CMPDI, RI – VI, P.O: Jayant, Singrauli, MP-486890. If in the opinion of the Regional Director, CMPDI, RI – VI, Singrauli, one contract agreement can be executed covering more than one work, the selected party would be allowed to do so, with understanding that he will be bound by the time frame indicated against each work and he is being required to furnish security deposit and fulfillment of other conditions including performance bond.

6.0 DEVIATIONS / VARIATIONS IN QUANTITIES – EXTENT AND PRICING:

6.1 The quantities given in the 'Schedule of Quantities' are provisional 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.

The company through its Engineer-in-charge or his representative shall, without radically changing the original scope and nature of the contracted work, have power to make any alterations in or additions to or substitution of the original specifications 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 conditions in all respects on which they agree to do the main work and at the same rate / rates as are specified in the contract.

6.2 If the additional, altered or substituted work includes any class of work for which no rate / rates is / are specified in the contract, rates for such items shall be determined by the Engineer-in-charge as follows:

(a) The rate shall be derived from the rate / rates for similar or near similar class of work as is / are specified in the contract / tender, failing which

(b) The rates shall be derived from the company's prescribed schedule of rates based on which the estimate for tendering has been prepared plus or minus the percentage by which the tendered amount for the whole work quoted by the contractor is above or below the estimated amount as per the tender documents, failing which

(c) The rate shall be derived from contractor's rate claimed for such class of work supported by analysis of the rate / rates claimed by the contractor. The rate to be determined by the Engineer-in-charge as may be considered reasonable taking into account percentage of profit an overhead not exceeding ten percent or on the basis of market rates, if any, prevailing at the time when work was done.

However, the Engineer-in-charge shall be at liberty to cancel the instruction by notice in writing and to arrange to carry out the work in such manner as he / she considers advisable under the circumstances. The contractor shall under no circumstances suspend the work on the plea of non-settlement of rates.

6.3 Alterations in the quantities shall not be considered as a change in the conditions of the contract nor invalidate any of the provision thereof provided that a supplementary work order or agreement for the item/items involved will be necessary when the alterations involved one or more of the followings:

(i) An increase of less or equal to 10% of total awarded cost of the work requires approval of competent authority who originally approved the award of work.

(ii) An increase of more than 10% of the total cost of the work calculated from the original tendered quantities and the contract price.

(iii) More than 10% deviation from original awarded value should require approval of next higher authority, but total amount should be within the delegated power of the next higher authority.

6.4 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) as may be assessed and certified by the Engineer-in-charge.

6.5 The company through its Engineer-in-charge or his representative, on behalf of the company, shall have power to omit any 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 work in accordance with the instruction given by the Engineer-in-charge. No claim for omitting the part of the work or extra charges / damages shall be made by the contractor on these grounds.

6.6 In the event of any deviation being ordered which in the opinion of the contractor changes radically the original scope and 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 or the rate / rates to be paid thereof shall be resolved separately with the company.

7.0 TIME FOR COMPLETION OF CONTRACT / PENALTY

The time frame for carrying out the generation of environment data shall be the essence of the contract. For delayed execution of the work, CMPDI reserves the right to impose penalty @ ½ % of each work order value per week of delay. The aggregate of such

compensation/ compensations shall not exceed 10 (ten) percent of the total value as shown in the work order This penalty would be adjusted from the security and / or recovered from the bills or dues of the contractor either against the same work or dues against other work. In situations where CMPDI is satisfied about reasons for delay, CMPDI may consider request for extension of time without imposition of penalty. The decision of the CMPDI in this regard shall be final and binding. The CMPDI however will not be responsible for any delay on its parts that may be attributed in execution of the work and no claim what so ever will be entertained on this accounts.

8.0 QUALITY ASSURANCE – 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 specifications, instructions of the Engineer-in-charge. The Engineer-in-charge may issue from time to time further detail instructions/directions in writing to the contractor. All such instructions/directions shall be consistent with the contract documents and should be reasonably inferable there from, along with clarifications/explanations thereof, if necessary.

8.1 All equipment used for data generation and the data/report 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 for his satisfaction that the materials so comply.

8.2 The contractor shall immediately after the award of contract draw up a schedule giving dates for submission of data as required or necessary by the specification for approval of Engineer-in-charge who shall approve after amendments, if any, promptly so that there is no delay in the progress of the work of the contractor or of the work of any of the subcontractor. On receipt of data as per schedule, the Engineer-in-charge shall arrange to check with reasonable promptness ensuring conformity of the data with the required specification and complying with the requirements as per contract documents. The contractor shall be bound to take fresh samples and furnish data accordingly, if disapproved by the Engineer-in-charge.

8.3 The company, through the Engineer-in-charge, shall have full power to reject any data due to a defect therein for not conforming to the required specification or for equipment not being in accordance with the required quality and standard or for not being in accordance with the samples approved by him or for any other reason. The contractor shall forthwith remedy the deficiency at his expense and no further work shall be done pending such rectification, if so instructed by the Engineer-in-charge.

9.0 TERMINATION, SUSPENSION, CANCELLATION & FORECLOSURE OF CONTRACT

9.1 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 & 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 expiry of the period as may be specified by the Engineer in Charge in a notice in writing

OR

- b. 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 expiry of the period as may be specified by the Engineer in Charge in a notice in writing

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 the company.

OR

- e. Obtains a contract with the company as a result of ring tendering or other non-bonafide method of competitive tendering.

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 be giving a written notice to cancel the whole contract or portion of it in default.

The contract shall stand terminated under 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 arrangement 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 company or by an order of Court, not being a voluntary liquidation proceedings for the purpose of amalgamation or reorganization, or a receiver or manager is appointed by the court on the application by the debenture holders of the company, if any.

- c. If a 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 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.

9.2 On cancellation of the contractor or on termination of the contractor, the Engineer in Charge shall have powers

- a. To take possession of the site and any materials, equipments, implements, stores, etc. there on.

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 up to the time of cancellation less on a/c payment made till date and value of contractors materials, equipment, etc, taken possession of after cancellation.

d. To recover the amount determined as above, if any, from any moneys due to the contractor or 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 9.2 (d)

9.3 Suspension of Work: - The contractor shall on receipt of the order in writing of Engineer in Charge (whose decision shall be final & binding on the contractor), suspend the progress of work or any part thereof for such time in such manner as the Engineer in Charge may consider necessary so as not to cause any damage, or endanger the safety thereof for any of the following reasons:

a. On account of any default on the part of the contractor, or

b. For proper execution of the works, or part thereof reasons other than the default of the contractor or,

c. For safety of the works or part thereof.

The contractor shall during such suspension properly protect and insure the works to the extent necessary and carry out the instruction of the Engineer in Charge. If the suspension is ordered for reasons b) and c), the contractor shall be entitled to an extension of time equal to the period of every such suspension, plus 25% for completion of the item or group of items of the work for which a separate period of completion as specified in the contract and of which the suspended work forms a part.

9.4 Foreclosure of contract in full or in part - if at any time after acceptance of the tender, the company decides to abandon or reduce the scope of the work 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/reduction in the scope of work, the company shall be liable

a. To pay the contractor at the contract rates full amount for works executed and measured at site up to the date of such abandonment/reduction in the work.

b. 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 supply for the work including supply to labour/staff quarters, office, etc.

c. 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.

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 amount payable, the contractor shall not have any claim for compensation whatsoever either for abandonment or for reduction or for reduction in the scope of work, other than those as specified above.

The bidding documents will clearly state that, if the contractor fails to complete the work and the order is cancelled, the amount due to him on account of work executed by him, if payable, shall be paid to him only after due recoveries as per the provisions of the contract and that too after alternative arrangements to complete the work has been made.

10.0 FORCE MAJEURE

The Contractor shall promptly notify the client in writing, of any situation or event arising from circumstances beyond his control and which he could not reasonably foresee, which makes it impossible for the Contractor to carryout in whole or in part his obligations under this Agreement. Upon the occurrence of such a situation or event, the services shall be deemed to be postponed for a period of time equal to that caused by the force majeure and a reasonable period not exceeding fifteen (15) days to remobilize for the continuation of the services.

11.0 COMPLETION CERTIFICATE:

The contractor shall give notice of completion of field work and submit 2 (two) copies of the Draft Report to the engineer-in-charge. The Engineer-in-charge shall within 30 days from the completion thereof study the draft report and ascertain the deficiency / deficiencies, if any, to be rectified / regenerate the data by the contractor as also the items, If any, for which payment shall be made at reduced rate if the deficiencies are of a minor nature and the Engineer-in-charge is satisfied that the contractor has already made arrangements for rectification of in the event of contractor's failure to rectify the deficiencies for any reason whatsoever, the deficiencies 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 hereof, he shall issue the completion certificate indicating the date of completion of the work, deficiencies to be rectified, if any, and the items, if any, for which payment shall be made at reduced rate including reasons therefore and with necessary instructions to the contractor to clear the site.

11.1 In cases 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.

11.2 In case of contractor's failure, the EIC shall have right to get the work done at the cost of the contractor.

12.0 ADDITIONAL RESPONSIBILITIES OF THE CONTRACTOR:

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

(a) The Contractor shall exercise all reasonable skill, care and diligence in the performance of the services under the Agreement and shall carry out all his responsibilities in accordance with the recognized professional standings and fulfill the requirements of experts committees constituted by MoEFCC/CPCB/SPCB, Govt. of India. The Contractor shall in all professional matters act as a faithful performer to the client and act fairly. The Contractor shall respect the laws and customs of the country.

(b) The remuneration of the Contractor charged to the client according to the unit rates of this Agreement shall constitute his only remuneration in connection with the Agreement and neither he nor his personnel shall accept any trade commission, discount, allowance or indirect payment or other consideration in connection with or in relation to the Agreement or to the discharge of his obligations there under.

Contractor shall not have the benefit, whether directly or indirectly, of any royalty or of any gratuity or any commission in respect of any protected article or process used for the purposes of this agreement.

The Contractor during execution of work, without absolving himself of contractual obligations, performance guarantee etc. shall have authority to make minor alterations to design as may be necessary or expedient, but he shall obtain the prior approval in writing of the client to any substantial modification of the design of the said works and to any such instruction to a Contractor which constitutes a major variation, omission or addition to alter contract. In the event of any emergency however, which in the opinion of the Contractor requires immediate action in the client's interest, the Contractor shall have authority to issue such orders as required on behalf of the client.

The Contractor must inform the Client immediately of any orders issued without prior consent and follow up such advise, as soon as possible.

(d) When the contractor shall determine that an integral part of the work has been completed, which the contractor deems is capable of being accepted the contractor shall give forty eight hours prior written notice to the client that such integral part is ready for trial, test and acceptance, Such trial and tests shall be carried out under the supervision of the contractor and in the presence of the client's representative. Upon completion of such tests to the entire satisfaction of the client, the contractor shall execute a Maintenance. Certificate recommending acceptance and the client shall take the completed works under his care, custody and control.

(e) The contractor will provide all the expert technical advice and skill, which are personally required for the class of services for which he is engaged. Where specialist technical advice or assistance is required beyond that committed under the scope of services, contractor may, with the prior written consent of the client arrange for the provision of such services, and client shall pay for all such services at the rates which client agrees to pay. However, the contractor shall assume full and unenviable responsibility for all the services which he is committed to render under this agreement.

(f) The company reserve 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.

(g) The contractor / contractors shall keep on the work, during the progress a Competent Superintendent and necessary assistant who shall represent the contractor (s)

in his/their absence. Important instructions shall be confirmed to the contractor(s) in writing.

(h) 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 three hours of such orders. The contractors shall further be responsible for making arrangements at his own cost for accommodation and other essential needs of the staff and workers under his employment.

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

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 or Central Government or Municipalities and other authorities in India. The contractor/contractors shall comply with all applicable provisions of the safety laws drawn up by the State or Central Government 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.

(j) The contractor / contractors shall familiarize themselves with and be governed by all laws and rules of India and Local statutes and orders and regulations applicable to his / their work.

(k) The contractor/contractors shall "furnish to the EIC or his authorized representative with work reports from time to time regarding the contractor/contractors organization and the progress made by him/them in the execution of the work as per the contract agreement.

(l) All duties, taxes (excluding service tax) and the other levies payable by the contractor under the contract, or for any other cause as applicable on the last date of submission of tender, shall be included in the rates, prices and the total bid price submitted by the bidder. All incidentals, over heads etc as may be attendant upon execution and completion of work shall also be included in the rates, prices and total bid price submitted by the bidder.

However, such duties, taxes, levies etc which is notified after the last date of submission of tender and/or any increase over the rate existing on the last date of submission of tender shall be reimbursed by the company on production of documentary evidence in support of payment actually made to the concerned authorities.

Tenders /Service providers should quote their rates excluding the impact of Service Tax. Service tax will be paid extra, as applicable. The Service Tax invoice should clearly mention the Service tax registration number of the service provider and the name of the service receiver i.e. CMPDI Ltd.

(m) Payment of Service tax shall be the total responsibility of the contractor .However, the contractor shall be entitled to the re-imbursement to the extent of service tax at actual.

- (n) The contractor / contractors shall make his / their own arrangement for all materials, tools, staff and labour 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 the entire satisfaction of the company.
- (o) The contractor / contractors shall make their own arrangement for carriage of all materials to the work site at his / their own cost and supply of all water required for the contracted work and drinking water to his / their workmen.
- (p) The work shall not be sublet to any other party, unless approved by Engineer-in-charge in writing.
- (q) The contractor / contractors shall not pay less than the minimum wages to the labourers engaged by him/them 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. The contractor / contractors shall make necessary payments of the Provident Fund for the workmen employed by him for the work as per the laws prevailing under provisions of CMPF and Allied Schemes and Miscellaneous provisions Act 1948 or Employees Provident Fund and Miscellaneous Provisions Act 1952 as the case may be.
- (r) 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 labourer including payment of provident fund etc. considered necessary as per prevalent Statutes, Acts and Laws and the company may arrange for witnessing the payment to be labourer by its representatives.
- (s) The contractor shall in addition to any indemnity provided by law, indemnify and keep indemnified.
- (i) The company or an agent or employee of the company against any action, claim or proceeding relating to infringement or use of any patent or design rights 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 and / or specifications issued by the company after submission of tender by the contractor.

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

- (ii) The company against all losses and claims for injuries or damage to any third party or to any property belonging to any third party which may arise out of or in consequence of the environmental data generation or performance of the work under the contract and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto.
- (iii) 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 Disputes Act 1947. The Employees State Insurance Act 1948, CMPF and Allied Scheme and Provisions Act 1948. EPF and Miscellaneous Provisions Act 1952 and Maternity Benefit Act 1961 or

any modifications thereof or of any other law relating thereto and rules made there under 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.

(t) Insurance

The contractor/ contractors shall take following insurance policies at his own cost.

(i) The contractor shall at all times during the pendency of the contract indemnify the company against all claims, damages or compensation under the provisions 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 law relating thereto.

(ii) The contractor shall at all times during the pendency of the contract also indemnify the company against all claims, damages or compensation against claims by third parties resulting from acts performed in carrying out the services.

(iii) The contractor shall ensure that the insurance policy/policies are kept alive till full expiry of the contract by timely payment of premiums and shall not be cancelled without the approval of the company and a provision is made to this effect in all the 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 tender rate.

(iv) In the events 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 by the contractor.

*This clause no 12(t) shall be applicable for phased award of works of value of over Rs.50 lakhs each.

(u) Anything of historical or other interest or of significant value unexpectedly discovered on the site shall be the property of the owner. The contractor shall notify the EIC of such discoveries and carry out the EIC's instruction for dealing with them.

13. SETTLEMENT OF DISPUTES

In case of any claim is made by the employee of the concerned contractor, the contractor/party engaged will be liable to meet the same.

In case of any dispute case will be filed under the jurisdiction of Waidhan.

In case of any dispute if any private party is engaged the Arbitrator will be appointed by the CMD, CMPDI and in case if any Govt. Undertaking is engaged the permanent Arbitration Machinery of Govt. of India will be engaged.

SECTION -3

LETTER OF BID & FORMATS

FORMAT OF LETTER OF BID

LETTER OF BID SHOULD BE PRINTED ON THE LETTER HEAD OF THE BIDDER

(As Enrolled Online on e-Procurement Portal of MCL)

To

The Regional Director
Regional Institute – VI
P.O:Jayant, Singrauli ,MP-486890.

Sub: Letter of Bid for the work.....

Ref No. :

TENDER ID NO. : CMPDI/RI-VI/ENV/2015-16/6/1823

Date: 06.11.2015

Dear Sir,

I/We offer to execute the work as per our offered bill of quantity in accordance with the conditions of the NIT document as available in the website.

This Bid and your subsequent Letter of Acceptance/ Work Order shall constitute a binding contract between us.

I/We hereby confirm our acceptance of all the terms and conditions of the NIT document unconditionally.

If any information furnished by me/us online towards eligibility in this tender is found to be incorrect at any time, penal action as deemed fit may be taken against me/us for which I/we shall have no claim against CMPDI.

(This document is digitally signed by the DSC holder authorized by the bidder and therefore no physical signature is required).

Format for Authorization to DSC holder bidding online on behalf of bidder.

NON JUDICIAL STAMP PAPER OF Rs. 10.00

I/We do hereby authorized M/s /Mr. /.....Address for online bidding on behalf of me/ us for the e-tenders invited by Central Mine Planning & Design Institute Limited, Regional Institute VI, P.O:Jayant, Singrauli ,MP-486890 on <https://mcltenders.gov.in>.

Signature Seal of DSC Holder Authorized for online on behalf of the bidder.		Signature Seal of the bidder Authorizing the DSC Holder for online bidding.
--	--	--

Signature and Seal of the Notary

AFFIDAVIT

(NON JUDICIAL STAMP PAPER OF Rs 5/-)

I.....

..... Partner/Legal Attorney Proprietor/ Accredited Representative of
M/s. Solemnly declared that:

1. I/We are submitting tender for the work

.....
.....
.....

against Tender Notice No. ----- dated -----

2. None of the partners of our firm is relative of employee of CMPDI.

3 All information furnished by me / us in respect of fulfillment of eligibility criteria and information given in this Bid is complete, correct and true.

4. All documents / credentials submitted along with this tender are genuine, authentic, true and valid.

5. If, any information or document submitted is found to be false /incorrect at any time, Employer may cancel my Bid 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. I/We have never been banned or delisted by any Govt. or Quasi Govt. Agency or any Public Sector Undertaking.

OR

I/We have been banned by the organization named "-----" for a period of ----- year/s, effective from ----- to -----

Signature of the Tenderer

Dated-----

Seal of Notary

**MANDATE FORM FOR ELECTRONIC FUND TRANSFER/INTERNET BANKING
PAYMENT.**

To
**Central Mine Planning & Design Institute Limited,
Regional Institute - VI,
P.O:Jayant, Singrauli ,MP-486890.**

Sub: Authorization for release of payment due from **Central Mine Planning & Design Institute Limited, Regional Institute - VI, P.O. Jayant, Singrauli, MP-486890** through Electronic Fund transfer/Internet Banking.
(SBI-NET)

Ref: Order No. _____ Date _____ and/or Tender/Enquiry/Letter No. _____
Date _____

(Please fill in the information in CAPITAL LETTERS, Please TICK wherever it is applicable).

1. Name of the Party : _____
2. Address of the Party : _____

City _____ PIN Code _____
E- Mail Id _____
Permanent Account Number _____

3. Particulars of Bank

Bank Name		Branch Name	
Branch Place		Branch City	
PIN Code		Branch Code	
MICR No.			
(9 Digits code number appearing on the MICR Band of the cheque supplied by the Bank. Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name and code number)			
RTGS CODE			
Account Type	Savings	Current	Cash Credit
Account Number(as appearing in the Cheque Book)			

4. Date from which the mandate should be effective.

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information. I shall not hold Central Mine Planning & Design Institute Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through SBI Net.

Place:

Date:

Signature of the party/Authorized Signatory.

Certified that the particulars furnished above are correct as per our records.

Banker's Stamp :

Date :

(Signature of the Authorized official from the Banks)

BANK GUARANTEE PROFORMA FOR PERFORMANCE SECURITY/GUARANTEE

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)

(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULED BANK
AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)

To:

**Central Mine Planning & Design Institute Limited,
Regional Institute - VI, P.O: Jayant, Singrauli, MP-486890.**

In consideration of the **Central Mine Planning & Design Institute Limited**, having its registered office at **Regional Institute - VI, P.O: Jayant, Singrauli, MP-486890**. (hereinafter called to as the "Employer" which expression shall unless repugnant to the context or meaning thereof, include all successors, administrators and assigns) having awarded to _____ [Name & Address of the Contractor] (hereinafter called to as "Contractor" which expression shall unless repugnant to the context of meaning thereof include its successors, administrators, executors and assigns) the work _____ [Name of the Work] by issue of Letter of Award No. _____ [Work Order/Letter of Intent No.] and the same having been unequivocally accepted by the Contractor resulting into a Contract Agreement dated _____ valued at _____ [value of Work Order] (hereinafter called 'the Contract') and the Employer having agreed to accept Performance Bank Guarantee of ____ [indicate figure]% of the Contract Sum _____ [amount in figures and words] from a Nationalized/Scheduled Bank for due performance of the work executed by the Contractor as per the terms & conditions contained in the said Contract.

We, _____ [name of the Bank], of _____ [address of the Bank] (hereinafter called to as "Bank" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand and or, all money payable by the Contractor to the extent of _____ [amount of guarantee in figures and words], at any time from _____ to _____ without any demur, reservation, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrecoverable and shall continue to be enforceable as per the terms & conditions contained in the said Contract.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time, to extend the validity of time of Performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this Guarantee, to postpone, from time to time, the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forebear or to enforce any covenants contained or implied in the Contract, between the Employer and the Contractor or any other course or remedy or security available to the Employer. The Bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to matter aforesaid or any of them or by reason of any other act of forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing

whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor in first instance, without proceeding against the Contractor and notwithstanding any security or other Guarantee that the Employer may have in relation to the Contractor's liabilities.

Dated this _____ day of _____ at _____

For and on behalf of the Bank.

Signature _____

Name _____

Designation _____

Common Seal of Bank _____

SECTION -4

SPECIAL TERMS & CONDITIONS

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Notwithstanding anything stated in this agreement, under mentioned Special Terms & Conditions 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 Climate Change (MoEFCC) and to the satisfaction of the client.
2. For Environmental Baseline 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 8 of NIT 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 and 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 their 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 qualification 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) by State Pollution Control Board/Ministry of Environment ,Forest and Climate Change and Wildlife Authority of State/ Government of India.

- (viii) In case Environmental Baseline Data Generation covers more than one location, i.e. adjoining or in proximity, sampling locations and size etc. would be so planned to keep the cost at minimum.
 - (ix) The payment for Environmental Baseline 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 MoEFCC, the same has to be regenerated by the agency at his own cost.
 - (xi) In case the agency fails to get the data regenerated within the stipulated time, CMPDI may get the said data generated by some other agency at the agencies 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 4 (four) 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 Leasehold boundary showing the surface features namely National / State Highways , rail routes , rivers, nallahs, lakes, villages , different industries etc. as per instruction of Engineer- 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 leasehold 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 leasehold 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 leasehold 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 leasehold 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, intimate the client, represented by *Regional Director, CMPDI RI-VI, Singrauli*, in writing, of the contractor's expert personnel visiting the project or site proposed to be visited, tasks proposed to be carried and 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 and 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 labours 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 one 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-VI, Singrauli* 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-VI, Singrauli 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.

SECTION -5

**TECHNICAL
SPECIFICATIONS**

TECHNICAL SPECIFICATIONS

Air Quality

- (i) **Parameters to be covered:**
SPM, RPM(PM10), PM2.5, SO₂, NO_x, Mercury (Hg), Lead (Pb), Chromium (Cr), Nickel (Ni), Cadmium (Cd) & Arsenic (As), Free Silica in PM10, .
- (ii) **Methodology:** As specified in the standards mentioned in National Ambient Air Quality Standards prescribed by MoEFCC in G.S.R. 826(E) vide Notification dated 16th November, 2009 and standards for coal mines, G.S.R. 742(E) dated 25th September, 2000 and other conditions as per recent TORs from MoEFCC.
- (iii) **Location of Monitoring Stations:** The air quality stations shall be **eight** per project site, depending on predominant wind direction, local conditions and other factors.

Note

- i. The frequency of air sampling for PM10, PM2.5, SO₂ & NO_x 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 x 8 stations x 2 projects = 384 samples in total for a season.}
- ii. The frequency of analysis of heavy metals like Pb, Hg, Cr, As, Ni, Cd in PM10 shall be one sample per station per month i.e., 8 stations x 1 sample x 3 months x 2 projects = 48 samples in total for a season.
- iii. 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.
- iv. Number of Sampling station shall be eight per project.

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), hourly standard deviation of wind direction data. 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 or any meteorological measuring equipment/wind monitor. 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 (<0.5, 0.5-1.5, 1.5-3.5) data
 - Average daily predominant wind direction (wind blowing from)
 - Average daily temperature (oK) 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 (<0.3, 0.3-1.5, 1.5-3 m/s) data
 - Average seasonal predominant wind direction (wind blowing from)
 - Average seasonal temperature (oK) 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 including wind rose for study period, monthly wind rose and wind rose for day most similar to predominant pattern. The report shall be submitted in hard copy and soft copy. Soft copy of Met File should be compatible with ISCST3/AERMOD Air Quality Prediction Model.

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. 19th May, 1993 and as amended on 31.12.1993 and 2.4.1996)

Following parameters of Effluent sample are to be analysed

Odour, Temperature, Turbidity, Colour, p H, Solid (Suspended), Total Kjeldahal Nitrogen(TKN), Cyanide, Ammonical Nitrogen, BOD, COD, Nitrate Nitrogen, Phosphate (Ortho), Calcium, Chlorides, Chlorine Residual, Fluoride, Hardness (Total), Sulphate, Sulphide, Phenolics, Aluminium, Cadmium, Boron, Chromium Hexavalent, Iron, Nickel, Copper, Lead, Manganese, Mercury, Selenium, Zinc, Vanadium, Arsenic, Chromium (Total), Oil & Grease .

Note:

- i. Sampling Station: The sampling station shall be three per project.
- ii. Frequency of Sampling: The frequency of water sampling at each station would be one sample per station per project in one season i.e 1 samples x 3 stations x 2 projects=6 samples in total.

Surface Water Samples – As per parameters and methodology detailed in Inland surface water standards (class C). Class C- Tolerance limit for surface water used for drinking water source with conventional treatment followed by disinfection.

Following parameters of Surface water sample are to be analysed

Odour, Temperature, Colour, Solid (Suspended), Solid (Dissolved), Dissolve Oxygen (DO), BOD, p H, Nitrate Nitrogen, Calcium, Chlorides, Fluoride, Total Hardness

(CaCO₃), Sulphate, Phenolic, Cadmium, Chromium Hexavalent, Iron, Copper, Lead, Manganese, Magnesium, Mercury, Selenium, Zinc, Arsenic, Total Coliform, Oil & Grease

Note:

- i. Sampling Station: The sampling station shall be three per project.
- ii. Frequency of Sampling: The frequency of water sampling at each station would be one sample per station per project in one season i.e 1 samples x 3stations x 2 projects=6 samples in total.

Drinking Water Samples – As per parameters and methodology detailed in IS: 10500:2012(Drinking Water Specification – 1st Revision) and subsequent amendment.

Following parameters of Drinking water sample are to be analysed

Odour, Taste, Temperature, Turbidity, Colour, Solid (Dissolved), Alkalinity, Calcium, Chlorides, Chlorine Residual, Fluoride, Hardness (Total), Nitrate, p H, Arsenic Sulphate, Phenolics, Aluminium, Cadmium, Boron, Chromium Hexavalent, Iron, Copper, Lead, Manganese, Mercury, Selenium, Zinc, Faecal Coliform (MPN)

Note:

- i. Sampling Station: The sampling station shall be six per project.
- ii. Frequency of Sampling: The frequency of water sampling at each station would be one sample per station per project in one season i.e 1 samples x 6stations x 2 projects=12 samples in total

(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, CHP; 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)

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, 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 of noise level recording shall be in fortnightly basis and day and night separately.
- (iv) **Location:** The noise level stations shall be same as the air quality stations i.e. 8(eight) 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.

(iii) **Frequency:** The frequency of sampling shall be once per sampling station.

(iv) **Location:** The soil sampling station shall be 3(three) number unless otherwise specified in the work order.

Note:

- i. Sampling Station: The sampling station shall be three for Jayant OCP & four for Dudhichua OC project.
- ii. Frequency of Sampling: The frequency of sampling at each station would be one sample per depth per station per project for one season i.e 1 samples x 3 depths x7stations =21 samples in total.